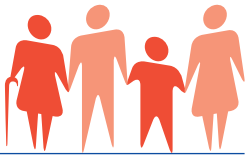
Canterbury Wellbeing Index

June 2014

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha



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Section

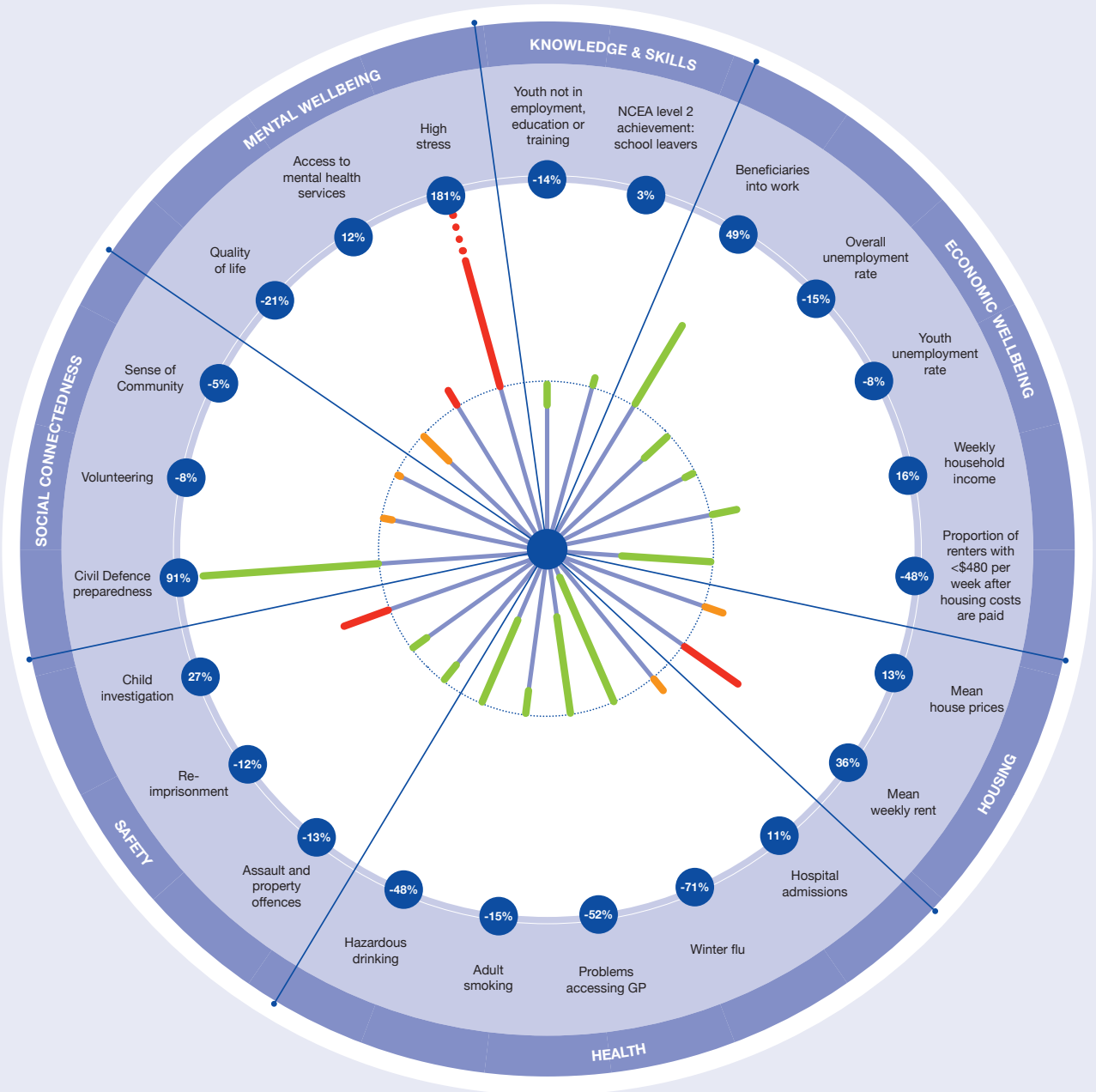
Canterbury Wellbeing Index

Interpreting changes in social recovery 2008-10 to 2013-14

The spider diagram uses 'spokes' to represent changes in each indicator,

- the blue dotted circle represents average data prior to the September 2010 earthquake (where possible using a two year average from January 2008 to September 2010); and
- the spokes represent post-earthquake data where possible using an average from 2013 to June 2014.

Longer spokes represent greater change. However, there is no relationship between indicators in magnitude of change. Spokes extending out from the blue circle indicate increases, and spokes extending inwards indicate decreases.



Pre and Post Earthquake Social Recovery Analysis

FAVOURABLE
By comparison to pre-quake and where possible national trends

NEUTRAL
Either changes reflect national trends, the average has not changed or changes are otherwise ambiguous

LESS FAVOURABLE
By comparison to pre-quake and where possible national trends

Canterbury Wellbeing Index: an overview[1]

Knowledge and skills

Despite considerable disruption to the schooling network, school leavers have consistently achieved NCEA Level 2 or above at higher rates than prior to the earthquakes: 70 per cent in 2009, 72 per cent in 2010, 75 per cent in 2011 and 73 per cent in 2012.

A buoyant employment market generated by the rebuild has led to a drop in the rate of young people not in education, employment, or training to 9.2 per cent in March 2014 compared with 12.8 per cent across New Zealand.

Economic wellbeing

Since 2011 the unemployment rate has lowered significantly, reaching 3.3 per cent in the March 2014 quarter which is well below the national rate (6.2 per cent).

Young people are more likely to find jobs than elsewhere in the country. Only 16.6 per cent of those aged 15-19 years were unemployed in the March 2014 quarter compared with 22.3 per cent across New Zealand. For those aged 20-24 years the rate dropped to 6.1 per cent (compared with 13.1 per cent across New Zealand).

Greater Christchurch has had a 16.6 per cent increase in median equivalised gross weekly household income between 2008 and 2013, while New Zealand overall experienced an 8.1 per cent increase over this period.

For low income earners living in rental accommodation, their income has increased at a higher rate than their housing costs. The proportion of renting households with a gross income of less than $480 per week after rental housing costs are paid dropped from 39 per cent in 2011 to 19 per cent in 2013.

Housing

The loss of housing stock caused by the earthquakes has stimulated price rises. Mean house prices increased by 16.8 per cent across Christchurch, 32.1 per cent in Selwyn district and 24.4 per cent in Waimakariri district between the November 2010 and November 2013 quarters.

Over the same period, mean weekly rent increased by 35.5 per cent in Christchurch (an extra $106 per week on average) and it is increasing at a faster rate than the national average. Increased demand for rental accommodation has come from displaced households and workers arriving to assist with the rebuild. As a result, fewer low-cost rentals are available which is impacting on low income earners.

Health

Physical health indicators selected for the index show little on-going earthquake impact. Hospital admissions (including those for cancer) have resumed a pre-earthquake pattern of increase after dropping immediately following the February 2011 earthquake.

Access to general practice has improved since the time of the earthquakes. Only 8.2 per cent of residents reported that they had been unable to get an appointment in 2012/13 compared with 15.5 per cent in 2011/12.

Both smoking and hazardous drinking rates have declined and are lower than national rates. Smoking rates were 16.2 per cent in 2012/13 compared with 18.7 per cent nationally and hazardous drinking rates were 11.3 per cent compared with 17.3 per cent nationally.

Safety

Total assaults declined by 5 per cent in 2013 from the pre-earthquake period of 2008-2009. Total property offences declined by 16 per cent. Despite fluctuations between 2010 and 2013, there was a 2 per cent reduction in dwelling assaults, compared with a 6 per cent decline nationally.

Canterbury's re-imprisonment rate declined from 27.4 per cent in 2011 to 24.1 in 2013 compared with a decrease from 27.1 per cent to 26.7 per cent nationally during this period. This decline may reflect the focus on finding rebuild-related employment for released prisoners in Canterbury.

Child investigations are counted through notifications requiring further action which may be generated by concerns about child abuse, or the behaviour or mental wellbeing of a child or young person. Notifications requiring further action increased by 27 per cent in the twelve months to June 2013 compared with the pre-earthquake period of the 24 months to June 2010. Over this same period there was an 18 per cent increase nationally. However, looking at just the year prior to the earthquakes, this variance is less significant. When comparing the twelve months to June 2010 with the twelve months to June 2013 there was a 10 per cent increase in notifications requiring further action in Canterbury compared with 12 per cent nationally.

Social connectedness

Residents have experienced significant upheaval and population movement which has reduced social connectedness. The proportion of people reporting a strong sense of community with others in their neighbourhood fell from 57 per cent in 2010 to 47 per cent in April 2014. Those reporting lower levels of connectedness were in temporary housing, young adults aged 18-34, people living with a physical health disability, renters and those who had moved since the September 2010 earthquake.

Mental wellbeing

In 2011 and the first six months of 2012, demand for mental health services remained relatively flat, but it has increased since 2013. The overall proportion of people accessing mental health services increased by 12 per cent in the eight months to August 2013 from the eight months to August 2010. In particular, specialist mental health services for those aged 0-17 years and psychiatric emergency services have experienced increased demand.

By April 2014, 22 per cent of the population were reporting high levels of stress (compared with 18 per cent across New Zealand cities in 2012). Higher levels of stress were reported by those in temporary accommodation, people with a physical health condition or disability, Māori and renters.

By April 2014, 75 per cent of the population were reporting a high quality of life (compared with 80 per cent across New Zealand cities in 2012).

[1]Data presented in the summary highlights key information from both the spider diagram and the indicators.

Why do we need the Canterbury Wellbeing Index?

The Canterbury Wellbeing Index was developed by the Canterbury Earthquake Recovery Authority (CERA) with the support of multiple agencies to track the progress of the social recovery in greater Christchurch. Indicators are used to identify emerging social trends and issues to enable agencies to respond in a timely way. The Canterbury Wellbeing Index is also prepared to provide the greater Christchurch community with accurate and comprehensive information about the social recovery.

The Canterbury Wellbeing Index has been published annually since June 2013. Results can be accessed in full at **www.cera.govt.nz/cwi**

How was the Canterbury Wellbeing Index developed?

In late 2011 CERA convened a series of meetings with representatives of 28 agencies to identify the social indicators that should be tracked through the recovery. Expert advice was received through the literature review of international best practice "Designing indicators for measuring recovery from disasters", undertaken by Canterbury District Health Board.

CERA requests and receives administrative and survey data from multiple agencies regularly to form the basis of the indicators in the Canterbury Wellbeing Index. Where possible, indicators are tailored to the greater Christchurch boundaries comprised of Christchurch city, and the Selwyn and Waimakariri districts.

The six-monthly CERA Wellbeing Survey was developed to provide additional recovery-focused data on the wellbeing of the residents of greater Christchurch. It forms a significant part of the Canterbury Wellbeing Index. CERA Wellbeing Survey data are also published in full on the CERA website.

Draft indicators are subjected to peer review and quality assurance processes, and agencies responsible for the indicators review the content prior to public release.

The Canterbury Wellbeing Index is a collaborative project across many government agencies:

Action on Smoking and Health, Canterbury District Health Board, Canterbury Earthquake Temporary Accommodation Service, Canterbury Public Health, Child, Youth and Family, Christchurch City Council, Creative New Zealand, Department of Corrections , Department of Internal Affairs, Department of Labour, Earthquake Commission, Electoral Commission, Energy Efficiency and Conservation Authority, Environment Canterbury, Housing New Zealand, Corporation, Ministry of Business, Innovation and Employment, Ministry of Civil Defence and Emergency Management, Ministry of Culture and Heritage, Ministry of Education, Ministry of Health, Ministry of Justice, Ministry of Pacific Island Affairs, Ministry of Social Development, Natural Hazards Research Platform, New Zealand Police, Partnership Health, Selwyn District Council, Sports Canterbury, Sports New Zealand, Statistics New Zealand, Te Puni Kōkiri, Te Rūnanga o Ngāi Tahu and Waimakariri District Council.

What happens in response to the trends identified in the Canterbury Wellbeing Index?

Emerging trends and issues identified through the Canterbury Wellbeing Index are used to inform decision-making by CERA and other social sector agencies working towards social recovery. Examples of initiatives and decisions that were informed by data collected through the Canterbury Wellbeing Index include the establishment of the Residential Advisory Service to help property owners progress their home repairs or rebuild; as well as the Government's Budget 2014 decision to allocate on-going funding for the provision of psychosocial services.

New Zealand Government

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Participation in education

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is participation in education important?

Our early childhood centres, schools and tertiary institutions exist as an investment in the futures of our children and young people.

Participation in all stages of the education system is crucial so that young people can develop the skills and knowledge they need to find employment and gain a high quality of life. When levels of participation and achievement are high, the region and the country benefit economically, society is more cohesive and cultures are enriched.

By participating in early childhood education, young children are prepared socially and academically for their transition to primary school. Participation in early childhood education can also help reduce inequalities among our most vulnerable children.

A low level of participation in compulsory education can be a signal that issues such as a disruptive home life or behavioural problems are interfering with attendance. Sustained truancy affects educational achievement and can be a strong predictor of violence, delinquency, substance abuse, suicide risk, unemployment and early parenting.[1] Linkages between truancy and crime are of considerable concern.

Young people who are not engaged in employment, education or training (NEET) miss the opportunity to develop skills and knowledge at an age that has a strong influence on future success. They also miss the opportunity to contribute fully to society.

Tertiary education builds on human capital. It is vital for creating a socially cohesive greater Christchurch. Young people who have valued qualifications and skills are more likely to find sustainable employment, put roots down in the city, and work to create a better future.

International students have a doubly positive impact. First, they strengthen the financial position of schools and tertiary providers they attend. Second, they bring an international perspective to greater Christchurch.

Attracting domestic and international students back to tertiary providers based in greater Christchurch will contribute significantly to the economic recovery.

How was participation in education impacted by the earthquakes?

After the February 2011 earthquake, 18 schools were relocated and 7,000 students were bussed daily to host sites. Fifty-five per cent of secondary students were ‘site sharing’, with one school holding classes in the mornings and another school holding classes in the afternoons.[2]

Within three weeks 84 per cent of school students were able to attend school again, and within a month 78 per cent of early childhood education centres were back up and running.

However, the earthquakes continued to have a major impact on education provision. Most early childhood centres, schools and tertiary providers had been damaged in some way or the number of enrolments had changed as people moved around or away from greater Christchurch.

The earthquakes changed patterns of attendance in early childhood education, with enrolments down by 1,125 in the year to July 2011. Many affected centres were located in the east of the city.

Following the February 2011 earthquake, over 12,000 primary and secondary students also left the school they had been attending and enrolled elsewhere, often at a school outside the region. Many returned, but in July 2012 there were 3,573 fewer students enrolled in greater Christchurch schools than in July 2010.

In the tertiary sector, 2011 domestic enrolments were down 14 per cent on 2010. Across Lincoln and Canterbury universities, first year enrolments were down by 28 per cent.

International enrolments for the first eight months of 2011 were down 31 per cent. The earthquakes dented the confidence of potential international students in Christchurch as an education destination. A large proportion of the reductions in international students were in private training establishments.[3]

What is happening now?

The Ministry of Education and Tertiary Education Commission have engaged with educators and communities to develop the Education Renewal Recovery Programme for greater Christchurch.

The draft Education Renewal Recovery Programme was released for public consultation in May 2012 and finalised in August 2012 in the document entitled *Directions for Education Renewal in Greater Christchurch*. It was developed in response to population change and damage to land and educational facilities that occurred after the Christchurch earthquakes in 2010 and 2011. The programme aims to offer an innovative response to the earthquakes by improving the delivery of education, extending options for learners and lifting student achievement.

Schools

As part of the overall plan for education renewal, proposals for 38 schools in greater Christchurch to close or merge were originally announced in September 2012. These proposals took into account earthquake damage, roll numbers, weather tightness, the age and wear and tear of buildings, population movement and future population growth and school locations.[4]

Extensive consultation was undertaken with schools and communities on these proposals; considerable feedback helped shape the final decisions. The final decisions affected 24 of the original 38 schools.

In summary these decisions were[5]:

- 11 schools will merge to create five merged schools (this includes Phillipstown and Woolston schools, whose merger decision was contested and remains subject to legal process)
- 11 schools will close (this includes the four schools that will close to form the new year 1–13 Aranui Community School).

Two schools have also chosen to voluntarily close.

These final decisions then fed into the greater Christchurch Education Renewal property programme that the Ministry of Education announced in November 2013. This outlined the Government's intention to invest $1.137 billion to rebuild and renew 115 schools in greater Christchurch over the next 10 years.

During the 10-year programme,[6] the Ministry of Education will:

- construct 13 schools on new sites
- rebuild 10 schools on existing sites
- fully redevelop 34 schools
- moderately develop 58 schools.

When the programme is complete, more than 80 per cent of teaching spaces in greater Christchurch will be modern learning environments. This will be one of the most modern schooling networks in the country and will serve as a platform for student learning well into the future.

Tertiary

The Tertiary Education Strategy (2014–19) released in March 2014 sets out the Government's long-term strategic directions for the tertiary education system and highlights "delivering skills for industry" as one of its key priorities.[7]

In October 2013, the Government announced an $18.9 million funding boost, which will allow the Christchurch Polytechnic Institute of Technology (CPIT) to cater for another 1,000 trade students per year to support the growing demand for skilled workers for the Canterbury rebuild.[8]

The University of Canterbury has a redevelopment programme to modernise its campus and infrastructure. About 80 per cent of the university's space will be remediated. The total programme is valued at $1.1 billion over 10 years, of which about 25 per cent will be insurer-funded and about half funded by the university. In October 2013, the Government announced that it will provide a $260 million cash injection for the remainder of the university's redevelopment programme.

Lincoln University is currently working on its campus redevelopment plan as it identifies what it needs to do to recover and grow, and is considering a number of different investment options. A core component of this plan is the 'Lincoln Hub' which is a collaborative partnership between AgResearch, Dairy NZ, Landcare Research, Plant and Food Research and Lincoln University.

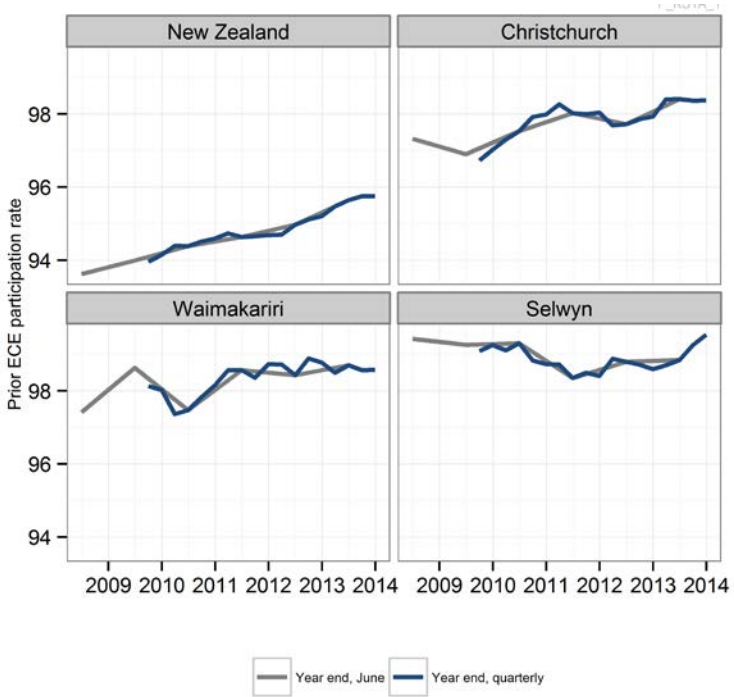
What are the indicators telling us?

ECE participation

This is measured in this report as the proportion of Year 1 entrants who had prior participation in early childhood education (ECE).

Before the earthquakes, greater Christchurch was well served with 15,644 ECE places (June 2010) which increased to 16,186 in 2013. Figure 1 confirms that ECE participation has been consistently higher than the national average. Despite the earthquakes, this high rate of ECE participation continued in 2012 in greater Christchurch. Latest figures from 2013 show this on-going pattern.

Figure 1: Proportion of Year 1 entrants who had previously participated in early childhood education



Student absences

This is measured in this report through the total absence rate and unjustified absence rate from primary and secondary schools. Unjustified absence is also called 'truancy'.

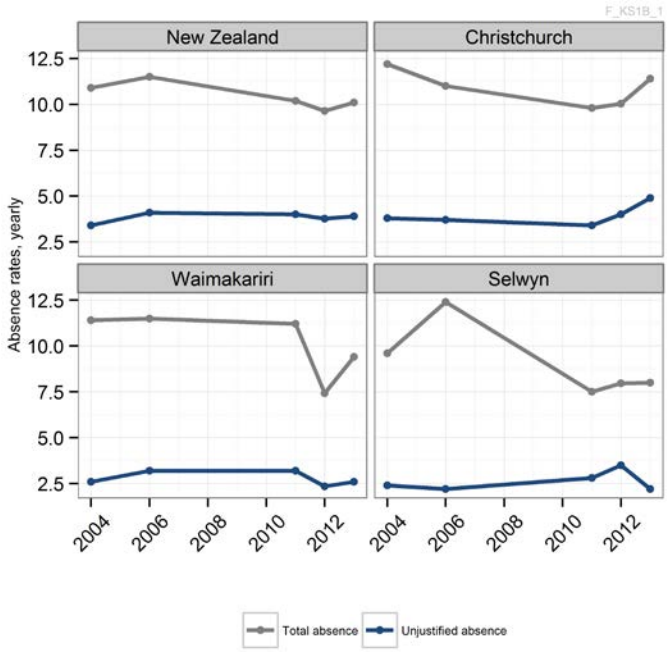
Total absences have increased in the three areas which make up greater Christchurch following a decline after the major earthquakes. Unjustified absences show a pattern of increase in Christchurch city since 2011 but overall have dropped in Waimakariri and Selwyn districts in recent years and remain below 2011 levels.

In the first year after the earthquakes, schools reported fewer student absences. This is reflected in Figure 2, which records a slight decline in the total absence rate in Christchurch city and Selwyn district in the 2011 year compared with previous years. The rate in Waimakariri district remained the same.

Since 2011, the total absence rate has increased in Christchurch city, declined sharply then picked up in Waimakariri district and increased and levelled off in Selwyn district. Both the Selwyn and Waimakariri figures remain below pre-earthquake levels.

Between 2011 and 2013, the unjustified absence rates for Waimakariri and Selwyn districts fluctuated, but in 2013 rates were below pre-earthquake levels. The rate has increased annually in Christchurch city since 2011 and it is currently above the national rate.

Figure 2: Total absence rate and unjustified absence rate[9]



NEET (not in education, employment or training) rate

Figure 3 shows that the proportion of young people aged 15–24 years who are not in employment, education or training (NEET) in greater Christchurch spiked after the February 2011 earthquakes. However, this proportion generally dropped below the overall New Zealand rate during the post-earthquake period, in line with the pre-2011 pattern.

The NEET rate in greater Christchurch peaked at 17 per cent in March 2011 and has subsequently nearly halved, dropping to 9.2 per cent by March 2014 (compared with 12.8 per cent across New Zealand).

The NEET rate for males clearly shows this pattern of decline. In the March 2014 quarter, there were 4,000 NEET males in greater Christchurch, representing a NEET rate of 9.3 per cent (compared with 10.6 per cent for males in New Zealand overall). This fell from a NEET rate of 15.7 per cent (5,500 males) for the March 2011 quarter.

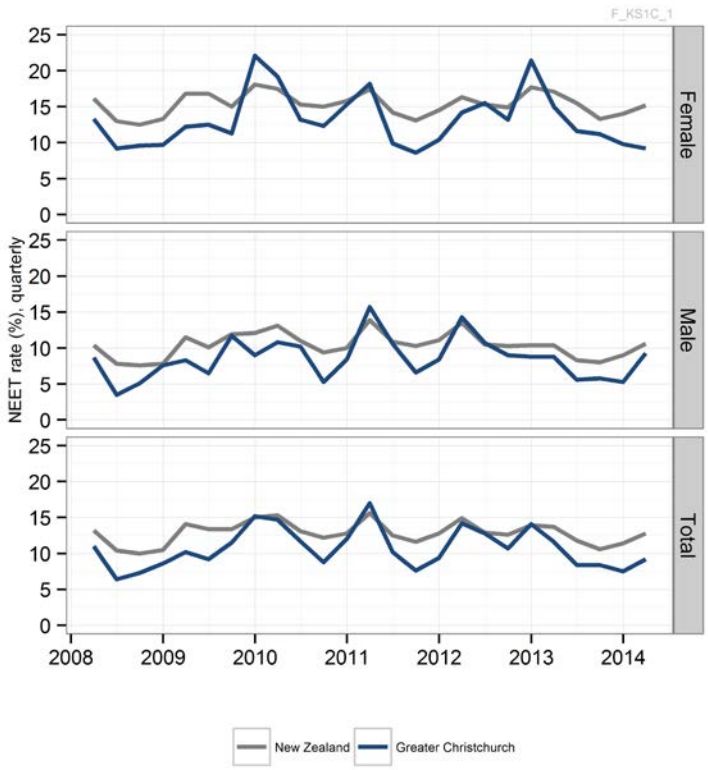
While the NEET rate for females steadily increased over the 2012 year, peaking at 21.4 per cent in December 2012 (6,600), it has generally declined over 2013. In the March 2014 quarter, there were 3,300 NEET females in greater Christchurch, representing a NEET rate of 9.2 per cent. This was substantially lower than the 15 per cent NEET rate recorded a year earlier. Nationally the NEET rate also declined to 15.2 per cent in March 2014.

The latest figures show that the disparity between the male and female NEET rates for greater Christchurch has reduced.

It is anticipated that as employment and training opportunities generated by the rebuild grow, the NEET rate will continue to fall.

Trade training scholarships for women (aged under 25 years) offered by CPIT are aimed at providing the skills and knowledge to start a career in the trade industry. They are also expected to encourage women to explore career opportunities in the rebuild, particularly those in traditionally male-dominated occupations.

Figure 3: 'Not in employment, education or training' (NEET) rate for the youth population by sex



Tertiary enrolments

This is a measurement of the domestic and international students enrolled in tertiary institutions.

Figure 4 shows that enrolments of all part-time and full-time students in formal tertiary education in greater Christchurch declined by nearly 17 per cent from 2009 (45,912 students) to 2013 (38,250 students), compared with an 11 per cent decline across New Zealand.

Annually the greatest decrease in total enrolments occurred from 2010 to 2011. Since then figures have levelled off but remain below those recorded before the earthquakes.

In greater Christchurch, enrolments in universities declined by 14 per cent from 2009 (21,552 students) to 2013 (18,607 students). Polytechnic enrolments declined by 21 per cent over the same period (from 17,494 to 13,798 students) compared with a 23 per cent decline nationally.

Polytechnic enrolments by year dropped most notably at the time of the major earthquakes but have subsequently started to increase. This may reflect the growing trades training opportunities offered at CPIT to support demand for skilled workers for the Canterbury rebuild.

Figure 4: Number of tertiary enrolments

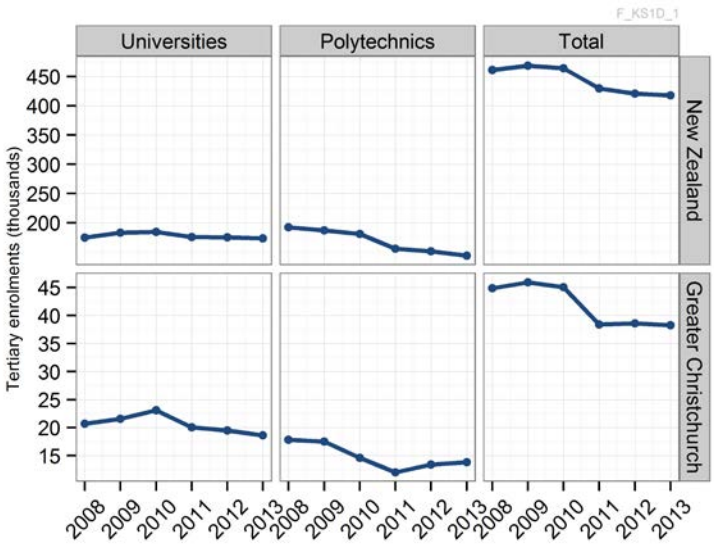


Table 1 sets out enrolment numbers for domestic and international students.[10] In 2011 enrolments in tertiary education dropped significantly from 2010: by 14 per cent for domestic students and by 17 per cent for international students.

For 2013, total intakes of tertiary students at Christchurch-based institutions were slightly lower than in 2012 and were still 15 per cent down on 2010. International enrolments increased between 2012 and 2013 (4 per cent), while domestic enrolments were down 1 per cent from 2012.

Table 1: Full-year domestic and international student enrolments in greater Christchurch 2010–2013

Type of student	2010	2011	2012	2013
Domestic	39,399	33,709	34,684	34,198
International	5,644	4,670	3,881	4,052
Total	45,043	38,379	38,565	38,250

Student engagement

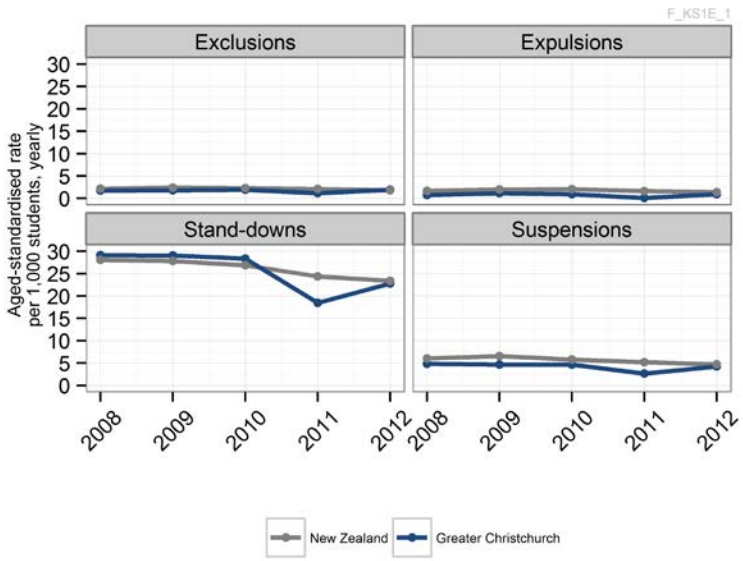
Student engagement is measured in this report by the age-standardised rate of exclusions, expulsions, stand-downs and suspensions for primary and secondary school students.

Stand-downs and suspensions in greater Christchurch declined in 2011 after the major earthquakes but have subsequently increased.

Figure 5 shows that the age-standardised rate for stand-downs in the greater Christchurch area decreased by 11 per 1,000 students from 2009 (29 per 1,000 students) to 2011 (18 per 1,000 students). The rate subsequently increased in 2012 to 23 per 1,000 students. Across New Zealand in the same period (2009 to 2012), stand-downs fell from 28 to 23 per 1,000 students.

The age-standardised rate for suspensions in greater Christchurch also decreased by 2 per 1,000 students from 2009 (5 per 1,000 students) to 2011 (3 per 1,000 students) but increased to 4 per 1,000 students in 2012 compared with 5 per 1,000 across New Zealand in 2012. These statistics may reflect a greater tolerance in the school environment and an increase in community supports in the period immediately following the earthquakes.

Figure 5: Age-standardised rate for stand-downs, expulsions, suspensions and exclusions per 1,000 students



Student transience

In this report, student transience is measured by the number of times a school student has re-enrolled within greater Christchurch during the school year.

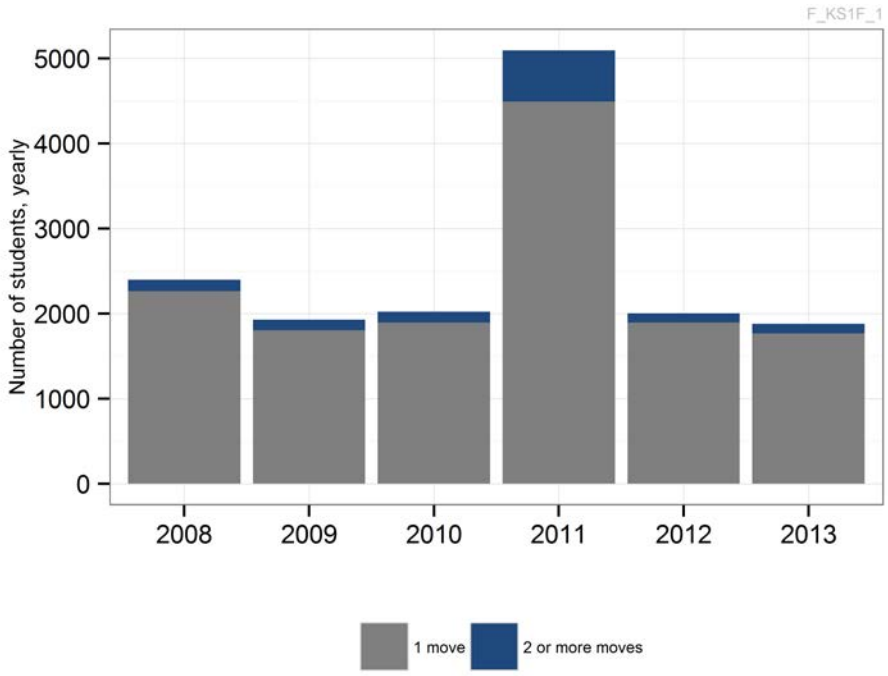
Transience increased in 2011 but has returned to pre-earthquake levels.

Figure 6 shows there was a noticeable change in student transience during 2011. The proportion of students who re-enrolled at least once more than doubled between 2009 (2.7 per cent or 1,926 students) and 2011 (6.8 per cent or 5,092 students) before returning to pre-earthquake levels in 2012 (2.8 per cent or 2,003 students) and dropping further to 2.6 per cent (1,878 students) in 2013. The number of students who re-enrolled in a new school twice or more increased almost fivefold from 123 students in 2009 to 600 in 2011. Similarly, this dropped back below pre-earthquake levels in 2012 (109) and 2013 (111).

This movement most likely reflects the significant upheaval families faced with damaged homes and changes to employment patterns and social connections during 2011. The 2012 and 2013 figures suggest that this upheaval has subsided and the numbers that have moved reflect standard patterns of pre-quake transience.

The vast majority of students within greater Christchurch remain enrolled in the same school each year (over 93 per cent each year during the period 2008–2013).

Figure 6: Number of students who re-enrol at a different school in greater Christchurch each year



Find out more

Find out more about the Ministry of Education's education renewal plans: www.shapingeducation.minedu.govt.nz

Find out more about education statistics: www.educationcounts.govt.nz

Find out more about *Right Service Right Time*, an innovative approach to ensure the wellbeing of children and families: www.rightservice.org.nz

Find out more about CPIT free trades training: www.cpit.ac.nz/study-options/our-study-interest-areas/trades

Find out more about the Ministry of Women's Affairs research on using women's labour in the Canterbury recovery: www.mwa.govt.nz

Technical notes

ECE participation:

Data source:	Ministry of Education administrative data
Data frequency:	Yearly to June and yearly to each quarter
Data complete until:	June 2013 and December 2013

Notes: The measure is institution-based, so the geographic assignment is based on where children are in childcare, not where they normally reside. Christchurch city, Selwyn and Waimakariri refer to the territorial authority boundaries.

Data presented are yearly to June, and yearly to each quarter. ECE prior participation rates are affected by seasonal variations.

Student absences

Data source: Ministry of Education's Attendance in New Zealand Schools Survey

Data frequency: Yearly in 2004, 2006, 2009, 2011, 2012 and 2013

Notes: Rates for the Christchurch area in 2011 should be interpreted with caution. These data were collected during the week in June 2011 when there were significant aftershocks and schools may have been closed. Schools had the option to report the week before or after, depending on whether they kept electronic or paper records.

NEET (youth not in education, employment or training)

Data source: Household Labour Force Survey (HLFS), Statistics NZ

Data frequency: Quarterly

Data complete until: March 2014

Notes: The HLFS interviews approximately 32,000 people or 16,000 private households in New Zealand each quarter. Each person is interviewed for eight quarters (two years) so that changes in labour market can be measured. Interviews are carried out each week of the quarter so that the data are an average for that quarter. The working-age population consists of usually resident, non-institutionalised, civilian population of New Zealand aged 15 years or over.

The labour force consists of members of the working age population who, during the survey reference week, were classified as 'employed' or 'unemployed'.

Those not in the labour force comprise any person in the working-age population who is neither employed nor unemployed. They mainly consist of people who:

- are retired
- are not actively seeking work
- attend educational institutions
- are permanently unable to work due to physical or mental disabilities
- were temporarily unavailable for work in the survey reference week
- have personal or family responsibilities such as unpaid housework or childcare.

NEET includes both those people who are unemployed (part of the labour force), and those who are not in the labour force, and at the same time, not in education and training.

Greater Christchurch is comprised of Christchurch City Council, Selwyn District Council and Waimakariri District Council and is below survey design level. Data are indicative only and should be interpreted cautiously. Data for greater Christchurch during 2011 are subject to slightly higher sampling error than normal owing to interruption of surveying.

The HLFS is a sample survey and therefore subject to sampling error. Estimates based on populations fewer than 1,000 are suppressed as they are subject to sampling errors too high for most practical purposes. Estimates of numbers have been rounded to the nearest hundred.

Tertiary enrolments

Data source: Ministry of Education administrative data

Data frequency: Yearly

Data complete until: 2013

Notes: Numbers are head counts, not equivalent full-time students, and include New Zealand and international students. The numbers include Christchurch campus enrolments for institutions headquartered elsewhere (eg, Wellington Institute of Technology, Southland Institute of Technology, University of Otago), and exclude non-Christchurch enrolments of Christchurch-based providers (eg, the Telford campus of Lincoln University). Telford Rural Polytechnic merged with Lincoln University in 2011.

Students who were enrolled in more than one sub-sector have been counted in each sub-sector. Consequently, the sum of the sub-sectors may not add to the total number of students. Students who were enrolled in more than one territorial local authority have been counted in each authority. Consequently, the sum of the students in all territorial local authorities may not add to the total number of students.

Total figures include students from universities, polytechnics, Te Wānanga o Aotearoa and private training establishments.

Student engagement

Data source: Ministry of Education Stand-downs and Suspensions database and the Ministry of Education July school roll returns

Data frequency: Yearly in July

Data complete until: 2012

Notes: The numerator for the rates in this indicator was from the Ministry of Education Stand-downs and Suspensions database, and the denominator for the rates was from Ministry of Education July school roll returns. Only state and state integrated schools are included in the data.

The age-standardised rate of intervention per 1,000 students eligible for that intervention is the number of observed interventions divided by the number of expected interventions multiplied by the latest national rate per 1,000. By age-standardising, rates from different areas can be compared more accurately by controlling for the effect of differing age distributions in those different areas. All of the age-standardised rates are standardised against the current year national rate so that the data are comparable across years.

All students are eligible for suspension and stand-downs. Only students up to the age of 16 years are eligible for exclusions. Only students 16 years and older are eligible for expulsion.

The data have been aggregated for all of New Zealand, and separately for those territorial local authorities that constitute greater Christchurch (Christchurch City Council, Selwyn District Council and Waimakariri District Council).

The engagement data are defined as:

Stand downs – the removal of a student from school for a specified period

Suspension – the removal of a student from school until the Board of Trustees decides the outcome

Exclusion – a student under 16 years old is permanently removed from school and has to enrol elsewhere

Expulsion – a student 16 years old or over is permanently removed from the school.

Student transience (number of moves within greater Christchurch)

Data source: Ministry of Education school enrolment data

Data frequency: Yearly in March

Data complete until: 2013

Notes: The data include students who were enrolled in schools in greater Christchurch (Christchurch City Council, Selwyn District Council and Waimakariri District Council) throughout the entire school year.

Endnotes

[1] www.educationcounts.govt.nz/indicators/main/student-engagement-participation/1935

[2] Ministry of Education. (2012). *Shaping education: directions for education renewal in greater Christchurch*.

[3] Ministry of Education. (in press). *Monitoring the recovery: post-compulsory education in Christchurch*.

[4] www.shapingeducation.govt.nz

[5] To be implemented by Term 1, 2017.

[6] Planned to be completed by the end of 2022.

[7] www.mbie.govt.nz/news-and-media/news-from-around-mbie/tertiary-education-strategy-2014-19-released

[8] www.stuff.co.nz/the-press/news/9242483/18-9m-pumped-into-CPIT-for-trades

[9] Due to the earthquakes, figures for Christchurch may not represent 'typical' rates for the region. The survey of school rolls was scheduled to take place during the week of June 2011 that was subject to substantial aftershocks. Schools had the option of reporting the week earlier or later instead. Note schools were surveyed for absence rates in 2009, but the data are not available at the territorial authority level for that year.

[10] This denominator differs from that used for Figure 4.

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Educational achievement: NCEA Level 2 pass rate

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is NCEA achievement important?

A formal school qualification, such as the National Certificate of Educational Achievement (NCEA), is a measure of the extent to which young adults have completed a basic prerequisite for higher education and training and many entry-level jobs.

People who achieve higher educational qualifications also tend to earn more. In turn, with higher earnings they can maintain better health, participate more in community life and live in better-quality housing. In addition, their children tend to go further in their own education.

An educated workforce is also critical to a region's future economic success. Cities with higher education levels grow jobs and population faster, and are more resilient to economic downturns, than cities with lower education levels.[1]

NCEA Level 2 is considered the minimum qualification needed to continue with further education or join the workforce. One of the Government's priorities is to increase the proportion of 18-year-olds with NCEA Level 2 or an equivalent qualification so that they can contribute fully to the economy.

Since NCEA was introduced, NCEA Level 2 pass rates for Christchurch students have been higher than the national average. Selwyn district students have also achieved at a high level over time. Results in the Waimakariri district have generally been similar to the national average.

How was NCEA achievement impacted by the earthquakes?

In 2011 the New Zealand Qualifications Authority developed a special derived grades procedure for students in greater Christchurch to address concerns that school closures and site sharing may have impaired learning and to mitigate any such impact.

Many greater Christchurch schools, including a large number who were site sharing, achieved better results in 2011 than in 2010. This finding is consistent with the trend towards improving results in the area since the introduction of NCEA. While the special grades procedure may have contributed to some extent, principals have observed that students and staff generally demonstrated significant determination in challenging times during 2011.

What is happening now?

As part of the Better Public Services programme the Government has set a target that 85 per cent of 18-year-olds will gain NCEA Level 2 or an equivalent qualification by 2017.[2] In line with this goal, the Ministry of Education continues to monitor achievement in greater Christchurch against the impact of the earthquakes.

The Ministry of Education is leading the greater Christchurch Education Renewal Recovery Programme, which aims to build on the best of existing practice, while supporting the development of new, more effective approaches to teaching and learning.[3] One of the key objectives of this programme is that all learners achieve a solid academic base, gaining at least NCEA Level 2.

Recovery for greater Christchurch

The Ministry of Education's Youth Guarantee initiative provides young people with a wider range of learning opportunities to achieve NCEA Level 2 or equivalent, to enable young people to transition to further education and participate in the workforce. A range of programmes – including Vocational Pathways, Secondary–Tertiary Programmes (such as trades academies), service academies and fees-free places – provides young people with opportunities to engage in higher education and vocational training.

What are the indicators telling us?

NCEA achievements can be measured in different ways to present different pictures of how the schooling system is performing.

- '16-year-old data' focus on only the 16 year cohort who attained NCEA Level 2 or a higher qualification, providing a clearer picture of examination success.
- 'School leavers' data show the highest qualification of people who have left the schooling system, indicating how well prepared students are for further education or employment.

Figure 1 shows that NCEA Level 2 or higher pass rates for 16-year-old students in Waimakariri and Selwyn districts and Christchurch city increased in each earthquake-affected year with the overall rate for greater Christchurch growing from 66.2 per cent in 2009 to 72.6 per cent in 2012.

In Christchurch city, pass rates increased from 65.5 per cent in 2009 to 70.8 per cent in 2012. In Waimakariri and Selwyn districts during 2012, achievement rates peaked at 76.2 per cent and 84.3 per cent respectively.

These findings indicate that NCEA achievement for this cohort of students was high despite the earthquakes.

Figure 1: Proportion of 16-year-old students who attained NCEA Level 2 or a higher qualification

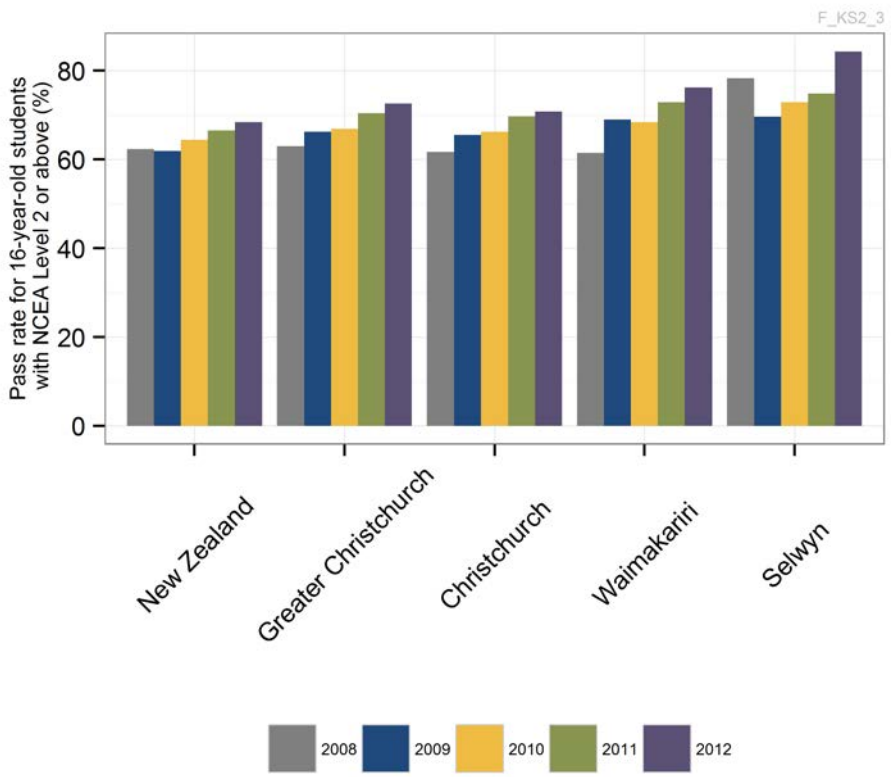


Figure 2 shows that in greater Christchurch, school leavers achieved NCEA Level 2 or above at an increasingly higher rate in 2010 (72 per cent) and 2011 (75 per cent) despite significant challenges caused by the earthquakes. While the level dropped back slightly in 2012 (to 73 per cent), it remained higher than the pre-earthquake rate (70 per cent in 2009). National figures have shown a steady increase since 2009.

Figure 2: Proportion of school leavers who achieved NCEA Level 2 or a higher qualification

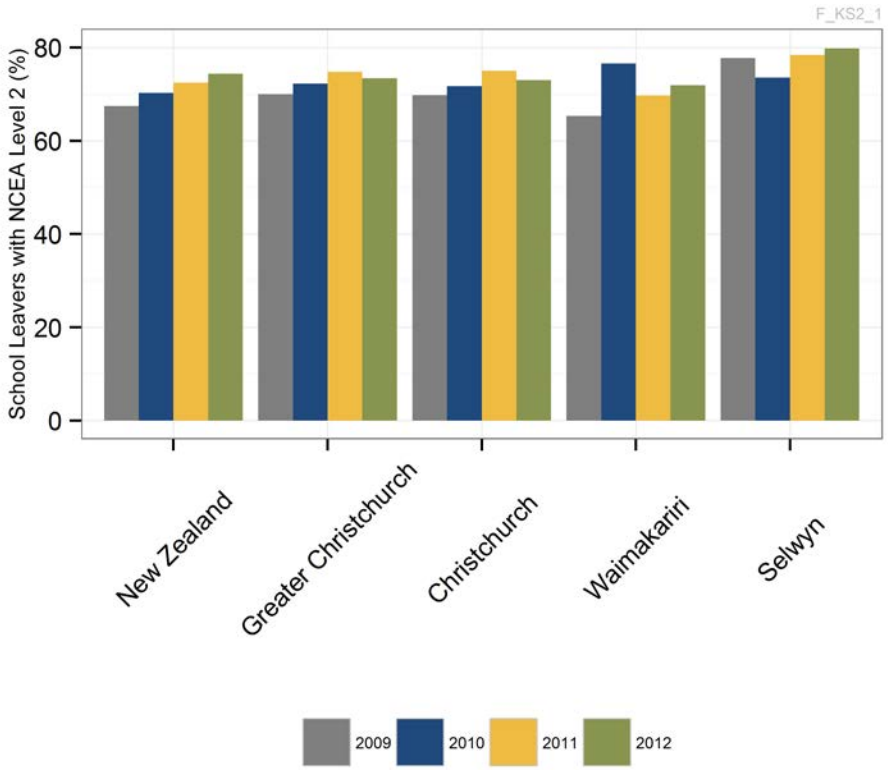
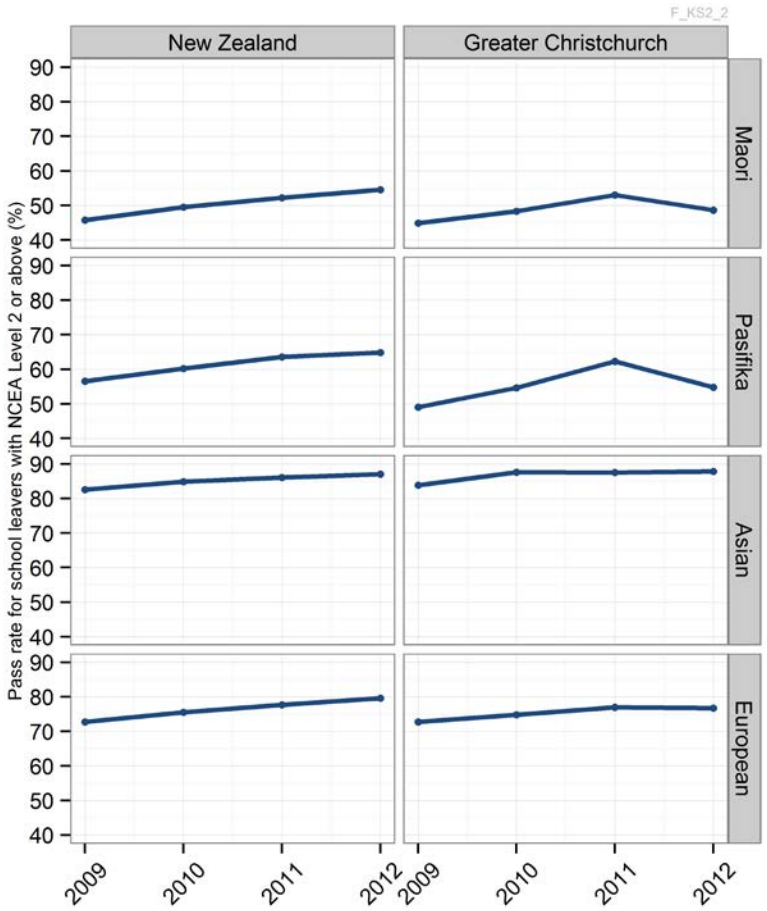


Figure 3 presents the proportion of school leavers who attained NCEA Level 2 or higher by ethnicity. In particular, it highlights the disparity between the achievement of Māori and Pacific students, compared with other ethnicities, both locally and New Zealand wide.

Between 2009 and 2012, school leaver achievement rates for European and Asian students in greater Christchurch show an increasing pattern, which is generally consistent with national trends. European student achievement grew from 73 to 77 per cent and Asian student achievement increased from 84 to 88 per cent over this period.

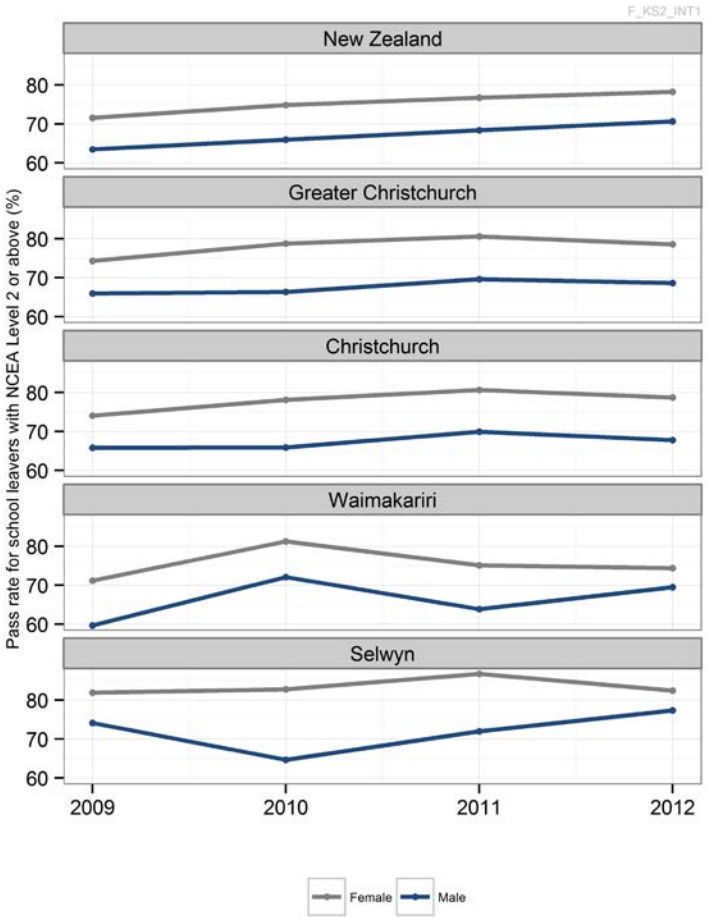
Notably school leaver achievement for both Māori and Pacific students in greater Christchurch increased between 2009 and 2011, from 45 to 53 per cent for Māori students and from 49 to 62 per cent for Pacific students, but decreased in 2012 (Māori 49 per cent, Pacific 55 per cent). In contrast, during the same period Māori and Pacific students' achievement consistently improved nationally. This difference may reflect other wellbeing-related issues experienced by these groups in greater Christchurch during the later earthquake period.

Figure 3: Proportion of school leavers who attained NCEA Level 2 or a higher qualification by ethnicity



As shown in Figure 4, the proportion of school leavers gaining NCEA Level 2 or above has consistently been higher for female students than for male students. Some of the variation in rates in Waimakariri and Selwyn districts is likely to be due to the smaller number of people involved, which makes the data less reliable.

Figure 4: Proportion of school leavers who attained NCEA Level 2 or a higher qualification by gender



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about NCEA from the New Zealand Qualifications Authority: www.nzqa.govt.nz/qualifications-standards/qualifications/ncea

Find out more about the Youth Guarantee programme: http://youthguarantee.net.nz

Technical notes

Data sources:	Ministry of Education database of New Zealand Qualifications Authority NCEA results
Data frequency:	Yearly in September and June
Data complete until:	2012

Notes: International students and students with gender unknown are excluded from the overall data and data by gender.

Specific schooling year-level data have been discontinued; therefore we have moved to target 16-year-olds (as at 1 May) to align with students at curriculum Year 12 (NCEA Level 2). This also tends to be more accurate as schooling year level can be a more variable measure.

Another option that was considered was to use the Better Public Services measure which relates to a national indicator set by the Government and specifically targets 18-year-olds with NCEA Level 2. Analysing this on a regional basis is problematic as data relate to the school a student last attended whereas, for this age group, movement is common for further tertiary study. To avoid this problem we have considered those students who are 16 years of age with NCEA Level 2 or above.

When comparing 16-year-olds with NCEA Level 2 or above with school leavers, results need to be interpreted with caution as cohorts tend to be more variable across specific year groups, especially at a regional level. School leaver data capture a mixed age cohort, generally making them a more robust measure.

Total students have been used as the denominator (rather than candidates or the July roll). Total students are defined as domestic, normally resident students that have been enrolled in any New Zealand school for more than 20 days after 1 March.

The definition of candidates has changed from ‘students who have gained at least one credit in a year’ to ‘students who have been enrolled to participate in at least one standard during the year’ – regardless of the result.

Greater Christchurch includes Christchurch city and Waimakariri and Selwyn districts.

Endnotes

[1] Simon, C.J. and Nardinelli, C. (1996). The talk of the town: Human capital, information and the growth of English cities. *Explorations in Economic History* 33(3): 384–413.

David, M. (2004). Education levels drive down city growth, cited in A. Plyer and E. Ortiz (2011).

The New Orleans Index at Six. Greater New Orleans Community Data Centre.

[2] Better Public Services www.ssc.govt.nz/better-public-services

[3] Ministry of Education. (2012). *Shaping education: directions for education renewal in greater Christchurch*. Wellington.

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Canterbury Wellbeing Index

Employment outcomes

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is employment important?

Employment has a direct impact on wellbeing. It affects the economic wellbeing and the quality of life of an individual and their family and it also has significant impacts on social and emotional wellbeing.

Most researchers agree that being employed is the most important way for a person to get enough income to meet their material needs and to fully participate in their community.[1] It is also central to an individual's identity and their role in society.[2]

Unemployment has strong linkages to ill health and other outcomes. Unemployed people have higher mortality rates, a higher risk of mental health issues and a higher rate of criminal activity.[3] Longitudinal studies show that unemployment has a direct effect on health over and above the effects of socioeconomic status, poverty and prior ill-health.[4]

It is particularly important for the future of greater Christchurch, and New Zealand, that young people are able to find employment when they finish their education and training. Young people are particularly vulnerable in the job market because they generally do not yet have the experience and skills to compete with older workers. The recent global economic downturn increased youth unemployment rates in New Zealand; however, young people are finding significant job opportunities in the rebuild of greater Christchurch.

When people move from unemployment to employment, they gain in material wellbeing, physical and mental health, and socioeconomic status.[5] Increasing employment rates in the greater Christchurch region will be central to the recovery of the community and the economy.

How was employment impacted by the earthquakes?

The February 2011 earthquake had immediate economic consequences across greater Christchurch and the whole of the South Island. Most severely affected were the tourism sector, small businesses, and service industries such as retail, hospitality, international education and aged care.

Businesses in the central business district cordon could not trade from, or even access, their premises. Smaller suburban centres in older parts of town such as Sydenham were disproportionately affected as damage from unreinforced masonry buildings closed roads and pavements, making it harder for pedestrians to reach them. Some of the large shopping malls could not open due to damage, and economic activity was disrupted completely or forced to shift to different parts of town.

On 28 February 2011 the Government set up the Earthquake Support Subsidy so that businesses could continue to pay their employees when they were unable to operate or were losing significant trade. A similar package called Job Loss Cover assisted the self-employed. Because of these payments, a significant number of businesses were able to remain viable.[6]

Partly as a result of these measures, fewer people moved onto the unemployment benefit than might be expected in the period after the earthquakes. Since then the labour market has picked up as many businesses relocated to new premises and began trading again. Others started trading online.

Recovery for greater Christchurch

What is happening now?

The work involved in rebuilding and repairing domestic dwellings and commercial buildings is expected to fuel economic growth in the Canterbury region for a number of years. This growth is increasing employment in the region.

Thousands of construction-related workers will be required at the peak of rebuilding activity. Demand is expected to be greatest for carpenters and joiners, painters, concreters and plasterers as well as for general labourers. Additional employees will also be required in non-construction occupations that support the rebuild, such as accountants, lawyers, hospitality and retail workers.

Information from Statistics New Zealand shows that the demand for construction workers has already gained momentum. According to the latest Census of Population and Dwellings, 'construction' has replaced manufacturing as the largest industry in greater Christchurch. In 2013, 1 in 8 adults (25,764 people) in greater Christchurch worked in the construction industry. This is an increase of 59.3 per cent (9,594 people) since 2006.[7] Other industries to experience growth in the number of workers since 2006 include health care and social assistance (up 13.4 per cent), professional, scientific and technical services (up 14.8 per cent) and public administration and safety (up 29.7 per cent).[8]

New Zealand–born workers (81.1 per cent) comprised the majority of construction workers in 2013, followed by those born in the United Kingdom and Ireland (9.4 per cent) and Asia (2.4 per cent). Most construction workers are male; however, females now account for 14.5 per cent (3,735 people) of workers in this industry, an increase from 13.1 per cent (2,112 people) in 2006.[9]

Canterbury continues to be the fastest-growing region in the country by a significant margin. The economy is estimated to have grown by 7.5 per cent during 2012 while the national rate was 2.5 per cent.[10] In 2013 economic growth for the region was estimated at 5.6 per cent compared with 4.4 nationally.

The Ministry of Business, Innovation and Employment's Jobs Online Index shows a 22.3 per cent increase in skilled vacancies between March 2013 and March 2014 in Canterbury. This compares with a 16.7 per cent increase for all of New Zealand. The increase in Canterbury was largely driven by increases in hospitality and tourism (up 38.2 per cent), information technology (up 26.2 per cent) and health care and medical (up 22.3 per cent).[11]

In the year to March 2014, the number of people employed in Canterbury rose by 8.9 per cent (29,100 people) compared with a national increase of 3.7 per cent. The employment rate in Canterbury was 69.9 per cent while it was 65.2 per cent for New Zealand. During this time, unemployment decreased by 2,600 (17.6 per cent) in the region. The unemployment rate for Canterbury was 3.3 per cent in March 2014 (compared with 6.2 per cent nationally), the lowest since the September 2008 quarter, when it was also 3.3 per cent.[12] [13]

As the employment indicators continue to improve, concerns about workplace stress as a result of the earthquakes appear to be having less of a negative impact on the daily lives of people in greater Christchurch. In the April 2014 CERA Wellbeing Survey, only 13 per cent of residents indicated that work pressures (ie, workplace relocation, workload increasing as a result of the earthquakes) are still having a moderate or major negative impact on their everyday lives compared with 27 per cent in September 2012.

Similarly, the April 2014 CERA Wellbeing Survey showed that workplace safety concerns are less likely to have a negative impact, with the proportion of residents reporting concerns dropping to 4 per cent from 16 per cent in September 2012. However, concerns about workplace safety may grow as the pace of the rebuild picks up because the rise in construction work may bring an increased risk of work-related injuries.[14]

In 2011, the Government invested $42 million in trades training through Skills for Canterbury, which includes up to 3,000 more construction-related training places in polytechnics in order to capitalise on rebuild opportunities. In November 2012, the Government committed an extra $28 million to maintain the expanded training pipeline for tradespeople. The Government also announced significant investment in training opportunities: 10,000 new apprenticeships and a further 300 places through the He Toki ki te Rika Māori trades training initiative.

From 1 July 2014 until the end of June 2015, up to 1,000 beneficiaries living outside the Christchurch area[15] will be able to apply for a special, one-off $3,000 payment to help them relocate if they have a confirmed, full-time job offer in the region.

The offer will be open to any beneficiary living outside the Christchurch area but will be focused on young people aged 18–24 years as the rebuild will offer them opportunities to get good employment skills.[16]

The Tertiary Education Strategy (for 2014–19) released in March 2014 sets out the Government's long-term strategic direction for the tertiary education system and highlights 'delivering skills for industry' as one of its key priorities.[17]

What are the indicators telling us?

Beneficiaries obtaining work

This report uses two measures of beneficiaries obtaining employment (data from the Ministry of Social Development):

- the proportion of the total population of beneficiaries who cancel their benefit because they have obtained work
- the number of cancellations of a benefit due to obtaining work.

Note that not all unemployed people seek or are eligible for a benefit.

Typically more people have been leaving benefits for work in greater Christchurch in recent years compared with the period prior to the earthquakes. Figure 1 shows that the proportion of beneficiaries in Canterbury who left a benefit for work decreased to 1.2 per cent in the month after the February 2011 earthquake. This was the lowest proportion since December 2008. Since then, there have been marked increases, with 3.8 per cent leaving a benefit for work in May 2011 compared with 2.6 per cent across New Zealand. While fluctuating, the Canterbury rate has generally remained above pre-earthquake levels since 2011. In January 2014, 2.1 per cent of beneficiaries left a benefit for work in Canterbury the same rate as across New Zealand.

Prior to the February earthquakes the proportion of beneficiaries leaving a benefit for work was consistently higher for New Zealand than for Canterbury. This pattern reversed following the major earthquakes.

Figure 2 shows that at the end of 2012, approximately 500 people were leaving a benefit for work each month in Canterbury. Following seasonal trends, this number tapered off over the Christmas period. This seasonal pattern resumed in 2013.

Figure 1: Proportion of beneficiaries leaving a benefit for employment

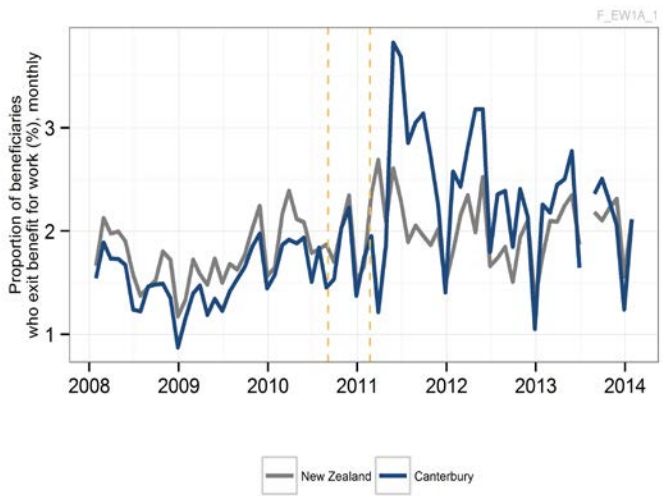


Figure 2: Number of beneficiaries leaving a benefit for employment

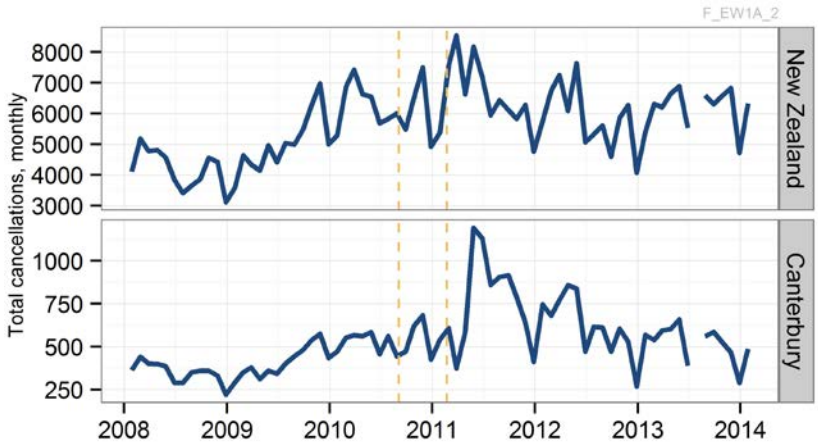


Figure 3 shows that since the earthquakes, more male beneficiaries have entered into employment. Following the earthquakes, figures peaked in May 2011 with 1,192 people leaving benefits for employment in Canterbury. Of these, 740 (62 per cent) were male and 452 (38 per cent) were female. This compares with 58 per cent of males and 42 per cent of females leaving a benefit for employment nationally during the same month. This gender imbalance has now narrowed within Canterbury, where 261 males (54 per cent) and 226 females (46 per cent) left a benefit for employment in January 2014.

This gender imbalance is changing as the rebuild generates wider economic growth and employment opportunities. However, one reason for this disparity, regardless of labour market opportunities, is the issue of childcare and the need for part-time employment options for the primary caregiver.

Figure 3: Number of beneficiaries leaving a benefit for employment, by sex

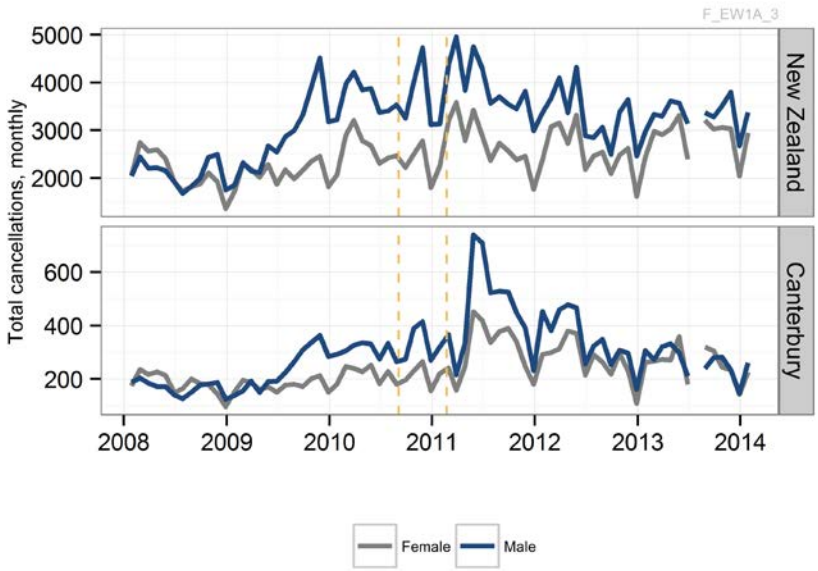
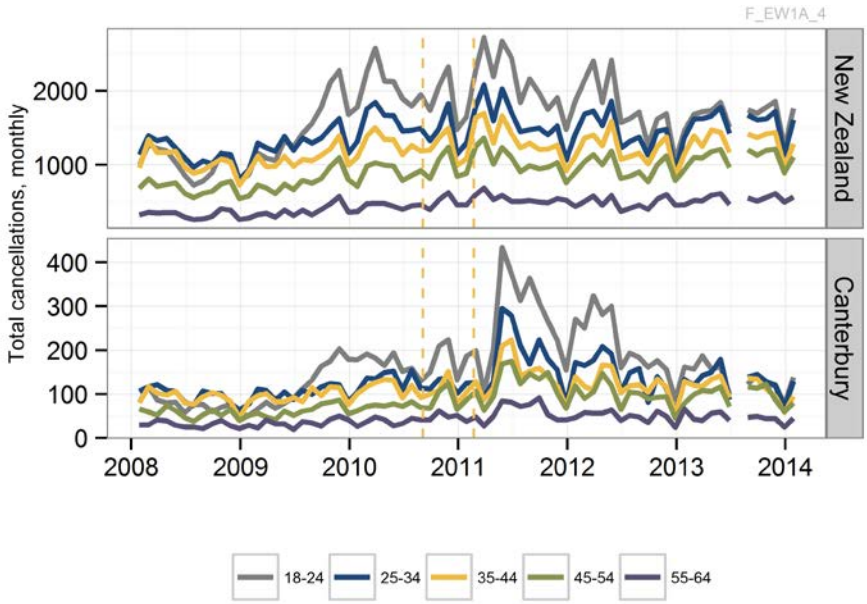


Figure 4 shows that, following the earthquakes, employment opportunities have been greater for young people. During the peak in May 2011, when 1,192 people left a benefit for employment in Canterbury, 425 were aged 18–24 and 295 were aged 25–34 years. Together these age groups made up 60 per cent of those leaving benefits within May 2011. However, this reflects a national pattern that shows those aged 18–34 years comprised 57 per cent of people leaving a benefit for employment.

Current figures show that the number of people aged 18–34 years leaving a benefit for employment has eased back in both Canterbury and New Zealand. This group accounted for 55 per cent of people leaving benefits for employment in Canterbury during January 2014. Nationally, they made up 53 per cent of people leaving benefits for employment over the same month.

Figure 4: Number of beneficiaries leaving a benefit for employment, by age



Rates of employment, unemployment and participation

The unemployment rate is the number of unemployed expressed as a percentage of the labour force.

The employment rate is the number of those employed for more than an hour a week expressed as a percentage of the labour force.

The labour force participation rate is the total number of people classified as employed or unemployed expressed as a percentage of the working-age population.[18]

How is greater Christchurch doing?

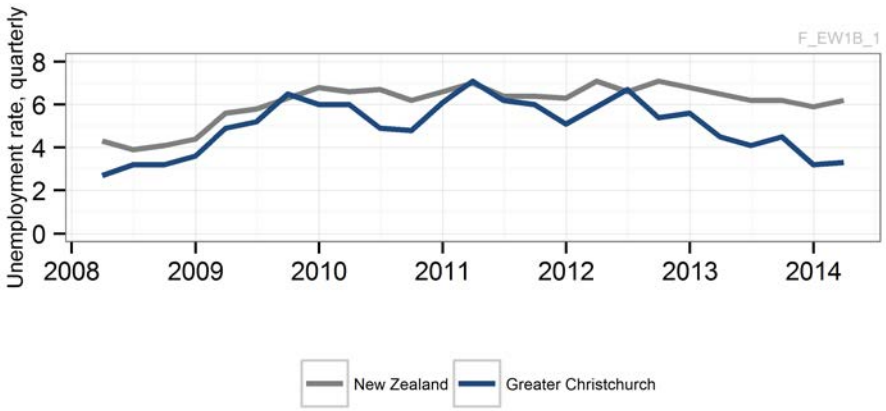
Unemployment[19]

Figure 5 shows that prior to the earthquakes, the unemployment rate in greater Christchurch was tracking upwards but typically remained lower than the national rate. Since 2011 unemployment has lowered significantly in greater Christchurch and the gap between the local and national rates has continued to widen. The unemployment rate for greater Christchurch peaked at 7.1 per cent in March 2011 following the February earthquake, but dropped to 3.3 per cent in the March 2014 quarter – one of the lowest rates since December 2008 and well below that of New Zealand overall (6.2 per cent). This rate reflects the significant demand the rebuild has generated for workers in the region.

Young people appear to be gaining employment opportunities from the rebuild and recovery. In the March 2014 quarter, there were 3,400 unemployed young people aged 15–19 years in greater Christchurch which represents an unemployment rate of 16.6 per cent (compared with a New Zealand rate of 22.3 per cent). Greater Christchurch's March 2014 rate was lower than the pre-earthquake rate of 17.8 per cent in September 2010 and is a significant decrease from 40.2 per cent recorded in the December 2012 quarter.

In March 2014, there were 2,200 unemployed young people aged 20–24 years in greater Christchurch. This group had an unemployment rate of 6.1 per cent which was significantly lower than New Zealand's rate (13.1 per cent) in the same quarter. The greater Christchurch March 2014 rate was considerably less than the pre-earthquake rate of 10.8 per cent in September 2010.

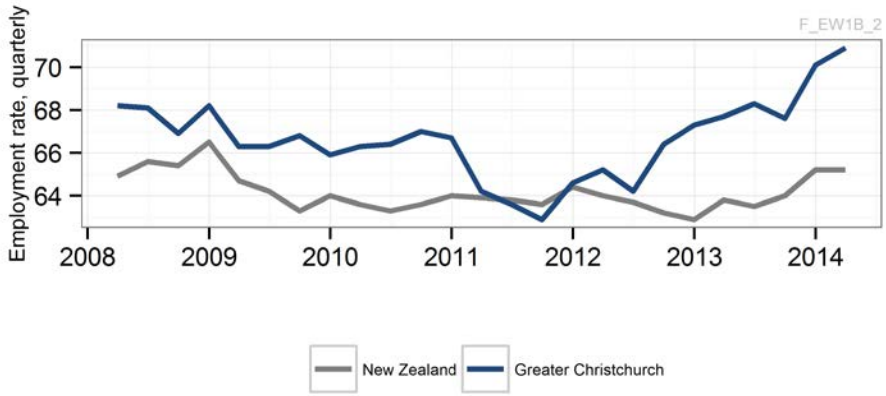
Figure 5: Unemployment rate



Employment rate[20]

After a sharp decline in the employment rate following the earthquakes, the rate for greater Christchurch has trended upwards, surpassing the national rate, and is now well above pre-earthquake levels. Figure 6 shows the employment rate for greater Christchurch fell from 67 per cent in September 2010 to 63 per cent in September 2011 before recovering to 67.3 per cent in December 2012 and climbing to 70.9 per cent in March 2014. This rate of 70.9 per cent is notably higher than the 65.2 per cent recorded nationally in the same quarter. The rate of employment in greater Christchurch is expected to increase further as the rebuild gains momentum.

Figure 6: Employment rate

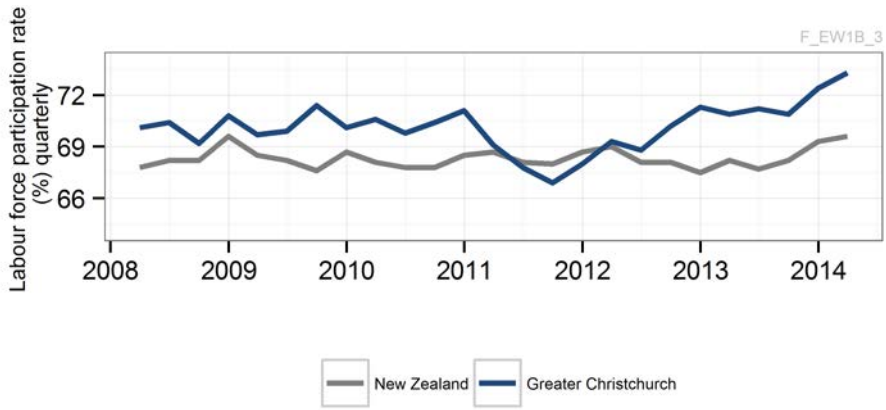


Labour force participation rate[21]

Figure 7 shows that the proportion of the greater Christchurch population who were in the labour force decreased significantly in the period after the February 2011 earthquake but has subsequently tracked upwards and is now above pre-quake levels. The labour force participation rate in greater Christchurch dropped to 66.9 per cent in September 2011. The rate returned to pre-quake levels in the March 2013 quarter (70.9 per cent) and reached 73.3 per cent in March 2014 (compared with 69.6 per cent across New Zealand).

There may be many reasons for this effect. For example, some people may have taken time out from seeking employment to focus on their family's wellbeing in the months following the major earthquake but are now gaining or looking for employment opportunities generated by the rebuild.

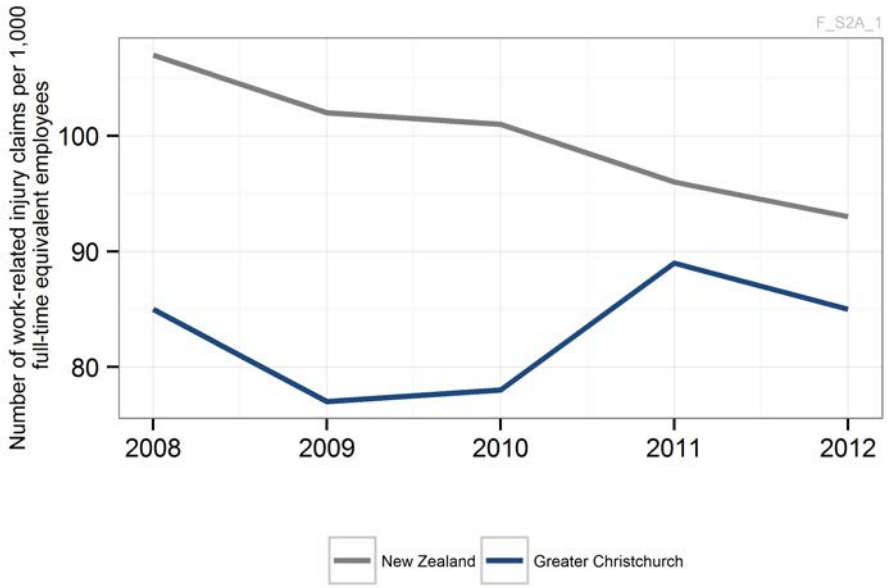
Figure 7: Labour force participation rate



Work-related injuries

Figure 8 shows that nationally the incidence rate of work-related injury claims has steadily decreased since 2008. In comparison, the pattern in greater Christchurch has been more variable. The rate dropped in 2009 and remained relatively stable over 2009 and 2010 at approximately 78 accidents per 1,000 full-time equivalent positions (FTEs) per annum. However, the rate increased to 89 per 1,000 in 2011 before declining to 85 per 1,000 in 2012. This indicator will need to be carefully monitored during the rebuild as the construction industry typically has a high incidence rate of injury.[22]

Figure 8: Number of work-related injury claims per 1,000 full-time equivalent employees



Summary

Overall the rebuild is delivering significant employment opportunities in greater Christchurch, as evidenced by improving trends in the most recent employment data. The opportunity exists to ensure that many people benefit from labour market opportunities through the rebuild, including females and those aged 15–19 years.

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more from CERA about the Canterbury economic indicators: cera.govt.nz/economic-indicators

Find out more about the Canterbury Skills and Employment Hub: www.opportunitycanterbury.org.nz

Find out more about jobs in the rebuild: www.jobseeker.co.nz/Rebuild-Opportunities-Canterbury-jobs

Find out more about jobs for young people: www.facebook.com/BBCanty

Find out more about jobs for disabled people:

www.dol.govt.nz/er/pay/exemptions/Employment%20Supports%20for%20People%20with%20Disabilities.pdf

Find out more about economic development in Christchurch city: www.cdc.org.nz

Find out more about economic development in the Waimakariri district: www.northcanterbury.co.nz/business/ENCInfo

Find out more about economic development in the Selwyn district: www.selwyn.govt.nz/services/economic-development

Technical notes

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013, April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Beneficiaries obtaining work

Data source:	Ministry of Social Development's (MSD) database
Data frequency:	Monthly
Data complete until:	January 2014

Notes: Until 15 July 2013, cancellations and clients are calculated from the total number of working-age benefits of the following types: 1) Domestic Purposes Benefit (DPB) and DPB-related benefits, which include DPB-Caring for Sick or Infirm, DPB-Sole Parent, DPB-Woman Alone and Emergency Maintenance Allowance; 2) Invalid Benefit; 3) Sickness Benefit and Sickness Benefit Hardship; and 4) Unemployment Benefit and Unemployment Benefit Hardship. Cancellations in these benefit types were counted if they were cancelled for the reason 'Obtained work'.

From 15 July 2013, benefit categories have changed. Cancellations and clients are now calculated from the total number of working-age benefits of the following types: 1) Emergency maintenance allowance ; 2) Job seeker related; 3) Sole parent support; and 4) Supported living payments related.

For more information on benefit changes, see:

www.workandincome.govt.nz/individuals/benefit-changes The Canterbury Work and Income region presented here excludes the Ashburton service area.

Note that the eligibility requirements for the Unemployment Benefit are different from the definition of unemployed in the Household Labour Force Survey (HLFS). See MSD for information about Unemployment Benefit eligibility requirements: www.statistical-report-2010.msd.govt.nz/main+benefits/unemployment+benefits/eligibility+%96+unemployment+benefits.

Note that these benefit data may be affected by earthquakes as some service centres had interrupted services following the February 2011 earthquakes. These data are not adjusted for external factors affecting employment (eg, government policy or recession).

Data for the month of July 2013 have been excluded from figures 1, 2, 3 and 4. This is due to benefit changes in mid July, which would mean that benefit categories would be understated if they were included during that month.

Employment, unemployment and labour force participation rate

Data source: Household Labour Force Survey (HLFS), Statistics New Zealand

Data frequency: Quarterly

Data complete until: March 2014

Notes: The HLFS interviews approximately 32,000 people or 16,000 private households in New Zealand. Each person is interviewed for eight quarters (two years) so that changes in labour market can be measured. Interviews are carried out each week of the quarter so that the data are an average for that quarter.

The greater Christchurch area includes Christchurch City, Waimakariri District and Selwyn District Councils and is below survey design level. Data are indicative only and should be interpreted cautiously.

Data for greater Christchurch during 2011 are subject to slightly higher sampling error than normal owing to interruption of surveying.

The HLFS is a sample survey and therefore subject to sampling error. Estimates based on populations fewer than 1,000 are suppressed as they are subject to sampling errors too high for most practical purposes. Estimates of numbers have been rounded to the nearest hundred.

‘Unemployed’ refers to all people in the working-age population who during their reference week were without a paid job and were available for work and had either actively sought work in the past four weeks, or had a new job to start within four weeks. A person whose only job search method in the previous four weeks has been to look at job advertisements in newspapers is not considered to be actively seeking work.

The ‘unemployment rate’ is the number of unemployed people expressed as a percentage of the labour force.

‘Employed’ refers to HLFS respondents who, during the survey reference week, had: 1) worked for one hour or more, for pay or profit, in the context of an employee–employer relationship or self-employment; 2) worked without pay for one hour or more in work that contributed directly to the operation of a farm, business or professional practice owned or operated by a relative; or 3) had a job but were not at work due to a) own illness or injury, b) personal or family responsibilities, c) bad weather or mechanical breakdown, d) direct involvement in an industrial dispute, or e) leave or holiday.

The ‘employment rate’ refers to the employed, as a percentage of the working-age population.

The ‘labour force’ refers to members of the working-aged population who, during the survey reference week, were classified as ‘employed’ or ‘unemployed’.

The ‘labour force participation rate’ refers to the total labour force expressed as a percentage of the working-age population.

Work-related injury claims

Data source:	Injury statistics - Work-related claims, Statistics New Zealand
Data frequency:	Yearly
Data complete until:	2012

Notes: Injury Statistics – Work-related Claims measures claims accepted by the Accident Compensation Corporation (ACC) for work-related injuries. The statistics are based on one claim for each person for each injury event. Claims are only included if some costs are recorded.

Full-time equivalent employee information from the Household Labour Force Survey is used to calculate the number of work-related injury claims per 1,000 FTEs. Full-time equivalent employees (FTEs) is a standard measure used in labour force statistics, for example, to calculate average weekly earnings. FTEs are calculated as the number of full-time employees plus half the number of part-time employees.

The data in this information release are not a definitive count of all work-related injuries. This is because not all work-related injuries result in a claim to ACC. The 2012 data are provisional and subject to change.

Endnotes

[1] Milligan, S., Fabian, A., Coope, P. and Errington, C. (2006). *Family wellbeing indicators from the 1981–2006 New Zealand Censuses.* Statistics NZ, University of Auckland, University of Otago.

[2] Waddel, G. and Burton, A.K. (2006). *Is working good for your health and wellbeing?* Department of Work and Pensions, UK Government.

[3] Keefe, V. et al. (2002). Serious health events following involuntary job loss in New Zealand meat processing workers. *Journal of Epidemiology* 31: 1155–61.

Blakely, T. et al. (2003). Unemployment and suicide: evidence for a causal association? *Journal of Epidemiological Community Health* 57: 594–6001.

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All cited in Waddel et al. (2011). *Christchurch city health profile*, p 55.

[4] Junaker, R. (1991). Unemployment and mortality in England and Wales: a preliminary analysis. *Oxford Economics Papers*, 43: 305–20.
Mathers, C., and Schofield, D. (1998). The health consequences of unemployment: the evidence. *Medical Journal of Australia* 168: 178–82.

[5] Waddel et al. (2011). *Christchurch city health profile.*

[6] Labour and Immigration Research Centre, Department of Labour. (2011). *A changing landscape: the impact of the earthquakes on Christchurch workplaces*. Retrieved from www.dol.govt.nz/research

[7] Statistics New Zealand (2014). 2013 Census QuickStats about greater Christchurch, p 26. Retrieved from www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-greater-chch.aspx

[8] See endnote 7.

[9] See endnote 7.

[10] ANZ Regional Trends (February 2013). Retrieved from http://www.anz.co.nz/commercial-institutional/economic-markets-research/regional-trends/

[11] Jobs Online Index. http://www.dol.govt.nz/publications/jol/reports/jol-mar-14/

[12] Retrieved from www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/HouseholdLabourForceSurvey_HOTPMar14qtr.aspx

[13] These figures are not seasonally adjusted.

[14] Statistics New Zealand. Injury statistics – work-related claims: 2010. Retrieved from www.stats.govt.nz/browse_for_stats/health/injuries/InjuryStatistics_HOTP10/Commentary.aspx#occupation

[15] 'Christchurch area' refers to the areas covered by the Ashburton, Hurunui, Selwyn and Waimakariri district councils and Christchurch City Council.

[16] Retrieved from internal correspondence from the Ministry of Social Development.

[17] www.mbie.govt.nz/news-and-media/news-from-around-mbie/tertiary-education-strategy-2014-19-released

[18] See technical notes relating to the Household Labour Force Survey (Statistics New Zealand).

[19] This rate is not seasonally adjusted.

[20] See note 19.

[21] See note 19.

[22] Statistics New Zealand: internal communication 21 May 2014.

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Household income

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is household income important?

Having sufficient household income contributes substantially to a family's wellbeing. With an adequate income, a household can get essential and non-essential items such as quality housing, food, health services and transport and members of a household can participate in their community through social and recreational activities.

Where parents have sufficient income, the children in a household are more likely to experience wellbeing in virtually every dimension that social scientists measure.[1] Where there is insufficient income, children are more likely to experience negative outcomes such as lower educational achievement, poorer health, poorer economic status in their adult life, and behavioural problems.

Rises in household income have wider economic benefits through helping the economy to grow and increasing a country's tax base.

How was household income impacted by the earthquakes?

The earthquakes caused significant damage to the economy.

A quarter of the respondents in the 2012 CERA Wellbeing Survey experienced potential or actual loss of employment or income as a result of the earthquakes.[2] In addition, 45 per cent of respondents reported 'additional financial burdens (eg, replacing damaged items, additional housing costs, and supporting family members)' as a result of the earthquakes.[3]

On the other hand, 18 per cent of residents experienced business and employment opportunities as a result of the earthquakes.

What is happening now?

The rebuild is fuelling economic growth in the region. In turn, this growth is likely to increase household incomes. Canterbury continues to be the fastest-growing region in the country by a significant margin – it is estimated that its economy grew by 7.5 per cent during the year to December 2012. While this rate eased back to 5.6 per cent for the year to December 2013, it compares favourably with a national measure of year on year growth of 4.4 per cent in 2013.[4]

However, there is heavy demand for housing from displaced residents and workers coming to the city for the rebuild. This demand is driving up house prices and rents, which could potentially reduce median equivalised weekly income after housing costs.

According to the April 2014 CERA Wellbeing Survey, 26 per cent of residents said that additional financial burdens as a result of the earthquakes continue to negatively impact on their everyday lives. For 15 per cent, this impact was moderate or major.

What are the indicators telling us?

This report measures household income in two ways:

- median and 20th percentile equivalised gross weekly household income
- median weekly household income net of housing costs for renters and home owners.

Median and 20th percentile equivalised gross weekly household income

Median gross household income is the dollar amount that divides all households into two equal groups based on their income. Half the households have an income above that amount, and half the households have an income below that amount.

The 20th percentile for household income is the dollar amount that divides households into the 20 per cent of households that have an income below this amount and the 80 per cent that have an income higher than this amount.

Household income has been 'equivalised' which means the dollar amounts have been adjusted based on the age and number of children in the household.

Figure 1 shows that the median equivalised gross weekly household income has increased for greater Christchurch and New Zealand overall from 2008 to 2013.

Median equivalised weekly household income for greater Christchurch was $1,126 in 2008 and increased to $1,313 in 2013. During the same five years, the median equivalised weekly household income for New Zealand overall was slightly lower, reaching $1,173 in 2013.

Overall, greater Christchurch has had a 16.6 per cent increase in median equivalised gross weekly household income between 2008 and 2013, while New Zealand experienced an 8.1 per cent increase over this period. Much of the increase recorded for greater Christchurch occurred in the post-earthquake period between 2012 and 2013 (11 per cent or an increase in the median income of $132 per week). In comparison, prior to the earthquakes between 2008 and 2010 median equivalised gross household income in greater Christchurch increased by less 1 per cent.

Figure 1: Median equivalised gross weekly household income

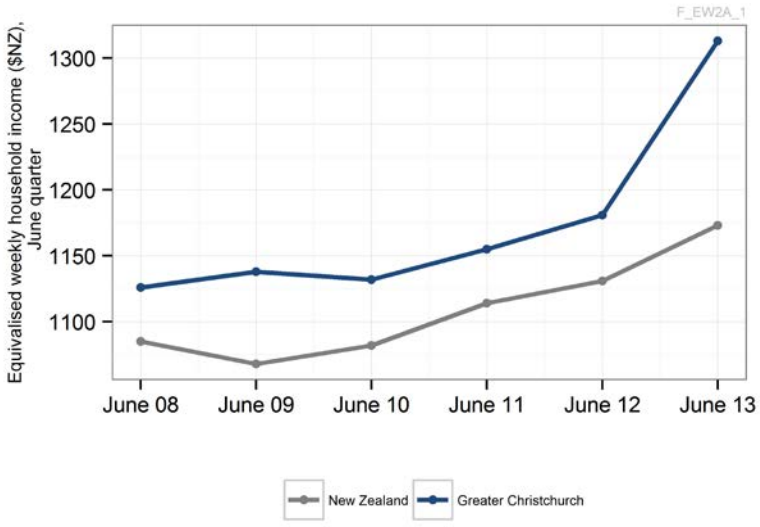
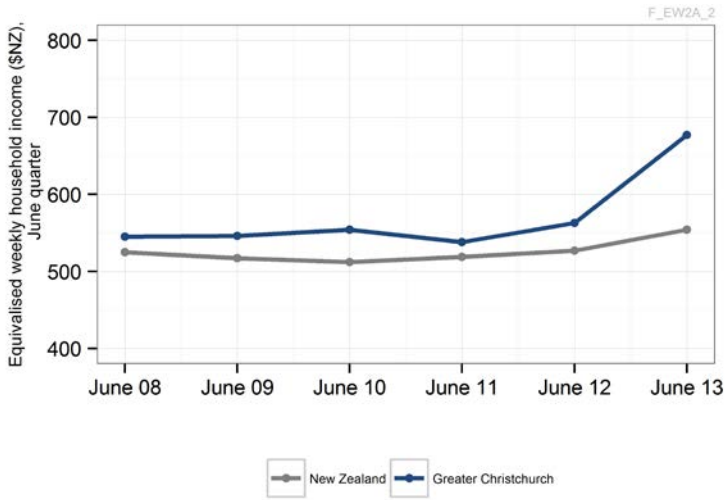


Figure 2 shows that the 20th percentile for equivalised gross weekly household income increased by 24.2 per cent in greater Christchurch, from $545 in 2008 to $677 in 2013. This compares with a 5.5 per cent increase across New Zealand from $525 to $554 over this period. Again, Christchurch's greatest annual increase (20.2 per cent) occurred between 2012 and 2013 ($563 to $677). Nationally there was a 5.1 per cent increase between 2012 and 2013, from $527 to $554.

Figure 2: 20th percentile equivalised gross weekly household income



Median weekly household income net of housing costs

This is the median amount that households have in gross weekly income after housing costs have been deducted. Home owners have higher median weekly household incomes than those who rent, both in greater Christchurch and in New Zealand as a whole.

Figure 3 shows the median equivalised weekly household income net of housing costs for greater Christchurch home owners increased 7.5 per cent, from $1,227 in 2010 to $1,319 in 2012, after a dip in 2011. Between 2012 and 2013 the figure dropped by 2.7 per cent to $1,284.

Figure 3: Median equivalised weekly household income net of housing costs for home owners

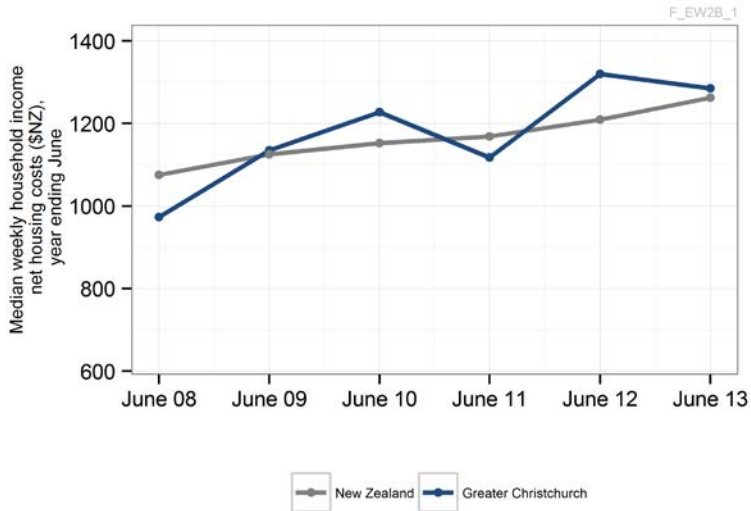


Figure 4 shows that renters in greater Christchurch experienced a decline in median equivalised weekly household income net of housing costs between 2010 ($796) and 2011 ($634). This was followed by an increase between 2011 and 2012 ($878) and this increase continued into 2013 ($894). Overall, there was a 45 per cent increase in median equivalised weekly household income net of housing costs for renters between 2008 and 2013 in greater Christchurch, compared with 17 per cent nationally. The dip in median equivalised weekly household income net of housing costs from 2010 to 2011 was experienced across New Zealand and therefore may be due to factors impacting on those who rent other than the effects of the earthquakes.

Figure 4: Median equivalised gross weekly household income net of housing costs for renters

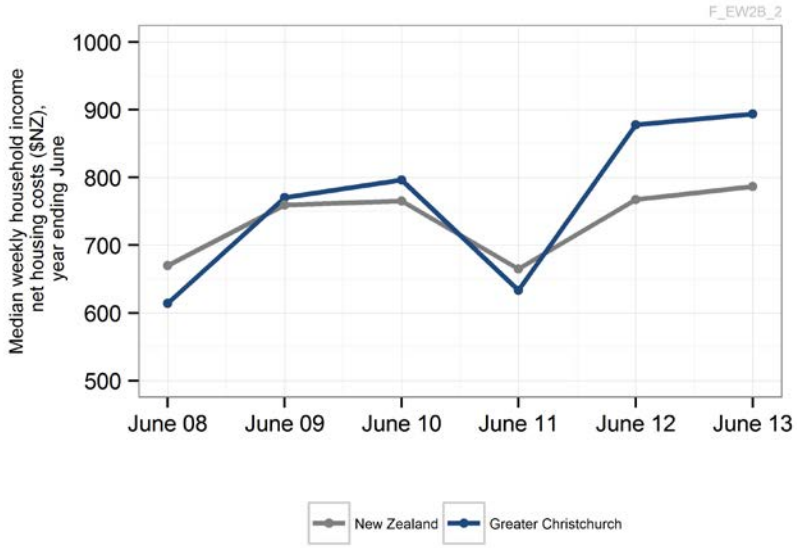
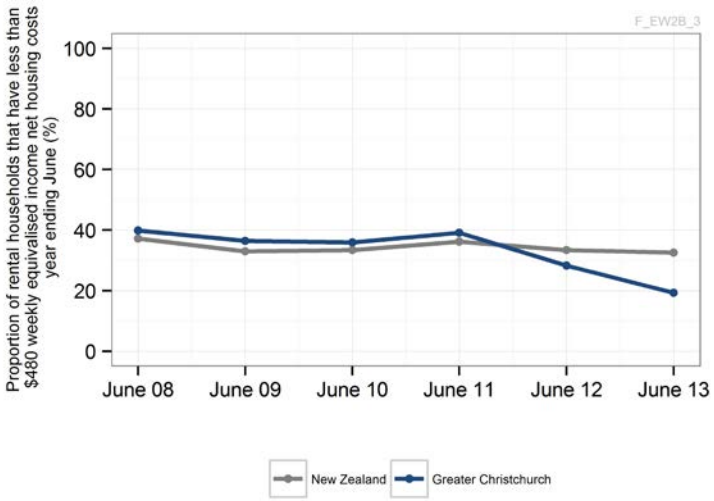


Figure 5 shows the proportion of renting households in greater Christchurch with a gross income of less than $480 per week after rental housing costs are paid.

It shows that low income earners living in rental accommodation have also experienced income increases at a higher rate than their housing costs. The proportion of renting households with a gross income of less than $480 per week after rental housing costs are paid dropped from 39 per cent in 2011 to 19 per cent in 2013. Nationally there has been little change during this period.

This decrease indicates that there are fewer residents of greater Christchurch who have less than $480 per week after rental housing costs.

Figure 5: Proportion of renting households that have less than $480 of gross weekly household income net housing costs



Summary

Taken together, the indicators of household income presented in this report show that incomes have been increasing at roughly the same rate as for the rest of New Zealand, with the exception of 2013, when incomes appear to have increased notably in greater Christchurch. When income after housing expenses (particularly renters) is taken into account, residual income has generally increased faster in greater Christchurch than in the rest of New Zealand.

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the Canterbury economic indicators: www.cdc.org.nz and http://cera.govt.nz/economic-indicators

Find out more about the standard of living in Christchurch city: http://www.ccc.govt.nz/cityleisure/statsfacts/statistics/economicstandardofliving.aspx

Technical notes

CERA Wellbeing Survey

Data source: Canterbury Earthquake Recovery Authority

Data frequency: Six-monthly September 2012, April 2013, September 2013, April 2014

Data complete until: April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Median and 20th percentile gross weekly household income

Data source: New Zealand Income Survey (NZIS), Statistics New Zealand

Data frequency: Annually during the June quarter

Data complete until: June 2013 quarter

Notes: The NZIS is run annually during the June quarter as a supplement to the Household Labour Force Survey (HLFS). As a supplement, the NZIS is asked of all respondents to the HLFS. In the HLFS, approximately 15,000 private households (approximately 29,000 individuals) in New Zealand are interviewed.

Equivalisation is of gross weekly household income using the Revised Jensen Scale. Adult and child definitions are consistent with Household Economic Survey treatment (see below).

Households composed exclusively of people outside the ages 18–64 years are excluded.

Dollar values presented are nominal, which means they represent the currency value each year they are reported, but they have not been adjusted for inflation. Therefore the value (or 'purchasing power') of one dollar may change from year to year.

Greater Christchurch is the aggregation of Christchurch City, Waimakariri District and Selwyn District Councils and is below survey design level. Data are indicative only and should be interpreted cautiously.

Data for greater Christchurch in 2011 are subject to slightly higher sampling error than normal owing to interruption of surveying.

Weekly household income net housing costs

Data source: Household Economic Survey (HES) and HES (Income), Statistics New Zealand

Data frequency: Yearly. HES results are 2007, 2010 and 2013, and HES (Income) results are 2008, 2009, 2011, 2012 and 2013

Data complete until: June 2013

Notes: The HES is conducted every three years, and collects information on household expenditure and income, as well as a wide range of demographic information. A shorter version of the survey, HES (Income), is collected in the two years between the full HES.

Greater Christchurch is the aggregation of Christchurch City, Waimakariri District and Selwyn District Councils and is below survey design level. Data are indicative only and should be interpreted cautiously.

Households that are 'Not owned' cover dwellings where the household does not own the dwelling, and either pays rent or lives there rent-free. 'Owned' households cover dwellings that are held (or not held) in a family trust, regardless of whether mortgage payments are made or not made for the dwelling.

Household income is from total regular and recurring income sources, and is gross (before tax) income. Weekly household income net of housing cost is defined as Gross Household Income less Housing Cost. Differences between HES and HES (Income) mean that caution should be used when comparing the results.

Dollar values presented are nominal, which means they represent the currency value each year they are reported, and so have not been adjusted for inflation. Therefore the value (or 'purchasing power') of one dollar may change from year to year.

Housing costs include mortgage principal repayments, mortgage interest payments, mortgage application fees, rent payments, other payments associated with renting (eg, bonds paid in the last 12 months), property rates payments (both regional and local government), and payments associated with building-related insurance.

Endnotes

[1] Meyer, S. (2002). *The influence of parental incomes on children's wellbeing*. Ministry of Social Development, p 65.

[2] For information on the CERA Wellbeing Survey, refer to the technical notes.

[3] For 26 per cent of respondents, additional financial burdens have 'moderately' or 'majorly' negatively impacted their everyday life.

[4] ANZ Regional Trends (February, 2013 and 2014). Retrieved from www.anz.co.nz/resources/b/c/bc26fc804e9abfe19984fdfa34380e44/ANZ_Regional_Trends_20130219.pdf?MOD=AJPERES&CACHEID=bc26fc804e9abfe19984fdfa34380e44 and www.anz.co.nz/resources/7/8/78042a41-2126-4f59-9723-e2728eca4130/RegionalTrends-20142502.pdf?MOD=AJPERES&CACHEID=78042a41-2126-4f59-9723-e2728eca4130

Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Housing affordability and availability

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why are housing affordability and availability important?

Access to housing is a basic human need. There is also growing recognition that good-quality, affordable housing is essential to strong communities.

Affordable housing is usually defined as housing (rented or owned) that costs no more than 30 per cent of a household's gross income.[1]

Affordability and availability are closely linked. Where housing supply is low and demand for houses is high, the market increases prices. People with limited income may find it more difficult to obtain affordable housing.

Changes in relative levels of affordability also affect the demand for different kinds of housing. For example, if home ownership becomes less affordable, more households will rent.

Poor-quality or overcrowded housing can affect people's mental and physical health.[2] In particular, housing that is cold, damp and mouldy significantly worsens the health of older people, small children and people who already have health problems.[3] Adequate housing is particularly important for children as poor-quality accommodation can limit their educational attainment.[4]

How were housing affordability and availability impacted by the earthquakes?

As a result of the earthquakes, there were an estimated 171,000 properties in greater Christchurch with a dwelling damage claim.[5] It is estimated that over 12,000 properties were seriously damaged and of these, an estimated 4,400 outside the red zone were uninhabitable because they required major repairs or rebuild.[6] An additional 8,062 properties were classified as residential red zone. Over half the respondents (51 per cent) in the 2012 CERA Wellbeing Survey reported having to 'live day to day in a damaged home' and 22 per cent said this had a negative impact on their everyday life.

Housing New Zealand (HNZC) and Christchurch City Council (CCC) provide social housing to people with a serious housing need. Prior to the earthquakes, HNZC had 6,122 properties in greater Christchurch, which housed approximately 18,000 people.[7] Ninety-five per cent of HNZC's properties were damaged in the earthquakes; 550 were uninhabitable including 215 in the residential red zone (188 in Christchurch and 27 in Kaiapoi).

CCC is the second-biggest landlord in New Zealand with 2,675 city housing rental units. Prior to the earthquakes, CCC had 2,649 units of which 97 per cent were damaged.[8] At the current time, 84 per cent of the portfolio is open while 444 units remain uninhabitable. This consists of 331 units subject to repair or rebuild and 113 units in the residential red zone. Detailed engineering evaluations have been completed on all units to determine whether they were structurally able to withstand any earthquakes in the future. Unoccupied units have been prioritised for evaluation and repair/rebuild as a way of increasing the supply of units available for rent.

After each of the major earthquakes, the immediate response of both organisations was to establish the wellbeing of tenants and ensure properties had access to essential services. Urgent repairs were made and, where necessary, tenants were re-housed.

Recovery for greater Christchurch

International evidence indicates that the quantity of low-cost, private rental accommodation reduces after a disaster.[9] This is partly due to the loss of properties that are not rebuilt, and also the higher rents that landlords can charge for a house that has been repaired to a higher standard.

According to tenancy bonds data, in the year to January 2011 there were 10,172 bonds lodged with weekly rents below $300, but in the year to January 2014 only 3,969 such bonds were lodged.[10] This suggests there has been a 60 per cent reduction in the supply of low-cost private rental stock.

In addition to private rental housing, some niche forms of housing were particularly affected. For example, at least 250 beds in boarding houses, bedsits and low-cost, one-bedroom units in the east of the inner city were lost.[11] These dwellings predominantly housed vulnerable single men with social and mental health issues.

What is happening now?

Housing and wellbeing

There is evidence that earthquake-related housing and insurance issues can act as 'secondary stressors' that have a direct impact on individual and community resilience. Secondary stressors are circumstances, events or policies that are indirectly related to the primary stressor (the earthquakes).[12] Secondary stressors typically persist longer and can delay people's recovery. International experience shows that delays in insurance and housing recovery are secondary stressors, as is living in temporary accommodation.[13]

In the April 2014 CERA Wellbeing Survey, 21 per cent of respondents reported that dealing with insurance issues had a negative impact on their everyday life, down from 37 per cent in September 2012. Respondents continued to report a low level of satisfaction with the communication and information received from the Earthquake Commission (EQC) (29 per cent compared with 25 per cent in 2012) and private insurers (34 per cent compared with 27 per cent in 2012). Nineteen per cent said 'decisions about house damage, repairs and relocation' were still having a strong negative impact on their everyday lives, compared with 29 per cent in 2012.

Housing and insurance-related issues are having significant impacts on wellbeing but there has been progress in resolving earthquake related dwelling claims. By the end of the first quarter of 2014, 109,460 of the approximately 149,000 under-(EQC) cap property claims had been settled. Of the 22,455 over-cap claims lodged with private insurers, 44 per cent (9,870 property claims) had been settled. At the combined level (i.e. under and over-cap), dwelling claims associated with 119,335 properties had been resolved, representing 70 per cent of the approximately 171,000 properties with earthquake dwelling claims in greater Christchurch.

'Let's Find & Fix' is a community-led initiative launched in April 2014, which aims to identify earthquake-damaged homes that need temporary repairs to keep them safe, secure and weather tight, through the use of media, mail drops and door knocking. This campaign, initiated by Canterbury Communities' Earthquake Recovery Network (CanCERN), is supported by CERA, Red Cross, Community Energy Action, EQC and Insurance Council of New Zealand members. Community Energy Action is leading the 'fix' phase of the campaign. By 30 May 2014, approximately 4,909 houses had been door knocked as part of this campaign. Of this total, 882 had been identified as meeting the criteria for the initiative.

Housing affordability and availability

Pressures are emerging that are impacting on housing affordability and availability, particularly in the rental market. These pressures include the permanent relocation of households from the residential red zone and other homes that cannot be repaired or rebuilt, displaced households requiring temporary accommodation while their homes are repaired or rebuilt, and the arrival of the labour force that is assisting with the rebuild.

CERA and the Ministry of Business, Innovation and Employment (MBIE) are jointly delivering the Housing Recovery Programme. This programme considers the market's response to the housing issues arising from the recovery and coordinates central and local government housing activities. Activity is well underway to support the current and future needs for affordable and available housing. This work includes:

- enabling and supporting the provision of short- and medium-term solutions to meet the need for temporary accommodation for displaced residents
- supporting the delivery of social and affordable housing and its impact on vulnerable populations
- changing or developing regulations to encourage an increase in the supply of housing.

Short- and medium-term solutions for temporary accommodation

After the February 2011 earthquake, the exact number of people needing urgent accommodation was unknown. MBIE commissioned 350 campervans to provide temporary shelter for displaced residents and HNZC managed an 0800 service to match displaced residents with unused private homes or holiday homes. However, uptake of these services was relatively low as it seems people tended to stay with friends and family.

By August 2011 the Government established its first temporary village for displaced residents in Kaiapoi, followed by Linwood Park, Rawhiti Domain and Rangers Park. These villages are for home owners and renters whose homes are uninhabitable and who need accommodation while their home is repaired or rebuilt. As at 31 March 2014, there were 110 housing units in these villages with 14 more planned for the Rangers Park village. A total of 558 households had used these villages in the period from July 2011 to 31 March 2014 and the median stay for vacated tenants was 43 nights.

The Government also recognised that insurance cover for home owners may expire before some are able to return to a rebuilt or repaired home. Temporary Accommodation Assistance was introduced to assist with rent, board or motel stays so that displaced home owners do not need to cover two sets of accommodation costs. As at 31 March 2014, 944 households were receiving Temporary Accommodation Assistance at a total cost of $258,745 weekly. In total, 2,425 households (as at 31 March 2014) have received Temporary Accommodation Assistance since 2011.

The Earthquake Support Coordination Service was established to support displaced individuals and families directly affected by the earthquakes. This service provides information and connects people with the services they may need. By 31 March 2014, 8,682 individuals and families had used this service. All of the services listed above are provided through the Canterbury Earthquake Temporary Accommodation Service, which is operated jointly by MBIE and the Ministry of Social Development. In 2014 the Government announced funding that will see the continuation of these support services over the next four years.

Social and affordable housing

By December 2012, HNZC had repaired and tenanted 212 vacant earthquake-damaged homes. In April 2013, HNZC reached a $320 million settlement with insurers over 5,559 homes damaged in the Canterbury earthquakes which enabled the agency to develop its repair and rebuild programme.

HNZC announced that up to 5,000 of its earthquake-damaged properties would be repaired by the end of December 2015 (1,188 repairs had been completed as at May 2014). In addition, up to 700 new houses will be built during the same period to replace housing lost due to the earthquakes, including red-zoned housing. There will also be a major reconfiguration and redevelopment of Housing New Zealand's assets to deliver multiple housing options for the future over 10 years, which will refresh HNZC's portfolio and create opportunities for the affordable housing market.[14]

The Government's Social Housing Fund is providing $21 million over three years (2013–2015), matched by $10 million from the Canterbury Community Trust to support non-government provision of new social and affordable housing in Canterbury. Funding was announced in October 2013 for three housing projects which will deliver a total of 51 homes at an investment of $13 million. Further funding was announced in March 2014 for five community housing providers to receive $14 million to build a further 75 units in Christchurch.

New social housing reforms have been passed by the Government. The way services are delivered has changed, with multiple agencies now taking responsibility for social housing provision. These changes came into effect on 14 April 2014.[15]

MBIE's March 2013 housing pressures report examined how much overcrowding and homelessness was created by the earthquakes.[16] While acknowledging that there are no reliable statistics, the report estimates that between 5,510 and 7,405 residents are without secure housing, up from 3,750 before the earthquakes. MBIE will continue to monitor housing market indicators, including rent and house prices.[17]

CCC is aiming to have repaired or replaced the remaining 331 closed social housing units by June 2016 and aims to replace the additional 113 units that were red zoned though intensification of existing sites.

In 2014 the Government announced a Housing Accord with Christchurch City Council to boost the supply of temporary and affordable housing, improve supply and quality of social housing, and remove regulatory barriers to the development of more residential housing.

Regulations to encourage an increase in the housing supply

Significant land has been freed up to enable rapid rebuilding, with thousands of sections rezoned in greater Christchurch since the earthquakes. The number of building consents for new dwellings is rising at a higher rate than the New Zealand average.[18]

Regulatory changes have been made to District Plans to streamline the design and consenting process so that a range of temporary accommodation can be developed for the migrant workforce.

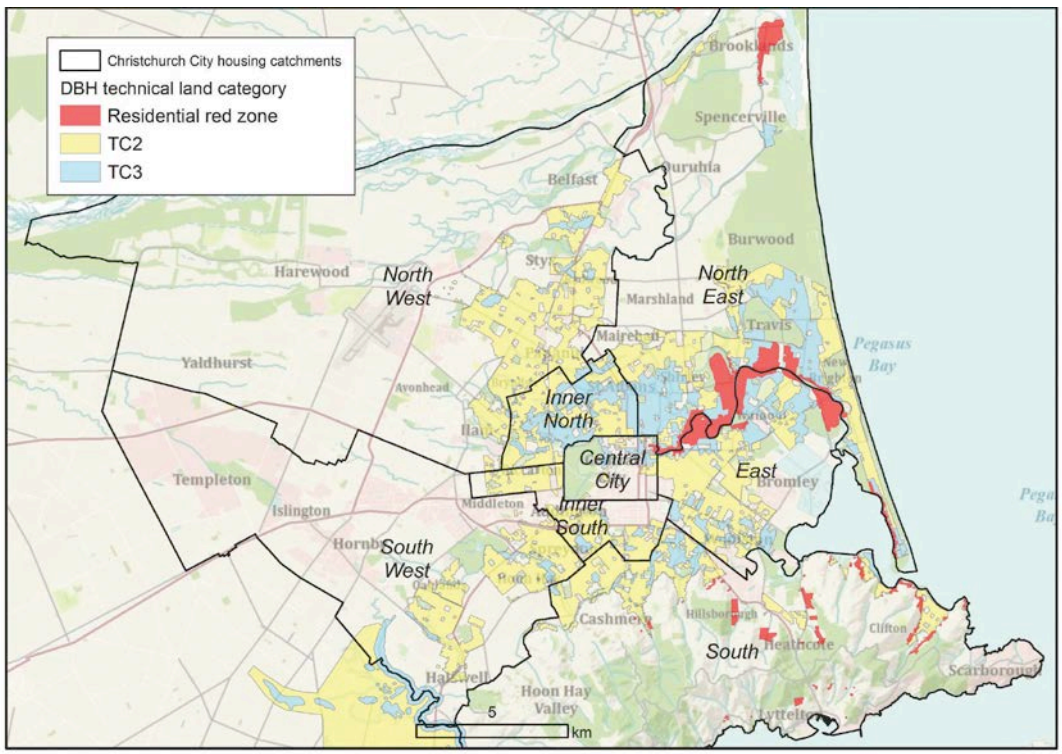
In November 2012 the Minister for Canterbury Earthquake Recovery also directed Environment Canterbury to prepare a Land Use Recovery Plan for greater Christchurch with support from Christchurch City Council, Selwyn and Waimakariri District Councils, Te Rūnanga o Ngāi Tahu, New Zealand Transport Agency and CERA.

The Land Use Recovery Plan responds to the impacts of the earthquakes on residential and business land use, and provides a framework for rebuilding and future development. It puts land use policies and rules in place to assist in the rebuilding and recovery of communities (including housing and businesses) that have been disrupted by the earthquakes, helping to achieve the vision of the *Recovery Strategy for Greater Christchurch: Mahere Haumanutanga o Waitaha*.[19] The Land Use Recovery Plan took effect on 6 December 2013.[20]

What are the indicators telling us?

The following indicators for housing are, where possible, broken down into the eight geographic areas of Christchurch city shown in map 1 below, as well as Selwyn and Waimakariri districts, which together form the greater Christchurch area. Please refer to Map 1 when reading this section.

Map 1: Geographic areas of Christchurch city



Houses and sections

Trends in affordability and availability within the house and section market are being measured using the following indicators:

- mean sale price for houses as an indicator of affordability, which can also reflect changes in availability
- the number of houses and the number of sections sold each month in greater Christchurch as indicators of changes in demand and supply.

Figure 1 shows that monthly mean house sale prices remained largely stable before and immediately after the earthquakes for most of greater Christchurch. However, pressures have subsequently pushed up prices throughout the city.

Taking a longer view, Table 1 shows that some areas within greater Christchurch have had significant increases in mean house sale prices. Between the three months to November 2010 and the three months to November 2013, prices have risen most notably in the west (North West and South West) and Inner South of the city, and at a slower pace in the east (East and North East) and Inner North, where much of the worst liquefaction occurred. Selwyn and Waimakariri districts have experienced large price increases as people move from Christchurch city.

Looking at the change in mean house sales prices in the period following the first earthquake, between the three months to November 2010 and the three months to November 2013, mean prices rose 36.4 per cent in the South West, 32.5 per cent in the North West and 27.4 per cent in the Inner South. Overall, the mean house price increased by 16.8 per cent across Christchurch city, 32.1 per cent in Selwyn district and 24.4 per cent in Waimakariri district in this period.

Figure 1: Mean sale price for houses

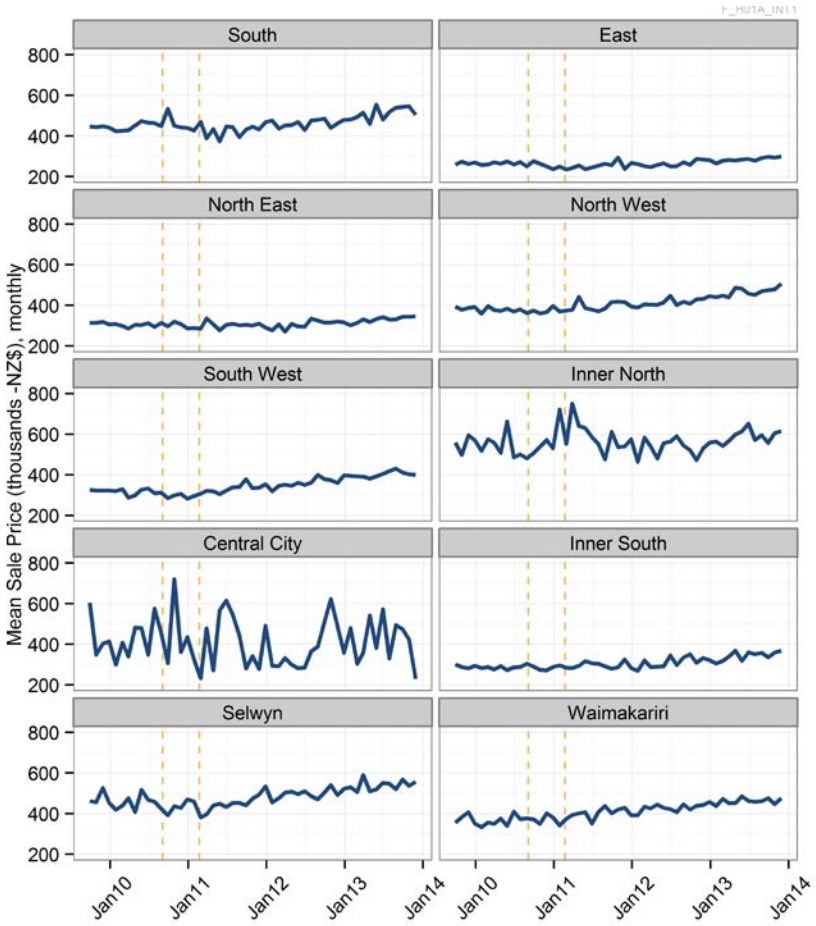


Table 1: Change in mean house prices from November 2010 to November 2013[21]

Area	3 months to the end of November 2010	3 months to the end of November 2013	% change
South	$475,075	$531,081	11.8
East	$263,356	$296,601	12.6
North East	$308,489	$344,612	11.7
North West	$367,595	$487,083	32.5
South West	$296,833	$404,850	36.4
Inner North	$538,098	$592,755	10.2
Central City*	$462,662	$375,507	–18.8*
Inner South	$278,370	$354,765	27.4
Christchurch city (total)	$378,304	$442,011	16.8
Selwyn district	$419,278	$553,833	32.1
Waimakariri district	$374,782	$466,266	24.4

* Low sample size means this area is measured with significant measurement error.

Figure 2 shows the number of monthly house sales in Waimakariri district increased considerably after the February 2011 earthquake, peaking at 185 sales in September 2011. House sales also grew in Selwyn district, reaching a peak of 111 in March 2012. Although still generally higher than pre-earthquake levels, the growth in monthly house sales subsequently eased in both districts during 2012 and 2013.

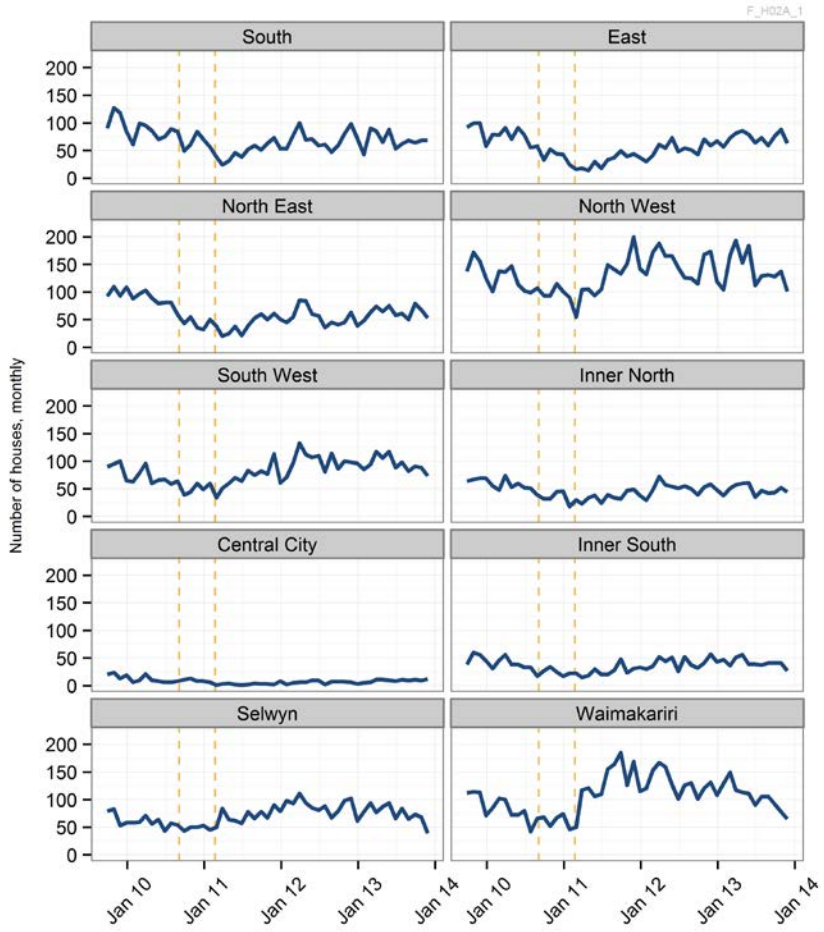
House sale figures aggregated annually for the year to November show a similar pattern. Between 2010 and 2011, sales in Waimakariri district increased by 62 per cent from 877 to 1,423 and by 9 per cent to 1,550 in 2012. In 2013 house sales reduced by 18 per cent to 1,263.

Between 2010 and 2011, house sales in Selwyn district increased by 20 per cent from 663 to 794 and by 35 per cent to 1,075 in 2012. In 2013 house sales dropped by 17 per cent to 886. In comparison, between the year to November 2010 and the year to November 2011, the number of house sales in Christchurch city declined from 6,806 to 5,311 (by 22 per cent). Numbers picked up in 2012, increasing by 38 per cent to 7,334 before shrinking back slightly (0.4 per cent) to 7,301 in 2013.

Across the geographic areas within Christchurch city, a pattern emerges of a market that had declining sales in the pre-earthquake period followed by a growth in sales in the year after. This was particularly noticeable in the North West and South West of the city. However, the rate of increase appears to have levelled off in a number of areas during 2012 and 2013 (Figure 2).

When viewed together, Figures 1 and 2 indicate that while house sales increased in 2011, there was sufficient supply in most areas. However, higher demand in Selwyn, Waimakariri, and the North West and South West of Christchurch increased mean prices markedly in those areas in 2012 and 2013. Despite a comparatively subdued market in the East, North East and Inner South, overall mean house prices in greater Christchurch have increased at a slightly faster rate than those in New Zealand overall.[22]

Figure 2: Number of houses sold



Monthly section sales in greater Christchurch increased considerably following the major earthquakes. In more recent years, numbers have continued to fluctuate above pre-earthquake levels but the rate of growth has generally slowed.

Figure 3 shows a spike in monthly section sales in the winter months of 2011 across greater Christchurch. This timing coincides with the Government's first set of land zone announcements on 23 June 2011 and likely indicates that newly classified red zone residents were largely driving this spike in section sales.

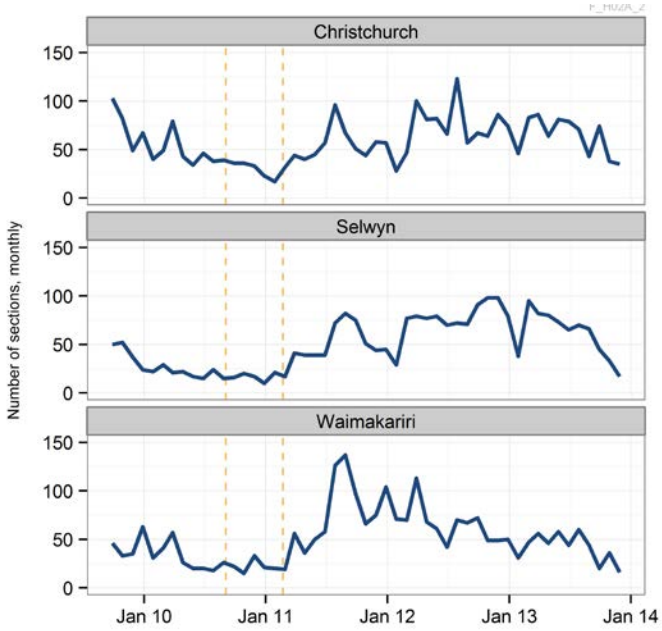
At an annual level (for the year to November), section sales appear to have eased after a period of rapid growth. The total number of section sales in Selwyn district increased by 119 per cent from 242 to 530 between 2010 and 2011. Sales increased by 67 per cent to 886 in 2012 and dropped by 16 per cent to 743 in 2013.

In Waimakariri district, between 2010 and 2011 sales grew by 105 per cent from 372 to 761. In 2012 sales totalled 836 (10 per cent increase) but shrunk by 39 per cent to 508 in 2013.

Section sales in Christchurch city grew by 6.3 per cent between 2010 and 2011 from 540 to 574. In 2012 sales reached 858, an increase of just under 50 per cent compared to the previous year. While still comparatively high, sales eased back by 13.3 per cent to 744 in 2013.

A large number of section sales is important for the recovery, in part because it indicates that residents are choosing to remain in greater Christchurch. Additionally, building new homes on these sections will stimulate the local economy and will grow the supply of houses, which is a positive sign for future affordability and availability of housing.

Figure 3: Number of sections sold



Rental market

The affordability and availability of rental housing are measured using the following indicators:

- mean (average) weekly rent for new tenancies each month as an indicator of changes in affordability
- the total number of bonds lodged for rental properties in Christchurch that cost under $300 per week as an indicator of affordability and the availability of low-cost rental properties
- the number of new rentals listed with Trade Me in Christchurch city each week as an indicator of availability.

Figure 4 shows that mean weekly rent for new tenancies increased in the period following the September 2010 and February 2011 earthquakes throughout greater Christchurch. Looking at the change in mean rents between the three months to November 2010 and the three months to November 2013, the mean increase in Christchurch city of 35.5 per cent equates to an extra $105.90 per week in rent on average (Table 2).

Table 2 shows that the biggest percentage increases have occurred in the South (48.1 per cent), the North West (42.1 per cent), and the Inner North of Christchurch (41.2 per cent each). The East, which suffered considerable damage due to the earthquakes, still has the lowest mean rents of $338.84 per week, with a mean increase of $79 per week (a 30.4 per cent increase).

Rental prices have risen due to a shortage of properties available to rent and the heavy demand for rental housing from displaced residents and workers coming in to the city for the rebuild.

As of April 2014, mean private weekly rents across the wider Canterbury region were continuing to increase at a faster rate than the national rental average.[23]

Mean weekly rent has increased across homes of all sizes, but especially for those with more bedrooms. Anecdotally, demand for houses with more bedrooms is being driven by employers seeking accommodation for incoming workers and families being displaced due to the residential rebuild. From the three months to November 2010 to the three months to November 2013, weekly rentals for houses with five-plus bedrooms have increased by 45.5 per cent in Christchurch city.

Table 2: Change in mean weekly rent from November 2010 to November 2013[24]

Area	3 months to the end of November 2010	3 months to the end of November 2013	% change
South	$352.85	$522.70	48.1
East	$259.82	$338.84	30.4
North East	$296.60	$374.78	26.4
North West	$324.47	$461.02	42.1
South West	$317.16	$408.21	28.7
Inner North	$307.78	$434.44	41.2
Central City	$282.01	$348.36	23.5
Inner South	$268.49	$354.30	32.0
Christchurch city (total)	$298.65	$404.55	35.5
Selwyn district	$340.93	$444.98	30.5
Waimakariri district	$309.41	$402.18	30.0

Figure 4: Mean weekly rent

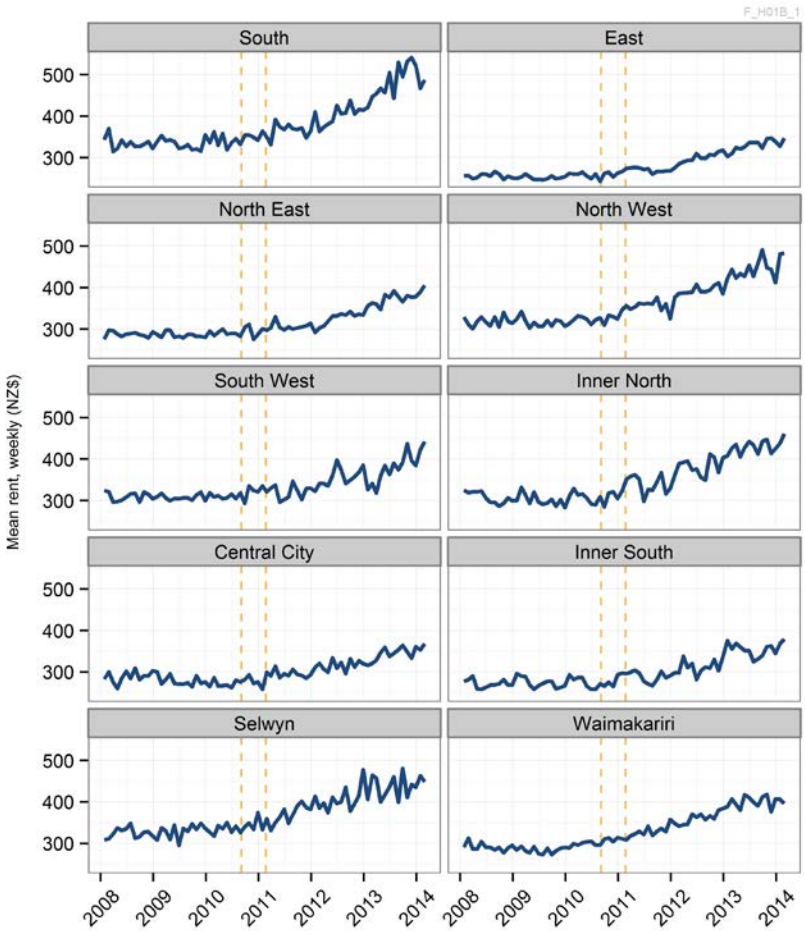


Figure 5 shows that the proportion of bonds for low-cost rentals (less than $300 per week) lodged per month within greater Christchurch remained relatively steady in the year before the September 2010 earthquake (averaging 54 per cent of all bonds lodged). However, it also demonstrates that there has been a steady decrease in the proportion of low-cost rentals since then, to a low of 21 per cent in February 2014.

The drop in the proportion of low-cost properties available for rent is probably because poorer-quality housing was damaged in the earthquakes and increasingly landlords are charging higher prices following earthquake repairs and as demand for rentals grows. According to the April 2014 CERA Wellbeing Survey,[25] around a fifth of respondents (17 per cent) reported that they are still being affected by having to move house as a result of the earthquakes, although for many this move may have been short term.

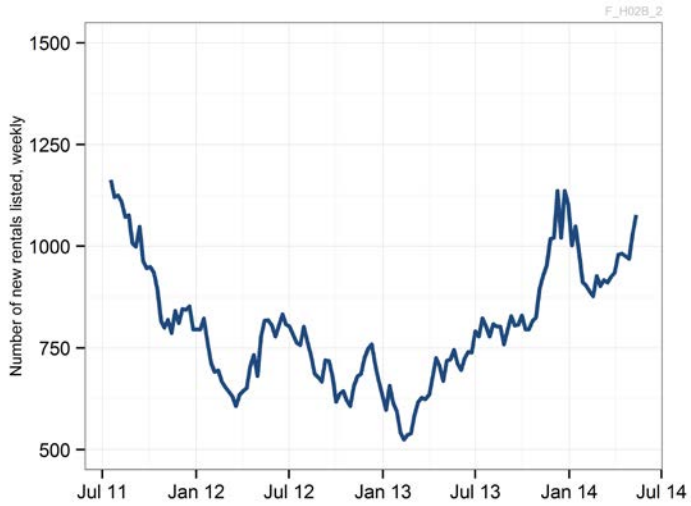
Further analysis shows the number of new bonds lodged for low-cost rentals declined in all areas of the city between 2009 and 2013 (year to December). During this period, the total in East Christchurch dropped by more than half from 2,181 to 777 (64 per cent), the North East declined from 1,563 to 552 (65 per cent) and the Inner North dropped from 1,374 to 471 (66 per cent), reflecting the high level of damage to homes in those areas.

Figure 5: Percentage of rental bonds lodged monthly with weekly rent below $300

Figure 6 shows the number of rental listings on Trade Me for Christchurch city fell over the period from August 2011 to February 2013. It has subsequently shown an increasing pattern, peaking around January 2014, which may reflect a number of variables including the gradual inclusion of earthquake-repaired housing in the rental market. In August 2011 there was a weekly average of 1,078 properties listed on Trade Me. This fell to an average of 536 per week in February 2013. By April 2014 the weekly average had increased to 976.

Further analysis of the vacancy rate[26] across the whole of the private sector rental market shows that it has fallen sharply from 3.3 per cent in December 2010 to 2.8 per cent in December 2012 and further to 2.4 per cent in March 2013.[27] [28] This trend suggests that fewer private rental properties have been remaining vacant in between tenancies.[29]

Figure 6: Number of rental listings on Trade Me



Social housing

Social housing impacts are measured in two ways in this report:

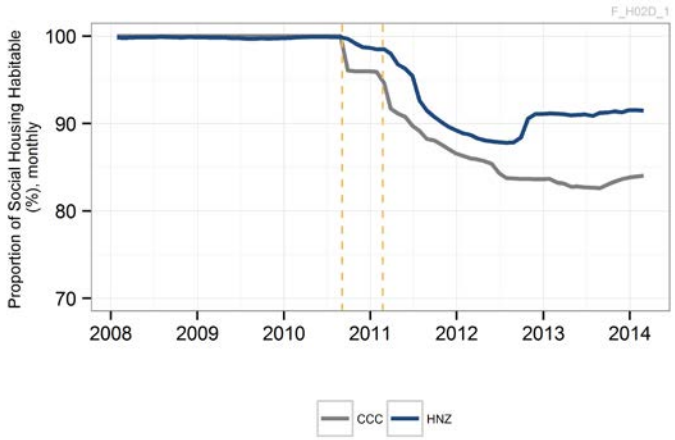
- habitability rates for CCC and HNZC social housing units
- social housing waiting lists.

Following the September 2010 and February 2011 earthquakes, a large number of social housing units were damaged and became 'uninhabitable', reducing the supply of social housing. Since April 2011, detailed engineering evaluations have found structural problems in additional units and some have become uninhabitable.

Figure 7 shows that the percentage of habitable CCC and HNZC housing units in Christchurch city decreased after the September 2010 earthquake and continued to decrease as the detailed engineering evaluations progressed. The proportion of habitable CCC housing reached a low of 82.6 per cent in August 2013 before levelling off at 84 per cent in February 2014.

The proportion of habitable HNZC units followed a similar pattern until late 2012, when it increased, reflecting the repair of damaged housing as part of the HNZC programme to repair up to 5000 houses by December 2015. Since October 2012, over 90 per cent of HNZC units have been habitable.

Figure 7: Proportion of habitable HNZC and CCC housing units



From April 2014 the Ministry of Social Development has been responsible for managing applications for social housing and the current waiting list for HNZC homes and those of other social housing providers. Categories A and B are applicants with the most urgent housing needs.[30] Figure 8 shows that while the HNZC waiting list decreased over the first half of 2012 assisted by the repair of a number of units, it generally grew from mid 2012 through to January 2014.

CCC is the second-largest social housing provider for low-income tenants in Christchurch.[31] CCC keeps records of the number of applicants for social housing units that meet its criteria. CCC's waiting list has also increased over 2012 and 2013 but eased back in late 2013.

Figure 8: CCC and HNZC (categories A and B only) waiting lists[32]

Temporary accommodation assistance

Figure 9 shows the number of people receiving temporary accommodation support. This support includes:

- Temporary Accommodation Claims (TAC) paid by insurers (data are sourced from both the Insurance Council of New Zealand (ICNZ) and more recently, CERA's Insurance Company and Project Management Office Survey (the 'Insurer Survey))
- Temporary Accommodation Assistance (TAA) from the Government (CETAS).

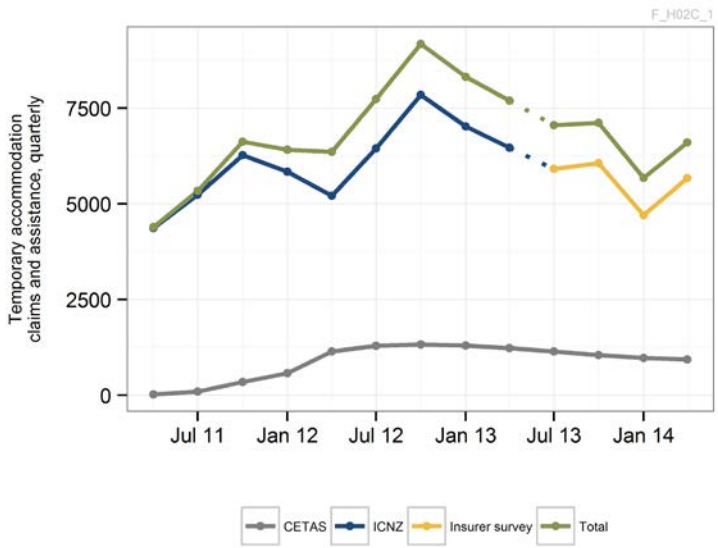
Figure 9 shows that before April 2013, TAC data peaked in the October quarter 2012, when 7,847 houses received payments for temporary accommodation from insurers. After 2013 the Insurer Survey shows that the number of households receiving temporary accommodation payments increased over the first quarter in which the survey was run (July to October quarter 2013) from 5,911 to 6,063 and then dropped to just over 4,700 payments in January 2014. Latest figures indicate an increasing trend.

Many insurance policies cover a year of temporary accommodation. Thereafter home owners who remain displaced are able to apply for Temporary Accommodation Assistance from the Canterbury Earthquake Temporary Accommodation Service (CETAS).

The number of households receiving TAA from the Government increased every quarter during the first year that the programme was established. This demand subsequently levelled off after peaking at 1,327 in the final quarter (October to December) of 2012. At the April quarter 2014, a total of 1,229 households were receiving Temporary Accommodation Assistance.

As at the April 2014 quarter, an estimated total of 6,602 households were receiving assistance from either TAC and TAA for costs associated with living away from their homes.

Figure 9: Estimated number of households receiving temporary accommodation assistance



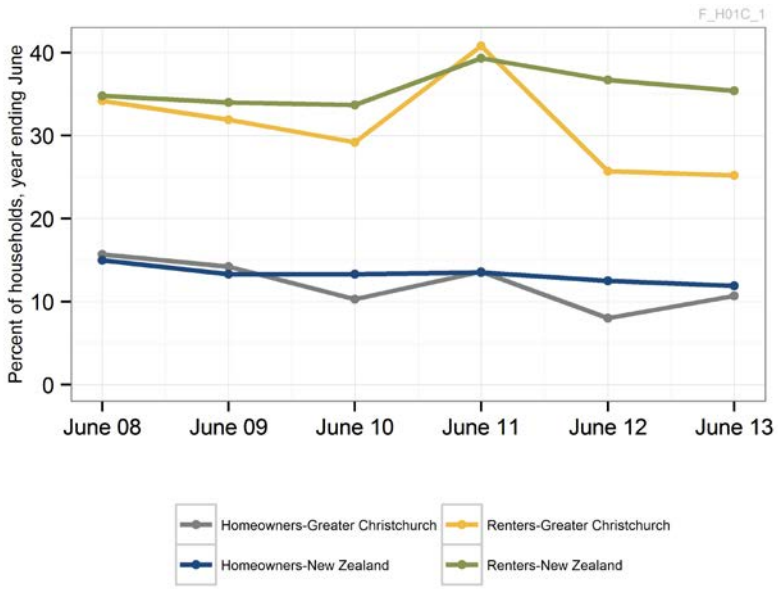
Housing costs relative to income

Housing affordability is usually defined as housing that is of reasonable quality and does not cost so much that households cannot afford other basic needs (ie, no more than 30 per cent of household gross income).

Figure 10 indicates that the proportion of those in greater Christchurch spending more than 30 per cent of their household income on housing has decreased from 34 per cent of renters in the year ending June 2008 to 25 per cent in 2013 (after a spike of over 40 per cent in 2011). Over the same time, the percentage of home owners who spend more than 30 per cent on housing decreased from 16 per cent in 2008 to 11 per cent in the year ending June 2013.

These findings relate to a small sample and should be treated with caution.

Figure 10: Percentage of households who spend more than 30 per cent of their household income on housing



Summary

In the two years before the February 2011 earthquake, the number of house sales was decreasing in line with the general easing in the property market. Following the February 2011 earthquake there was an increase in the number of houses sold across greater Christchurch. There were also increases in mean house prices in the Waimakariri and Selwyn districts and throughout Christchurch city.

Rents in greater Christchurch are rising at a greater rate than the rest of the country, due to a decrease in the supply of rental properties after February 2011 and increasing numbers of households seeking temporary accommodation. The city's social housing capability has increased slightly in recent years, after dropping due to structural damage, but remains below pre-earthquake levels. Overall the proportion of low-cost rental housing has decreased, which may be putting pressure on vulnerable residents. However, indications are that income may be increasing at a greater rate than housing costs.

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the Land Use Recovery Plan: www.developingchoices.org.nz and http://cera.govt.nz/recovery-strategy/built-environment/land-use-recovery-plan

Find out more about changes to social housing provision: www.msd.govt.nz and www.hnzc.co.nz

Find out more about a new client-focused social housing website: www.housing.msd.govt.nz,

Find out more about the key housing indicators for Canterbury from the Ministry of Business, Innovation and Employment (Building and Housing Group): www.dbh.govt.nz/key-indicator-reports

Find out more about the Canterbury Earthquake Temporary Accommodation Service, including temporary villages and Temporary Accommodation Assistance: www.quakeaccommodation.govt.nz

Find out more about Housing New Zealand's Earthquake Recovery Programme: www.hnzc.co.nz/cerp

Find out more about the Earthquake Commission: www.eqc.govt.nz

Find out more about the Insurance Council of New Zealand: www.icnz.org.nz

Technical notes

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013 and April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

House and section sales

Data source:	Quotable Value (QV) Residential Property Monthly Price Movement Dataset
Data frequency:	Monthly
Data complete until:	November 2013

Notes: Houses include all properties with a land use description defined by QV as 'bach', 'multi-unit', 'multi-use within lifestyle', 'multi-use within residential', 'residential', 'single unit – lifestyle', 'single unit excluding bach'

Median house sale prices and weekly rents are not monitored as sale prices and rent values tend to cluster at specific dollar amounts. This is a problem because, unlike an average, a median has to be an actual number taken from the data. This means that median values can have larger variation over time, instead of moving smoothly. For example, there can be long periods when there is no or little change, followed by sharp jumps up or down.

Rental market

Data source: Tenancy Bonds database, MBIE

Data frequency: Monthly

Data complete until: February 2014

Notes: Seasonality may exist in the rental and housing market. Rentals may be especially affected by the university term. Data are for new tenancy bonds registered per month.

Data source: Trade Me data, CETAS

Data frequency: Weekly

Data complete until: 12 May 2014

Notes: Seasonality may exist in the rental and housing market. Rentals may be especially affected by the university terms.

Includes all listings not listed as 'section'.

Trade Me data refer to all rental listings within Christchurch city, which makes up approximately 90 per cent of greater Christchurch's rental market.

Social housing capacity and waiting lists

Data source: Christchurch City Council and Housing New Zealand

Data frequency: Monthly

Data complete until: February 2014 (HNZC and CCC)

Notes: Occupancy rates are calculated by dividing total habitable units by total occupied/let units.

Housing New Zealand habitability rate = (number of let properties at month end + number of vacant properties at month end) / Total properties.
Waiting list allocation system criteria: www.hnzc.co.nz/about-us/our-publications/factsheets/SAS_criteria/Social-allocation-system-Criteria.pdf

Housing New Zealand data are for categories A and B only.

CCC habitability rate = (Total Vacancies at month end + Total Occupied at month end) / Total housing units.
Waiting list eligibility criteria: http://resources.ccc.govt.nz/files/CityHousingApplicationForm-docs.pdf

Temporary accommodation

Data source: Canterbury Earthquake Temporary Accommodation Service (CETAS) administrative records, Insurance Council New Zealand (ICNZ) administrative records and CERA's Quarterly Insurer and PMO Survey

Data frequency: Monthly for CETAS and ICNZ but displayed quarterly, quarterly for the Insurer Survey

Data complete until: April 2014 for CETAS and the Insurer Survey, January 2013 for ICNZ

Notes: Data shown represent current claims/assistance on one day each quarter and therefore should not be interpreted as an exact representation of the current claim levels over the entire quarter. CETAS data are collected monthly but displayed quarterly by the corresponding first month's value. Figures displayed are those current, not the total who have applied. CETAS Temporary Accommodation Assistance started on 21 February 2011, was stopped on 22 February 2011 due to the earthquake, and became operational again in April 2011. Post January 2013, monitoring data from ICNZ were discontinued due to data quality issues. An average of the January

and July quarter was taken to calculate the April 2013 data point; thereafter CERA Insurer Survey data are used.

Data from ICNZ and the CERA Insurer Survey should be compared with caution. Data from ICNZ are from the six major insurance companies operating in greater Christchurch whereas the CERA Insurer Survey collates data from nine of the largest insurers operating within greater Christchurch.

Assumptions from the CERA Insurer Survey data are based on results from an insurer with the largest market share and may not be representative of all other insurers sampled within the survey.

Data relate to households with current accommodation assistance/claims rather than individuals.

Housing costs relative to income

Data source: Household Economic Survey (HES) and Household Economic Survey (Income), Statistics NZ

Data frequency: Years ending June 2008–2013

Data complete until: June 2013

Notes: The HES is conducted every three years, and collects information on household expenditure and income, as well as a wide range of demographic information. A shorter version of the survey, HES (Income), is collected in the two years between the full HES.

Differences between HES and HES (Income) mean that caution should be used when comparing results over time.

Greater Christchurch is the aggregation of Christchurch City, Waimakariri District and Selwyn District Councils and is below survey design level. Data are indicative only and should be interpreted cautiously.

Households that are 'Not owned' cover dwellings where the household does not own the dwelling, and either pays rent or lives there rent-free. 'Owned' households cover dwellings that are held (or not held) in a family trust, regardless of whether mortgage payments are made or not made for the dwelling.

Household income is from total regular and recurring income sources, and is gross (before tax) income.

Housing costs include mortgage principal repayments, mortgage interest payments, mortgage application fees, rent payments, other payments associated with renting (eg, bonds paid in the last 12 months), property rates payments (both regional and local government), and payments associated with building-related insurance.

The percentage spent on housing is calculated by dividing household income by housing costs.

Note that households with higher income can afford to pay more than 30 per cent of their income on housing costs and may choose to do so without reducing their ability to afford other basic needs.

Endnotes

[1] Ministry of Social Development. (2012). *Social report.* Retrieved from http://socialreport.msd.govt.nz/economic-standard-living/housing-affordability.html
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[2] Affordable Housing National Research Consortium. (2001). *Affordable housing in Australia: pressing need, effective solution*. Canberra: AHNRC.

[3] Howden-Chapman, P. (2008). Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *British Medical Journal* 337:a1411.

Howden-Chapman, P. (2007). Effect of insulating existing homes on health inequalities. *British Medical Journal* 10.1136/BMJ.39070.573032.80.

[4] Mitchell, I. and O'Malley, S. (2004). How affordable is housing in New Zealand and what strategies are available to reduce housing stress? Paper presented to Social Policy, Research and Evaluation Conference, 25–26 November.

[5] Canterbury Earthquake Recovery Authority. (2013). Canterbury economic indicators: February 2013. Retrieved from: http://cera.govt.nz/sites/default/files/common/canterbury-economic-recovery-dashboard-february-2013.pdf

[6] The 4,400 estimate is based on Orion connection data (source MBIE).

[7] Housing New Zealand Corporation. (2011). *Briefing to the Incoming Minister*. Retrieved from www.hnzc.co.nz/about-us/our-publications/briefing-to-the-incoming-minister-2011/briefing-for-the-minister-of-housing-2011/briefing-to-the-incoming-minister-2011.pdf

[8] In addition to HNZC and CCC, it is estimated that there are an additional 704 beds provided by non-governmental organisations in Christchurch. Ministry of Business, Innovation and Employment. (2013). *Housing pressures in Christchurch: a summary of the evidence*. Ministry of Business, Innovation and Employment.

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[14] From CERA internal correspondence.

[15] For more information, see www.mbie.govt.nz

[16] Ministry of Business, Innovation and Employment. (2013). *Housing pressures in Christchurch: a summary of the evidence.* Ministry of Business, Innovation and Employment. Retrieved from www.dbh.govt.nz/UserFiles/File/Publications/Sector/pdf/christchurch-housing-report.pdf

[17] The term 'housing insecurity' is used in this report to reflect the Statistics New Zealand definition of homelessness as "living situations where people with no other options to acquire safe and secure housing: are without shelter, in temporary accommodation, sharing accommodation with a household or living in uninhabitable housing": Statistics New Zealand. (2009). New Zealand definition of homelessness. Wellington.

[18] Statistics New Zealand. Infoshare. Since 2008–10, the number of new residential building consents has risen 160 per cent in Waimakariri district, 12 per cent in Christchurch city and 79 per cent in Selwyn district in the year to December 2012. This compares with 5 per cent for New Zealand on average.

[19] http://cera.govt.nz/recovery-strategy/built-environment/land-use-recovery-plan

[20] See www.developingchoices.org.nz

[21] Comparisons used in this analysis involved the mean for the three months to the end of November 2010 and the mean for the three months to the end of November 2013 in order to avoid seasonal effects.

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[23] Annual rent increase to March 2014 was 12 per cent for Canterbury compared with 4 per cent for New Zealand (source MBIE).

[24] Comparisons used in this analysis involved the mean for the three months to the end of November 2010 and the mean for the three months to the end of November 2013 in order to avoid seasonal effects.

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[30] Ministry of Business, Innovation and Employment. (2013). *Housing pressures in Christchurch: a summary of the evidence.* Ministry of Business, Innovation and Employment.

[31] See note 31.

[32] Note that CCC data are missing for 2011 due to internal disruptions as staff were displaced from their offices. Missing data from 2012 are due to staffing issues. Data trends between these periods should be viewed with caution and are represented in the graph by a dotted line.

Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Keeping well and having access to health services

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why are keeping well and having access to services important?

Good health is crucial to the wellbeing of individuals, their families and their communities. The health system aims to maximise both the length and quality of life.

By keeping healthy, people are more able to lead rich and rewarding lives within their families and their communities. People who are less healthy may find it more difficult to participate in sports and recreation, or arts and cultural activities, or simply to complete the tasks of daily living. They may also struggle to socialise with their family, friends and community.

Health is determined by a number of environmental and social factors that health services have no control over. For example, living in poor-quality housing, having a low income or being unemployed, and having few educational qualifications significantly lessen people's health and wellbeing.[1] Poor-quality housing that is cold, damp and mouldy significantly worsens the health of older people, young children and people who already have health problems.[2]

Our health system aims to maintain the health of the population, identify any disease or health condition as soon as possible and provide timely access to health care services. Early access helps to restore health, for example through surgery, or helps people with a long-term condition to continue to function as well as possible. If geographical, cultural and other barriers to care are reduced, more people gain help from health services in a more timely manner.

Acute medical admissions

In an acute medical admission, a person is admitted to a hospital because they require urgent specialist attention, which may be for any of a wide range of medical conditions.[3] Acute medical admissions make up a third of all hospital admissions in New Zealand. If the rate of acute medical admissions increases, it could indicate the underlying health status of the population is declining. Alternatively it could mean that people are not accessing or engaging with community services, especially general practice, which is the point of first contact with the health system for most people.[4]

International research suggests that cardiovascular disease rates may increase after disasters.[5] Even in 'normal times', cardiovascular disease such as congestive heart failure among the elderly is particularly likely to affect the rate of acute medical admissions.[6]

Among children, respiratory admissions are one of the two leading causes of acute medical admissions. Respiratory illness, especially asthma in children, is affected by housing quality.[7]

Influenza-like illness

Influenza (flu) is a significant public health issue. Ten to twenty per cent of New Zealanders are infected every year.[8] While most recover at home, some are admitted to hospital because their condition becomes serious. Influenza can be fatal for a small number of people, most of whom already have health problems. As well as affecting wellbeing, influenza has a financial impact on workplaces, and can place a heavy load on primary care and hospital services during winter epidemics.

Since the earthquakes, people are more likely to be living in damaged, overcrowded homes that are damp and cold, which may lead to more cases of influenza. If the incidence of influenza rises, acute

medical admissions for cardiac and respiratory conditions, particularly in the elderly and children, are also likely to increase.

Childhood immunisation rates

Childhood immunisation provides protection from a range of serious illnesses, including measles, mumps, rubella, diphtheria and whooping cough.

Childhood immunisation rates are a good indicator of access to primary care, as these immunisations are undertaken in general practices. If there are barriers to seeing general practitioners (GPs), such as cost or transportation, then it is likely that immunisations rates will decrease.

Until July 2012, the Government targets for immunisation required that 85 per cent of two-year-olds were immunised by July 2010, 90 per cent by July 2011 and 95 per cent by July 2012.[9] This has been a successful campaign, with immunisation coverage across New Zealand rising from 67 per cent in 2007 to 88 per cent in December 2010.[10]

In 2012 the Government's target changed to focus on eight-month-olds, requiring district health boards to ensure that 85 per cent were immunised by July 2013, 90 per cent by July 2014 and 95 per cent by December 2014.[11]

Access to primary health care

Primary health care services, such as general practices and medical centres, are the main means for many New Zealanders to take care of their health needs. People need to be able to access primary health services on time to get treatment for a health condition before it becomes more severe. In the 2012/13 New Zealand Health Survey, 80.5 per cent of Canterbury respondents had visited a GP in the past 12 months compared with 76.8 per cent nationally.

How were keeping well and having access to health services impacted by the earthquakes?

The September 2010 earthquake triggered an immediate rise in heart attacks, with increased admissions to cardiac services in the days following the earthquake. The February 2011 earthquake did not lead to a significant increase in heart attack admissions, which may be because those who would have been predisposed to a heart attack in February had experienced it earlier as a result of the September quake.

However, the February earthquake had a major impact on hospital services, with a loss of over 100 beds in general medicine and 635 beds in aged residential care.[12] Over 250 elderly rest home residents were evacuated to other regions because their rest homes were no longer habitable. This group were repatriated to other Canterbury facilities by December 2011, although approximately 60 chose to continue to live outside Canterbury.

The February earthquake also had a profound impact on the primary care and community provider infrastructure and its capacity to provide health care. However, most services were soon back up and running again.

Since the earthquakes, households have been exposed to factors that increase the risk of acute medical admissions for respiratory conditions and other health problems. These risk factors include damaged, damp and cold homes, and overcrowding of homes, schools and office spaces.

Some community members have suggested that liquefaction silt may have an effect on respiratory illness rates although there is little evidence to support this belief.[13] A report from the Institute of Environmental Science & Research (ESR) concluded that health impacts of liquefaction are unknown.[14]

What is happening now?

Under the *Recovery Strategy for Greater Christchurch: Mahere Haumanutanga o Waitaha*, agencies within the Canterbury health system are responsible for delivering the Canterbury District Health Board (CDHB) Transition Programme. This programme will create services and environments that are more able to support people to stay well. In this way, the health system's ability to manage demand for health services and keep people well will be enhanced

Immediately after the February 2011 earthquake, support was provided to vulnerable populations and providers. Services to support people at risk of acute admission to hospitals were extended and new programmes were developed to support people in their own homes following discharge from hospital. The Government's influenza immunisation programme was extended in Canterbury to include under 18-year-olds in addition to the usual national target groups: people aged 65 years and over, pregnant women, and people under 65 years with a long-term health condition. Canterbury District Health Board has extended free influenza vaccination for children under 18 years until 2015 because of the housing situation and pressure on hospital beds.

The rate of respondents reporting excellent, very good, or good self-rated health in the New Zealand Health Survey has increased slightly in Canterbury from 90.8 per cent in 2006/7 to 93.3 per cent in 2012/13, while in New Zealand overall the rate has decreased slightly from 90.2 per cent to 90.1 per cent. This indicates that self-rated health has not changed since the earthquakes.

What are the indicators telling us?

Acute medical admissions

The three measures used in this report are:

- the number of acute general medical admissions
- the number of admissions for congestive heart failure for people aged 65+ years
- the number of respiratory admissions for children aged 0–15 years.

The number of acute general medical admissions has resumed a pre-earthquake pattern of increasing over time after dropping immediately after the February earthquake. Acute admissions increased by 11 per cent in the year to February 2014 compared to the average number of admissions for the two years to February 2010.

Figure 1 shows that acute medical admissions have a seasonal pattern of increases in the winter months. They have also been increasing over time. In previous years, demand tended to trail off in September; however, there was a second peak in November 2010, which may indicate that the September 2010 earthquake caused some additional demand. Conversely, demand fell after the February 2011 earthquake. This may have been due to changes in people's behaviours and an increase in community-based services. The spike in admissions in the winters of 2012 and 2013 follows a similar pattern to that seen pre-earthquakes.

Figure 1: Number of acute general medical admissions

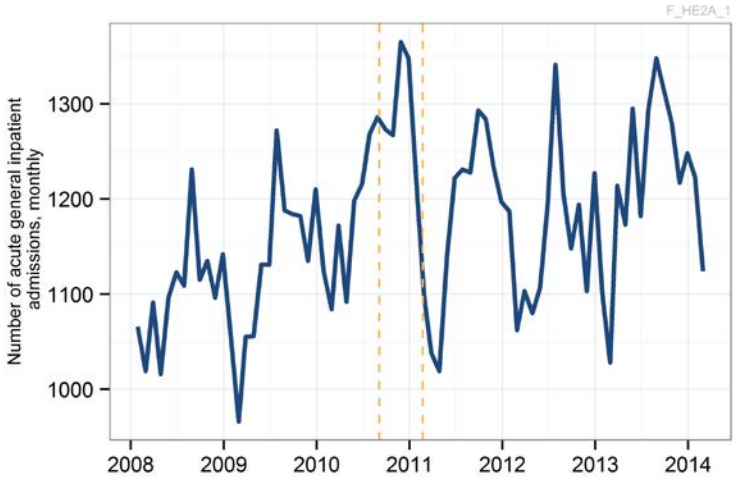


Figure 2 shows that the peak of inpatient admissions for congestive heart failure (as the primary reason for admission) was lower in the winter of 2010 than in all previous years. However, admissions had started to peak before the September 2010 earthquake. Congestive heart failure admissions also peaked in the winter of 2011, but comparatively the demand fell in the winters of 2012 and 2013.

Figure 2: Number of congestive heart failure admissions for people aged 65 years and over

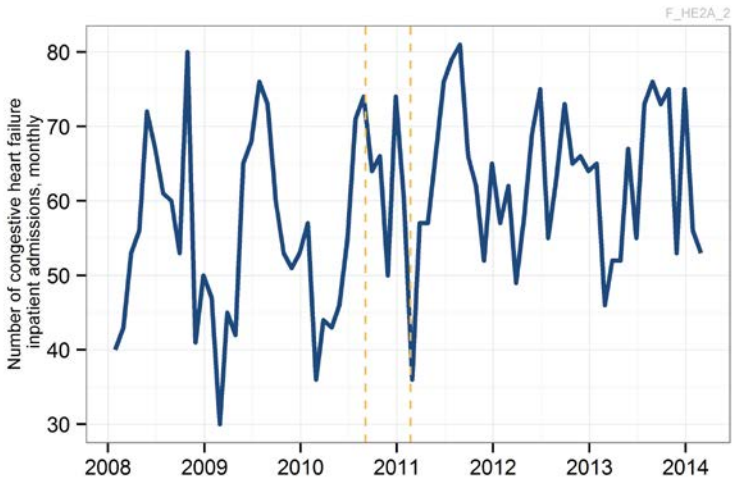
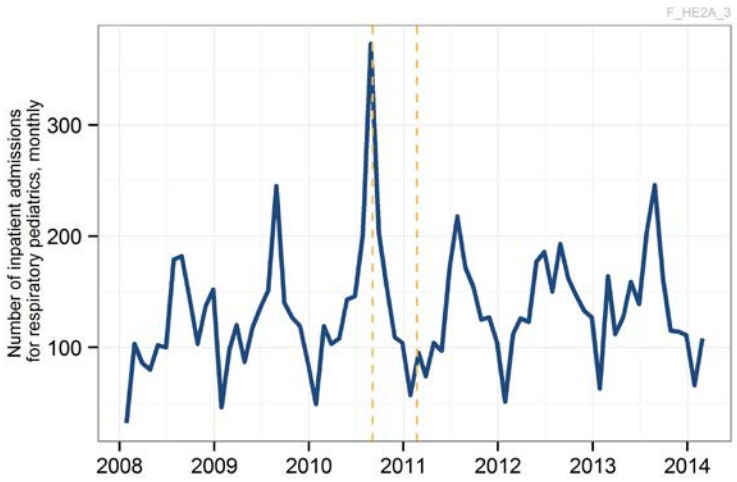


Figure 3 shows that there appears to be little association between the earthquakes and respiratory admissions for children aged 0–15 years. The number of admissions has also tended to increase in winter months, and the largest spike occurred in August 2010, before the September 2010 earthquake. There were also spikes in the winters of 2011, 2012 and 2013; however, this seasonal pattern is similar to the pre-earthquake period.

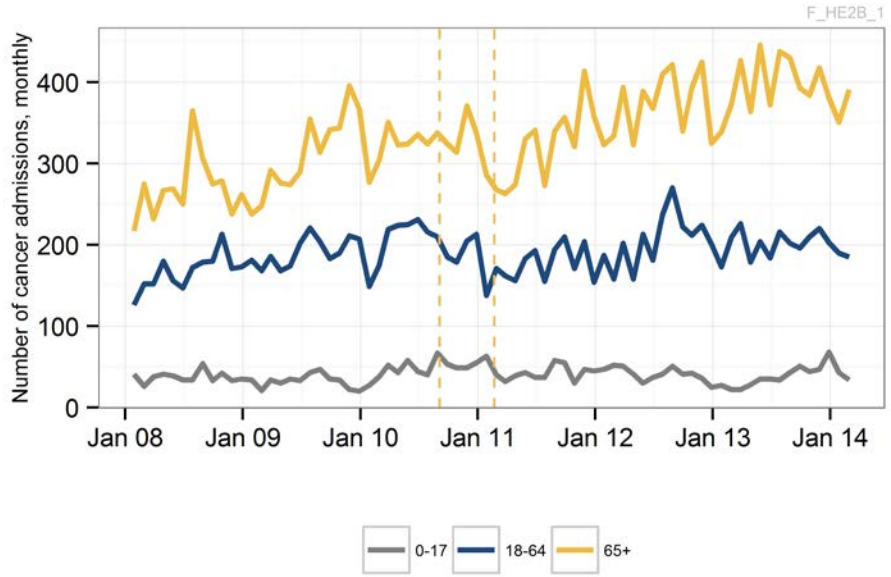
Figure 3: Number of respiratory admissions for children aged 0–15 years



Cancer admissions

This is measured by the total number of all cancer admissions. Figure 4 shows that immediately following the earthquakes, the number of admissions for cancer dropped for all age groups. This may reflect issues around access to hospital services during this time. Admission figures have subsequently resumed an increasing trend that pre-dated the earthquakes and therefore it appears that there has been no earthquake impact on cancer rates.

Figure 4: Number of cancer admissions by age



Influenza-like illness (rates)

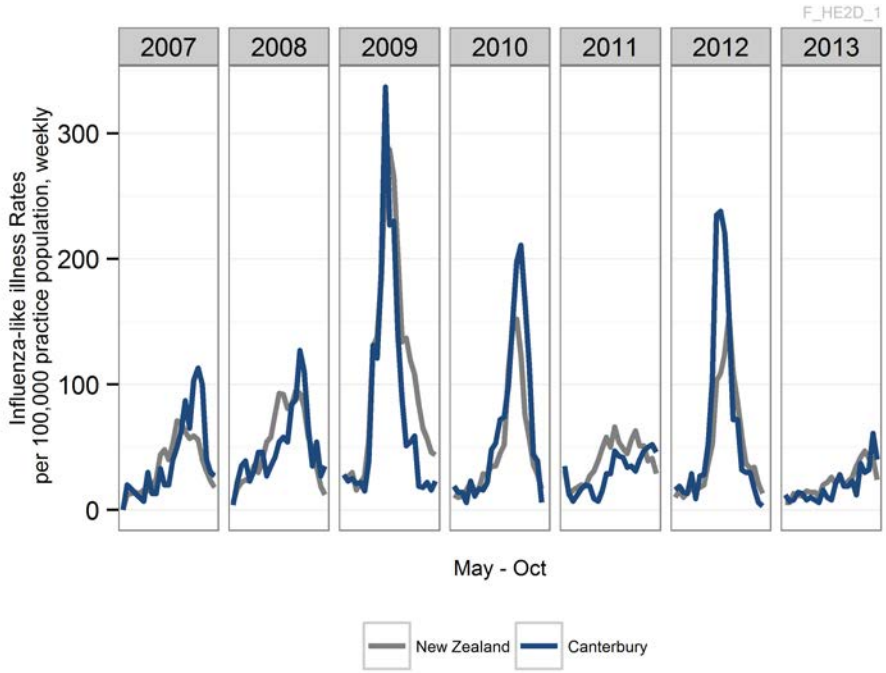
This is the rate of influenza-like illness per 100,000 population of people enrolled in general practices.

Influenza-like illness rates are determined by a number of factors including the virulence of the influenza strains that are circulating in any given year and the proportion of the population that has received the influenza vaccination.

In 2011 New Zealand experienced a low incidence of influenza compared with previous years. During that year (May to October), Canterbury had even lower rates than New Zealand overall.

However, as shown in Figure 5, the 2012 season was more severe. The rates in Canterbury were more than double those of New Zealand during the July peak and were the highest reported nationally. In 2013, rates dropped notably in both Canterbury and nationally. Influenza incidence is unpredictable; vaccination and good personal respiratory hygiene are the best methods of prevention.

Figure 5: Weekly influenza-like illness rate

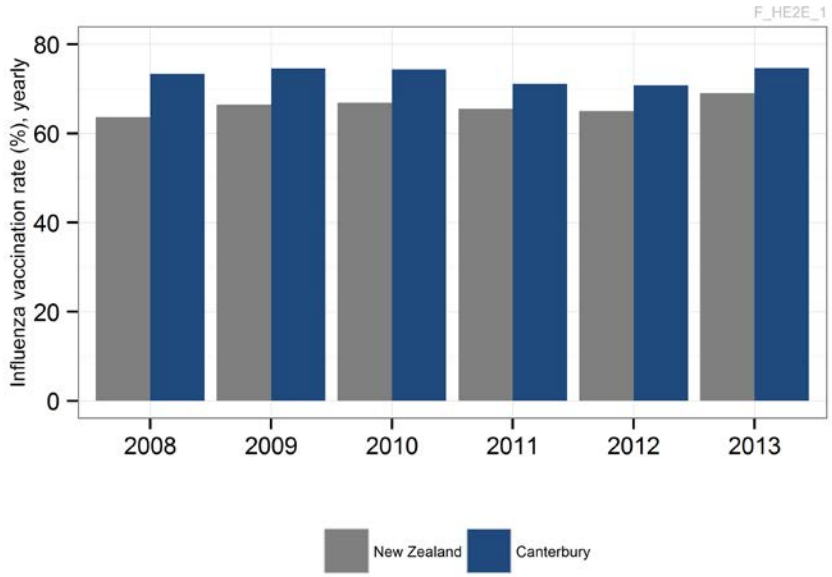


Influenza (vaccinations)

In this report, influenza vaccinations are measured as the proportion of the population enrolled in general practices aged 65 years and over who receive an influenza vaccine each year.

Vaccination is the most effective means of protecting against influenza.[15] Figure 6 demonstrates that the yearly 65+ vaccination rate for influenza in the Canterbury area has remained relatively stable over time, ranging from 71 to 75 per cent between 2008 and 2013. In 2011, the rate dropped to 71 per cent of the eligible enrolled population, although this was still higher than the national rate of 65 per cent. This may indicate that people in Canterbury were less likely to seek a vaccination, in part due to the general impacts on daily activities caused by the earthquakes and the mildness of that winter. By 2013 the rate had returned to pre-earthquake levels, increasing to 75 per cent.

Figure 6: Vaccination rate for eligible population aged 65 years and older



Access to general practice services

The two measures used in this report are:

- barriers to health care
- childhood immunisation rates.

Table 1 presents data from the New Zealand Health Survey. It shows that in 2011/12, over a quarter of Canterbury residents (28.2 per cent) reported unmet need for primary health care for a variety of reasons, which meant they were unable to get health care when needed. This dropped to 24.1 per cent a year later.

Respondents were asked about their experiences of getting an appointment at their usual medical centre within 24 hours in the past 12 months. In the 2011/12 survey, 15.5 per cent of Canterbury respondents indicated that they had been unable to get an appointment but in the 2012/13 survey this had decreased to 8.2 per cent. This indicates that access to GPs may have been affected by the earthquakes.

The proportion of residents not seeking GP services due to cost increased slightly during the post-earthquake period. In contrast, fewer residents found the cost of after-hours health services and prescriptions to be barriers to their health care.

Table 1: Summary of barriers to health care for adults in the past 12 months from the New Zealand Health Survey

Indicator	CDHB area %	
	2011/12	2012/13
Experienced unmet need for primary health care	28.2	24.1
Unable to get appointment at usual medical centre within 24 hours	15.5	8.2
Unmet need for GP services due to cost	15.9	16.3
Unmet need for after-hours service due to cost	9.1	7.5
Unfilled prescriptions due to cost	6.6	5.7

Note: Results reported are age-standardised prevalence (%) data for adults 15 years and over

Childhood immunisation rates are measured in two ways in this report:

- two-year-old immunisation rates (Government target July 2010 – July 2012)
- eight-month-old immunisation rates (Government target July 2013 – December 2014).

Figure 7 shows the immunisation rates for two-year-olds dipped in the two quarters after the February 2011 earthquake in Canterbury. This may indicate that general practice access was difficult in that period. The rate recovered and peaked at 93 per cent in the quarter ending March 2012, before dipping below 90 per cent in August 2012.[16] Data for eight-month-olds indicate that Canterbury District Health Board is on track to meet the target of 95 per cent immunisation by December 2014.

Figure 7: Immunisation rates for two-year-olds and eight-month-olds

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the links between health and housing in New Zealand: www.healthyhousing.org.nz

Find out more about how to get winter flu jabs: www.cdhb.govt.nz/yourhealth/staying_healthy.htm

Find out more about accessing health services in Canterbury: https://www.cdhb.health.nz/Your-Health/Pages/default.aspx

Find out more about the Canterbury District Health Board Transition Programme: http://www.cdhb.health.nz/About-CDHB/corporate-publications/Documents/transition_2012_plan.pdf

Find out more about the ESR report on PM10 and Christchurch liquefaction silt: www.esr.cri.nz

Technical notes

Morbidity

Data source: Canterbury District Health Board

Data frequency: Monthly

Data complete until: February 2014

Notes: Acute medical admissions are defined as acute general inpatient admissions where the health specialty is general medicine. Acute respiratory admissions are defined as acute general inpatient admissions where the health specialty is respiratory medicine.

We have moved to consider primary diagnosis cases for congestive heart failure (CHF) admissions rather than all coded cases. This should be a better reflection of the underlying population as people with heart failure often have co-morbidities. CHF admissions are defined as ICD Codes I50, J81 as principle diagnosis.

Cancer admissions

Data source: Canterbury District Health Board

Data frequency: Monthly

Data complete until: February 2014

Notes: Cancer data should be viewed with caution as most people use cancer services as outpatients.

Admissions are acute and arranged for general medicine, respiratory and CHF except for cancer. Cancer is defined as ICD codes C00-C96 and D45-D47.

Influenza-like illness (rates)

Data source: Community and Public Health, CDHB

Data frequency: Weekly

Data complete until: October 2013

Notes: The rate presented is the influenza-like illness (ILI) rate per 100,000 practice population. ILI is measured weekly starting in week 18 (approximately the first week of May) through to week 40 (approximately the first week of October).

ILI surveillance is a voluntary national surveillance programme conducted in every district health board annually by sentinel medical practices. General practitioners identify all ILI patients who attend their practices from weeks 18–40 inclusive during the influenza season.

Influenza (vaccinations)

Data source: Canterbury District Health Board

Data frequency: Yearly

Data complete until: 2013

Notes: The vaccination rate is the number of people over 65 years who are vaccinated each year divided by the enrolled population for the target group. These data are provided by the national Primary Health Organisations Performance Programme. The assumptions are not provided and enrolled population does not match DHB records.

New Zealand Health Survey: Access to general practice services and self-rated health

Data source: Ministry of Health

Data frequency: Data collected 2006/07, 2011/12 and 2012/13

Data complete until: 2012/13

Notes: The New Zealand Health Survey has a multi-stage, stratified, probability-proportional-to-size sampling design. The survey is designed to yield an annual sample size of approximately 13,000 adults and 4,500 children.

A dual frame approach has been used where participants are selected from an area-based sample and a list-based Electoral Roll sample. The aim of this approach is to increase the sample sizes for Māori, Pacific and Asian ethnic groups.

Interviews are conducted in participants' homes, with the interviewer typing responses directly into a laptop computer using 'Survey System' computer-assisted personal interview software. Showcards with predetermined response categories are used to assist respondents, where appropriate.

The 2011/12 survey was the first time the New Zealand Health Survey asked directly about most of the unmet need indicators. Respondents were asked if they were 'Unable to get an appointment at usual medical centre within 24 hours in the past 12 months' in 2006/07, 2011/12 and 2012/13.

The Canterbury region was defined as the Canterbury District Health Board area.

The results reported are age-standardised prevalence (%) data for adults aged 15 years and over.

Immunisations

Data source: Canterbury District Health Board and Ministry of Health

Data frequency: Quarterly

Data complete until: December 2013

Notes: Immunisation data come from the National Immunisation Register from the Ministry of Health. The data represent the proportion of children who have completed their age-appropriate immunisations by the time they turned the milestone age (eight months or two years). Data are reported quarterly.

Endnotes

[1] Howden-Chapman, P. et al. (2004). *Retrofitting houses with insulation to reduce health inequalities*. Retrieved from: http://www.healthyhousing.org.nz/wp-content/uploads/2010/01/Insulation-proofs.pdf

[2] Howden-Chapman, P. (2008). Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *British Medical Journal* 337:a1411.

Howden-Chapman, P. (2007). Effect of insulating existing homes on health inequalities. *British Medical Journal* 10.1136/BMJ.39070.573032.80.

[3] Note the literature does not appear to agree upon a single definition: www.bgs.org.uk/index.php?option=com_content&view=article&id=44:gpgacutecare&catid=12:goodpractice&Itemid=106/

[4] New Zealand Health Technology Assessment. (1998). *Acute medical admissions: a critical appraisal of the literature*. Christchurch School of Medicine: New Zealand Health Technology Assessment. Retrieved from www.otago.ac.nz/christchurch/otago014024.pdf

[5] Jiao, Z., Kakoulides, S.V., Moscona, J. et al. (2011). Effect of Hurricane Katrina on incidence of acute myocardial infarction in New Orleans three years after the storm. *American Journal of Cardiology* 109: 502–505.
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[6] See note 5.

[7] See note 5.

[8] www.health.govt.nz/our-work/diseases-and-conditions/influenza

[9] Ministry of Health. (2011). *Targeting immunisation: increased immunisation*. Wellington. Retrieved from www.health.govt.nz

[10] See note 9.

[11] DHB health targets. Retrieved from www.health.govt.nz/new-zealand-health-system/health-targets

[12] Canterbury Earthquake Recovery Authority, unpublished data.

[13] www.stuff.co.nz/national/4656584/Residents-say-silt-dust-a-health-risk

[14] Institute of Environmental Science and Research (2012). *PM_{10} and Christchurch liquefaction silt.* Institute of Environmental Science and Research.

[15] www.bpac.org.nz/BPJ/2014/March/influenza-vaccination.aspx

[16] Part of this dip may be accounted for by a change in the Government target – as an additional vaccination was added to the schedule.

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Mental wellbeing

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is mental wellbeing important?

Mental wellbeing is a positive state where people are emotionally healthy, are able to live full and creative lives, and can deal with life's challenges. Mental wellbeing can also be defined as flourishing, where people are engaged with life, and have a sense of meaning and purpose.

Mental wellbeing can positively affect most dimensions of people's lives: family and friendships, employment, education, physical health and life expectancy.[1]

People who are mentally well are more productive in the workforce, do better in education and are able to function better cognitively. They are also more likely to live longer, are less likely to engage in adverse behaviours like smoking, hazardous drinking, drug use and risky sexual behaviour, and they are less likely to be obese.[2]

One in four people will experience a mental health problem at some point in their life. At any given time, one in every six adults is experiencing mental ill health.[3]

Experts agree that disasters have a negative impact on people's mental wellbeing, particularly at the severe end of the spectrum.[4] The World Health Organization estimates that after a disaster, severe mental health disorders increase from 2–3 per cent to 3–4 per cent of the population, and mild to moderate mental disorders can double from 10 per cent to 20 per cent.[5] However, experts agree that over time, those experiencing mild psychological reactions will be able to cope and recover if they receive basic support.[6]

Stress from a disaster can also increase risk behaviours such as alcohol and drug abuse, and problem gambling. Such behaviours can be early warning signs of mental health issues.[7] In May 2011 Chief Science Advisor Professor Sir Peter Gluckman indicated that up to 5 per cent of the population may continue to have significant psychological ill health requiring professional help as a result of the earthquakes.[8]

International experience suggests that post-disaster stressors, such as delayed decisions about property and insurance, are some of the most significant factors that increase the risk of mental ill health and hold back recovery. These 'secondary stressors' are circumstances, events or policies that are indirectly related or 'non-inherent and consequential' to the earthquakes.[9] Examples are housing difficulties; problems with insurance; and loss of social networks.[10]

In contrast, primary stressors are defined as stressors that are directly related to the disaster; for example, injuries sustained or aftershocks.

The mental wellbeing of some population groups may be particularly vulnerable after a disaster. These groups include people who already had mental health issues and those who lack the social supports necessary to help them cope. Other vulnerable people are those who had no previous difficulties, but who have experienced significant loss as a result of the earthquakes. This may include loss of a loved one, personal injury, loss of property, or financial problems. Recovery is improved where affected people perceive that social supports are available and they are able to access these supports.[11]

Recovery for greater Christchurch

How was mental wellbeing impacted by the earthquakes?

The earthquakes have deeply affected the residents of greater Christchurch. The loss of life, injury, damage to homes and businesses, and the stress associated with the earthquakes and aftershocks are experiences that many people have never had before, and never wish to have again.

Psychological recovery was interrupted by the sequence of aftershocks during 2011 and 2012, which meant that people had to continue to respond to new events.[12]

Levels of general distress in the population were high immediately after the earthquakes. Health and welfare services reported high demand for assistance with general stress symptoms, hyper-vigilance and anxiety. For some people, these symptoms continued for a long time.

By the middle of 2012, services were reporting that people's mental wellbeing was less affected by aftershocks. However, a growing number of people were saying that secondary stressors such as uncertainty around decisions relating to their insurance and the repair or rebuild of their homes were causing stress and anxiety.[13]

Table 1 shows key findings from the 2012 CERA Wellbeing Survey, which asked a number of questions about secondary stressors associated with the earthquakes.[14] The survey found that 65 per cent of those surveyed reported 'dealing with EQC/insurance issues in relation to personal property or house' had an impact on their lives and over a third (37 per cent) reported that this had a moderate or major negative impact on their everyday life.

Table 1: Most common negative outcomes of the earthquakes, as reported in 2012

Negative outcome	% who had experienced outcome	% who reported moderate or major negative impact
Loss of other* recreational, cultural and leisure time facilities (cafes, restaurants, libraries etc)	69	34
Distress or anxiety associated with on-going aftershocks	66	42
Dealing with EQC/insurance issues in relation to personal property and/or house	65	37
Making decisions about house damage, repairs and relocation	54	29

* Additional questions were asked about the loss of indoor and outdoor sports facilities.

While there were some obvious challenges to mental wellbeing due to the earthquakes, people also experienced many positives.

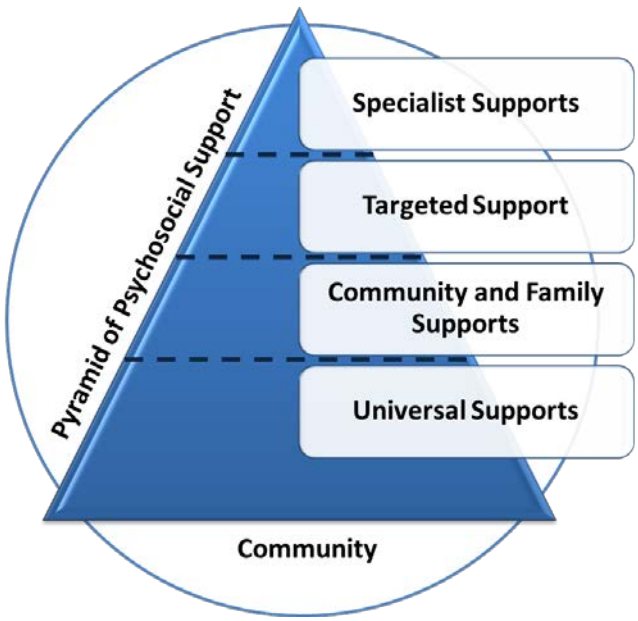
Table 2 shows the four most common positive outcomes, which include 'pride in ability to cope' and 'heightened sense of community'. Research has shown that bonds with family and friends can become stronger, and that people become more knowledgeable about themselves, wiser and more compassionate, and find new perspectives on life after facing adversity.[15]

Table 2: Most common positive outcomes of the earthquakes, as reported in 2012

Positive outcome	% who had experienced outcome	% who reported moderate or major positive impact
Pride in ability to cope under difficult circumstances	76	41
Family's increased resilience	69	36
Renewed appreciation of life	68	45
Heightened sense of community	67	34

What is happening now?

Since September 2010, government and non-government social service agencies have worked together to develop a layered system of wellbeing support for people experiencing distress, based on the Psychosocial Intervention Pyramid. Many of these services are focused on early intervention, to ensure that people can get help and support that will prevent them from developing more severe mental health conditions. This stepped approach is illustrated in the following pyramid; services, support and information are then outlined below.



Across the pyramid a number of community and family services are in place to help people access information and the health and social services they need.

- The 'All Right?' social marketing campaign was launched in February 2013 to assist people who are struggling and to provide tools and support to improve their wellbeing.[16]
- The 0800 Canterbury Support Line provides callers with advice and referral to timely and appropriate support.
- Counselling services have been provided at no cost to residents affected by the earthquakes. The main provider is Relationships Aotearoa (formerly Relationship Services).
- The Earthquake Support Coordination Service is available for people who require more help. This service includes 34.6 FTE staff plus a further 5 Kaitoko workers[17] who support vulnerable and at-risk whānau. They provide practical information and support to people displaced from their homes or who have on-going issues relating to the earthquakes.

- The 0800 Canterbury Support Line, counselling services and the Earthquake Support Coordination Service were funded for three years from 1 July 2010 to 30 June 2014 through the Government's Canterbury Earthquake Recovery Fund. The Government has announced new operating funding of $13.5 million which will see the continuation of these services over the next four years (1 July 2014 to 30 June 2018).
- Earthquake Assistance Centres in Avondale and Kaiapoi have provided information and assistance for home owners. The Avondale Centre was closed in December 2013 after providing residents with a total of 13,582 face-to-face appointments with specialists since it was set up in August 2011. The Kaiapoi Centre continues to support the local community and by 30 November 2013 had seen a total of 4,434 people.
- The Ministry of Education has developed several programmes to respond to the earthquake-related needs of students and teachers.
- The Ministry of Social Development and the Red Cross have funded training to help support community leaders, frontline staff, professional health and social service staff who are working with affected clients and communities.
- Extended general practitioner (GP) consultations have been put in place to deal with complex cases including people with mental and physical health effects.
- Brief intervention coordinators have provided up to five sessions of treatment for individual patients.
- The Canterbury District Health Board (CDHB) has, in conjunction with the Ministries of Health and Education, developed a local health and education joint action plan to address the emerging mental health issues for youth / school-age people in Canterbury following the earthquakes.[18]
- The Red Cross is focusing on supporting school children of all ages (and their families) in Canterbury who are experiencing earthquake-related anxiety or behavioural problems. The New Zealand Red Cross 2011 Earthquake Commission has allocated $2.3 million to increase youth work and social work in Canterbury schools until 2016. The Youth Workers in Schools Grant ($1.2 million) will be used to fund 33 extra youth workers and extra hours for current youth workers in 33 earthquake-affected intermediate and secondary schools. The service will be provided by 24-7 YouthWork. The Social Workers in Schools Grant ($1.1 million) will be used to provide six social workers for earthquake-affected primary and intermediate students who are considered high need, high risk and high priority.[19]
- Dr Rob Gordon, an Australian specialist in disaster psychology, has visited Christchurch several times to give talks to a wide range of groups and organisations on recovering from a disaster. This has provided opportunities for communities to better understand the psychology of recovery.[20]
- The Residential Advisory Service was established on 16 May 2013 to help address rebuild-related stressors for property owners with insurance and other repair or rebuilding challenges. The service provides independent assistance to residential property owners to help them understand and progress the repair and rebuild process. Since its launch, this Service has received 4,744 contacts from residential property owners (as at 23 May 2014). Of these, 1,018 residential property owners have meet with an independent advisor and 461 have been referred to other agencies or organisations better matching their individual needs.

Looking forward

In February 2014 Cabinet approved the Community in Mind Strategy – a psychosocial strategy for greater Christchurch. The Strategy was released June 2014.

The Strategy is intended to guide agencies and community groups in developing, targeting and coordinating their programmes and activities for the psychosocial recovery of greater Christchurch over the next five years. It has three strategic components:

- **platform for community** – strengthening and supporting communities to drive their own recovery
- **communication and engagement** – ensuring coordination of recovery information and facilitating engagement opportunities
- **innovative services** – promoting the development and delivery of innovative services, supports and information to assist psychosocial recovery.

CERA's role is to ensure a Programme of Action is developed to support the Strategy and to implement a monitoring and reporting framework to assess progress.

Key partners are the three territorial authorities in greater Christchurch, CDHB, Ministry of Education, Ministry of Social Development, Ministry of Health, Ministry of Pacific Island Affairs, Te Puni Kōkiri, Red Cross NZ, representatives from the non-governmental organisation (NGO) sector, and a wide range of community organisations.

What are the indicators telling us?

Overall quality of life

Prior to the earthquakes, quality of life in Christchurch city was monitored using the Quality of Life Survey.[21] Similar to the national figures, 90 to 95 per cent of city residents indicated that their quality of life was good or extremely good prior to the earthquakes.[22] Since 2012, quality of life in greater Christchurch has been measured using the CERA Wellbeing surveys which show that **overall quality of life** has declined in the period after the major earthquakes and remains below the 2010 level.

In 2012, 74 per cent of greater Christchurch residents and 72 per cent of Christchurch city residents reported a high quality of life (Figure 1).[23] Notably, these lower figures followed a decrease to 80 per cent across New Zealand cities which suggests that, while an earthquake effect is apparent, other factors may have also had an impact.

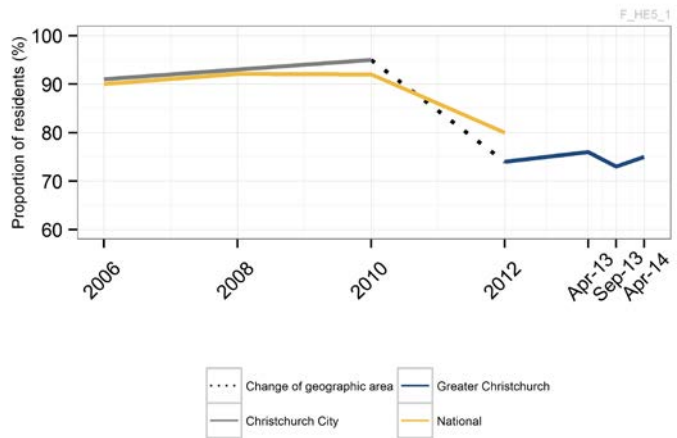
Over a year later in April 2014, there was little change in reported quality of life, with 75 per cent of greater Christchurch residents (73 per cent for Christchurch city) rating their quality of life positively. Just 7 per cent indicated that their quality of life was poor, which is consistent with previous results.

Those more likely to rate their overall quality of life positively in April 2014 were from higher income households (ie, more than $100,000) (85 per cent). In comparison, those less likely to rate their overall quality of life positively were people with a physical health condition or disability (55 per cent), people living in temporary housing (59 per cent), people of Māori (63%) or Pacific / Asian / Indian (61%) ethnicity and those from lower income households (ie, less than $30,000) (64 per cent).

According to the 2013 CERA Youth Wellbeing Survey, young people in greater Christchurch rate their quality of life higher than the total population who responded to the April 2014 CERA Wellbeing Survey. In 2013, 81 per cent of people aged 12– 24 years said their quality of life was extremely good (25 per cent) or good (56 per cent). Just 5 per cent indicated that their quality of life was poor.

Young people who were unemployed (74 per cent) and/or living with a long-term health condition or disability (54 per cent) were more likely to report having a lower quality of life.

Figure 1: Overall quality of life reported as good or extremely good



Change in quality of life

The September 2012 CERA Wellbeing Survey also asked respondents if their quality of life had changed **since the earthquakes**. Over half (54 per cent) reported that their quality of life had 'decreased significantly' (10 per cent) or 'decreased to some extent' (44 per cent). In April 2014, fewer people reported deterioration in their quality of life. Just under one-quarter (22 per cent) indicated that their quality of life had decreased in **the previous 12 months**. Of this group, 4 per cent said their quality of life had 'decreased significantly' and 18 per cent said it had decreased 'to some extent'. Another 17 per cent believed their quality of life had improved during the previous year.

Greater Christchurch residents living with a physical health condition or disability (41 per cent), people of Māori ethnicity (31 per cent) and people from lower-income households (less than $30,000) (29 per cent) were more likely to report deterioration in their quality of life over the previous 12 months.

Overall, respondents from Christchurch city rated their current quality of life, compared with the previous 12 months, less positively than those in Selwyn and Waimakariri districts and were more likely to say their quality of life had decreased.

Impacts of the earthquakes

There has been an overall increase in reported stress in greater Christchurch since the earthquakes, reflecting the significant impacts of the earthquakes on residents' wellbeing, although the rate now appears to be levelling off. At the same time there has been an increase in levels of stress across the country which reflects wider non-earthquake factors.

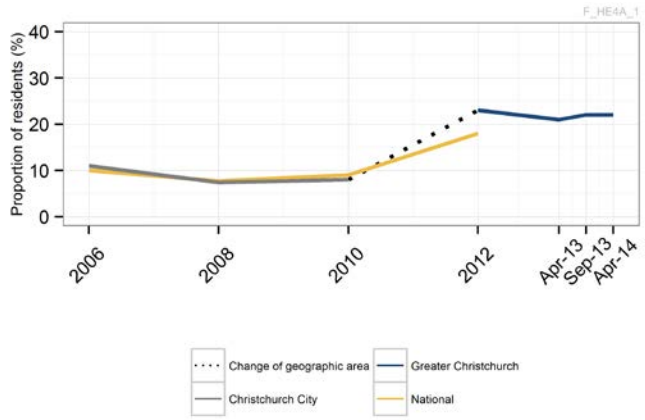
According to Figure 2, 8 per cent of residents in Christchurch city reported a high level of stress during 2010 compared with an average of 9 per cent across New Zealand cities.[24] In September 2012, the CERA Wellbeing Survey showed that stress levels had grown considerably: 23 per cent of greater Christchurch respondents (Christchurch city: 24 per cent) indicated that they had experienced stress 'always' or 'most of the time' in the previous year that had a negative effect on them. This reflected an increase across New Zealand cities to 18 per cent indicating that other non-earthquake related factors were also impacting on wellbeing.

The rate of stress for residents in the region was similar in both September 2013 and April 2014 at 22 per cent (Christchurch city: 22 per cent in September 2013 and 23 per cent in April 2014). In April 2014, 24 per cent of respondents reported rarely or never experiencing stress, compared with 20 per cent in 2012.

In April 2014, groups reporting disproportionately higher levels of stress than the rest of the population were those living in temporary accommodation (40 per cent), people living with a physical health condition or disability (39 per cent), Māori (33 per cent), renters (30 per cent) and those who had moved house since the earthquake sequence began (27 per cent).

When asked about their levels of stress during the last 12 months, 27 per cent of young people aged 12–24 years who responded to the 2013 CERA Youth Wellbeing Survey indicated they experienced stress always or most of the time. Stress levels were lower for young people living in the Selwyn district (21 per cent) compared with those in Christchurch city and the Waimakariri district (both 27 per cent) and higher for people with a long-term health condition or disability and the unemployed.

Figure 2: Proportion of respondents reporting high levels of stress



The April 2014 CERA Wellbeing Survey indicates that some of the secondary stressors, which take longer to recover from, continue to be a problem for residents. The three most prevalent issues continuing to have a moderate or major negative impact on the daily lives of residents are:

- being in a damaged environment and/or surrounded by construction work (30 per cent in September 2012, 21 per cent in April 2013, 20 per cent in September 2013 and 24 per cent in April 2014).
- transport related pressures (20 per cent in September 2012, 17 per cent in April 2013, 14 per cent in September 2013 and 22 per cent in April 2014).
- dealing with EQC/insurance issues in relation to personal property and house (37 per cent in September 2012, 26 per cent in April 2013, 23 per cent in September 2013 and 21 per cent in April 2014)

Divorce statistics

Divorce statistics have not yet shown an increasing pattern despite anecdotal evidence that the earthquakes have led to a high number of relationship breakdowns in greater Christchurch. However it is important to note that divorce is granted after a minimum of two years of separation. Therefore divorces initiated after the September 2010 earthquake would only become visible in divorce statistics from September 2012.

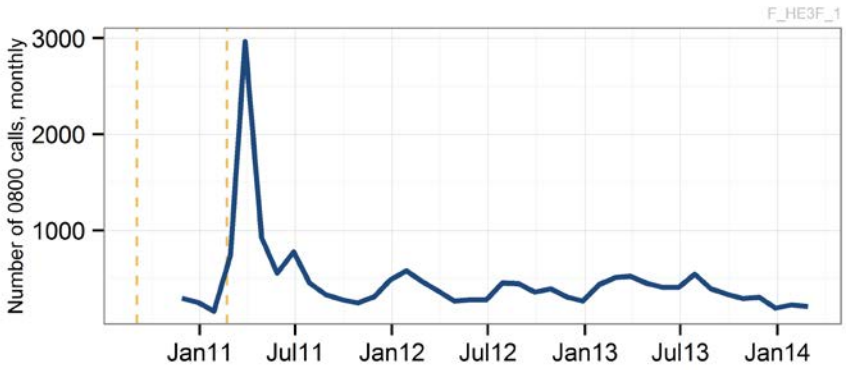
According to the 2013 Census there has been a slight change in the proportion of residents in greater Christchurch who have become divorced (dissolved marriages and dissolved civil unions) in recent years. In 2006 the divorce rate was 8 per cent growing slightly to 8.2 per cent in 2013. Separations (still legally married or in a civil union but permanently separated) actually decreased from 3.8 to 3.6 per cent during this period.

Divorce data from the Ministry of Justice for wider Christchurch shows little change pre and post-earthquakes with the exception of 2010/2011 when the number dropped from 1,065 in 2009/2010 to 942 in 2010/2011. The decrease in 2010/2011 may have been impacted by the relocation of the Family Court after the major earthquakes. Also applying for a divorce may not have been a priority for people given other issues at the time. In the following two years divorce numbers were 1,024 (2011/2012) and 1,008 (2012/2013).

Access to earthquake support services

The 0800 Canterbury Support Line is a government-funded service providing information about a range of services and support to callers affected by the earthquakes and subsequent recovery. Figure 3 shows there was a spike in calls to the 0800 Canterbury Support Line immediately after the February 2011 earthquake. A smaller increase in calls in February 2012 may have been due to the anniversary of the 2011 earthquake and the increase in August 2012 may have followed land zoning announcements. Between September 2010 and February 2014, more than 18,000 residents sought assistance through this service.

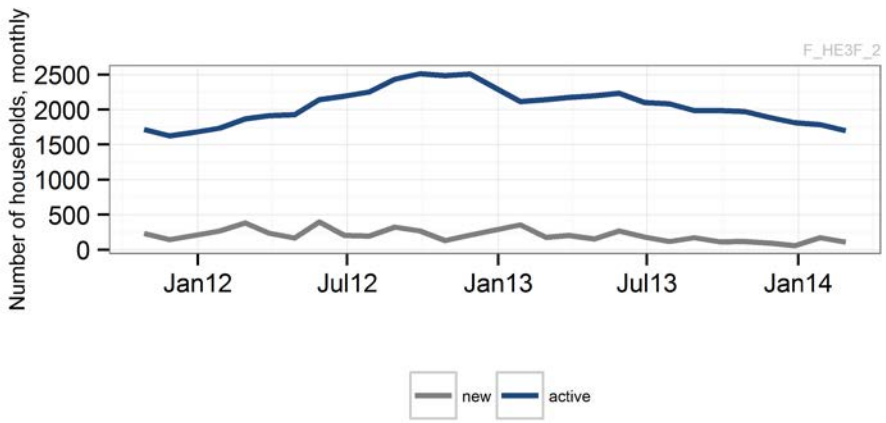
Figure 3: Calls to the 0800 Canterbury Support Line



As at February 2014, 59,200 no-cost counselling sessions have been provided to residents by Relationships Aotearoa and contracted providers. Since September 2010, approximately 24,100 people have been supported by this service, with an average of 220 new clients entering each month. Clients have presented for reasons including chronic stress related to secondary stressors around housing and insurance, which are affecting people's wellbeing and recovery.

The Earthquake Support Coordination Service was established to provide information and practical help for those whose homes and lives have been affected by the Canterbury earthquakes.[25] Figure 4 shows that between 60 and almost 400 new households have enrolled monthly with the service since October 2011. The number of active households peaked at 2,511 in September 2012 and has since gradually declined. Overall, 8,789 households have been or are being supported by the service as at 31 March 2014, and 1,653 households remain registered.

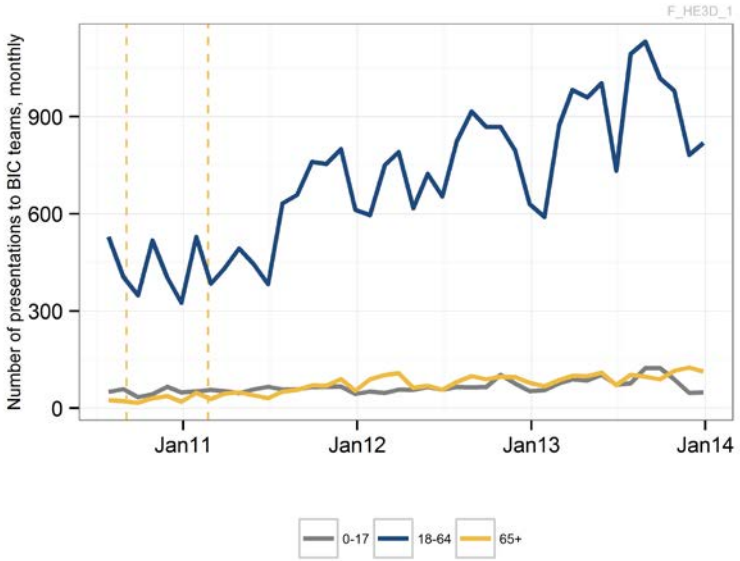
Figure 4: Households registered with Earthquake Support Coordination Service



Access to brief intervention counselling in general practice

Brief intervention counselling (BIC) provides people with mild to moderate mental health concerns up to 5 sessions of free psychological intervention from their general practice team, with the possibility of onward referral to a related community agency.[26] Figure 5 shows there has been an increase in the number of people seeking brief intervention counselling services in the CDHB region monthly from July 2011. The service employed additional staff to meet increased demand from the earthquakes. Presentations peaked at over 1,300 per month in August 2013 which was nearly triple the rate of presentations in August 2010 (486 presentations).

Figure 5: Number of attendances for brief intervention counselling by age



Total number of clients accessing existing CDHB mental health services

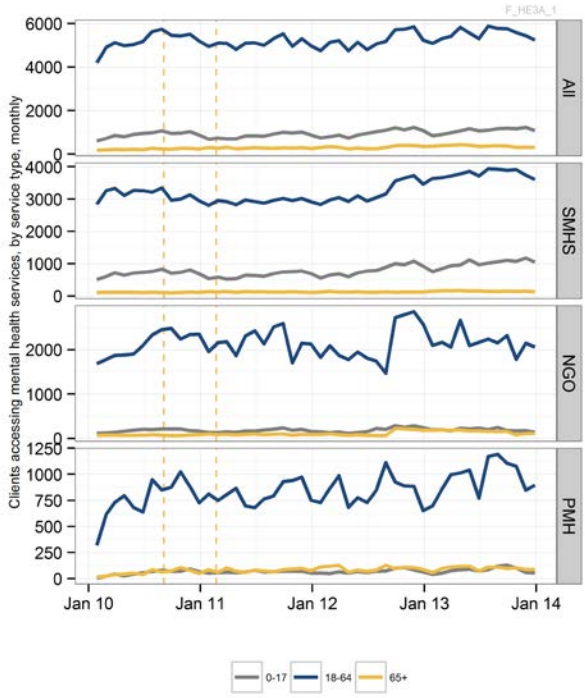
Figure 6 shows the total number of clients seeking mental health services in the CDHB region and then provides breakdowns of access to specialist mental health services, NGOs and primary mental health. These services all existed before the earthquakes.

Total demand did not increase significantly in the period immediately after the earthquakes (2011–2012), which may suggest that the increase in community cohesion and support or the provision of support services at a community level prevented demand for more specialised mental health services. Since then total demand has picked up. The total number of clients accessing all mental health services increased by 7 per cent between the year to December 2012 and the year to December 2013 compared with 4.6 per cent in the previous year. Overall, the total number of clients accessing mental health services increased by 12 per cent in the eight months up to August 2013 compared to the average number of clients for the pre-earthquake period, comprising the eight months up to August 2010.

There have been slight increases in access to specialist mental health services, NGO services and primary care-based mental health services over 2013 to 2014. In particular, young people (0–17 years) are accessing specialist mental health services at greater rates. In the three months to September 2013, an average of 1,058 young people accessed specialist services each month, up from 888 in the three months to September 2012 and 682 in the three months to September 2011. This may reflect an increase in the level of distress experienced by young people in Canterbury or may result from increased awareness of mental health issues within the community due to various promotional campaigns, prompting more people to seek help.

It is important to note that some demand-driven services have been increasing faster than the overall access rates. For example there has been a 30 per cent increase in access to the Psychiatric Emergency Service (PES) in 2013. PES is significant as it captures the highly acute cases.

Figure 6: Total number of clients accessing mental health services, by service type and age



Dispensing of pharmaceuticals for mental health

This is measured by the number of anti-depressants and anxiety medication units dispensed.

Anti-depressants are used to treat a range of mental health issues. Figure 7 shows that the number of anti-depressants dispensed in the CDHB region declined to 1,874,562 units in the three months to the end of March 2011, the period of the most devastating earthquakes. This represents a decrease of 7 per cent compared to the three months to the end of December 2010. It is not possible to determine whether this drop in units demonstrates a decline in need or usage, whether prescriptions were filled in other parts of New Zealand, or if people were too busy with other concerns to get to a GP.

The number of antidepressants then plateaued from May 2011 to December 2011 before dipping in the first quarter of 2012 and again in early 2013. In the second half of 2013, it appears that rates of dispensing, while still increasing, were growing on average at a slower rate compared with the rate before the earthquakes.

Figure 7: Number of anti-depressant units dispensed

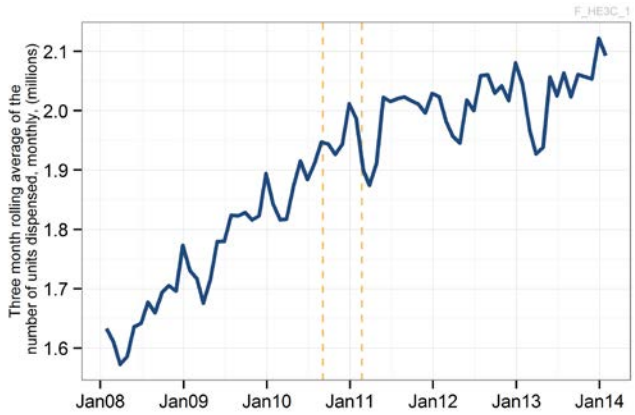
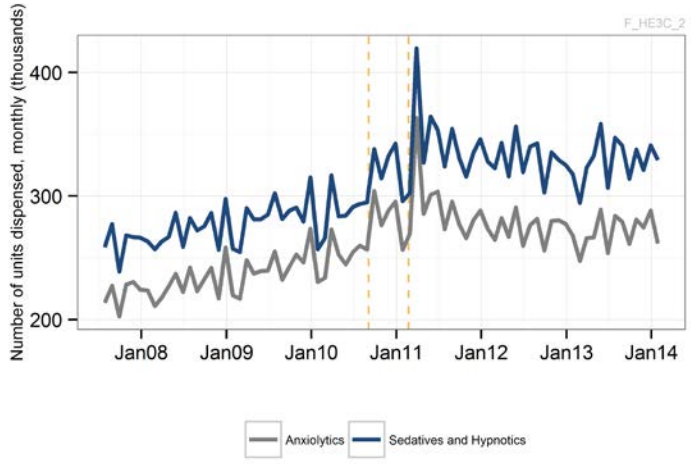


Figure 8 shows that the number of anti-anxiety medications (anxiolytics, sedatives and hypnotics) dispensed in the CDHB region increased immediately after the February 2011 earthquake. Levels peaked in March 2011 when 363,246 units of anxiolytics and 419,623 units of sedatives and hypnotics were dispensed. Numbers represent an increase of 33 and 32 per cent respectively compared with a year earlier (March 2010). These medications are usually prescribed in response to acute stress and sleep difficulties. Since then the number of units dispensed has generally been decreasing, in contrast to an increasing trend before the earthquakes.

Figure 8: Number of anti-anxiety units dispensed



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the support and assistance you can receive: www.cera.govt.nz/support-and-assistance

Find out more about the Canterbury District Health Board's mental health services: www.cdhb.govt.nz/yourhealth/mental.htm

Find out more about building community resilience: www.familyservices.govt.nz/working-with-us/programmes-services/connected-services/supporting-canterbury/resources-reports.html

Ring the Earthquake Support and Counselling Line on: 0800 777 846

Be connected to an Earthquake Support Coordinator: 0800 673 227

Be connected to a Kaitoko Whānau Earthquake Support Worker on: 0800 KAI TAHU or 0800 524 8248

Technical notes

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013 and April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

'Quality of life' and 'Experienced stress that has had a negative effect'

Data source:	The Quality of Life Survey (2006, 2008, 2010 Christchurch city and New Zealand data, and 2012 New Zealand data); CERA Wellbeing Survey (2012, 2013 and 2014 greater Christchurch data)
Data complete until:	October 2012 and April 2014

Notes: The Quality of Life Survey is a national survey run every two years. Computer-assisted telephone interviews were conducted with New Zealand residents aged 15 years and older. Residents were selected randomly from the Electoral Roll. The Christchurch sample size is 496 for 2010. For 2010, fieldwork was conducted between 19 November 2010 and 2 March 2011. All interviewing in Christchurch was undertaken before the 22 February 2011 earthquake (and after the first large quake in September 2010).

The questions were asked in the same fashion in the Quality of Life surveys and the CERA Wellbeing Survey

The results of the Quality of Life Survey include residents of Christchurch only, while the CERA Wellbeing Survey also includes residents of Waimakariri and Selwyn. The 'national' total in 2012 is the combined results of the six Quality of Life Project cities of Auckland, Porirua, Hutt, Wellington, Christchurch and Dunedin.

The 'national' total in 2010 is the combined results of the eight Quality of Life Project cities of Auckland, Hamilton, Tauranga, Porirua, Hutt, Wellington, Christchurch and Dunedin.

Prior to 2010, a further two cities were involved and the 'national' average included a number of people resident outside the main Quality of Life Project cities.

Divorce and separation statistics

Data source: Statistics New Zealand, Census of Population and Dwellings

Data frequency: 5 yearly (7 years for the 2013 Census)

Data complete until: 2013

Notes: The 2011 Census was not held on 8 March 2011 as planned, due to the Christchurch earthquake on 22 February 2011. At that time the 2011 Census could not have been successfully completed given the national state of emergency and the probable impact on Census results.[27]

The 2013 Census was held on 5 March 2013 and results were available from late 2013.

See www.stats.govt.nz/Census/2013-census/info-about-the-census.aspx

Dissolution applications

Data source: Ministry of Justice

Data frequency Yearly

Data complete until: June 2013

Notes: Data relates to applications filed at Christchurch or Rangiora. Divorce rates are not available.

The 0800 Canterbury Support Line

Data source: Family and Community Services Southern, Ministry of Social Development

Data frequency: Monthly

Data complete until: March 2014

Notes: Calls are logged as low, medium or high priority by staff. Calls are also categorised by reason for call.

Earthquake Support Coordination Service

Data source: Canterbury Earthquake Temporary Accommodation Service

Data frequency: Monthly

Data complete until: March 2014

Notes: Data from February 2011 to September 2011 were not available for graphing as they were previously collated monthly.

Brief intervention counselling services

Data source: Canterbury District Health Board

Data frequency: Monthly

Data complete until: December 2013

Notes: The BIC service provides up to five sessions of free psychological intervention for clients and, in some cases, also refers clients to other community agencies, such as Presbyterian Support and the Stop Trust, for ongoing support. Clients are referred to the BIC service through their general practice teams.

Mental health referrals to pre-existing services

Data source: Canterbury District Health Board

Data frequency: Monthly

Data complete until: December 2013

Notes: The data represent all referrals received from all sources, and referrals seen. Referrals seen are those referrals that proceeded to be seen for assessment/treatment (one day or more) for one or more contacts and include mental health earthquake-related services.

Note: there have been some data integrity issues that have affected capturing of NGO data.

Mental health pharmaceuticals

Data source: Pharms Data Mart via Canterbury District Health Board

Data frequency: Monthly

Data complete until: January 2014

Notes: The data presented are for units within prescriptions that are filled by patients. This does not measure the number of people that are actually taking prescribed medications. Further, some people do not fill prescriptions due to cost (5.7 per cent in 2012/13 in the CDHB region – according to the New Zealand Health Survey) and these people may be disproportionately represented in those requiring mental health pharmaceuticals.

Paxam (Clonazepam) is a drug primarily used to treat epilepsy. This has changed therapeutic groups and now is classified as an anxiolytic.

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[5] Adapted from Van Ommeren, M. (2006). Inter-Agency Standing Committee (IASC) guidance on mental health and psychological support in emergency settings. Paper presented at Public Health Pre-deployment Training, 28 November 2006: Chavannes de Bogis, Switzerland.

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[9] Department of Health. (2009). *NHS emergency planning guidance: planning for the psychosocial and mental health care of people affected my major incidents and disasters: Interim national strategic guidance.* London: Department of Health.

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[11] Lock, S., Rubin, G.L., Murray, V. et al. (2012). Secondary stressors and extreme events and disasters: a systematic review of primary research from 2010-2011. *PLoS Current.* 2012 October 29. doi: 10.1371/currents.dis.a9b76fed1b2dd5c5bfcfc13c87a2f24f

[12] Geonet. (2012). *Aftershocks.* Retrieved from www.geonet.org.nz/canterbury-quakes/aftershocks

[13] Information from Canterbury Earthquake Recovery Authority.

[14] For information on the CERA Wellbeing Survey, refer to the technical notes.

[15] Joseph, F. (2011). *What doesn't kill Us: the new psychology of posttraumatic growth.* Basic Books.

[16] All Right? is a Healthy Christchurch project that is being led by the Mental Health Foundation and the Canterbury District Health Board.

[17] As at 31 March 2014.

[18] Briefing paper in relation to the Minister's visit to Christchurch, 14 November 2012, Canterbury District Health Board.

[19] Retrieved from https://www.redcross.org.nz/what-we-do/in-new-zealand/stories/extra-support-for-canterbury-schoolchildren

[20] Dr Gordon has identified six tips for coping with the ongoing effects of a disaster. See https://www.redcross.org.nz/what-we-do/in-new-zealand/helping-in-canterbury

[21] See www.qualityoflifeproject.govt.nz/survey.htm

[22] The Quality of Life Survey (2006, 2008, 2010 Christchurch city and New Zealand data)

[23] Note that data from previous years are not directly comparable with the 2012 results as they were obtained using a different methodology. However, the results of the two surveys can be compared in a very general sense.

[24] See notes 21 and 22.

[25] www.familyservices.govt.nz

[26] www.cdhb.health.nz

[27] See www.stats.govt.nz/Census.aspx

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Risk factors

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why are risk factors important?

Risk factors and the behaviours behind them put people, and at times their families and communities, at risk of harm or poor health.

Problem gambling

Around 3 per cent of New Zealand adults are at risk of problems from their own gambling.[1]

Problem gambling affects not only the gamblers themselves but also the people around them. The evidence indicates that between 5 and 10 other people are affected to varying degrees by the behaviour of each serious problem gambler.[2]

Many of the consequences of problem gambling are financial. A 2010 study estimated that 5 per cent of adults had experienced someone in their wider household going without something they needed or a bill being unpaid in the previous 12 months because of gambling.[3] Problem gambling can lead to social isolation, depression, suicide, relationship breakdown, lowered work productivity, job loss, bankruptcy and crime (including family violence and fraud).[4]

Air quality

Home heating is the main cause of air pollution in urban centres in winter and people's heating decisions can present health risks to others. When solid fuels burn, they emit particulate matter into the air. The main pollutant of concern is PM_{10} (including $PM_{2.5}$) which is particulate matter less than 10 microns in diameter (less than 2.5 microns in the case of $PM_{2.5}$). People then breathe in those particles and absorb them into their lungs. These particles can irritate eyes, throats and lungs and result in health problems.

In mid 2012, the Canterbury District Health Board (CDHB) released a position statement recognising that clean air is a requirement for community health and wellbeing. It also acknowledged the considerable international evidence that air pollution causes excess morbidity and mortality, particularly through increases in the incidence of respiratory and cardiovascular illness. These effects are particularly concerning for the elderly and infants, people with asthma and other respiratory diseases, and sufferers of other chronic diseases, such as heart disease.

The World Health Organization has established a health-based guideline of 50 micrograms of PM_{10} per cubic metre of air ($\mu g/m^3$) averaged over a 24-hour period. Days when this guideline is exceeded are referred to as high pollution days. The Government's National Environmental Standards for Air Quality have set national targets that polluted airsheds around New Zealand must meet. Christchurch and Kaiapoi must reduce the number of high pollution days to meet a target of three days a year by September 2016 and one day a year by September 2020. Rangiora must meet a target of one day a year by September 2016.

Christchurch ratepayers have made a significant investment in cleaning up the air over the last 10 years. Before the earthquakes, the number of annual high pollution days in Christchurch fell from 60 to 16. Although considerable gains have been made, there is still some way to go to achieve the National Environmental Standards for Air Quality.

Warm homes

Many New Zealand homes do not meet World Health Organization recommendations for an indoor temperature of 18 degrees Celsius (and up to 21°C for the very young and the very old).[5] Cold, damp homes have negative health effects, especially for older people, children and people with a health condition or disability. The benefits of improved home insulation and more efficient heating

Recovery for greater Christchurch

include reduced health risks and lower heating costs.[6] In response to these issues, the Government introduced the Warm Up New Zealand: Heat Smart programme in 2009, which ran until June 2014, and the Warm up New Zealand: Healthy Homes programme, which began in 2013.

The Energy Efficiency and Conservation Authority (EECA) administered the Warm Up New Zealand: Heat Smart programme and has provided $347 million over five years for insulation retrofits and clean, efficient heating grants. The Government is investing a further $100 million over the next three years as part of its new Warm Up New Zealand: Healthy Homes insulation programme.

Smoking rates

Tobacco smoking kills 5,000 New Zealanders a year. Although smoking prevalence has reduced over time, according to the New Zealand Health Survey 18.7 per cent of New Zealanders continue to smoke.[7]

Smoking tobacco is a risk factor in six of the eight leading causes of death worldwide.[8] In New Zealand the main causes of smoking-related death are cancer, vascular diseases and respiratory diseases. About 50 per cent of regular smokers will be killed by their smoking. For Māori, the mortality rate due to smoking is 10 per cent higher than the rate for non-Māori.[9]

Obesity

Obesity is defined as an excessively high amount of body fat in relation to lean body mass. Eating a healthy diet and getting regular physical activity can help maintain a healthy body size.

Obesity is associated with an increased risk of a number of health conditions, including type 2 diabetes, ischaemic heart disease, high blood pressure, cancers, arthritis (especially osteoarthritis) and stroke.

The latest results from the New Zealand Health Survey show that three in ten adult New Zealanders were obese in 2012/13 (30.3 per cent). The number of obese adults continues to increase.[10]

Hazardous drinking

Alcohol is the most commonly used recreational drug in New Zealand. Just over 17 per cent of adult New Zealanders reported drinking alcohol at a level that was hazardous to their health in 2012/13.[11] Alcohol is a cause of over 60 different health conditions and, for almost all conditions, heavier alcohol use means higher risk of disease or injury.[12] Estimates indicate between 600 and 1,000 people die from alcohol-related causes each year.[13]

Alcohol also contributes to death and injury through traffic accidents, drowning, suicide, assault and domestic violence.[14] Up to 35 per cent of injury-based emergency department presentations are estimated to be alcohol-related, rising to up to 70 per cent during the weekend.[15] New Zealand Police estimates that approximately one-third of all apprehensions involve alcohol.[16]

How were risk factors impacted by the earthquakes?

Problem gambling

Before the earthquakes, Christchurch had 114 venues operating 1,767 gaming machines. Earthquake damage reduced the number of functioning premises.[17] The February 2011 earthquake closed nine venues in the central business district, 15 venues in the eastern suburbs, and the Christchurch Casino.[18]

No venues closed in the western suburbs. Analysis of gambling spending indicates that displaced users of damaged premises shifted their use of gaming machines to functional premises in the western suburbs.[19]

In Kaiapoi, the September 2010 earthquake closed three of the four licensed gambling venues.

Air quality

There is a great deal of uncertainty about how the earthquakes affected air quality. Although thousands of chimneys fell down during the earthquakes, many of these were for unused open fires and therefore do not necessarily represent a gain for air quality across the whole of the airshed.

In August 2012 the Institute of Environmental Science & Research (ESR) released a report on the health and other impacts of liquefaction silt following the Canterbury earthquakes.[20] This report

concluded that PM_{10} from liquefaction silt has different physical and chemical properties to existing PM_{10} in Canterbury, and resulting health impacts are unknown. The report recommends that silt should be removed as soon as possible if further liquefaction occurs.

The Earthquake Commission (EQC) Winter Heating Programme was established after the earthquakes to offer people with damaged chimneys the choice of replacing their old log burners or open fires with a new, clean, efficient heating system with the cost covered through their claim to the EQC. In the first year after the February earthquake there were over 14,200 clean heating repairs and replacements. By 14 February 2014, 18,867 repairs or replacements of heating appliances had been completed (10,404 heat pumps and 8,463 log burners), and this programme is ongoing.[21]

Warm homes

As noted above, thousands of homes lost their primary heat source in the earthquakes. In addition, roof leaks, blocked drains or ventilation blockage due to earthquake damage to homes may have caused dampness and mould. Earthquake-damaged houses may become more draughty and harder to heat.

Smoking rates

Internationally, rates of smoking have tended to increase after a natural disaster.[22] However GP reported smoking data for Canterbury shows only a slight increase in smoking in 2011. This subsequently tracked downwards. In addition the region's smoking rate recorded by New Zealand Health Survey decreased from 19 per cent in 2006/07 to 17.7 per cent in 2011/12.[23]

Obesity

It has been suggested that levels of obesity may increase because disasters trigger a survival instinct which may cause people to consume more calories.[24] A research study of women that started before the Canterbury earthquakes found that before the earthquakes, women's eating habits were fairly stable. Following the February 2011 earthquake, emotional eaters who reported high levels of post-earthquake distress started reporting increased overeating.[25] The New Zealand Health Survey also shows a small increase in obesity in Canterbury in line with national trends from 22.4 per cent in 2006/07 to 23.1 per cent in 2011/12.[26]

Hazardous drinking

Many studies suggest that disasters can lead to increased alcohol use and abuse.[27] In greater Christchurch there are anecdotal reports of increased alcohol use immediately after the earthquakes. Women's Refuge reported an increased rate of hazardous drinking leading to domestic violence following the earthquakes.[28] However the New Zealand Health Survey shows a marked decline in hazardous drinking in Canterbury from 21.6 in 2006/07 to 11.0 in 2011/12.[29]

What is happening now?

Problem gambling

At December 2013, 92 venues in Christchurch city were operating with 1,321 gaming machines. Total venues had dropped from 99 a year earlier while machines had declined slightly from 1,325. Numbers remain below pre-earthquake levels. Just over 7 per cent of all gaming machines in New Zealand are located in Christchurch city while the city typically accounts for around 10 per cent of national gaming machine proceeds.[30]

In addition, the Multi Venue Exclusion programme has been introduced to Canterbury. Under this programme, people who have recognised that their gambling has become a problem can choose to exclude themselves from several venues at once without having to visit each venue separately to do so. This programme works across all venues and casinos.

Air quality

During winter 2014, Environment Canterbury will continue to relax the implementation of the Air Plan restrictions on the use of open fires and old wood burners for people living in earthquake or flooding damaged homes. This will ensure that residents will remain warm while waiting for a home repair or rebuild. However, the winter fire ban on open fires and older log burners still applies to people whose homes have not been compromised by earthquakes or flooding.[31] There will be also consideration given to those needing to use older burners who are in financial hardship.

Environment Canterbury is continuing to focus on improving the city's air quality through four key strategies: working closely with key partners such as city and district councils and district health boards, developing programmes to reduce household smoke emissions, review of the Air Plan and encouraging the development of ultra-low emissions log burners.

As part of the Air Plan review, Environment Canterbury is working closely with Community and Public Health to carry out a health impact assessment to gain further insight into how to support the community to have both warm homes and clean healthy air. This winter Environment Canterbury has launched a social marketing campaign to share tips on how to have a smoke-free chimney.

Warm homes

A change to the Earthquake Commission's rules around the Canterbury earthquake repairs process allows customers the opportunity to install insulation in areas exposed during earthquake repairs, even if the insulation work is not earthquake related. Insulation in some parts of a house can be difficult to access and install. Coordinating insulation installation with repairs will give customers the opportunity to get normally difficult spaces insulated.

Home owners are responsible for organising and paying for any insulation that has not been installed in the house already. The initiative has been a collaboration between the Canterbury Home Repair Programme and EECA.

The Warm Up New Zealand: Healthy Homes programme offers free ceiling and underfloor insulation to low income households with occupants at risk from illnesses linked to cold, damp housing. This includes low income households with children under 17 and elderly residents over the age of 65. EECA partners with Service Providers, third-party funders and Health and Social agencies to ensure that eligible low income households are identified and their houses are insulated for free. By December 2013, insulation had been installed in a total of 507 homes in greater Christchurch.

This work is on top of the four-year Warm Up New Zealand: Heat Smart programme (due to end in June 2014) which installed insulation in almost 22,000 rented and owned homes in greater Christchurch. It also installed almost 9,000 clean and efficient heaters between July 2009 and December 2013.

The 'Let's Find & Fix' door knocking campaign was developed by the Canterbury Communities' Earthquake Recovery Network (CanCERN) alongside agencies, including the Red Cross, EQC, CERA, Christchurch City Council, Christchurch Earthquake Appeal Trust, Tindall Foundation, Insurance Council New Zealand and insurers, to get temporary repair work on damaged houses carried out at no cost to the home owner. Red Cross volunteers aimed to contact more than 5,000 households in the worst-affected areas of greater Christchurch in April 2014. This campaign will help ensure that residents are warm, dry and secure over the coming winter months. By 30 May 2014, approximately 4,909 houses had been door knocked. Of this total, 882 had been identified as meeting the criteria for the initiative.

Smoking rates

CDHB and Smokefree Canterbury have a range of initiatives to support people to quit smoking and to work with schools in disadvantaged areas. Enrolments in the general practice-based cessation programme have increased significantly.[32]

Hazardous drinking

Christchurch City Council has developed a local alcohol policy (LAP) with tougher rules on where and when alcohol can be sold in Christchurch. The LAP – a provision of the Sale and Supply of Alcohol Act 2012 – will enable the council to regulate opening hours for licensed premises, control location and lay down one-way door restrictions in late-night bars and clubs. The draft LAP was out for consultation between 31 May and 1 July 2013. In October 2013, the council committee reviewing the LAP concluded deliberations on the 4,060 submissions it received on the draft and recommended that the incoming Christchurch City Council publicly notify the provisional LAP some time after 18 December 2013 as allowed under the Sale and Supply of Alcohol Act 2012.[33] However, the LAP is currently on hold as the council awaits the outcome of legal action relating to LAPs in other parts of the country.

What are the indicators telling us?

Problem gambling help seeking

We are measuring this in two ways:

- the number of new callers recorded in the Gambling Helpline database
- the number of clients seeking help from face-to-face problem gambling intervention services funded by the Ministry of Health.

There does not appear to be an immediate earthquake impact on new client calls to the Gambling Helpline from greater Christchurch residents, with numbers increasing slightly (2 per cent) between 2010 and 2011 after a general pattern of decline in line with the national trend. However after 2011, new client calls for greater Christchurch have declined at a faster rate than for New Zealand as a whole, with a 62 per cent drop between 2011 and 2013 compared with a 19 per cent reduction nationally (Figure 1).

Figure 1: Number of new clients that have contacted Gambling Helpline

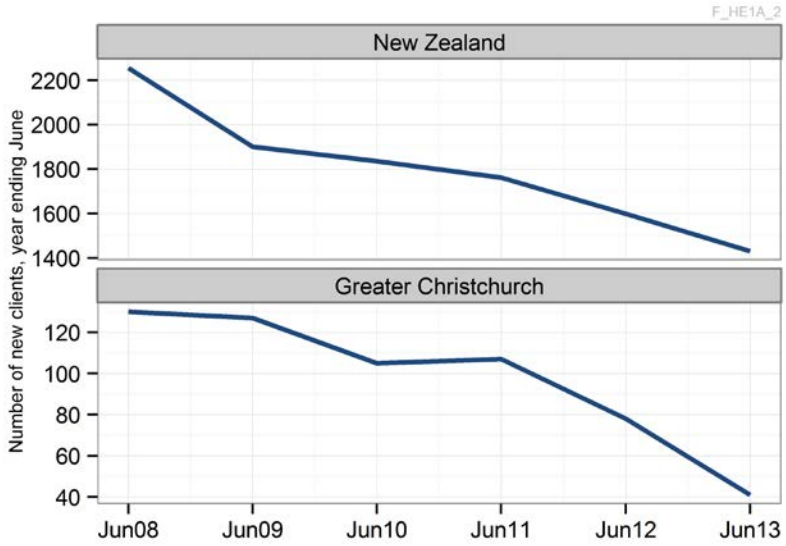
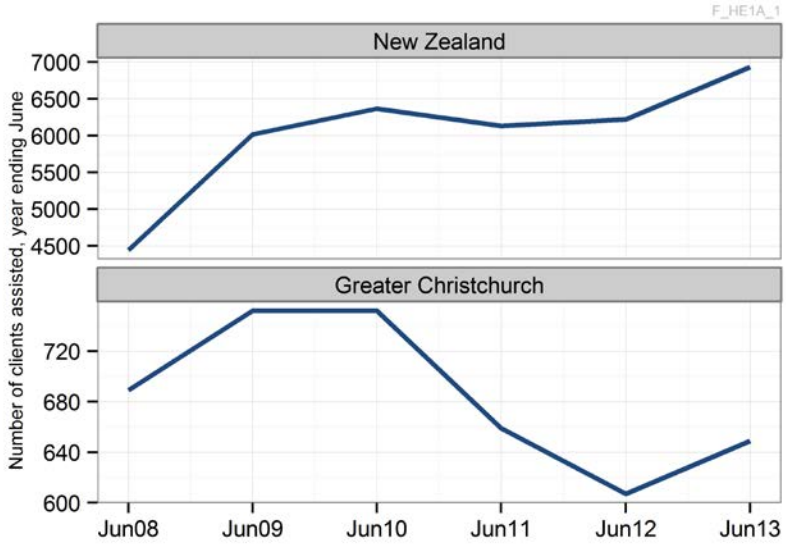


Figure 2 shows the number of people accessing face-to-face problem gambling services decreased significantly from the year ending June 2010 to the year ending June 2012 in greater Christchurch, while it remained relatively steady in New Zealand overall. In contrast, figures for the year ending June 2013 show a marked increase both in greater Christchurch and nationally.

Figure 2: Number of problem gamblers assisted by an intervention service



Air quality breaches

Air quality breaches are measured as the number of days the particulate level exceeds the daily level for particulate matter (PM_{10} of 50 µg/m^3) each year.

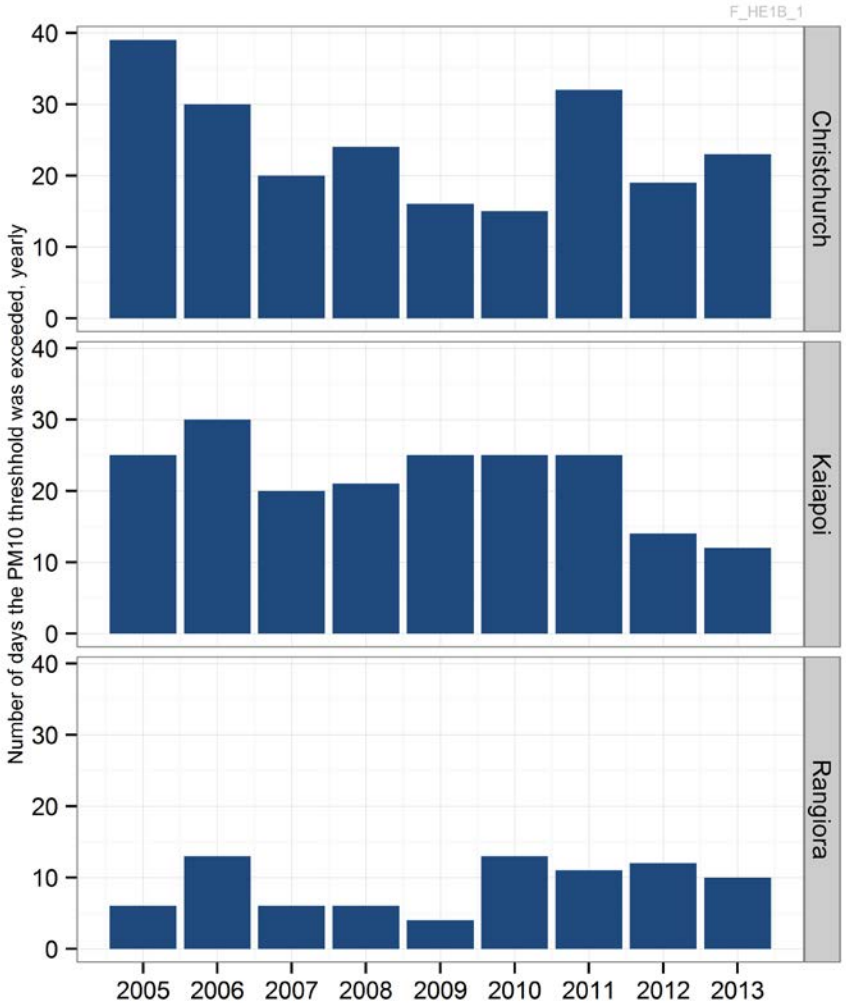
Air quality breaches in Christchurch city increased by 25 per cent in 2013 compared to the average number of breaches for the pre-earthquake period from 2008 to 2010.

Figure 3 shows the number of high pollution days each year. The number of days that exceed the standard varies annually and is affected by the weather. Typically high pollution days occur on still, cold winter nights when households burn wood for heating.

Environment Canterbury reported that 17 of the 32 high-pollution days recorded in Christchurch during 2011 were influenced by liquefaction silt and dust on roads. It was during this time that strong winds blew dry liquefaction silt around. Traffic also moved silt and finely ground gravel on roads into the air, which increased the number of days of air quality breaches in Christchurch during 2011.

In 2013, there was 23 high pollution days in Christchurch. This is greater than the 19 breaches in 2012 and significantly higher than the number of exceedance days recorded immediately prior to the earthquakes in 2009 (16 breaches). The number of high pollution days experienced in Kaiapoi in 2013 was 12 and in Rangiora 10; both totals are below the 2012 levels.[34]

Figure 3: Number of days of air quality breaches each year



Warm homes

Figure 4 shows clean heating installations in both rental and owner-occupied homes in greater Christchurch by EQC and EECA (Warm Up New Zealand: Heat Smart programme). The number of installations by the EQC Winter Heating programme spiked in May 2011, the first winter after the February earthquake, with a total of 3,469 installations. Since then, installations by month have continued, but at a much lower rate. In total between April 2011 and January 2014, EQC installed 18,467 clean heating appliances in greater Christchurch.

As part of the Warm Up New Zealand: Heat Smart programme, EECA installed heating appliances in a total of 8,965 homes between January 2010 and December 2013 in greater Christchurch (and insulation in over 22,000 homes). The new Warm Up New Zealand: Healthy Homes programme has been offering free ceiling and underfloor insulation to high-risk households.[35] As Figure 5 shows, the number of installations has increased since the start of the new programme, with a total of 507 insulations installed in the first five months.

Figure 4: Winter heating installations (clean heating appliances only) by EECA (Warm Up New Zealand: Heat Smart programme) and EQC in greater Christchurch

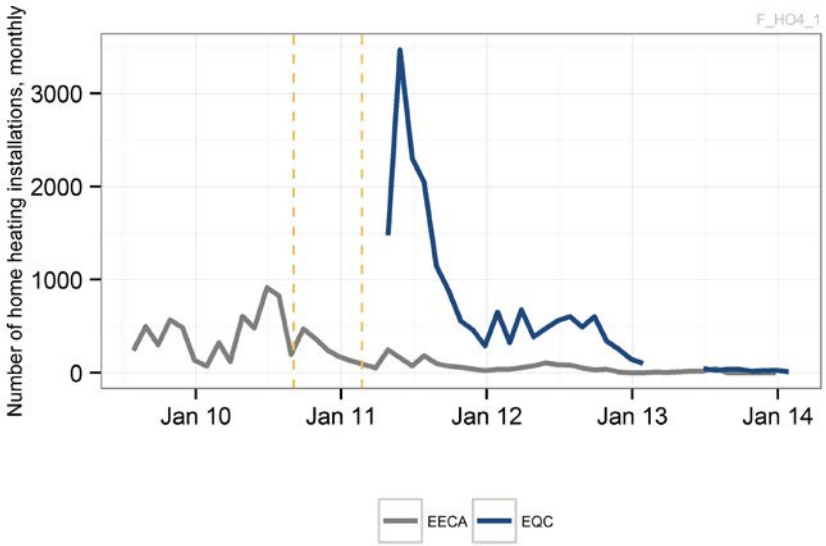
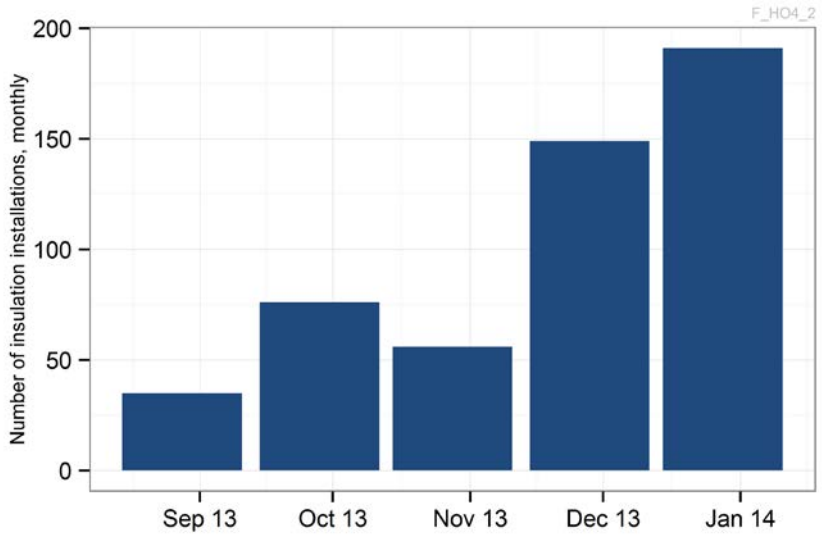


Figure 5: Winter insulation installations by EECA in greater Christchurch under the Warm Up New Zealand: Healthy Homes programme



Smoking rates

We are measuring this in three ways:

- youth smoking – measured as the proportion of the Year 10 population who smoke every day
- adult smoking – the proportion of the adult population presenting to their general practitioner (GP) who are current smokers
- adult smoking – the proportion of the adult population who are current smokers from the New Zealand Health Survey.

Figure 6 shows that the proportion of Canterbury Year 10 students (aged 14 or 15 years) who smoke every day has generally declined over time, consistent with national trends. According to the ASH Year 10 Survey, the Canterbury rates of daily smoking decreased from 3.8 per cent to 3.1 per cent between 2011 and 2012. This did pick up slightly to 3.2 per cent in 2013 but remained well below pre-earthquake levels.

Similarly, results from the New Zealand Health Survey (see Table 1) show that the proportion of young people aged 15–24 years who currently smoke has declined. The rate dropped from 18.6 per cent in 2006/07 to 15.1 per cent in 2012/13.

Figure 6: Proportion of the Year 10 population who are daily smokers

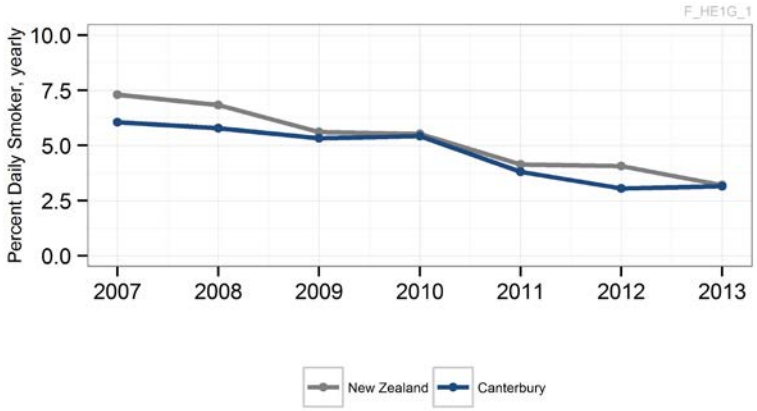
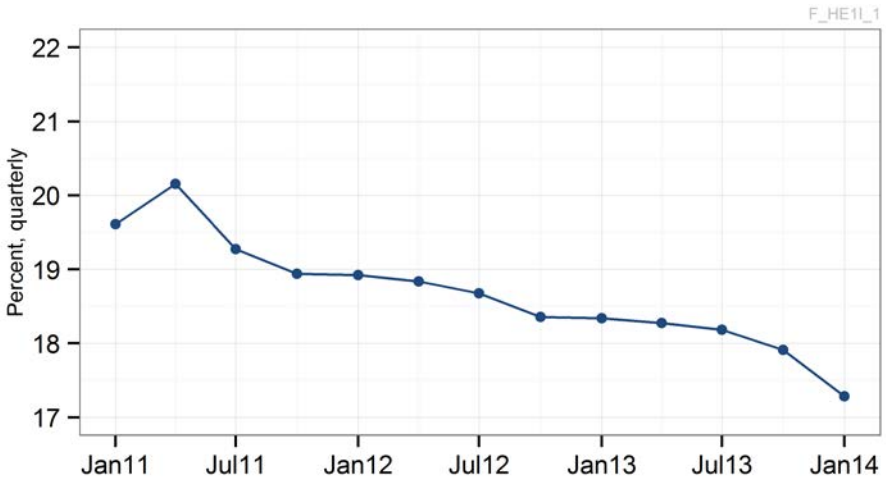


Figure 7 shows that the proportion of the adult population in Canterbury who reported to their GP that they 'are current smokers' increased slightly after the February 2011 earthquakes to just over 20 per cent (as at April 2011). The proportion has since tracked downwards, decreasing to 17.2 per cent in January 2014.

This decline in GP-reported adult smoking is generally consistent with results from the New Zealand Health Survey, which found that the proportion of smokers aged 15 years and over in Canterbury decreased from 19 per cent in 2006/07 to 16.2 per cent in 2012/13 (see Figure 8 and Table 1). The latest smoking rate in Canterbury for this group is slightly lower than in New Zealand overall (18.7 per cent in 2012/13). Table 1 shows that the rate of current smoking in the 45–64 years age group declined significantly over time, from 18.8 per cent in 2006/07 to 10.2 per cent in 2011/12, but has subsequently increased to 17.8 per cent in 2012/13.

Figure 7: Proportion of adult population who are current smokers



Obesity

Figure 8 shows that overall obesity has increased between 2006/07 and 2012/13 in both Canterbury (from 22.4 per cent to 30.3 per cent) and New Zealand (25.7 per cent to 30.3 per cent). According to Table 1, the rate of obesity in the 15–24 years age group increased significantly from 3.4 per cent in 2006/07 to 30.6 per cent in 2012/2013 compared with a national increase from 14.4 per cent to 20.6 per cent for this group.

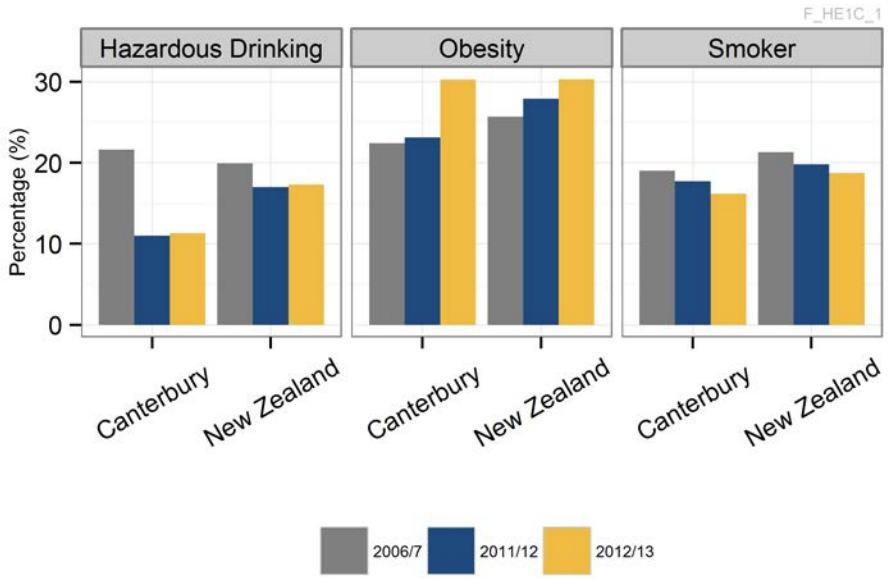
Hazardous drinking

The results for hazardous drinking in Figure 8 and Table 1 are of note, given anecdotal reports of increased alcohol abuse since the earthquakes. While hazardous drinking has decreased nationally (from 20 per cent in 2006/7 to 17.3 per cent in 2012/13), the rate in Canterbury almost halved, dropping from 21.6 per cent in 2006/07 to 11.3 per cent in 2012/13. Although the reasons for this decrease are not clear, the results are encouraging from a public health perspective, particularly in the 15–24 years age group where the recorded decrease, from 41.9 per cent in 2006/07 to 19.9 per cent in 2012/13, is important for long-term health.

Table 1: Proportion of Canterbury (CDHB) residents (15+ years) who are current smokers, obese, or hazardous drinkers from the New Zealand Health Survey[36]

Demographics	Current smoking (%)			Obesity (%)			Hazardous drinking (%)		
	2006/7	2011/12	2012/13	2006/7	2011/12	2012/13	2006/7	2011/12	2012/13
Sex									
Female	17.1	15.2	14.0	23.7	22.3	29.9	13.8	4.9	4.8
Male	21.9	20.7	18.7	20.4	24.4	30.4	30.7	16.6	17.4
Age (years)									
15-24	18.6	19.7	15.1	3.4	17.3	30.6	41.9	17.0	19.9
25-44	22.4	24.6	19.9	26.7	22.7	27.9	18.7	13.7	11.5
45-64	18.8	10.2	17.8	30.8	26.2	34.7	13.1	5.9	5.7
65+ years	8.5	5.4	3.5	27.8	29.2	28.5	6.4	0.7	3.1
Population rate CDHB area	19.0	17.7	16.2	22.4	23.1	30.3	21.6	11.0	11.3

Figure 8: Proportion of Canterbury (CDHB) and New Zealand residents who are current smokers, obese, or hazardous drinkers[37]



Find out more

Find out more about the Canterbury Wellbeing Index:www.cera.govt.nz/cwi

Find out more about the Let's Find & Fix campaign:
www.rebuildchristchurch.co.nz/blog/2014/4/let-s-find-and-fix

Ring the Gambling Helpline on 0800 654 655 or visit the website:
www.gamblinghelpline.co.nz

Find out more about problem gambling, including how to seek help in Canterbury and other parts of New Zealand, from the Health Promotion Agency's Choice Not Chance website:
www.choicenotchance.org.nz

Find out more about actions to eliminate disease and death caused by tobacco from ASH New Zealand: www.ash.org.nz

Ring the smoking Quitline on 0800 778 778 or visit the website: www.quit.org.nz

Find out more about the National Environmental Standards for Air Quality from the Ministry for the Environment: www.mfe.govt.nz/laws/standards/air-quality

Find out more about air quality in greater Christchurch, including air quality rules and policy, from Environment Canterbury: www.ecan.govt.nz/our-responsibilities/air/pages/default.aspx

Find out more about the Warm Up New Zealand: Healthy Homes programme:
www.eeca.govt.nz/eeca-programmes-and-funding/programmes/homes/insulation-programme

Find out more about the ESR report on PM_{10} and Christchurch liquefaction silt: www.esr.cri.nz

Find out more about the effect of alcohol on health:
www.alcohol.org.nz/alcohol-you/your-body-alcohol/body-effects

Find out more about the Christchurch City Council's local alcohol policy:
www.ccc.govt.nz/thecouncil/policiesreportsstrategies/policies/groups/alcohol/alcoholpolicy.aspx#jumplink4

Technical notes

Problem gambling prevalence

Data source: Ministry of Health administrative data

Data frequency: Year ending June

Data complete until: June 2013

Notes: Gambling Helpline data represent clients who are first time callers

The intervention client data represent the number of clients who have received problem gambling treatment services and who have identified to the service provider a primary problem gambling mode causing them significant harm.

A direct comparison between the July 2004 to June 2008 data and the July 2008 to June 2012 data has limitations because 1) new service specifications for problem gambling intervention service providers were implemented from January 2008 and 2) equivalent intervention services provided by the Gambling Helpline have been included in the data since November 2008.

Air quality breaches

Data source: Environment Canterbury air quality monitoring data

Data frequency: Data collected daily and reported annually in this report

Data complete until: December 2013

Notes: Environment Canterbury monitors air quality for three airsheds in the greater Christchurch area: Rangiora, Kaiapoi, and Christchurch city. PM_{10} in Christchurch city is measured at two locations: St Albans and Woolston. Data for Christchurch city come from the maximum reading from the two locations in the city. The data reported are the 24-hour average PM_{10} concentrations from midnight in $\mu g/m^3$.

The critical value for an exceedance is 50 $\mu g/m^3$, so the daily concentration has to be greater than 50 ug/m^3. Environment Canterbury reports there is uncertainty in measuring the PM_{10} concentrations (+/– 2 $\mu g/m^3$), so it reports PM_{10} concentrations in whole numbers. We have used the same method as Environment Canterbury and count the day as an exceedance if the PM_{10} concentration is greater than or equal to 50.5 $\mu g/m^3$.

EECA Warm Up New Zealand: Heat Smart programme retrofits

Data source: Energy Efficiency and Conservation Authority

Data frequency: Data collected monthly

Data complete until: December 2013

Notes: A retrofit is where a home has had a subsidised heating or insulation retrofit contracted by EECA. Data show the number of houses that had subsidised heating retrofits only.

The EECA data do not include repairs and replacements undertaken by the EQC winter heat programme.

Greater Christchurch is the aggregation of Christchurch city and Waimakariri and Selwyn districts.

EECA Warm Up New Zealand: Healthy Homes programme

Data source: Energy Efficiency and Conservation Authority

Data frequency: Data collected monthly

Data complete until: December 2013

Warm Up New Zealand: Healthy Homes is a new three-year government insulation programme delivering warmer, drier and healthier homes. The programme will be targeted at households (including renters) that have a Community Services Card and are at high health risk.

Greater Christchurch is the aggregation of Christchurch city and Waimakariri and Selwyn districts.

EQC winter heating installations

Data source: Earthquake Commission

Data frequency: Data collected weekly but reported monthly

Data complete until: January 2014

Notes: Chimney Replacement Programme. If a home owner's chimney was damaged significantly by the earthquakes, they could choose to have it rebuilt or to take part in the Chimney Replacement Programme. To be eligible, the house owner must have a claim with EQC and be referred to Fletcher EQR.

The Chimney Replacement Programme was set up following the September 2010 earthquake. It has since been rolled into the Canterbury Home Repair Programme run by EQC and Fletcher EQR. It offers people whose chimneys were damaged the choice of replacing their old log burner or open fire with a new, clean, efficient heating system, with the cost being covered under their EQC claim.

This data set excludes the security review period 22/2/13 to 17/5/13. A total of 48 completions were not recorded in the completed figures.

Smoking rates for youth from the Year 10 ASH Snapshot Survey

Data source: ASH New Zealand

Data frequency: Data collected annually

Data complete until: 2013

Notes: The Year 10 ASH Snapshot Survey has been used to monitor student smoking since 1999. The ASH survey samples approximately half of the schools in New Zealand with Year 10 students annually, and reports results for students who were 14 or 15 years of age at the time of the survey. The indicators are based on the results that are estimates for the whole population based on the Year 10 sample.

The survey normally takes place in Term 3. In 2011 it was changed to Term 2. In 2011, Term 2 went from 2 May to 15 July. In 2010, Term 3 ran from 1 August to 7 October.

Daily smokers are those students who reported that they smoke 'at least once a day' when asked, "How often do you smoke now?"

The Canterbury area refers to the Canterbury District Health Board boundaries.

PHO smoking rates for adults

Data source: CDHB PHO data

Data frequency: Data collected quarterly

Data complete until: January 2014

Notes: This is measured as the proportion of the adult population (15–74 years) who are current smokers in the Canterbury District Health Board area. The data are provided by Canterbury GPs. This information is required by the Ministry of Health and the proportion of the population who have been asked this question has steadily increased. The smoking rate is only calculated for those who have attended a GP in the past year. This may exclude many high-risk smoking groups from the present sample who do not access GP services for various reasons.

Data for January 2014 quarter are preliminary results and are accurate within ± 0.1 to 0.2 per cent.

New Zealand Health Survey: Results for smoking, obesity and hazardous alcohol use

Data source: Ministry of Health

Data frequency: Data collected 2006/07, 2011/12 and 2012/13

Data complete until: 2012/13

Notes: The New Zealand Health Survey has a multi-stage, stratified, probability-proportional-to-size sampling design. The survey is designed to yield an annual sample size of approximately 13,000 adults and 4,500 children.

A dual frame approach has been used where participants are selected from an area-based sample and a list-based Electoral Roll sample. The aim of this approach is to increase the sample sizes for Māori, Pacific and Asian ethnic groups.

Interviews are conducted in participants' homes, with the interviewer typing responses directly into a laptop computer using 'Survey System' computer-assisted personal interview software. Showcards with predetermined response categories are used to assist respondents, where appropriate.

Current smoker, based on the World Health Organization definition, is someone who has smoked more than 100 cigarettes in their lifetime and is currently smoking at least once a month.

Obesity is defined as a body mass index (BMI) of 30 or more. Survey interviewers measured respondents' height and weight, from which BMI could be calculated. BMI is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of their height in metres (kg/m^2). According to the World Health Organization:[38]

- a BMI greater than or equal to 25 is overweight
- a BMI greater than or equal to 30 is obesity.

BMI provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered a rough guide because it may not correspond to the same degree of fatness in different individuals and ethnicities.

Hazardous drinking is defined as a score of 8 or more on the 10-question Alcohol Use Disorders Test (AUDIT),[39] which includes questions about alcohol use, alcohol-related problems and abnormal drinking behaviour. Hazardous drinking refers to an established drinking pattern that carries a risk of harming the drinker's physical or mental health, or having harmful social effects on the drinker or others.

This score indicates a potentially hazardous drinking pattern with high risk of future damage to physical and/or mental health due to drinking alcohol, but may not yet have resulted in significant adverse effects.[40]

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CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Offending patterns

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why are offending patterns important?

Offending and people's fear of offending affect the wellbeing of individuals and communities. People who hold fears for their personal security can have a lower quality of life and a decreased sense of wellbeing, and may find it difficult to participate fully in their community.[1]

Similarly where offending in a community is perceived to increase or actually does increase, the community may become less appealing for new residents and/or for people who go there for recreation or shopping.[2] In contrast, communities with low levels of offending attract greater investment from the private sector, which in turn creates more employment opportunities and a higher quality of life as the community is more stable and healthier.[3]

Offending patterns are associated with poverty, exclusion and low quality of life. Conditions that make offending more likely are high levels of unemployment, low incomes, low educational achievement, and difficult early family circumstances including abuse and neglect.[4]

In addition to preventing people from starting a life of offending, significant social and economic resources are invested in reducing re-offending. Experts agree that crime is linked to unemployment, low earnings and job instability and that gaining stable employment is 'an important step away from offending'.[5]

The path to employment is smoother where the released prisoner has overcome any substance abuse issues, has found stable housing and has significant support to reintegrate into the community.[6] It is also beneficial if they receive training before they are released so that they have skills required in the labour market, and if local employers are prepared to employ ex-prisoners.[7]

It is anticipated that employment opportunities created by the repair and rebuild of greater Christchurch may help to lower the rates of offending and re-offending.

How were offending patterns impacted by the earthquakes?

As would be expected, the number of calls to emergency services in the immediate aftermath of the September 2010 and February 2011 earthquakes was high. These calls largely related to earthquake needs rather than criminal activity. Fewer calls were received after the 6.3 aftershock in June 2011.

In the aftermath of some disasters such as Hurricane Katrina in New Orleans, violence and property crime spiked immediately and later fell to a lower rate than before the disaster.[8] However, the context in New Orleans before the disaster was quite different from that in greater Christchurch. It is more typical for crime rates to drop after disasters and return to usual levels within six months to a year.[9]

In greater Christchurch, the New Zealand Police recorded a significant fall in total crime in the year following the September 2010 earthquake. Expressed as a rate per 10,000 of population, total recorded crime for the three years before the earthquake was 1,073 offences per 10,000. The rate for the year after the September 2010 earthquake dropped to 876 offences per 10,000 people.[10]

There are likely to be many reasons for the reduction in criminal behaviour. For example, after the earthquakes many people moved away from greater Christchurch and the communities that remained became more connected. In addition, after the February 2011 earthquake, the central business district, historically a high crime location, was closed and extra police and military

personnel from around New Zealand and other countries provided a reassuring presence to the community.

With the central business district closed, some of the criminal activities that are usually associated with centres of nightlife moved to other areas such as the entertainment hubs of Riccarton and Merivale.

Overall, burglary rates fell in a similar way to the rate for crime overall. However, the number of burglaries rose sharply in the month after the February 2011 earthquake, possibly because damaged and unoccupied homes made burglaries easier.

Researchers have found that immediately after other disasters, family violence rates have increased.[11] New Zealand Police data however suggest that, initially, greater Christchurch may not have followed this pattern.

Total family violence offences reported did increase in the month of the September 2010 earthquake (434 compared with 291 in September 2009). However, no increase was apparent immediately after the February 2011 earthquake and comparatively low levels of offences were reported in each of the four months following.[12] Yet these figures may not be an accurate record of offending: it is possible that reporting was lower due to other pressures caused by the earthquake. It is estimated that even in 'normal times' only 18 per cent of family violence events nationally are reported to the Police.[13]

Women's refuge providers support the view that rates of reporting may have been affected by the earthquakes. Their experience was that victims were less able to seek help due to many stressors, including damaged homes, lost employment and more frequent risk behaviours such as hazardous drinking.[14] Anecdotally, social services report that cases became more complex with the addition of earthquake-related stress.[15]

Like many other sectors, the justice sector experienced significant damage to infrastructure in the earthquakes. After losing its facilities, the Ministry of Justice opened a criminal court at Ngā Hau e Whā National Marae which operated until May 2013. Other social agencies based at the marae to assist people in need following the earthquakes reported that locating the court in the marae created stronger links with the community and across agencies.

What is happening now?

Total crime patterns in greater Christchurch are unique and it appears they have deviated from the trends evident after disasters overseas. Total assault- and property-related crime has decreased significantly since the start of the earthquakes in September 2010 and as of December 2013 was still below pre-earthquake levels.

While these reductions in crime are positive news, the rebuild of greater Christchurch creates more opportunities for offending, such as fraud.

The Government has directed social agencies working across the justice sector to focus on four priorities under the Drivers of Crime programme (launched in 2009). That is, they are to improve parenting support for at-risk families, address conduct and behavioural problems in childhood, reduce harmful alcohol use, and manage low-level repeat offenders.[16] Under the Prevention First strategy, the New Zealand Police are focusing on a goal of reducing total reported crime by 13 per cent by the 2014/15 financial year.

In addition to these goals the Department of Corrections is working to assist more offenders to find employment when they are released from prison. Among other forms of education, prisoners who meet certain criteria can participate in Trade and Technical National Certificates approved by the New Zealand Qualifications Authority, as well as in industry training qualifications. Under the Better Public Services results action plan, the Government has set a target of reducing re-offending by 25 per cent by June 2017.

The repair and rebuild offers significant opportunities for employment. To make the most of these opportunities, the Department of Corrections is providing training to offenders that will assist them to find employment in Canterbury, in areas such as light engineering, painting and decorating, timber joinery, food processing and grounds maintenance. Local prisons have already re-oriented their industry training courses to align with rebuild activity. For example, a major project is currently underway at the Rolleston Prison construction yard to refurbish damaged houses for social housing

providers. Through this project, prisoners and community offenders are able to contribute to the community in a meaningful way while gaining highly employable trade skills.[17]

Offenders on community work sentences have also been making a useful contribution to the city by carrying out proactive property maintenance, removing graffiti, and harvesting in the residential red zone. Since September 2013, in a collaborative project between the Canterbury Earthquake Recovery Authority and the Department of Corrections, work parties have gathered produce from vegetable patches and fruit trees now growing wild in the earthquake-damaged residential red zone. The harvested goods are then given to the City Mission for distribution through food parcels.

What are the indicators telling us?

Offences usually reported to the Police

This is measured using the following offence types in this report:

- *Assault-related*: 1) Assaults in public places, 2) Assaults in dwellings, 3) Serious assaults resulting in injury
- *Property-related*: 1) Burglary, 2) Vehicles stolen, 3) Robbery.

Assault-related offences

Reported assault-related offences typically declined during 2011. Figures tracked upwards during 2012 then subsequently dropped back in 2013, although numbers remained near or below pre-earthquake levels. Overall, total assaults in greater Christchurch declined by 5 per cent in the twelve months to December 2013 compared to the average number recorded in the pre-earthquake period comprising the two years to December 2009.

Figure 1 (annual data) shows that assaults in public places and serious assaults resulting in injury both declined in 2011 compared with the pre-earthquake levels of 2009. Assaults in public places dropped by 31 per cent over this period and serious assaults resulting in injury dropped by 11 per cent. This decrease was likely due to the reduction of licensed premises in the centre of Christchurch in 2011. In 2012 and 2013 figures for both assaults in public places and serious assaults remained below pre-earthquake levels. Current monthly data in Figure 2 demonstrates a similar pattern.

Figure 1 also shows that assaults in dwellings, which decreased by 6 per cent between 2010 and 2011, subsequently increased by 16 per cent in 2012 before dropping back in 2013 (by 10 per cent) below 2010 levels. Overall between 2010 and 2013 there was a 2 per cent reduction in dwelling assaults. Nationally, assaults in dwellings had declined by 6 per cent during this period.

An interagency initiative aimed at early intervention to prevent family violence was piloted in Christchurch. The ‘Police Safety Order’ pilot project was a collaboration of New Zealand Police, Stopping Violence Services and refuges to offer direct support and safety advice for people who are identified as being at risk of committing violence within their family. The project, which ran from December 2012 until February 2014, also bolstered existing services that support victims during this period.

Figure 1: Number of assault-related offences by year

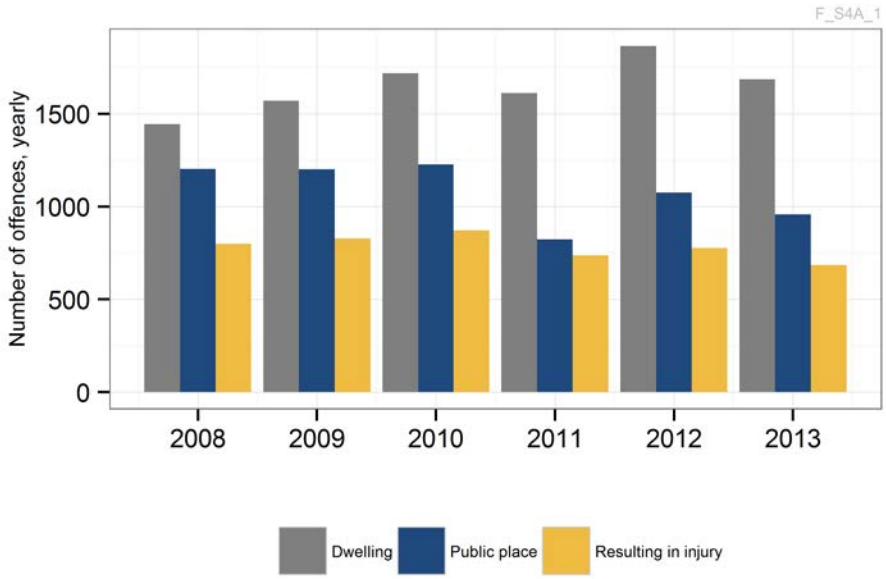
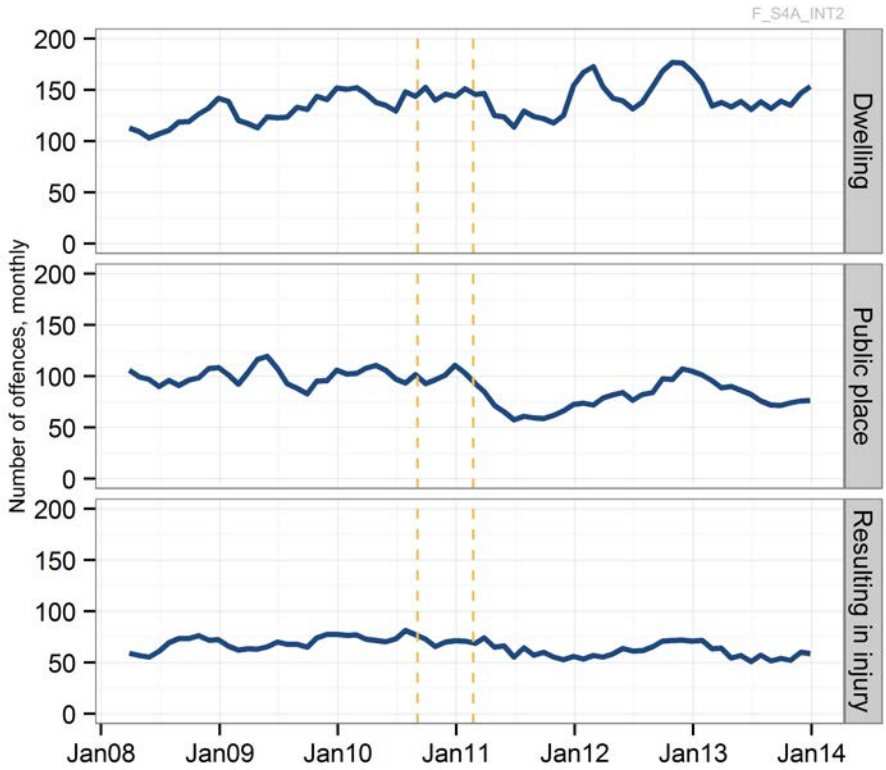


Figure 2: Number of assault-related offences by three-month rolling average

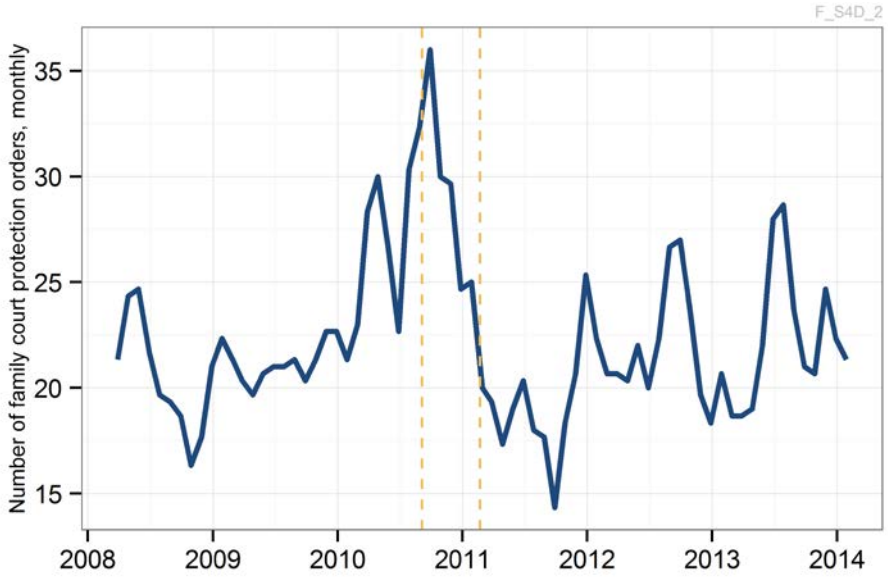


Another measure of family violence is the number of court-ordered final protection orders issued.

Figure 3 shows that there was a decrease in the number of final protection orders immediately after the earthquakes, reducing to 14 orders on average in September 2011. While the number of final protection orders has since increased, it remains below pre-earthquake levels

Another role of the family court system is to provide support to help families to resolve their issues. These may relate to relationship problems, arrangements for care of children or guardianship disputes. The Family Court will pay for up to three counselling sessions in each 12-month period. The number of pre-court counselling applications has declined consistently over recent years from 2,615 in the year to December 2010 to 1,788 in 2011, 1,613 in 2012 and 954 in 2013.

Figure 3: Three-month rolling average of the number of final protection orders



Property-related offences

Overall, property related offences in greater Christchurch declined by 16 per cent in the twelve months to December 2013 compared to the average number recorded in the pre-earthquake period comprising the two years to December 2009.

Annual data in Figure 4 show that the number of burglaries, robberies, and stolen vehicles generally decreased after the earthquakes. Current monthly data in Figure 5 show that burglaries are still tracking well below pre-earthquake levels.

Figure 4: Number of property-related offences by year

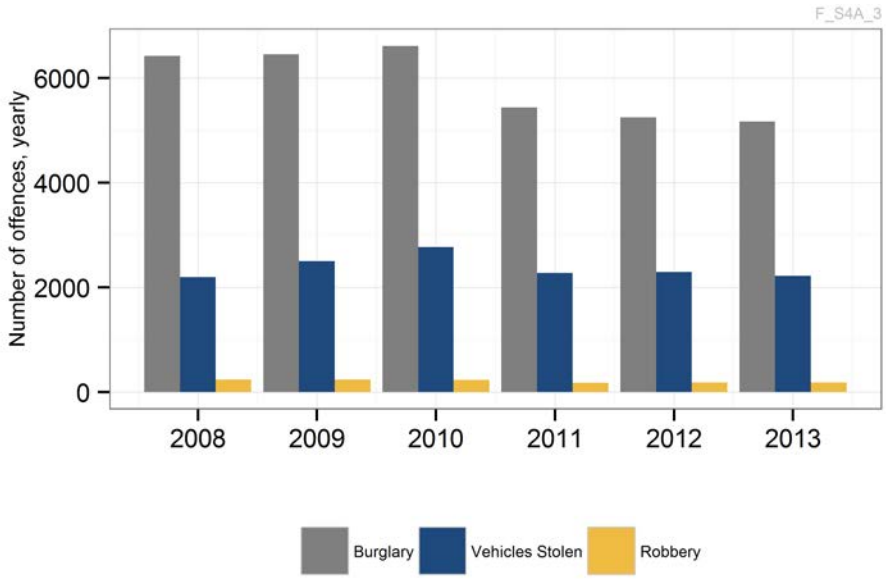
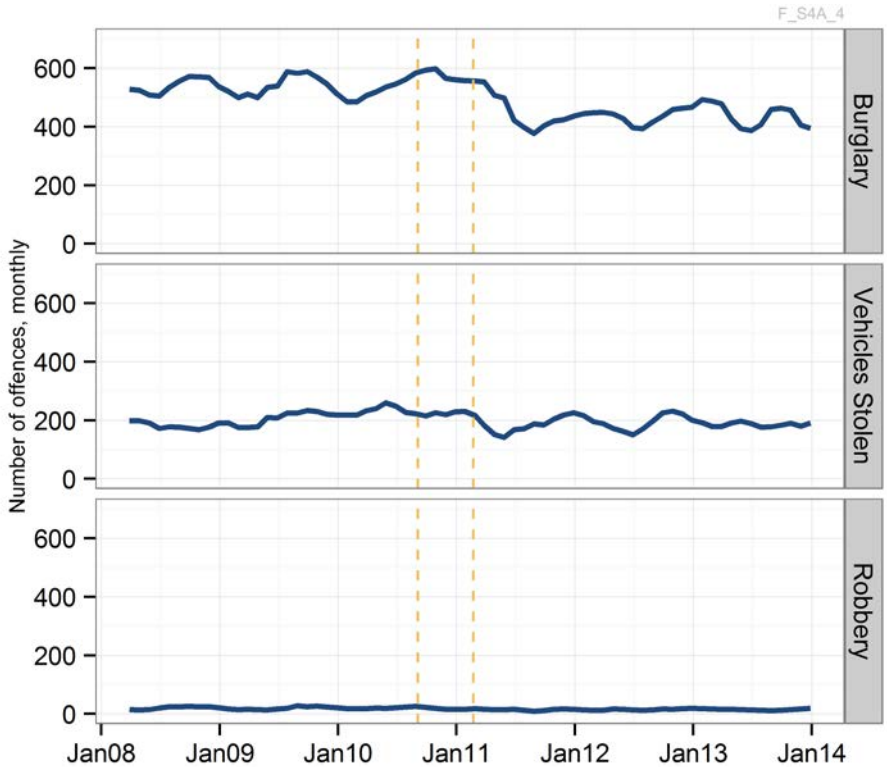


Figure 5: Number of property-related offences by three-month rolling average



Apprehensions for offences usually reported to Police

This is measured using the number of **apprehensions** for assault-related and property-related offences reported to New Zealand Police. The offence types included are serious assaults resulting in injury and burglary.

Figure 6 shows that there was a decline in apprehensions for serious assaults across a range of ages between 2010 and 2012. Youth offenders and offenders aged 31–50 years showed a particular decline during this period. The number of apprehensions for serious assaults resulting in injury by young people aged 17 to 20 decreased 29 per cent from 2010 to 2012. A similar trend is evident for the age group 31–50 years, for whom there is a 24 per cent decrease.

Figure 6: Number of apprehensions for serious assaults resulting in injury, by age

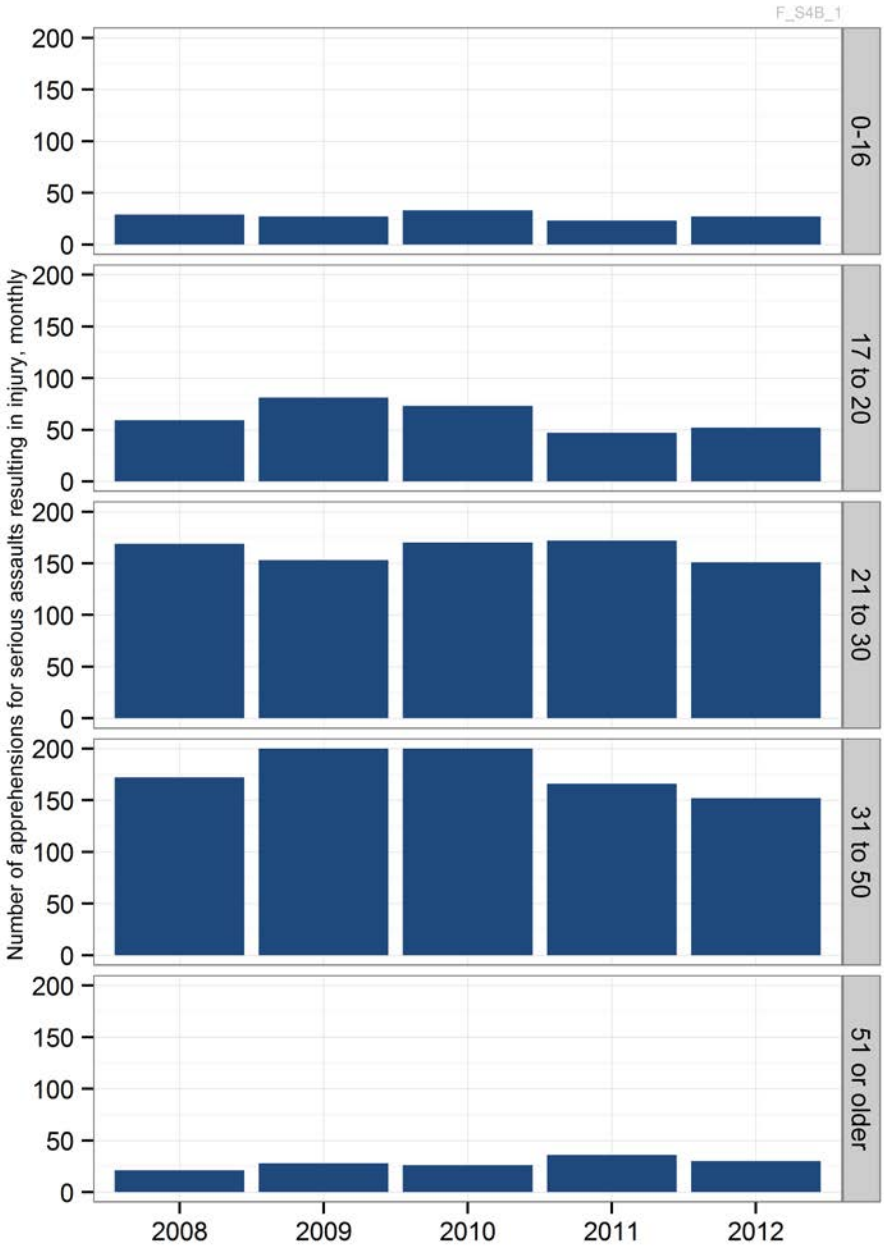
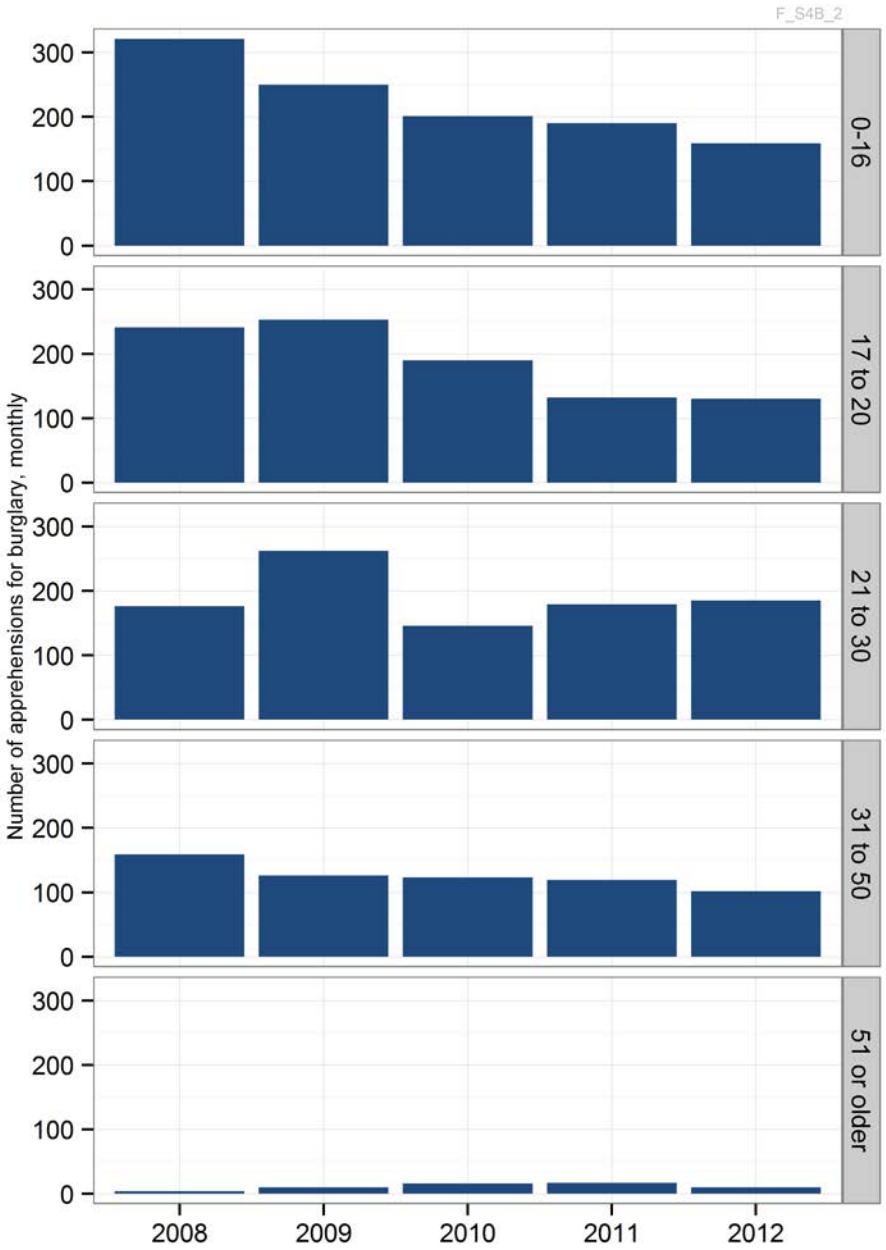


Figure 7 indicates that **apprehensions** for burglary have generally decreased between 2010 and 2012 for a number of age groups. The number of apprehensions for burglary for very young offenders aged 16 or under decreased by 21 per cent. For those aged 17–20 years, apprehensions decreased by 32 per cent while apprehensions among the 31–50 years age group show a 21 per cent decrease during this period. In contrast, apprehensions for burglaries increased by 27 per cent for the 21–30 year age group.

Figure 7: Number of apprehensions for burglary by age



Re-offending rates

This is measured using the prisoner re-imprisonment rate and community offender reconviction rate from the Recidivism Index. From 2011 onwards the Recidivism Index yields figures for Canterbury specifically.

Figure 8 shows that in 2011, 27.4 per cent of male prisoners in Canterbury were re-imprisoned within a year of their release. In 2012, the Canterbury rate decreased to 23.8 per cent then increased slightly to 24.1 per cent in 2013. Nationally the rate dropped from 27.1 to 26.7 per cent between 2011 and 2013.

Figure 8: Rate of re-imprisonment, men only

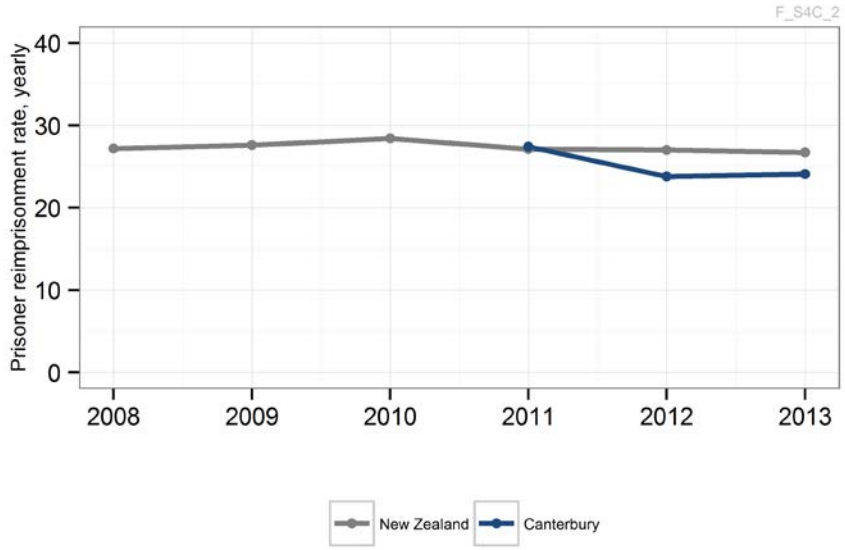
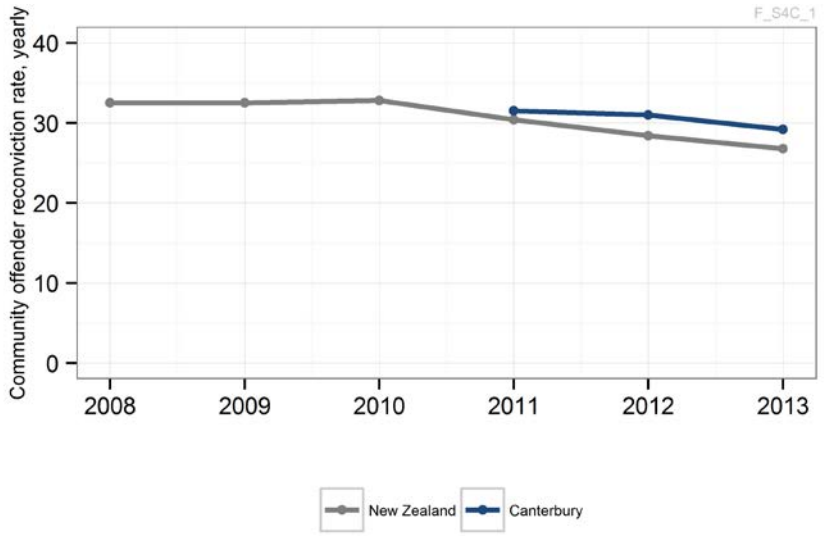


Figure 9 outlines the rate of reconviction for people on community-based sentences. These sentences include community work, home detention, and intensive and extended supervision.

In 2011, 31.5 per cent of Canterbury community offenders were reconvicted within a year of their community sentence ending. This dropped slightly to 29.2 per cent in 2013. Nationwide, the community offender reconviction rate also decreased from 30.4 per cent for 2011 to 26.8 per cent in 2013.

Figure 9: Rate of community offender reconviction, men and women



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the Department of Corrections' offender training and employment programmes: www.corrections.govt.nz/working_with_offenders/community_sentences/employment_and_support_programmes.html

Find out more about New Zealand Police monthly statistics for the Canterbury region: www.police.govt.nz/service/monthly-statistics

Find out more about the Campaign for Action on Family Violence: www.areyouok.org.nz

Find out more about Police Safety Orders: www.police.govt.nz/advice/family-violence/police-safety-orders

Find out more about counselling offered by the Ministry of Justice: www.justice.govt.nz/courts/family-court/what-family-court-does/counselling

Find out more about taking out a protection order: www.justice.govt.nz/courts/family-court/publications/pamphlets/applying-for-a-protection-order-english

Technical notes

Offences usually reported to the Police

Data source:	New Zealand Police monthly statistical indicators
Frequency:	Monthly
Data complete until:	December 2013

Notes: Yearly figures presented are aggregated from monthly statistical indicators.

These monthly statistics are "provisional and drawn from a dynamic operational database. They are subject to change as new information is continually recorded." The monthly provisional statistics are counted differently from the official statistics for recorded offences that are published each April and October. These figures should therefore not be compared with official statistics. For official statistics, see Statistics New Zealand crime and justice statistics: www.stats.govt.nz/crime

The monthly offence statistics presented here have been aggregated for the three Police districts closest to greater Christchurch: Southern Canterbury, Northern Canterbury, and Christchurch Central. A map of New Zealand Police districts is available from Statistics NZ: www.stats.govt.nz/tools_and_services/nzdotstat/recorded-crime-statistics/maps.aspx

Serious assaults resulting in injury: This is a new category for reporting crime statistics in New Zealand and reflects a category in the Australian Standard Offence Classification (ASOC), which New Zealand adopted in July 2010. Offences reported here include 'grievous assault', 'aggravated assault', 'male assaults female', 'assaults child' and other serious assaults that resulted in physical injury. This category excludes common assaults and other assaults that did not result in injury. Serious assaults resulting in physical injury can occur in public places or dwellings. In such instances, the assault will be included in two indicators in this report.

Public place assaults: The number of recorded assaults that occurred in public places. This includes both serious and minor assaults. This indicator focuses on the type of location where the assault occurred.

Dwelling assaults: The number of assaults recorded that occurred in dwellings. This indicator includes both serious and minor assaults. This indicator focuses on the type of location where the assault occurred. Most assaults in New Zealand occur in either public places or dwellings. Dwelling assaults often occur in situations where family violence is a factor. Note that the New Zealand Police is changing the way it collects family violence statistics, but that many family violence incidents occur in dwellings. www.police.govt.nz/news/release/31365.html

Robbery: The number of robbery offences recorded by Police. A robbery is a theft from a person that is accompanied by violence or threats of violence. Robbery offences have been included because they are serious offences that tend to be of public interest.

Burglary: The number of burglary offences recorded by Police. Unlike robbery, burglary does not necessarily involve violence or threats of violence. It does involve entering an enclosed space with the intention of committing an offence. Burglary offences have been reported here because they are serious offences that tend to be of public interest. Police has a strong focus on preventing and responding to burglaries.

Vehicles stolen: The number of offences Police recorded for theft or unlawful taking of a motor vehicle. This includes instances where a vehicle is taken for a joy ride and later recovered, as well as instances where vehicles are taken permanently. Such offences have been included because they are of public interest. Police has a strong focus on preventing and responding to these offences.

Protection orders

Data source:	Ministry of Justice. Final Protection Orders Granted under the Domestic Violence or Sentencing Acts
Frequency:	Monthly
Data complete until:	January 2014

Protection Orders are either 'Temporary Protection Orders' lasting three months or 'Final Protection Orders' which are permanent until discharged.

Notes: Prior to October 2009, Family Court proceedings related to applicants living in the Rangiora catchment area were filed and dealt with at Christchurch.

For privacy reasons, individual months with fewer than three orders have been excluded.

Final protection orders include orders made in the Family Court under the Domestic Violence Act 1995 and in the Criminal Court under the Sentencing Act 2002. The latter changes came into force July 2010. The change in July 2010 meant that more powers to make protection orders now exist than previously. However the number of protection orders made under the Sentencing Act (the new powers) in Christchurch is very small: 4 in 2010 (July–Dec), 5 in 2011 (Jan–Dec) and 11 in 2012 (Jan–Oct).

Pre-court counselling

Data source:	Ministry of Justice Applications for section 9 counselling under the Family Proceedings Act 1980 and section 65 counselling under the Care of Children Act 2004 as at 14 February 2014
Frequency:	Monthly

Data complete until: 14 February 2014

Notes: Filed in Christchurch or Rangiora between 1 January 2012 and 31 January 2014.

The Family Court arranges free counselling (for up to three hours) for couples who are having problems with their relationship, or who are separating and need help reaching agreement on issues such as arrangements for the care of their children. Counselling is also available for parents and guardians of a child if they are unable to reach agreement on an important issue concerning the child.

Apprehensions for offences usually reported to Police

Data source:	Statistics NZ apprehensions statistics for the most recent 24 months (calendar year)
Frequency:	Yearly
Data complete until:	December 2012

Notes: Apprehensions for two offence types are shown. These were chosen because there are comparable apprehensions data.

Note the **apprehensions and offences data sets are not directly comparable** because: 1) one is based on official statistics and one is based on monthly Police indicators which are counted differently; and 2) exact offence types included in each data set may vary.

The monthly offence statistics presented here have been aggregated for the three Police districts closest to greater Christchurch: Southern Canterbury, Northern Canterbury, and Christchurch Central. A map of NZ Police districts is available from Statistics NZ: http://www.stats.govt.nz/tools_and_services/nzdotstat/tables-by-subject/new-zealand-recorded-crime-tables/maps.aspx

Re-offending rates

Data source:	Department of Corrections Recidivism Index
Frequency:	Yearly
Data complete until:	2013

Notes: Rates are simple percentages, where the number re-imprisoned/reconvicted is the numerator, and total releases/new starts are the denominator. Rates are raw percentages, which means no adjustment for risk was made.

The re-imprisonment sample includes all prisoners released from Christchurch Men's Prison and Rolleston Prison. A small number of released prisoners may live outside of Christchurch and surrounding localities. Reconviction figures are for all offenders (male and female) managed on community sentences in the Christchurch Community Probation Service area. The follow-up period is 12 months from each individual offender's date of release or date of community sentence new start. For 2011 figures, offenders were released from prison or had new starts on community sentences between 1 April 2009 and 31 March 2010.

Community-based sentences include:

Community Work – unpaid work for non-profit organisations

Home Detention Sentences – offender to remain at an approved residence at all times under electronic monitoring and close supervision by a probation officer (sentence range 14 days to 1 year)

Supervision – rehabilitative community-based sentence (sentence range 6 months – 1 year)

Community Detention – community-based sentence with electronically-monitored curfew (sentence range up to 6 months)

Intensive Supervision – rehabilitative community-based sentence (sentence range 6 months to 2 years)

Extended Supervision – managing child sex offenders in the community (sentence range up to 10 years).

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Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Child abuse & neglect

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is reducing child abuse and neglect important?

Significant international evidence emphasises that it is important to have a safe, secure and attached childhood. Eighty per cent of a child's brain function develops in the first three years of life. If a child experiences repeated abuse or neglect, this harms their development, progression and functioning.[1] Unsafe childhood experiences are also clearly linked to poor adult mental health, substance abuse, and poor education and employment outcomes.[2]

Children who do not have positive childhood experiences have poorer outcomes as adults. If young people have had contact with Child, Youth and Family (CYF) as a child, they are five times more likely to have a criminal sentence by age 19 or 20 years than a young person who has had no contact with CYF.[3]

Child abuse and neglect add significant costs to the economy. One estimate is that the costs each year amount to a bill of up to $2 billion over the long term.[4]

The Government's vision for children is that every child thrives, belongs and achieves. It is focused on early intervention and improved access to services such as early childhood education, health services, and care and protection services for those who need a statutory response.[5]

There is no clear international evidence as to whether child maltreatment increases following an earthquake.[6]

It is therefore important that we continue to monitor rates of abuse or neglect throughout the recovery period. Children must also continue to have easy access to early childhood education and health services.

How were child abuse and neglect impacted by the earthquakes?

After the February 2011 earthquake, CYF observed higher levels of stress and frustration among some client families, particularly those who lost employment as a result of the earthquakes. The wellbeing of some parents who already had mental health conditions deteriorated. Some increases in the use of alcohol and in substance abuse were also observed.

Recovery for greater Christchurch

What is happening now?

In March 2012 the Government announced a number of targets for the public services, including the reduction of assaults on children. Specifically, the Government aims to halt the 10-year rise in children for whom physical abuse has been substantiated by CYF and to reduce current numbers by 5 per cent by 2017.[7] Actions are being developed through the White Paper for Vulnerable Children and the Children's Action Plan, released by the Government on 11 October 2012.

The Children's Action Plan responds to the White Paper and is based on nearly 10,000 submissions on the Green Paper for Vulnerable Children, as well as close consultation with key experts in health, justice, education and social services, and evidence from international best practice on what keeps children safe from harm.[8]

The White Paper for Vulnerable Children and the Children's Action Plan propose major changes over time to:

- screen children for vulnerability more effectively
- fully assess the needs of vulnerable children
- help front-line workers and communities to communicate concerns about children
- focus services more clearly on results.[9]

Actions already underway include the introduction of social workers to more low-decile primary schools, and changes to the Family Start programme to increase the focus on child abuse detection and prevention. In addition, an 'education assist' package is making it easier for teachers to communicate their concerns with CYF.[10]

By raising people's awareness, these actions could increase reporting of child assaults, which in the short term could increase the rate of proven physical abuse.

Note that the White Paper focuses particularly on the most vulnerable children in our communities including those who experience abuse and neglect.

What are the indicators telling us?

Child abuse and neglect are measured in two ways in this report:

- the number of notifications to CYF where further action is required (child investigations)
- the number of these notifications that lead to substantiated (proven) findings of abuse and/or neglect.

Child investigations are counted through notifications requiring further action which may be generated by concerns about child abuse, or the behaviour or mental wellbeing of a child or young person.

While fluctuating, the number of notifications to CYF requiring further action in Canterbury shows a steadily increasing trend over time which is in line with the national pattern. The monthly average number of notifications requiring further action increased in the twelve months to June 2013 by 27 per cent compared to the monthly average number of notifications for the 24 months to June 2010, and is higher than the 18 per cent increase across New Zealand. However looking at just the year prior to the earthquakes, this variance is less significant. When comparing the twelve months to June 2010 with the twelve months to June 2013 there was a 10 per cent increase in notifications requiring further action in Canterbury compared with a 12 per cent increase nationally.

Figure 1 uses a three month rolling average to show that the number of notifications to CYF requiring further action for Canterbury declined by 23 per cent in the year following the September 2010 earthquakes [11] from an average of 474 per month for the three months from June–August 2010, to 365 on average for June–August 2011. This drop contrasts with a 0.03 per cent national decrease over the same year.

The number of notifications requiring further action subsequently increased by 28 per cent from June–August 2011 to June–August 2012, when it was again at pre-earthquake levels (on average 467 notifications per month). Nationally notifications increased by 10 per cent for this period.

In Canterbury the number of substantiated findings of child abuse or neglect increased in the year to June 2013 by 16 per cent compared to the average number in the pre-earthquake period in the

twelve months to June 2010 (however, due to low numbers of substantiated findings of child abuse or neglect, any trends for Canterbury should be interpreted with caution).

Yearly data in Figure 2 for Canterbury show that over the year from July 2009 to June 2010, there were 1,134 substantiated findings of child abuse or neglect compared with 1,279 in the year to June 2011 (an increase of 13 per cent). There was a slight increase to 1,302 (2 per cent) in the year to June 2012 followed by a 1 per cent growth to 1,314 in the year to June 2013.

National rates over this period show an increasing trend apart from the July 2011 to June 2012 financial year, when rates decreased slightly by 0.5 per cent.

Figure 1: Three-month rolling average for number of CYF notifications requiring further action

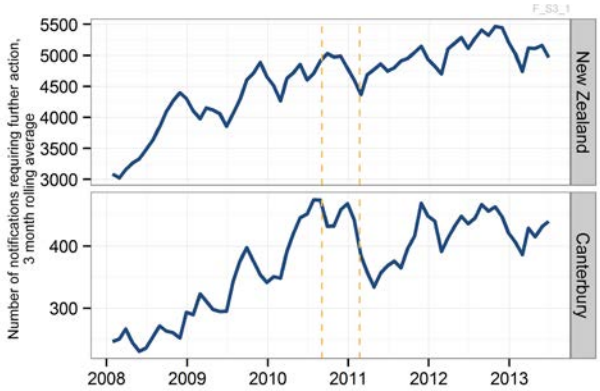
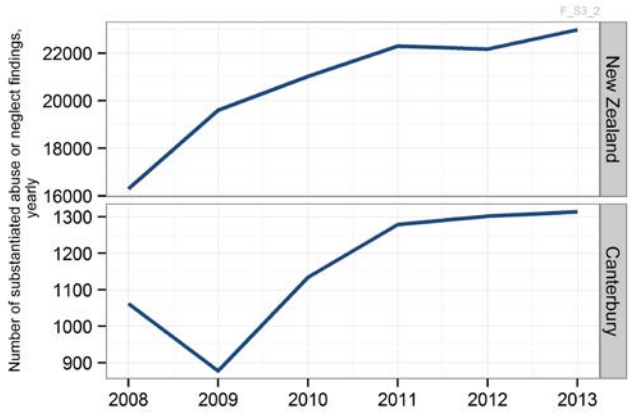


Figure 2: Number of substantiated findings of child abuse or neglect yearly



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out how to report child abuse and neglect: www.cyf.govt.nz/about-us/contact-us

Find out more about Better Public Services targets: www.msd.govt.nz/about-msd-and-our-work/work-programmes/better-public-services/index.html

Find out more about the Government's White Paper on Vulnerable Children and Children's Action Plan: www.childrensactionplan.govt.nz

Technical notes

Data source: Child, Youth and Family (CYF) administrative data

Data frequency: Monthly

Data complete until: June 2013

Notes: The Christchurch area is defined as that serviced by CYF sites in Christchurch city, Papanui, Sydenham and Rangiora.

Numbers represent notifications requiring further action and substantiated findings, not clients. Some clients may have more than one notification requiring further action or substantiated findings in the period.

When further action is required following a notification, there are two types of response: a formal investigation and/or a child and family assessment.

The data presented for notifications requiring further action are three-month rolling averages, with data presented as the final of three months. That means that data for August 2010 are the average of June, July and August 2010. The effect is to smooth some of the month-to-month variability. Because a data point represents the end of the three-month period, the data points for three months after each dashed line representing an earthquake partially reflect an earthquake-affected collection period.

Data presented for substantiated findings of abuse are aggregated yearly, due to low numbers in the Canterbury region. The year is July to June.

Endnotes

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[11] Canterbury includes the Christchurch City, Papanui, Sydenham and Rangiora sites whose boundaries changed to Christchurch East, Christchurch West, Rangiora, Papanui and Sydenham from June 2013.

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

People participate in and attend the arts

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is it important for people to be involved in the arts?

People attend and participate in the arts for pleasure, creative expression, personal growth and learning. Through participation in the arts, people are able to establish social ties and connect with their own and other cultures.

When individuals gain such advantages, the wider public also benefits. For example, cultures have greater empathy and understanding towards each other and communities are more able to express and create common values and identity.[1]

In addition, the arts promote broad social, cultural and economic goals, such as economic growth and better academic performance.[2]

New Zealanders support the arts strongly. In a 2011 survey, carried out by Creative New Zealand, 80 per cent of respondents agreed that arts help define who we are as New Zealanders, and 73 per cent agreed that the arts contribute positively to our economy. They agreed that their community would be poorer without the arts (69 per cent) and supported public funding of the arts (76 per cent).[3]

Research in 2011 also found that 91 per cent of adults in the Canterbury region had been to at least one cultural event or place within the previous three years.[4] However, this proportion is lower than the national average of 95 per cent.

How did the earthquakes affect the arts?

The earthquakes were devastating for the arts infrastructure of greater Christchurch.

All areas of visual arts at professional and community levels have been affected. The Christchurch Art Gallery remains closed, and individual artists have lost studio and exhibition spaces.[5] The earthquakes damaged some art collections, such as those held in the Central City Library and the University of Canterbury. Many collections were either left without a permanent home or their building was damaged and closed indefinitely. Dealer galleries also closed or moved, reducing the ability of artists to generate income and exhibit works.

Earthquakes disrupted, damaged or destroyed performing arts facilities including the Town Hall and Isaac Theatre Royal. Rehearsal spaces and community venues were lost and those that remained were oversubscribed. Key performing arts organisations and events, such as the Court Theatre, Christchurch Symphony Orchestra, kapa haka and the Christchurch Arts Festival, were disrupted. Contemporary performance arts were also affected with the loss of live music venues such as pubs, the Octagon restaurant, and churches that previously hosted the annual Acoustic Church Tours.

In the Arts Centre, where many artists had studios and galleries, 22 of 23 buildings were closed because they required substantial repairs. The estimated repair cost of the Arts Centre is $290 million.[6] The rebuild and restoration of the Arts Centre is expected to be completed in 2019.

Despite these challenges, 90 per cent of Christchurch residents agree that arts and culture have a vital role to play in rebuilding the city.[7]

Recovery for greater Christchurch

What is happening now?

The recovery of the arts and cultural sectors is generally being driven by arts community organisations and practitioners, with support from funding agencies such as Creative New Zealand and Canterbury territorial authorities. From September 2010 to April 2014, Creative New Zealand provided over $2.7 million in grants to artists, practitioners and organisations through its Earthquake Recovery Grants Fund.[8]

The Canterbury Cultural Collection Recovery Centre at the Air Force Museum, Wigram opened in 2012 to temporarily house collections and allow organisations to work on the collections. While this was primarily aimed at heritage collections, the centre has also supported arts-based collections such as the Christchurch City Choir's music collection.

The Court Theatre re-opened in temporary premises, where it is providing a full range of performances. The Isaac Theatre Royal rebuild is progressing with the aim of re-opening in late 2014.

Gap Filler, Greening the Rubble and Life in Vacant Spaces continue to offer innovative initiatives within vacant and temporary sites within Christchurch. These organisations support creative people and groups to bring interactive artworks into the city.

The Pallet Pavilion established in 2012 used crowd-sourced funding to remain open for a second summer. Until its closure in early 2014, it hosted markets, concerts and events and provided a low-cost venue for communities to connect in the central city.

RAD Bikes (Recycle a Dunger) is a Gap Filler project set up in collaboration with Inner City East Cycles which opened on Labour weekend 2013. It is a community bike shed, located in the central city and run by volunteers, where anyone can build or repair bicycles and/or help restore bikes to give away.

Christchurch residents were once again entertained in January 2014 by the world's best street and stage performers during the 10-day World Buskers Festival held in North Hagley Park and in venues around the inner city. The Ellerslie International Flower Show also attracted large numbers of residents and visitors to the city.

Art Box was created by the Christchurch Polytechnic Institute of Technology (CPIT) to provide visual, installation and performance artists with an innovative and different venue to present their work. Visual arts particularly have embraced this concept and experimented with new art forms. It makes up part of the new Boxed Quarter along with BeatBox, run by the Christchurch Music Industry Trust which provides studio and rehearsal spaces for Christchurch musicians.

The Christchurch Art Gallery continues to curate its 'Outer Spaces' programme, which exhibits new works of art in the central city and suburban areas. Art Beat continued its successful multi-arts programme of performance, music and exhibitions run over summer 2013 in the Re:START Mall.

Vendor galleries that closed or moved to the suburbs are being re-established closer to the city – for example, Jonathan Smart Gallery and Form Gallery. These established galleries are joined by galleries set up post-earthquake such as Chambers@241 and the Dog Park. Found and temporary spaces are also being used for art, including walls exposed by demolished buildings (street art scapes and murals such as the New Brighton Mural Madness project now in its second year), and residential red zone houses (used by a range of artists for temporary installation works).

Memory projects are important for helping earthquake survivors move forward and for honouring the lives of those who died. Online projects include CEISMIC and Quake Stories. Archives, museums and libraries are also collecting material on the earthquakes.

A community consultation process will be undertaken as part of the development of plans for the Canterbury Earthquake Memorial to ensure that the voices and ideas of the affected families and community are captured in the design process for the memorial.[9]

Restoration work on the Arts Centre is proceeding. The registry and old gymnasium buildings have been completed and tenanted, and additional work on other buildings is underway.[10]

The Ministry for Culture and Heritage is progressing work on the Art and Culture Recovery Programme for greater Christchurch. The programme aims to identify key activities and projects that will enable the arts and cultural sectors to return to full vibrancy in a sustainable way. It will detail what has been achieved to date and the agreed priority areas for future decision making.

The Christchurch City Council is leading the project to develop a Performing Arts Precinct within central Christchurch. The precinct will network with the existing Christchurch Town Hall which will be restored and enhanced.

In the April 2014 CERA Wellbeing Survey, 33 per cent of respondents reported they have had the opportunity to experience public events and spaces (eg, memorial events, and initiatives such as Gap Filler project and Re:START Mall). This experience is having a strong positive impact on the lives of 14 per cent – a finding that remains stable from earlier surveys. Those living in Christchurch city (15 per cent) were more likely to feel there had been a moderate or major positive impact on their everyday lives from the opportunities to experience public events and spaces than were residents in Selwyn (8 per cent) and Waimakariri districts (7 per cent).[11]

The April 2014 CERA Wellbeing Survey also showed that nearly a fifth (18 per cent) of residents were positively impacted by more opportunities for individual creative expression. For 7 per cent, this is having a moderate or major positive impact on their everyday lives. This finding is consistent with previous surveys (9 per cent in both September 2012 and April 2013 and 10 per cent in September 2013).

What are the indicators telling us?

People's involvement in the arts is measured as the proportion of all people who:

- attend arts events
- participate in arts events

Figure 1 shows that the proportion of the Christchurch population who did not attend arts events in the previous year increased significantly from 2008 to 2011 (from 19 per cent to 31 per cent of the population).

This decreased attendance in 2011 is likely due to the loss of many art spaces and places, and the impacts of the earthquakes on people both personally and financially.

Figure 1: Proportion of all people (aged 15 years and over) who attend arts events

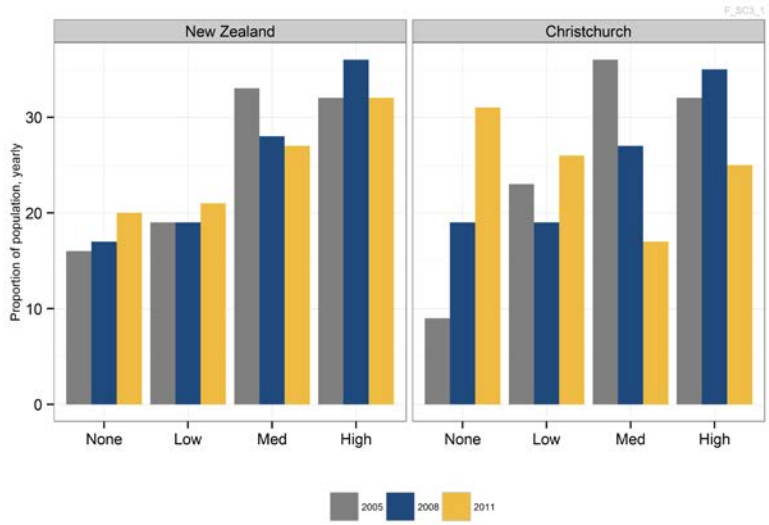
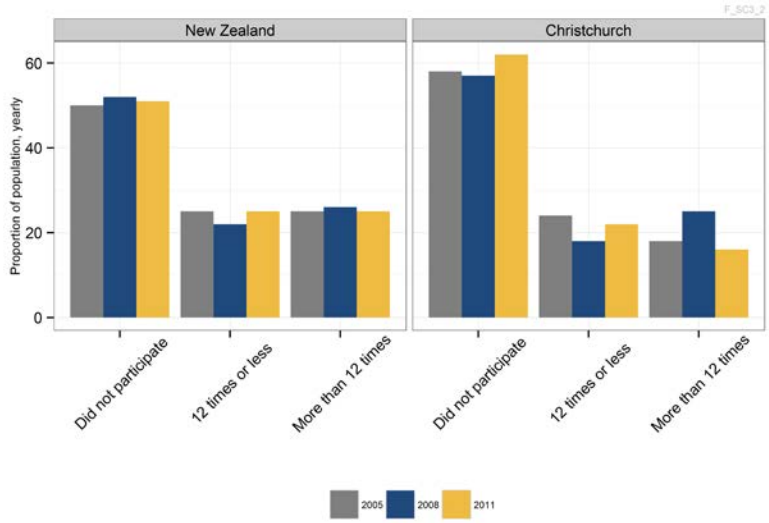


Figure 2 shows that the proportion of the Christchurch population who did not participate in arts events increased in 2011. In addition, people participated less frequently in 2011 than in 2008.

Figure 2: Proportion of all people (aged 15 years and over) who participate in arts events



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the New Zealanders and the Arts Survey: www.creativenz.govt.nz/en/arts-development-and-resources/research-and-arts-sector-resources/audience-atlas-new-zealand-report-2011

Find out more about Creative New Zealand's Earthquake Recovery Grants: www.creativenz.govt.nz/en/getting-funded/find-funding-opportunities/christchurch-earthquake-recovery-grant-141612171217038/general-info

Find out more about Gap Filler: www.gapfiller.org.nz

Find out more about BeatBox: http://christchurchmusic.org.nz/beatbox

Find out more about ArtBox: http://www.cpit.ac.nz/industry-and-research/industry-and-partnerships/capabilities-and-technologies-for-industry/artbox

Find out more about CEISMIC: www.ceismic.org.nz

Find out more about Quake Stories: www.quakestories.govt.nz

Find out more about the Court Theatre: www.courttheatre.org.nz

Find out more about the Christchurch Art Gallery: www.christchurchartgallery.org.nz

Find out more about the Christchurch Central Recovery Plan: www.ccdu.govt.nz

Find out more about the programme to rebuild and restore the Christchurch Arts Centre: www.artscentre.org.nz/rebuild---restore.html

Technical notes

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013 and April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Attending and participating in arts events

Data source:	New Zealanders and the Arts Survey, Creative New Zealand
Data frequency:	2005, 2008 and 2011 (next update 2015)
Data complete until:	2011

Notes: Christchurch boundary defined by the local Christchurch telephone calling area. Because this survey is a sample survey, results are subject to sampling error.

Definitions:

The arts are defined as:

- **visual arts:** painting; photography; sculpture; web-based/digital art; ceramic-making; film-making
- **performing arts (theatre, dance, music):** ballet or contemporary dance performances; theatre; concerts; singing or musical performances or events; circuses
- **literature:** writers' workshops or literary events; writing poetry, fiction or non-fiction
- **Māori arts:** art or craft; workshops, including carving, weaving or singing; kapa haka or other Māori dance or music activities
- **Pacific arts:** weaving and other Pacific handicrafts; workshops; carving; traditional dance; choir or other musical activities.

Attendance includes going to:

- art galleries (including online galleries), exhibitions and film festivals
- performances in theatre, contemporary dance, ballet, music concerts and circuses
- poetry or book readings, and literary festivals or events
- cultural performances and festivals and celebrations of Māori or Pacific arts.

Participation includes the active involvement of individuals, groups and/or communities in the making or presentation of art. It applies to professional, emerging and non-professional artists, including those involved in cultural and recreational activities.

Endnotes

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[2] See note 1.

[3] Creative New Zealand. (2012). *New Zealanders and the arts: attitudes, attendance and participation in 2011*. Retrieved from www.creativenz.govt.nz/en/arts-development-and-resources/research-and-arts-sector-resources/new-zealanders-and-the-arts-full-report-2011

[4] Creative New Zealand. (2011). *Audience atlas New Zealand.* Wellington. Retrieved from www.creativenz.govt.nz/en/arts-development-and-resources/research-and-arts-sector-resources/audience-atlas-new-zealand-report-2011

[5] Ministry for Culture and Heritage. (2012). Arts, Culture, and Heritage Collections Recovery Programme, unpublished, p 7.

[6] The Arts Centre (April, 2013). Issue 1.

[7] See note 5.

[8] For the most recent Earthquake Recovery Grants, see www.creativenz.govt.nz/en/results-of-our-work/who-got-funded/funding-rounds/emergency-recovery-grants-november-2013-february-2014

[9] www.ccdu.govt.nz

[10] See http://www.artscentre.org.nz/rebuild---restore.html

[11] For information on the CERA Wellbeing Survey, refer to the technical notes.

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Sports participation

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is participating in sport important?

When people participate in sport, there are significant benefits for themselves, their communities and the economy.

Evidence suggests that people who participate in sports and recreation are more productive employees, enjoy better health and have a better quality of life.[1] When people are more productive and healthier, society benefits and savings are made in the health system.

The sport and recreation sectors contributed an estimated $352.9 million to the GDP of Christchurch in the 2008/09 year, or 1.6 per cent of regional GDP.[2] In 2006 just under 4,500 people were employed in these sectors in the city.[3]

The people of greater Christchurch appear to appreciate the advantages that sports offer. A 2011 report showed over 94 per cent of adults and 96 per cent of young people in the Canterbury–West Coast region participate in at least one sport or recreation activity every year.[4]

How did the earthquakes affect sports participation?

The earthquakes caused critical losses in the sport and recreation infrastructure. Some highly valued facilities and spaces were closed indefinitely including QEII, Centennial Pool, AMI Stadium and a number of mountain biking and walking tracks in the Port Hills.[5]

Sports have been affected in different ways. For example, rowing lost the flat water space at Kerr's Reach, hockey lost access to artificial turfs, and athletics lost access to an all-weather track. Other sports such as basketball and netball had to operate across a reduced number of venues.

Almost half (47 per cent) of the respondents in the 2012 CERA Wellbeing Survey experienced the loss of usual access to the natural environment due to the earthquakes. Just under half the respondents (44 per cent) said they had experienced the loss of indoor sports and active recreation facilities, while 37 per cent had experienced the loss of outdoor sports and active recreation facilities.

Recovery for greater Christchurch

What is happening now?

The Sport and Recreation Earthquake Leadership Group (chaired by Sport Canterbury) is leading the Sport and Recreation Recovery Programme. This programme is working to recover the sport and recreation infrastructure so that participation remains high and caters for the immediate and long-term needs of the community. Part of this work is the development of a long-term plan for sport and recreation (*Spaces, Places and People*) to meet the needs of people wishing to take part in sport and physical activity on both a formal and informal basis. This online plan launched in May 2014 gives a long-term vision for the sports and recreation sector and guides decision making through the recovery.[6]

Sport Canterbury is also working with regional sport organisations to further develop their capability to deliver sport and recreation in the current environment and into the future.

Despite the losses to infrastructure, Canterbury has benefited from efficient repairs to sporting facilities including the Christchurch School of Gymnastics, Hagley Park netball courts, Cowles Stadium, the tennis courts at Wilding Park and the rowing sheds at Kerr's Reach. In addition, a number of other new facilities have been opened and are now in full use. These include a new hockey turf at Nunweek Park, the Kaiapoi Aquatics Centres and the Apollo High Performance Centre at Jellie Park. These successes have helped to move participation back to pre-earthquake levels.

The three priorities in the *Spaces, Places and People* plan: the Ngā Puna Wai Southwest Sports Hub, the Metro Sports Facility and the Hagley Park Cricket Oval indicate that the future for sport and recreation in greater Christchurch is promising.

What are the indicators telling us?

Sports participation is measured as the number of people who are members of clubs affiliated to the Canterbury regional sports body.

Prior to 2011, a number of sports have missing data which makes plotting trends over time problematic. Organisations that did not have complete data prior to 2011 have been excluded.[7] Figure 1 shows that total membership numbers of regional sports organisations in Canterbury declined by almost 2,600 people (2 per cent) over the 2011 and 2012 period; however, latest figures indicate that overall sports participation is now moving back to pre-earthquake levels, having increased by nearly 2,200 members (2 per cent) during 2013. In 2010, regional sport organisations in Canterbury had 132,158 members compared with 127,490 in 2013.

According to Sport New Zealand's Young People's Survey,[8] in 2011/2012 many school children (years 1–13) in greater Christchurch remained involved in sport and recreation, despite the challenges of the on-going earthquakes. Schools played an important role in providing sport and active recreation opportunities during this period, with 50 per cent of school children reporting that they belonged to a school sports team. Just over 57 per cent said they belonged to a sports club outside of school.

In addition, 55 per cent of children spent three hours or more each week taking part in training, practice or competitions and 64 per cent reported spending three hours or more per week taking part in sport or active recreation when 'mucking around'.

Typically males had greater involvement in sport both inside and outside school and spent more time participating.

Figure 1: Total memberships for Canterbury regional sports organisations

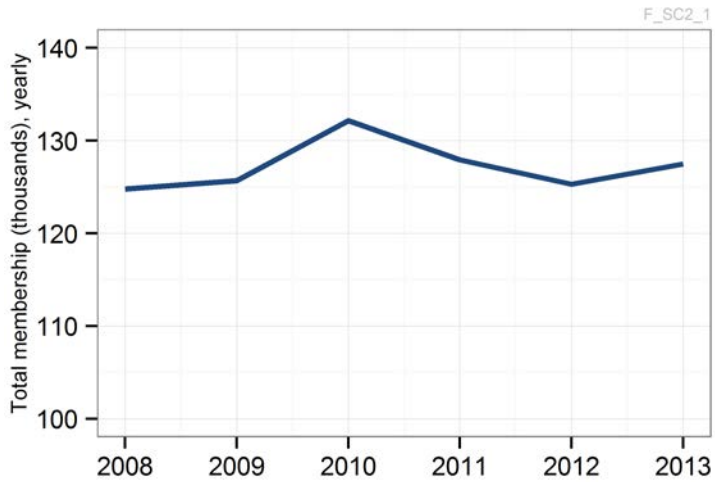
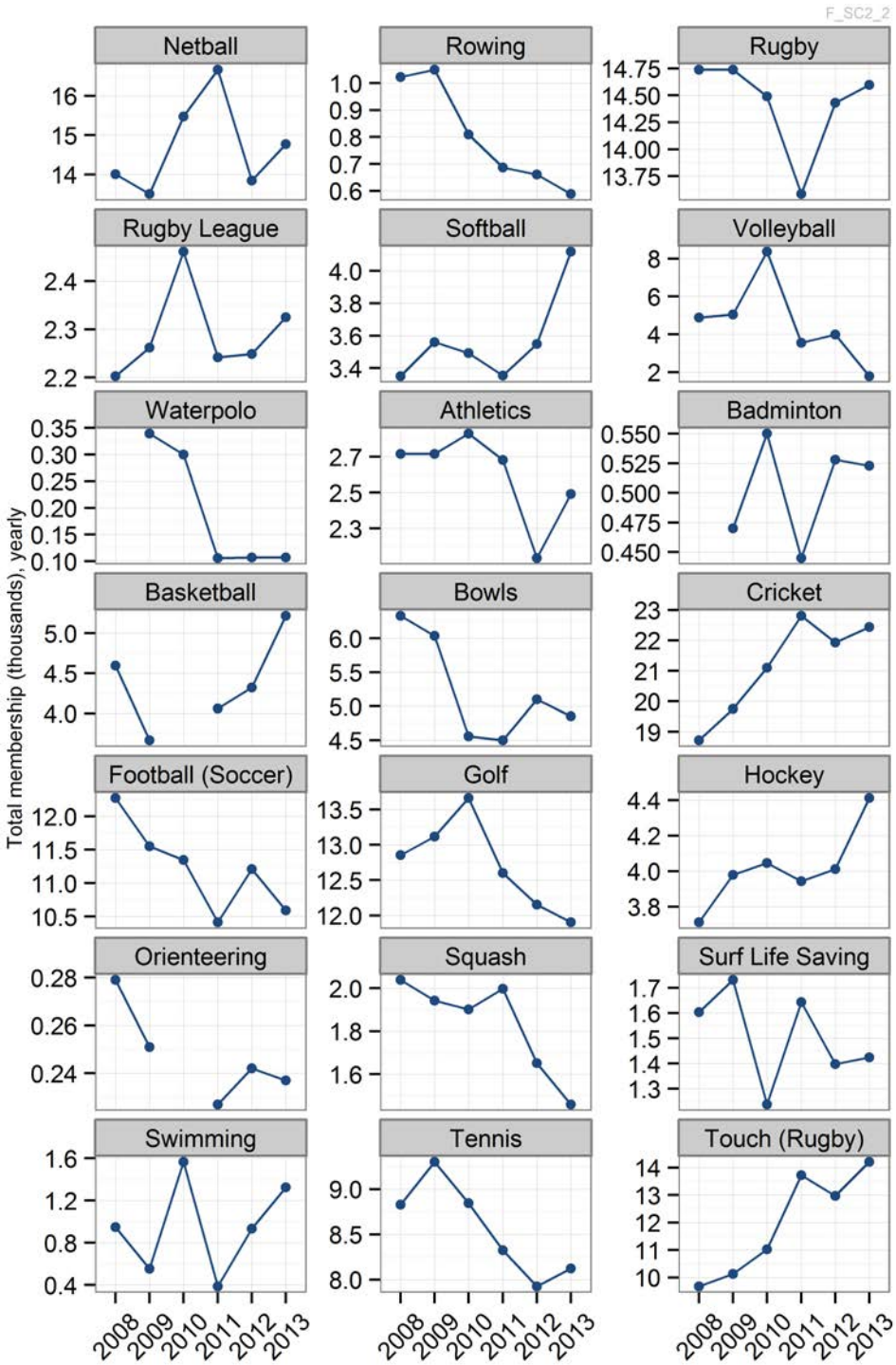


Figure 2 shows the membership patterns within individual sports in recent years. In the years following the major earthquakes, sport organisations' membership numbers fell for a number of sports including swimming, squash, volleyball and water polo. The loss of swimming pools and specialised facilities, such as tennis and squash courts, volleyball courts and bowling greens, is likely to have led to a decrease in participation during this period. In contrast, 2013 figures show that 12 out of the 21 regional sports organisations have higher membership numbers than the previous year, reflecting the on-going repair of existing sports facilities and the construction of new facilities as the recovery progresses.

Figure 2: Total memberships by specific regional sports organisations



The latest 2014 CERA Wellbeing Survey in Table 1 shows that although the proportions picked up slightly in April 2014, overall the loss of indoor and outdoor sport and active recreation facilities has had a diminishing impact on residents' daily lives. In 2012, the loss of indoor facilities had a moderate or major negative impact on 24 per cent of residents but this figure dropped to 17 per cent in April 2014. Similarly, the loss of outdoor facilities was a continuing negative issue for only 13 per cent of residents in early 2014, compared with 20 per cent recorded in September 2012.

Those living in the Selwyn and Waimakariri districts were less likely to say the loss of indoor and outdoor recreation facilities is still impacting negatively on their everyday lives. This issue is of least concern to residents aged 65 years or over city wide.

In comparison, the CERA Youth Wellbeing Survey carried out in late 2013 showed that the loss of recreational places and spaces is having a greater negative impact on young people aged 12–24 years in the wider Christchurch region.

Of this age group, 63 per cent had experienced loss of sport and recreation facilities such as swimming pools and sports fields. For 18 per cent, this was still having a moderate or major negative impact on their wellbeing.

Additionally, Table 2 shows that the loss of sport and recreation facilities was the second highest stressor for young people. This was felt most strongly among those living in Christchurch city, where 21 per cent reported a moderate or major negative impact compared with 12 per cent in Waimakariri district and 9 per cent in Selwyn district.

Table 1: Proportion of respondents that indicated an issue continues to have a moderate or major negative impact on their everyday lives, over time (CERA Wellbeing Surveys)

Issue	Extent that issue has had a moderate or major negative impact on everyday lives of residents (living in greater Christchurch)			
	September 2012 (%)	April 2013 (%)	September 2013 (%)	April 2014 (%)
Loss of indoor sport and recreation facilities	24	16	13	17
Loss of outdoor sport and recreation facilities	20	12	10	13

Table 2: Proportion of respondents aged 12-24 years that indicated an issues continues to have a moderate or major negative impact on their everyday lives in 2013 (top stressors) by territorial authority (CERA Youth Wellbeing Survey)

Issue	Extent that issue has had a moderate or major negative impact on young people's lives in 2013 (top stressors)			
	Greater Christchurch (%)	Christchurch city (%)	Selwyn district (%)	Waimakariri district (%)
Loss of other places you used to go (cafes, restaurants, libraries, places of worship, marae, arts and cultural centres)	25	29	13	20
Loss of sport and recreation facilities (eg, swimming pools, sports fields)	18	21	9	12

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about sports participation in Canterbury: www.sportcanterbury.org.nz

Find out more about Sport New Zealand: www.sportnz.org.nz

Find out more about Christchurch City Council recreation and sport: www.ccc.govt.nz/cityleisure/recreationsport/index.aspx

Find out more about Waimakariri District Council leisure and recreation www.waimakariri.govt.nz/leisure_recreation/pools.aspx

Find out more about Selwyn District Council facilities and parks: www.selwyn.govt.nz/facilities-and-parks

Find out more about the economic value of sports in Canterbury: www.sportnz.org.nz/Documents/Research/value%20of%20sport/full%20report/Canterbury-West%20Coast-VoSR-Report-pdf.pdf

Technical notes

Sports information

Data source: Sport Canterbury, drawn from the larger regional sports organisations. Note that other sports operate in the region but do not provide regional data to Sport Canterbury.

Data frequency: Annual

Data complete until: 2013

Notes: Regional sports organisations have different catchments and started reporting to Sport Canterbury in different years. See the table below. Some sports measure membership differently. The numbers are based on how that sport calculates its playing membership numbers. Data for Arawa Canoe, Canterbury Triathlon, Canterbury Yachting and GymSports are not included in Figure 1 or Figure 2 because only limited data were available.

Regional sports organisation	Region(s) covered	Years data provided
Arawa Canoe		2012–13
Athletics Canterbury	South Canterbury, Mid Canterbury, West Coast and Canterbury	2008–13
Badminton Canterbury	Canterbury	2009–13
Canterbury Basketball	Christchurch and Selwyn territorial authority regions	2008–09, 2011–13
Bowls Canterbury	Canterbury	2008–13
Canterbury Cricket	South Canterbury, Mid Canterbury, West Coast and Canterbury	2008–13
Mainland Football	Mid Canterbury, West Coast and Canterbury	2008–13
Canterbury Golf	Canterbury	2008–13
GymSports	South Canterbury, Mid Canterbury, West Coast and Canterbury	2011–13
Canterbury Hockey	Canterbury	2008–13
Canterbury Netball	South Canterbury, Mid Canterbury, West Coast and Canterbury	2008–13
Peninsula and Plains Orienteering	Canterbury	2008–09, 2011–13

Canterbury Rowing		2008–13
Canterbury Rugby	Canterbury	2008–13
Canterbury Rugby League	South Canterbury, Mid Canterbury and Canterbury	2008–13
Canterbury Softball	Canterbury	2008–13
Squash Canterbury	West Coast and Canterbury	2008–13
Surf Life Saving		2008–13
Swimming Canterbury	West Coast and Canterbury	2008–13
Tennis Canterbury	Mid Canterbury, West Coast and Canterbury	2008–13
Touch Canterbury	Canterbury	2008–13
Canterbury Triathlon		2012–13
Canterbury Volleyball	Canterbury	2008–13
Canterbury Waterpolo	Canterbury	2009–13
Canterbury Yachting	Canterbury	2011–12[9]

CERA Wellbeing Survey

Data source: Canterbury Earthquake Recovery Authority

Data frequency: Six-monthly September 2012, April 2013, September 2013 and April 2014

Data complete until: April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Data on impact of loss of indoor and outdoor space

- In September 2012, residents considered the extent their everyday lives *had been impacted* by an issue as a result of the earthquakes.
- In April 2013, September 2013 and April 2014, residents considered the extent to which their everyday lives *were still being impacted* by each issue as a result of the earthquakes.
- Area for all surveys relates to greater Christchurch.
- The percentage shown is the sum of both 'moderate negative impact' and 'major negative impact'.

CERA Youth Wellbeing Survey

Data source: Canterbury Earthquake Recovery Authority

Data frequency: Two yearly (2013 and another planned for late 2015)

Data complete until: 2013

Notes: The aim of the CERA Youth Wellbeing Survey 2013 is to measure the progress of earthquake recovery by collecting data on the self-reported wellbeing of those aged 12–24 years.

CERA worked with the Ministry of Education, Canterbury District Health Board, the Ministry of Youth Development, Christchurch City Council, Waimakariri District Council, Selwyn District Council, Ngāi Tahu, the Natural Hazards Research Platform and The Collaborative for Research and Training in Youth Health and Development to develop and implement the Youth Wellbeing Survey.

Survey questions were adapted from the CERA Wellbeing Survey and were tested with panels of young people to ensure that the wording and content were relevant.

The Youth Wellbeing Survey was open between 23 September and 13 December 2013 for responses from young people aged 12–24 years, living in greater Christchurch.

Methodology

An online survey aiming to generate a sample of young people in greater Christchurch that was as large and diverse as possible was undertaken between September and December 2013. Advertising through greater Christchurch youth networks and targeted promotional activities were the main recruitment strategies. Some hard copy responses from targeted groups of young people were also received.

The survey period included high school and university exams, and meant efforts to attract responses from different age groups needed to take the timing of study leave and exams into account.

Recruitment during this period may also have had some impact on the responses given by students who may have been experiencing greater stress than usual due to exam pressure.

Endnotes

[1] Dalziel, P. (2011). *The economic and social value of sport and recreation to New Zealand*, Research Report No. 322.

[2] SPARC. (2011). *The economic value of sport and recreation to the Canterbury–West Coast region*. Wellington: SPARC.

[3] Census 2006 data quoted in SPARC. (2011). *The economic value of sport and recreation to the Canterbury-West Coast region*. Wellington: SPARC.

[4] SPARC. (2011). *The economic value of sport and recreation to the Canterbury–West Coast region*. Wellington: SPARC. Note the data for young people are from the combined 1997, 1998 and 2000 New Zealand Sport and Physical Activity surveys. The data for adults are drawn from SPARC's 2007/08 Active NZ Survey. See www.activenzsurvey.org.nz

[5] Global Leisure Group. (2011). *Places and spaces for sport and recreation in greater Christchurch*, Final issues and options paper, unpublished.

[6] See Sports Recovery Action Plan: www.sportcanterbury.org.nz/spacesplacespeople/?utm_source=Leadership20Group&utm_medium=email&utm_campaign=Youre20Invited

[7] Canterbury Yachting (approximately 1,500 members) and GymSports (approximately 9,000 members) have not submitted membership data for 2008–10, meaning numbers would be artificially inflated by approximately 10,500 for 2011–12 if these data were included in the total calculated for Figure 1. Arawa Canoe (approximately 370 members) and Canterbury Triathlon (approximately 270 members) have also not been included in the total calculation for Figure 1 as they have no membership data for 2008–2011. For Canterbury Basketball and Peninsula and Plains Orienteering, which had missing data for 2010, the average of 2009 and 2011 data was substituted for 2010 in the calculation of total sports membership in Figure 1.

[8] Sport New Zealand. (2011). Young People's Survey.
Note: Data are from Sport New Zealand's Young People's Survey which is a nationwide, school-based survey. The Christchurch schools that were unable to participate in 2011 (from August to September) due to the earthquakes were given the chance to participate in Term 3, 2012 (many did). Results were then combined with the original 2011 data set. National data and associated documentation have been updated (not publicly released as at May 2014).
See the national report excluding updated greater Christchurch data: www.srknowledge.org.nz/researchseries/sport-new-zealands-young-peoples-survey-series and also see the main methodology report www.srknowledge.org.nz/research-completed/methodology-report-for-the-2011-young-peoples-survey

[9] No data available for Canterbury Yachting for 2013.

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Canterbury Wellbeing Index

Households are prepared for Civil Defence emergencies

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is being prepared important?

Being resilient after a disaster is a responsibility that individuals, households, businesses, communities and governments share.

Individuals and households are expected to take responsibility for preparing for, responding to and recovering from disasters. Authorities recommend that households are prepared to look after themselves for at least three days or more after an emergency.[1]

Preparedness is considered a good indicator of community resilience.[2] If people actively plan and prepare for protecting life and property, based on their awareness of the specific threats in their area, they can help their family and the wider community to re-establish stability after the event.[3]

Researchers have found that people are more likely to be prepared if they believe that the next emergency is likely to occur within 12 months. Those who believe there will not be an emergency for several years are much less likely to be prepared.[4]

How did the earthquakes affect households' level of preparation?

Between 4 September 2010 and 7 June 2012 the residents of greater Christchurch experienced 41 earthquakes of magnitude 5.0 or over, including four over magnitude 6.0.[5]

Residents experienced power outages, loss of sewer systems, closed shops and services, and damaged roads and public transport systems. In addition to significant support offered by government and non-government agencies, communities, households and individuals banded together to share resources, survive and even thrive in these difficult times.

It would therefore be expected that households in greater Christchurch would be more prepared after these earthquakes.

The *Review of the Civil Defence Emergency Management response to the 22 February Christchurch earthquake* found that "The resilience of the Christchurch community was demonstrated by the way so many households were able to care for themselves and also by the way in which community organisations stepped up and looked after their neighbourhoods."[6]

However, the review also noted that international experience has shown repeatedly that lower-income families struggling to survive from day to day do not have the ability to store food in advance or have the supplies recommended for survival.[7]

Recovery for greater Christchurch

What is happening now?

Christchurch City Council's Civil Defence Emergency Management recently launched the Resilient Business online tool. Resilient Business is about providing the tools to make it simpler for businesses to maintain continuity through a crisis or emergency. The Resilient Business website provides user-friendly tools for the business community to adopt effective resilience strategies appropriately tailored for the size of the business. Designed and implemented through an Auckland Council initiative, this is the culmination of a collaborative and coordinated approach; a website by business, for business. Resilient Business is now available in Christchurch, and is being delivered in partnership with the Canterbury Employers' Chamber of Commerce.[8]

The 'Piece of Cake' campaign was a collaborative project between Christchurch City Council, the Council's Civil Defence Emergency Management, CERA, All Right?, Te Raranga interchurch network, and The Neighbourhood Project. Promoted across greater Christchurch, the campaign encouraged neighbours to get to know one another over a piece of cake during the weekend of 29 and 30 March 2014.

There have been a number of national campaigns to encourage households to be prepared for an emergency. Part of the Earthquake Commission's role is to educate New Zealanders about being prepared in case of a natural disaster. Its 'Fix. Fasten. Don't Forget' preparedness campaign aims to motivate people to make necessary changes in their homes (such as securing chimneys, tall furniture and hot water cylinders) to help protect people, homes and contents if an earthquake happens.[9] This campaign was delivered differently to the people of Canterbury in recognition that their information requirements differ from the rest of New Zealand.

The Civil Defence 'Get Ready Get Thru' campaign also provides information about how to prepare for an emergency, including by creating an emergency plan and assembling emergency items.

What are the indicators telling us?

The extent to which households are prepared for an emergency is measured as the proportion of people who said their household has:

- all the items needed for basic preparation (a three-day supply of food and water, and a household emergency plan)
- all the items needed for better preparation (basic preparation, plus a torch, portable radio, spare batteries, first aid kit and essential medicines as well as food and water for three days and a household emergency plan)
- none of the items needed for basic preparation.

Figures 1 and 2 show that Canterbury residents have become better prepared for a civil emergency over time. In 2008, basic and better levels of preparedness in Canterbury were comparable with the national average. However, following the recent series of earthquakes in the region,[10] the proportion of people who said their household was prepared for a civil emergency has increased notably both locally and across the country. In Canterbury, the proportion of people who said their household has basic preparation increased from 13 per cent in 2008 to 40 per cent in 2012, and those who were better prepared likewise jumped from 10 per cent to 33 per cent by 2012.

Also in Canterbury, the proportion of people with an emergency plan[11] increased from 24 per cent in 2008 to 50 per cent in 2012. Nationally this figure increased from 24 per cent to 33 per cent during this period.

Figure 1: Proportion of people who said their household has all the items needed for basic preparation

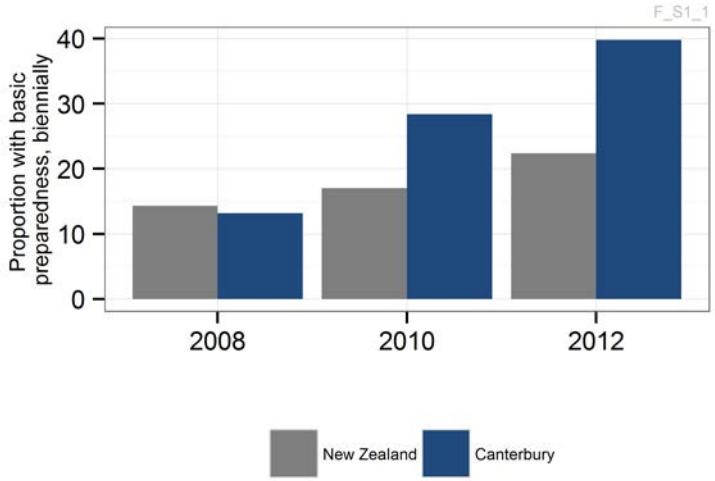


Figure 2: Proportion of people who said their household has all the items needed for better preparation

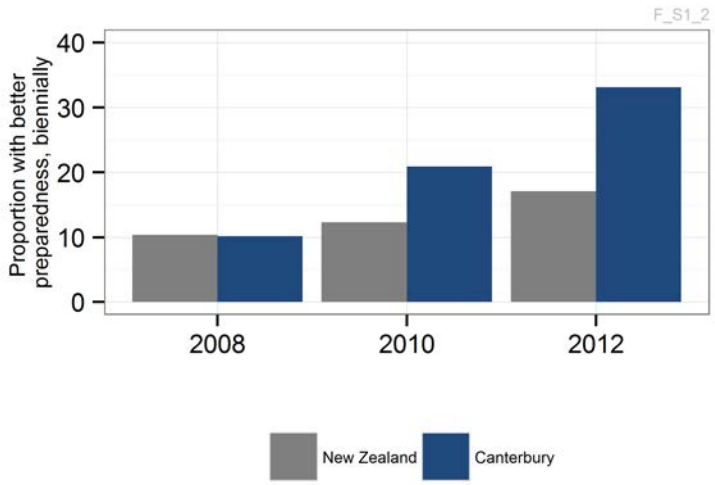
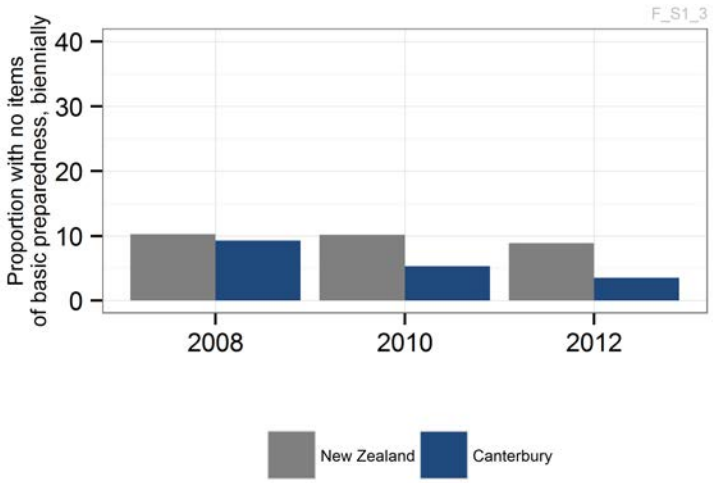


Figure 3 shows that the proportion of Canterbury residents who said their household has none of the items needed for basic preparation fell from 9 per cent in 2008 to 4 per cent in 2012. Households with none of the basic preparations tend to be renters (rather than owner-occupiers) and tend not to hold contents insurance.[12]

Figure 3: Proportion of people who said their household has none of the items needed for basic preparation



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about the New Zealand General Social Survey's findings on household preparedness: www.stats.govt.nz/browse_for_stats/people_and_communities/Households/natural-disaster-how-prepared-nzers.aspx

Find out more about how to prepare your home and your business for disasters: www.civildefence.govt.nz/memwebsite.nsf/wpgURL/Being-Prepared-Index?OpenDocument

Find out more about Civil Defence Emergency Management Group: www.cdemcanterbury.govt.nz/Emergency-Status/

Find out more about how to be a Civil Defence volunteer in Waimakariri district: www.waimakariri.govt.nz/civil_defence_home/volunteer-teams.aspx

Find out more about how to be a Civil Defence volunteer in Selwyn district: www.selwyn.govt.nz/services/civil-defence/community-response-volunteers

Find out more about how to be a Civil Defence volunteer in Christchurch city: www.ccc.govt.nz/homeliving/civildefence/volunteering/index.aspx

Find out more about the Earthquake Commission's Fix. Fasten. Don't Forget campaign: www.eqc.govt.nz/fixfasten

Technical notes

Household preparedness

Data source: New Zealand General Social Survey, Statistics NZ (NZGSS)

Data frequency: 2008, 2010 and 2012

Note: The criteria for basic preparation are a three-day supply of food and water, and a household emergency plan. The criteria for better preparation are a torch, a portable radio, spare batteries, first aid kit and essential medicines, as well as food and water for three days and a household emergency plan. A few respondents refused to answer the question, or did not know whether their households had an item; they were classified as not having the item for the 'basic and better preparation' analysis.

The NZGSS samples part of the population, so data are estimates only.

Residual responses ('don't know' or 'refuse') have been excluded from the denominator in this analysis. Person weights have been applied in this analysis so figures represent the proportion of people who said their household was prepared for an emergency.

In two previous reports, both the *New Zealand General Social Survey 2008 Fact Sheet: Natural disaster preparation at home* and *How prepared are New Zealanders for a natural disaster?* (2012) residual responses were included in the denominator but treated as a 'no' and household weights were applied to the analysis.

Emergency plan (2008, 2010 and 2012 NZGSS)

A household emergency plan documents a household's preparation for natural disasters which may disrupt the ability of household members to communicate with each other and could affect essential services. It includes the following:

- where to shelter in an earthquake, flood or storm
- how and where to meet during and after a disaster
- the best place to store emergency survival items and who is responsible for checking essential items
- what items will be needed in a getaway kit and where it will be kept
- how to turn off the water, gas and electricity in the home or business
- how to contact local civil defence organisations for assistance during an emergency.[13]

Endnotes

[1] http://www.getthru.govt.nz/how-to-get-ready/emergency-survival-items/

[2] Paton, D., Ronan, K., Johnston, D., Smith, L. and Johnston, M. (2003). *Responding to earthquake hazards: promoting household resilience and preparedness*. Paper presented at the Pacific Conference on Earthquake Engineering.

[3] Gurwitch, R.H., Pfefferbaum, B., Montgomery, J.M., Klomp, R. W. and Reissman, D.B. (2007). *Building community resilience for children and families*. Oklahoma City: Terrorism and Disaster Center at the University of Oklahoma Health Sciences Center.

[4] Paton, D., Smith, L.M. and Johnston, D. (2005). When good intentions turn bad: promoting natural hazards preparedness. *Australian Journal of Emergency Management* 20: 25–30.

[5] www.geonet.org.nz/canterbury-quakes/significant.html
Note: Between 4 September 2010 and 18 February 2014, the Canterbury region (including greater Christchurch) experienced 55 earthquakes ranging from magnitude 5 to 7 and above. There was a total of 4,199 earthquakes in the region during this period.

[6] McLean, I., Oughton, D., Ellis, S., Wakelin, B. and Rubin, C.B. (2012). *Review of the Civil Defence Emergency Management response to the 22 February Christchurch earthquake*, p 175.

[7] Mileti, D. (1999). *Disasters by design: a reassessment of natural hazards in the United States.* Joseph Henry Press.

[8] Information provided by Christchurch City Council.

[9] Information from www.eqc.govt.nz

[10] Note that data for 2010 were collected both before and after the September 2010 earthquake, so the increase may have been higher if data had been collected only after the event or after the February 2011 earthquake.

[11] See endnote 10.

[12] Statistics New Zealand. (2012) *How prepared are New Zealanders for natural disaster? Results from the 2010 General Social Survey.* Wellington.

[13] Definition provided by Statistics New Zealand – information from the General Social Survey.

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Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Social connectedness

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is social connectedness important?

Social connectedness refers to the relationships people have with others and the benefits these relationships can bring to the individual as well as to society.[1] High levels of social connectedness are thought to promote better health and psychological wellbeing.[2] People who feel socially connected also contribute towards building communities and society. They help to create 'social capital' – the networks that help society to function effectively. Social connectedness is particularly important in building communities that can withstand adversity, whether caused by economic, social or environmental shocks.[3]

Social connectedness includes relationships with family, friends, colleagues and neighbours, as well as connections people make through paid work, sport and other leisure activities, voluntary work or community service.

Social connectedness is more likely to be adversely affected by the earthquakes in groups that were vulnerable and had lower social connectedness before the earthquakes. This includes groups where mobility, physical frailty and medication needs are high.[4]

Providing adequate access to the built environment allows disabled people to be included in the economic and social life of the community, to make social connections and to contribute to society.[5]

Volunteering

Over a million New Zealanders are involved in voluntary work. As volunteers they make a huge contribution to sports, recreation, arts, culture and heritage, emergency and social services, health, education, conservation and the environment.[6]

Volunteering creates stronger communities by building social connections and networks of reciprocity and trust. Volunteers foster and maintain cultural identity through events and activities. They also maintain and improve our natural environment and provide services to families and those most vulnerable in communities.

Volunteering has a positive impact on the economy. Through their work, volunteers learn new skills that they can use in paid employment.

There are over 97,000 non-profit organisations in New Zealand. Of this total, 90 per cent rely entirely on voluntary labour.[7]

How was social connectedness impacted by the earthquakes?

The community immediately responded to the earthquakes with spontaneous volunteering. People pitched in and did whatever was necessary and possible to assist each other.

Noteworthy acts of altruism occurred in the hours after the earthquakes. Passersby pulled people from rubble and saved animals from damaged buildings. Teachers and bus drivers looked after groups of school children for hours before their parents were able to reach them.

In the days afterwards people shared meals with neighbours, created community food kitchens, supplied water to elderly residents, towed strangers' cars from holes in the roads and teamed up to deconstruct damaged chimneys.

Recovery for greater Christchurch

Response agencies such as the Red Cross, the Salvation Army and churches immediately started organising volunteers to knock on doors to assess the wellbeing of residents and to ensure their immediate needs were met. New volunteering groups formed organically, such as the Student Volunteer Army and Farmy Army who mobilised university students and the rural community respectively to clear liquefaction and undertake many other services.

Networks of professionals such as lawyers, accountants and health professionals offered their time and expertise for free to assist affected people. Residents' groups such as Canterbury Communities' Earthquake Recovery Network (CanCERN) and Addington Action formed to support their communities.

In other parts of the country, individuals, groups, churches and businesses also mobilised and established supply chains of items such as warm clothing, heaters and household items to distribute to affected people. Iwi representatives from around New Zealand arrived to volunteer their skills and provide support to Ngāi Tahu and other Māori communities.

People remaining in damaged areas developed new bonds with neighbours in similar predicaments. However, social connectedness was also weakened as people left their communities due to damage or concerns about aftershocks. In the 2012 CERA Wellbeing Survey, 26 per cent of respondents reported having to move house permanently or temporarily 'because of the earthquakes'.[8]

Whole communities were uprooted and some people felt their social networks had developed 'holes' due to people leaving.[9] Children's social networks were disturbed with some travelling to schools in other parts of town. Some people, particularly in the hard-hit eastern suburbs, had their lives and social connections severely disrupted.[10]

Many facilities where people used to meet and connect were damaged or closed down. In the 2012 CERA Wellbeing Survey, 69 per cent of respondents reported the loss of recreational, cultural and leisure time facilities (cafes, restaurants, libraries, marae, arts and cultural centres).

What is happening now?

Many informal and formal volunteering initiatives continue to provide assistance within greater Christchurch. Groups such as Habitat for Humanity are repairing and relocating damaged homes. The Red Cross outreach volunteers are present at a number of community hubs to provide a listening ear or information about Red Cross programmes and services. Red Cross volunteers also check on affected residents in the most vulnerable areas of greater Christchurch, as do a number of residents' groups and faith-based groups. Creative groups such as Gap Filler, Greening the Rubble and Life in Vacant Spaces have created temporary creative projects in vacant spaces.

The Department of Internal Affairs, which oversees the distribution of lottery funds, the Community Organisation Grants Scheme, and other funding programmes, continues to support volunteering through its funding and advisory role. This includes contributing funding to Volunteering Canterbury.

CERA has played a role in facilitating a range of initiatives that encourage existing connections and enable new ones to be created across the community. For example, it has:

- partnered with the Christchurch Earthquake Appeal Trust (CEAT) and the Methodist and Anglican churches to deliver the Summer of Fun series of free events targeting families (over 40 events in 2012/13 and over 66 events in 2013/14)
- partnered with CEAT and the YMCA to create a community events trailer which community groups can hire at no cost
- supported Rotary to develop the Rotary Neighbourhood Project Fund which provides small grants to assist community groups to host small neighbourhood and larger community events
- supported Te Raranga interchurch network to deliver the 'Piece of Cake' initiative which encouraged neighbours to get to know each other by sharing cake and conversation over the weekend of 29 and 30 March 2014

- The 'Let's Find & Fix' campaign is a new community-led initiative developed by CanCERN and supported by CERA, Red Cross, Community Energy Action, Earthquake Commission and Insurance Council of New Zealand members. With volunteers from the Red Cross, residents' associations and faith-based organisations going door to door, this campaign will be targeting damp, cold, unsafe, and unsanitary houses throughout greater Christchurch with the aim of providing temporary repairs to ensure everyone is warm and dry and safe, heading into a fourth winter after the February 2011 earthquake. As at 30 May 2014, approximately 4,909 houses had been door knocked as part of this campaign. Of this total, 882 had been identified as meeting the criteria for the initiative.

According to the April 2014 CERA Wellbeing Survey, 11 per cent of respondents reported that the loss of facilities where people meet and connect is having a negative impact on their wellbeing. The loss of indoor sport and active recreation facilities negatively impacted on 17 per cent compared with 24 per cent in September 2012. The loss of outdoor sport and active recreation facilities continued to impact 13 per cent compared with 20 per cent in 2012. The proportion of people indicating that the loss of other recreational, cultural and leisure time facilities reduced to 20 per cent in April 2014 compared with 34 per cent in September 2012.

What are the indicators telling us?

Sense of community

In this report, sense of community is measured in the following ways:

- sense of community with others in neighbourhood
- having anyone you could turn to for help during a difficult time (such as during a serious illness, after an injury or when needing emotional support)

Prior to the earthquakes Christchurch city residents (57 per cent) reported lower levels of a sense of community than the national average (60 per cent). However, after the major earthquakes it was slightly higher than across New Zealand. The 2012 CERA Wellbeing Survey showed that in the year following the February earthquakes, over half of residents in greater Christchurch (55 per cent) agreed that they felt a strong sense of community with others in their neighbourhood compared with 53 per cent across New Zealand[11] (see Figure 1). This may have been because the earthquakes had engendered a greater spirit of social connectedness during a time of uncertainty and upheaval for many. Figure 1 shows that since 2012, the proportion feeling a strong sense of community has dropped to 47 per cent (as at April 2014).

In April 2014, the group most likely to agree they feel a sense of community with others in their neighbourhood was those aged 50 years or over (55 per cent).

Those less likely to report a sense of community were people living in temporary accommodation (36 per cent), young adults aged 18–34 years (29 per cent), people living in rental accommodation (30 per cent), those who have changed address since the September 2010 earthquake (24 per cent) and people living with a physical health condition or disability (23 per cent).

Residents of Selwyn and Waimakariri districts continue to feel a greater sense of community than people living in Christchurch city.

According to the 2013 CERA Youth Wellbeing Survey, a higher proportion of young people feel a sense of community compared with the general population who responded to the latest CERA Wellbeing Survey. In 2013, 57 per cent of people aged 12–24 years agreed (strongly agree or agree) that they feel a sense of community with others in their neighbourhood. Those most likely to feel this way were aged 12–15 years (64 per cent) and at school (62 per cent). In contrast, the unemployed (38 per cent), young people living with a long-term health condition or disability and young people aged 19–24 years were less likely to feel a sense of community.

Figure 1: Percentage of residents who felt a sense of community (see technical notes relating to geographic boundaries)

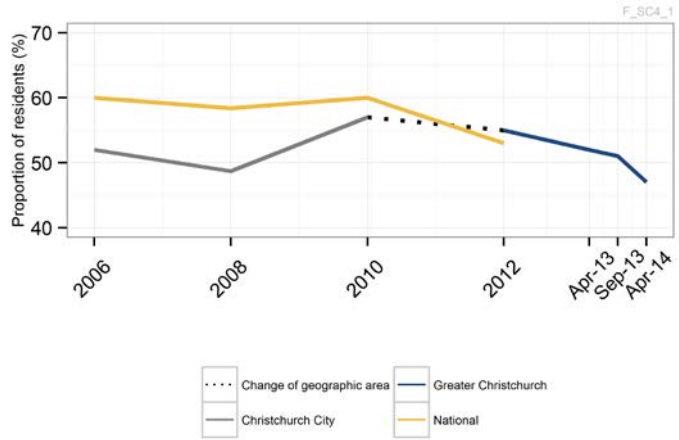


Figure 2 shows the percentage of residents who agreed that they had someone to turn to for help during a difficult time (measured by the New Zealand Quality of Life and CERA Wellbeing surveys). For Christchurch city and greater Christchurch, this percentage decreased from 98 per cent in 2010 to 88 per cent in 2012. In September 2013, the greater Christchurch figure remained relatively unchanged at 89 per cent.

Residents more likely to say they had someone to turn to were from households with relatively high income – over $100,000 (96 per cent). Of those who indicated they had someone to turn to, the majority (96 per cent) would turn to family and three-quarters (74 per cent) would turn to friends.

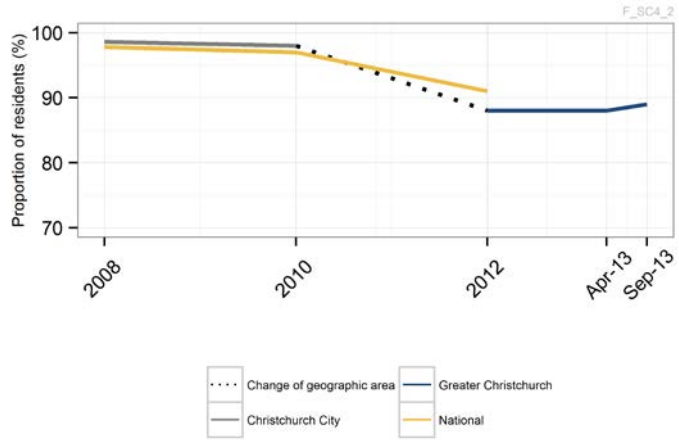
Those less likely to say they had someone to turn to in 2013 were of Pacific, Asian or Indian ethnicity (76 per cent).

Fewer respondents to the 2013 CERA Youth Wellbeing Survey said that they had someone to turn to for help (81 per cent) compared with the general population responding to the CERA Wellbeing Survey. Māori (76 per cent) and people of Pacific, Asian and Indian ethnicities (74 per cent) were less likely to have this support.

The earthquakes have produced their own set of challenges for people with a disability. However, this appears to be having less of a negative impact over time. Nineteen per cent of respondents to the CERA Wellbeing Survey reported 'dealing with barriers around disabilities as a result of the earthquakes in 2012.[12] In April 2014, 13 per cent of residents indicated that they continue to have their everyday lives negatively impacted by barriers relating to disability (whether existing or earthquake related). For 6 per cent, this is having a moderate or major negative impact. Some of the barriers may be due to damage to footpaths and roads in greater Christchurch, physical access to building and the closure and/or relocation of services into new premises.

In comparison, 16 per cent of young people who participated in the 2013 CERA Youth Wellbeing Survey have dealt with a disability since the earthquakes. This was still having a moderate or major negative impact on the everyday lives of 4 per cent of respondents.

Figure 2: Proportion of residents reporting they had someone they could turn to for help during a difficult time[13]



Almost half of respondents (47 per cent) in the 2012 CERA Wellbeing Survey reported a sense of a stronger personal commitment to Christchurch city or to Selwyn or Waimakariri districts as a result of the earthquakes. This subsequently dropped to 35 per cent in April 2014, and 16 per cent said this is having a moderate or major positive impact on their everyday lives. This change in the level of commitment may reflect the on-going frustration and uncertainty regarding stressors relating to insurance issues, house damage, repairs, relocation and living in a damaged environment.

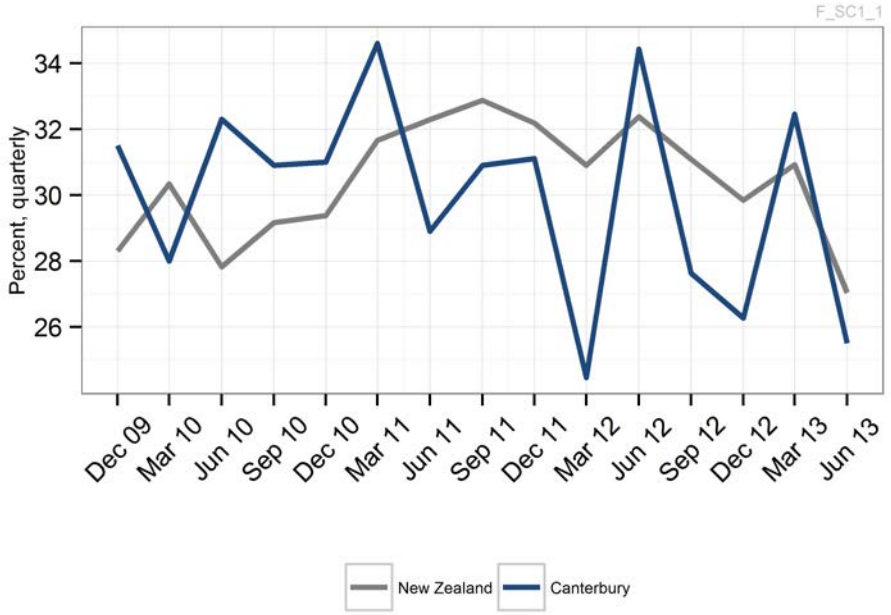
Volunteering

Data in Figure 3 show that the volunteering rate in Canterbury increased in the period immediately following the February 2011 earthquake to 35 per cent in March 2011, from 28 per cent in March 2010. The rate has since fluctuated and despite increasing again to 34 per cent in June 2012, it has generally remained below the New Zealand rate. Since December 2009, 30 per cent of the population (on average) have spent time volunteering in both New Zealand and Canterbury.

Similarly, after the February 2011 earthquake, people in Canterbury tended to volunteer more hours on average than before. However, time spent volunteering has generally remained below the New Zealand average since June 2011. This reduction may reflect levels of fatigue in the population and the impact of other stressors on individuals' lives.

When comparing the rates between Canterbury and New Zealand, it must be remembered that a lot of informal volunteering in Canterbury since the earthquakes is not captured by this measure.

Figure 3: Volunteering rate



Graffiti complaints

The total number of complaints to Christchurch City Council relating to graffiti has fluctuated annually in recent years but is currently tracking above pre-earthquake levels. Total complaints declined by 6 per cent between 2010 and 2011 from 8,080 to 7,619. Numbers then increased significantly (37 per cent) in 2012 to 10,438 before dipping by 5 per cent to 9,903 in 2013.

Noise complaints

Total noise complaints reported to Christchurch City Council peaked in 2010 at 14,152 complaints and has subsequently declined by 8 per cent to 12,960 in 2013. Typically, noise from radios, stereos and TVs is the major source of complaints. Notably the number of noise complaints caused by construction has more than tripled, increasing from 144 complaints in 2010 to 448 in 2013.

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about volunteering post-earthquakes across New Zealand: www.volunteernow.org.nz/article/14

Find out more about the Strengthening Communities Fund: www.ccc.govt.nz/cityleisure/communityfunding/communitygrants/index.aspx

Find out more about Volunteering Canterbury: www.facebook.com/pages/Volunteering-Canterbury/76308735321

Find out more about the Community Organisation Grants Scheme: www.communitymatters.govt.nz/Funding-and-grants---Crown-Funds---Community-Organisation-Grants-Scheme---Local-Priorities

Find out more about Red Cross assistance programmes and volunteering for the Red Cross: www.redcross.org.nz/what-we-do/in-new-zealand/helping-in-canterbury/

Find out more about Salvation Army assistance programmes and services and volunteering for the Salvation Army: www.salvationarmy.org.nz/need-assistance/welfare

Technical notes

CERA Wellbeing Survey

Data source: Canterbury Earthquake Recovery Authority

Data frequency: Six-monthly September 2012, April 2013, September 2013, April 2014

Data complete until: April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Sense of community

Data source: The Quality of Life Survey (2006, 2008, 2010 Christchurch city and New Zealand data, and 2012 New Zealand data); CERA Wellbeing Survey (2012, 2013 and 2014 greater Christchurch data)

Data complete until: October 2012 and 2014

Notes: The Quality of Life Survey is a national survey run every two years. Computer assisted telephone interviews were conducted with New Zealand residents aged 15 years and older. Respondents were selected randomly from the Electoral Roll. The Christchurch sample size is 496 for 2010. For 2010, fieldwork was conducted between 19 November 2010 and 2 March 2011. All interviewing in Christchurch was undertaken before the 22 February 2011 earthquake (and after the first large quake in September 2010).

Data from previous years are not directly comparable with the 2012 result as they were obtained using a different methodology and a different survey. However, the results of the two surveys can be compared in a very general sense.

The questions were asked in the same fashion in the Quality of Life surveys and the CERA Wellbeing Survey. The question, “If you were faced with a serious illness or injury, or needed emotional support during a difficult time, is there anyone you could turn to for help?” was not asked in 2006.

The results of the Quality of Life Survey include residents of Christchurch city only, while the CERA Wellbeing Survey also includes residents of Waimakariri and Selwyn districts.

The ‘national’ total in 2012 is the combined results of the six Quality of Life Project cities of Auckland, Porirua, Hutt, Wellington, Christchurch and Dunedin.

The ‘national’ total in 2010 is the combined results of the eight Quality of Life Project cities of Auckland, Hamilton, Tauranga, Porirua, Hutt, Wellington, Christchurch and Dunedin.

Prior to 2010, a further two cities were involved and the ‘national’ average included a number of people resident outside the main Quality of Life Project cities.

Volunteering

Data source:	Nielson CMI Survey via Department of Internal Affairs
Data frequency:	Quarterly
Data complete until:	June 2013

Notes: This indicator is based on survey questions from the Nielson CMI Survey. This survey only collects data on formal volunteering (ie, that done for/through an organisation). A negligible amount of informal volunteering (helping neighbours etc) is also captured. Results are provided for the population aged 10 years and older, which is the standard measure used by the Department of Internal Affairs for volunteering data.

The rate of volunteering used is the number of people aged 10 years and older who have formally volunteered for a group or organisation in the last three months, as a proportion of all people aged 10 years or older.

The 22 February 2011 earthquake fell in the middle of the March 2011 quarter survey period. The March 2011 quarter results should be considered indicative only due to data quality issues, especially in the Canterbury region.

Graffiti complaints

Data source:	Christchurch City Council
Data frequency:	Data collected monthly and aggregated annually in this report
Data complete until:	December 2013

Noise complaints

Data source:	Christchurch City Council
Data frequency:	Data collected monthly and aggregated annually in this report
Data complete until:	December 2013

Endnotes

[1] www.socialreport.msd.govt.nz/social-connectedness/

[2] Ministry of Social Development. (2005). *The social report 2005* www.socialreport.msd.govt.nz/documents/2005/sr05-social-connectedness.pdf

Giordano, G.N., and Lindstorm, M. (2010). The impact of changes in different aspects of social capital and material conditions on self-rated health over time: a longitudinal cohort study. *Social Science and Medicine* 70(5), 700–710. In Christchurch City Health Profile. Retrieved from: www.healthychristchurch.org.nz/media/27507/socialconnectedness.pdf

[3] Cork, S. (2009). *Brighter prospects: Enhancing the resilience of Australia*. Weston, ACT: Australia 21. In Christchurch City Health Profile. Retrieved from: www.healthychristchurch.org.nz/media/27507/socialconnectedness.pdf

[4] www.hrc.co.nz/wp-content/uploads/2013/12/HRC-Earthquake-Report-2013-web-launch.pdf page 95 / 96

[5] Human Rights Commission. (2012). *Better design for everyone: disabled people's rights and the built environment*. HRC: Auckland

[6] www.dia.govt.nz/diawebsite.nsf/Files/About_volunteering_NZ/$file/About_volunteering_NZ.pdf Also see www.volunteerwellington.org.nz/pdf/volweekfactsheet.pdf

[7] http://ndhadeliver.natlib.govt.nz/ArcAggregator/frameView/IE17576103/http://www.ocvs.govt.nz/ http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/Non-ProfitInstitutionsSatelliteAccount_HOTP2005.aspx

[8] For information on the CERA Wellbeing Survey, refer to the technical notes.

[9] Torstonson, S. (2011). *Supporting community resilience in post-quake Christchurch*. Retrieved from: http://ccoss.org.nz/wordpress/wp-content/uploads/Supporting-Community-Recovery-Final-Report-July-2011.pdf

[10] Christchurch City Health Profile. Retrieved from: http://www.healthychristchurch.org.nz/media/27507/socialconnectedness.pdf

[11] New Zealand Quality of Life Survey 2012.

[12] The actual question read: "Which of the following have you experienced as a result of the earthquakes? … dealing with barriers around disabilities (own or other people's) whether existing or earthquake related".

[13] Data from the April 2014 CERA Wellbeing Survey has been excluded from this analysis due to a change of question format

CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Civil participation

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is civil participation important?

Civil participation in public decision-making gives people a way of contributing to the communities they live in. This contribution is an important aspect of people's wellbeing.

Participation can bring an ability to influence decisions, as well as opportunities to connect with others in the community and to learn and understand what is going on. It can also build a sense of being valued by community leaders and others in the community.[1] Experts say that having a say in the rebuild helps people's recovery.[2]

Electoral participation is one way of measuring how much people feel engaged in, and responsible for, their community. If people believe strongly in their ability to be heard and to make a difference, they tend to enrol and to vote in elections.[3]

Higher voter turnout rates also suggest that the population has confidence in government and believes that the government is responsive to the views of citizens.[4]

General elections are held at least every three years, with the most recent held in November 2011. Local government elections are also held every three years, most recently in October 2013.

There appears to be little research on the impact of natural disasters on voter turnout, but it is generally agreed that disasters are likely to reduce voter participation.[5]

Voter turnout overall decreased after Hurricane Katrina in New Orleans. However, the impact of the disaster was not straightforward: in some more heavily flooded areas, turnout actually increased while it fell in some of the less flooded areas.[6]

How was civil participation impacted by the earthquakes?

The 2010 local government elections were held just one month after the September 2010 earthquake. Postal ballots were due by 9 October 2010.

The Christchurch City Council ran a campaign to raise voter awareness. Advertisements were placed on buses, in malls and in doctors' surgeries, and radio advertising and interviews were undertaken. As noted in Figure 1 this campaign appeared successful as voter turnout in the city increased by 10 per cent in 2010, from 2007.

The 2011 general election was held nine months after the February 2011 earthquake, and just five months after the major June 2011 aftershocks.

In recognition that the earthquakes had caused significant infrastructure and communications obstacles, the Electoral Commission heavily promoted advance voting in Christchurch for the general election.[7] Advance mobile services were provided via campervans which stopped at pre-advertised sites on the path of local bus routes.

As a result, a survey of voter and non-voter experiences found that 80 per cent of Christchurch residents were aware of advance voting options, in contrast to 63 per cent of all New Zealanders.[8] Advance voting in the badly damaged electorates of Christchurch East and Christchurch Central (19 per cent in each case) was higher than the national average of 15 per cent.[9]

This same survey found that Christchurch residents typically knew more about aspects of the general election process and the associated referendum than New Zealanders as a whole.[10]

Across New Zealand, voter turnout as a percentage of those eligible to vote fell by 6 per cent from 2008 to 2011. Voter turnout in the Christchurch electorates was only 1 per cent lower than in the 2008 election when adjusted for the lower turnout nationwide.[11]

Declining voter turnout is a long-term global trend.[12]

What is happening now?

Public engagement

Public engagement in decision making relating to the recovery of greater Christchurch is a key element of the *Recovery Strategy for Greater Christchurch: Mahere Haumanutanga o Waitaha*. CERA facilitates this involvement through its Community Engagement Strategy.

As part of this strategy, CERA developed engagement guidelines to help identify opportunities for the public to be involved in various aspects of recovery. Public engagement can include scoping, problem solving, and identifying issues and considerations, and can ultimately impact on the long-term sustainability and success of initiatives, policies and activities.

In line with these guidelines, CERA is communicating and engaging with individuals, families and communities to ensure they are supported to shape their own recovery. Providing information in a timely and targeted manner can be of huge benefit to communities. It is essential that the information reaches the intended audience in a way that is easily understood and helps people to respond in a way that is appropriate for their situation.[13]

Electoral participation

During 2013, the parliamentary electorate names and boundaries for the 2014 and 2017 general elections were reviewed by the Representation Commission. The proposed boundaries were then notified to the general public and to members of Parliament as well as being put forward for public discussion, for appropriate modification or adjustment. The Representation Commission finalised the electorate names and boundaries in April 2014.

The electoral boundaries have been reviewed to ensure that the number of people in each electorate reflects changes in the population following the 2013 Census of Population and Dwellings and to ensure that electorate names remain relevant.

Major boundary changes in the Christchurch area were required because of significant population movement away from the Christchurch East, Christchurch Central and Port Hills electorates. At the same time, the Waimakariri, Wigram and Selwyn electorates have increased beyond the permitted population limit. Final election boundaries are available on the Electoral Commission's website.[14]

The next general election is scheduled for 20 September 2014, and the next local government election is scheduled for 2016.

What are the indicators telling us?

This report measures civil participation in three ways:

- confidence in decision-making and satisfaction with communications and information
- voter turnout in local elections for councillors
- voter turnout in general elections.

Decision making and communication related to earthquake recovery

Table 1 shows confidence in overall decision making relating to the recovery from 2012 to 2014 recorded by the CERA Wellbeing surveys. Greater Christchurch Residents' opinions continue to be polarised as to whether they have confidence in the decisions made by the agencies involved in the recovery. In April 2014, 28 per cent of residents expressed confidence in overall decision making, 41 per cent indicated they lacked such confidence while 31 per cent were non-committal. Confidence has reduced since 2012.

Table 1: Confidence in decision making (CERA Wellbeing surveys)

Question	September 2012		April 2013		September 2013		April 2014	
	% expressed confidence	% expressed lack of confidence	% expressed confidence	% expressed lack of confidence	% expressed confidence	% expressed lack of confidence	% expressed confidence	% expressed lack of confidence
Confident that the agencies involved in the earthquake recovery have made decisions that were in the best interests of greater Christchurch	34	38	30	38	30	39	28	41

Table 2 shows respondents' satisfaction with communications and information (eg, timeliness, relevance, accuracy) from recovery agencies. In 2014, the results from the CERA Wellbeing Survey relating to the overall provision of information across all recovery agencies were again polarised. Thirty-three per cent of residents expressed satisfaction with information received about earthquake recovery decisions, 30 per cent were dissatisfied, while the remaining 37 per cent did not have a firm view. Satisfaction levels declined between 2012 and 2014.

Table 2: Satisfaction with communications and information (CERA Wellbeing surveys)

Question	September 2012		April 2013		September 2013		April 2014	
	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction
Satisfaction with communications and information about earthquake recovery decisions	36	32	33	29	34	30	33	30

Table 3 shows that in April 2014, a quarter (24 per cent) of residents in greater Christchurch reported being satisfied or very satisfied with the opportunities the public has had to influence earthquake recovery decisions. A higher proportion (38 per cent) said they were dissatisfied or very dissatisfied. The level of satisfaction decreased from 32 per cent in 2012.

Table 3: Satisfaction with opportunities to influence decisions (CERA Wellbeing surveys)

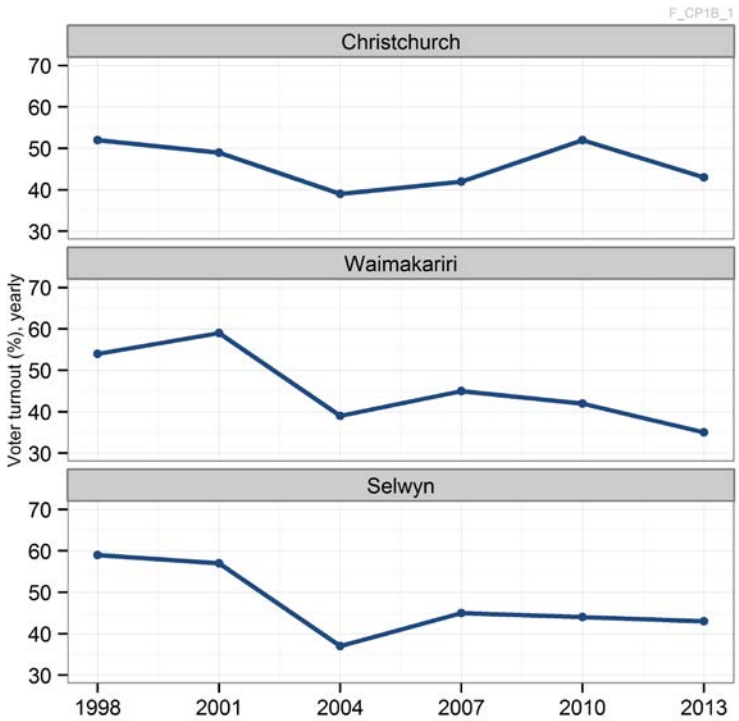
Question	September 2012		April 2013		September 2013		April 2014	
	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction	% expressed satisfaction	% expressed dissatisfaction
Satisfaction with the opportunities the public has had to influence earthquake recovery decisions	32	30	28	33	26	36	24	38

Local elections

Figure 1 shows that voter turnout for local elections for councillors increased in Christchurch city between 2004 and 2010, including after the September 2010 earthquake. Turnout grew from 39 per cent in 2004 to 42 per cent in 2007 and 52 per cent in 2010. However, voter turnout declined between 2010 and 2013, to 43 per cent. This is similar to the national figure of 41 per cent.

Voter turnout for local government elections for councillors declined slightly between the 2007 and 2010 elections in Waimakariri and Selwyn districts. This pattern has continued in 2013.

Figure 1: Voter turnout in local government elections for councillors



General elections

Figure 2 shows that voter turnout for general elections in greater Christchurch has declined from 2005 to 2011. This pattern is consistent with voting trends in New Zealand overall.

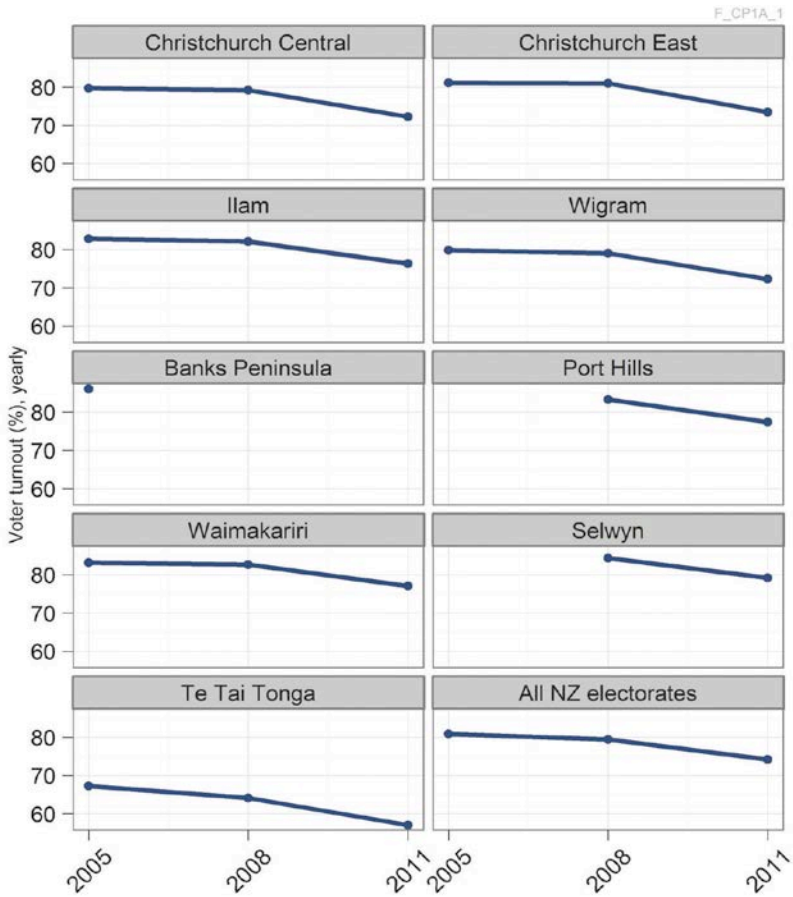
In the 2011 election, Christchurch East had the greatest decline, falling by 8 per cent from an 81 per cent turnout in 2008 to a 73 per cent turnout in 2011. In Te Tai Tonga Māori electorate, which covers a wider area than Canterbury alone, turnout fell by 7 per cent, from 64 per cent in 2008 to 57 per cent in 2011. The Wigram turnout dropped from 79 per cent in 2008 to 72 per cent in 2011.

According to the New Zealand General Social Survey (NZGSS) undertaken by Statistics New Zealand, 20 per cent of people (nationally) said they hadn't voted in the 2011 general election (this includes people who said they were not enrolled or not eligible to vote) while 19 per cent had not voted in the 2008 elections. The most common reason New Zealanders gave for not voting in the 2011 general election was that they 'didn't get round to it, forgot or weren't interested' in voting. This accounted for 21 per cent of non-voters and was a slight increase from 20.6 per cent in 2008. In addition, a further 7 per cent of non-voters in 2011 did not vote because they felt their vote would not make a difference, up from 3.9 per cent in 2008.[15]

Age, income and migrant status also made a difference to voting behaviour. The proportion of voters was lower among those aged 18–24 years (42 per cent), people who feel they do not have enough money to meet their daily needs (28 per cent) and recent migrants (60 per cent).[16]

Around 12 per cent of non-voters could not vote in 2011 because they were not registered.[17]

Figure 2: Voter turnout in general elections



Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more about CERA'S Community Engagement Strategy: http://cera.govt.nz/sites/default/files/common/cera-community-engagement-strategy.pdf

Find out more about elections in New Zealand: www.elections.org.nz

Find out more about electorate-level turnout information from 1996: www.electionresults.org.nz

Find out more about electoral boundary changes: www.elections.org.nz/news-media/changes-proposed-electorate-boundaries-0 and www.elections.org.nz/events/electorate-boundary-review and www.elections.org.nz/sites/default/files/bulk-upload/documents/proposed_electoral_districts_2013_report.pdf

Find out more about the New Zealand General Social Survey results on non-voters in the 2008 and 2011 elections: www.stats.govt.nz/browse_for_stats/people_and_communities/Well-being/civic-human-rights/non-voters-2008-2011-gen-elections.aspx

Technical notes

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013 and April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Voting information

Data source:	Electoral Commission. The Local Authority Election Statistics (Department of Internal Affairs) Local Government New Zealand
Data frequency:	Each election
Data complete until:	2011 and 2013

Notes: Voter turnout is defined as the proportion of all enrolled electors who cast a vote in general elections (Voter turnout = Total votes cast / Electoral population).

Local government elections occur every three years, most recently in 2013. Territorial authority elections for councillors and for mayors have almost identical turnout rates for these electorates. For simplicity, we are reporting only on councillor elections.

Electoral boundary review (general elections)

The parliamentary electorate names and boundaries for the 2014 and 2017 general elections have been reviewed by a statutory body called the Representation Commission.

This will ensure that the number of people in each electorate reflects changes in the population and that electorate names remain relevant.

Statistics New Zealand calculates the number of general and Māori electorates and population size for each electorate following the Census. The Representation Commission used these electoral populations and other statutory criteria to decide the electorate boundaries.

The proposed electorate boundaries were released for public comment on 21 November 2013.

The Commission finalised the electorate names and boundaries in April 2014 for the 2014 and 2017 general elections.[18]

Non-voters in 2008 and 2011 general elections: Findings from New Zealand General Social Survey

Data source:	Statistics New Zealand
Data frequency:	From the 2010 and 2012 NZGSS conducted every 2 years
Data complete until:	2012

This report presents reasons people gave for not voting. It includes selected characteristics of the non-voters, including their age, feelings of income adequacy, labour force status and migrant status.

The report is based on self-reported voting behaviour from the NZGSS and findings can be different from administrative data or voter turnout data available from the Electoral Commission.

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CERA
Canterbury Earthquake Recovery Authority
Te Mana Haumanu ki Waitaha

Canterbury Wellbeing Index

Population

JUNE 2014

The Canterbury Earthquake Recovery Authority (CERA) is monitoring and reporting on the progress of the recovery. The Canterbury Wellbeing Index tracks the progress of social recovery using indicators to identify emerging social trends and issues.

Why is population important?

The population is important because changes in population size have significant impacts on the natural, physical, economic and social environments.

Populations change through births, deaths and migration.

If a population grows, there is greater demand for cultural and recreational services such as libraries, art galleries, sports grounds and swimming pools. The social infrastructure must expand so that everyone in the population has access to important services such as schools, general practices, community halls and emergency services. With more people, demand also intensifies for natural resources such as land and energy, and greater pressure is placed on existing roads, water and waste systems.[1]

Under the right conditions, population growth can help drive economic growth as people consume more goods and services. In turn, higher consumption can create employment and boost the economic wellbeing and quality of life in the growing communities. However, for economic activity to increase there must be more supporting infrastructure such as roads, ports and telecommunications infrastructure.

If a population declines, less money circulates in the economy which can lead to businesses failing and people losing their jobs. Services such as hospitals and schools become less viable. In this way, long-term population decline reduces both economic and social wellbeing.

Before the earthquakes, the populations of Christchurch city and Waimakariri and Selwyn districts were growing, and Statistics New Zealand projected that this trend would continue. Since the earthquakes, predictions of population changes in greater Christchurch have had to be adjusted.

Using evidence from previous natural disasters in developed countries, it was expected that, in the first year following the disaster, less than 2.5 per cent of the population would leave the region[2] and that this would be offset by natural population growth and migration into greater Christchurch.[3] A long-term fall in the number of people in the region was considered unlikely.

International research suggests that the people who experience the greatest dislocation tend to be those whose homes have been most damaged.[4] In general, socioeconomically vulnerable populations are more likely to bear the burden of a natural disaster, to be displaced and to be displaced for longer.

After disasters, displaced people tend to relocate near their previous homes rather than moving long distances.[5] In this way, they can keep their links to their former communities as well as continue to work in their usual place of employment or attend their usual school.

The Census is the most comprehensive source of population data. The 2011 Census was due to be held on 8 March 2011, but was delayed due to the national state of emergency that followed the Canterbury earthquake on 22 February 2011.

The most recent Census was held on 5 March 2013 and results were available from late 2013. Census data in conjunction with other Statistics New Zealand population measures can now be used to track population change.

How was the population impacted by the earthquakes?

In the immediate aftermath of the February 2011 earthquake there were reports of tens of thousands of people leaving the city. For most people this was a short-term response to an emergency, as families wanted time out from the aftershocks and from the damage to their homes and workplaces. Most people returned over the following days, weeks and months.

According to an analysis of cell phone calls made by Christchurch users, around 55,000 residents may have left the city in the week after the February 2011 earthquake (15 per cent of the population).[6] Most calls were made from Otago, Auckland or Wellington. A month later, records indicate that most people had returned to Christchurch.

New Zealand Post mail redirections showed that 8,632 households relocated in the six weeks after the February 2011 earthquake compared with 2,397 in the six weeks before.[7] The majority (81 per cent) relocated within the Canterbury region, and 67 per cent of Christchurch city residents relocated within the city. Based on Christchurch City Council rates data, it appears that in the first few months people tended to relocate near their former neighbourhood. The median distance between former and current residences was just 3.5 kilometres.

The most common destinations for relocations outside Canterbury were Auckland, Otago and Wellington.

Within Waimakariri district, displaced households tended to relocate primarily within the district or to Christchurch city.

A national survey of 26,000 secondary students carried out in June 2011 asked if students had moved to a different home because of the earthquakes. In Canterbury, 8.2 per cent indicated they had moved, while in the rest of the country, on average, 1.8 per cent indicated they had moved out of Christchurch because of the earthquakes.[8]

In 2013 the CERA Youth Wellbeing Survey found that 46 per cent of respondents aged 12–24 years had moved from the address they were living at on 4 September 2010 (the date of the first Canterbury earthquake). Of this group, 39 per cent had moved once and 29 per cent had moved twice.

Statistics New Zealand estimated that in the year from June 2010 to June 2011, the population of Christchurch city decreased by 8,900 people (2.4 per cent).[9] Many were likely to have settled in other parts of Canterbury, as the total estimated loss to the Canterbury region was only 5,000 people. Estimates also indicate that between June 2011 and June 2012, Christchurch city's population declined by a further 1.2 per cent to 363,200.[10] This means that between June 2010 and June 2012, Christchurch city's population declined by about 13,500 (3.6 per cent) due to a net migration loss of 16,600 (partly offset by a natural increase of 3,100).

Between June 2010 and June 2011, the number of people leaving New Zealand permanently, or for the long term, increased by 22 per cent (to a total of 80,100).[11] In the year to June 2012 there was a further 9 per cent increase in international migrant departures.[12] One reason for this increase was that more residents of greater Christchurch were leaving because of the earthquakes.

The proportion of children and young people leaving Christchurch city was estimated to be higher than it was for other age groups. This was a result of families with young children leaving the city and the outflow of students choosing not to return to Christchurch to study. In all, 9.6 per cent (9,300) of those aged 0–19 years left the city between June 2010 and June 2012 and the population aged 35–49 years decreased by 5,700 (7 per cent). During the same period, the male population aged 20–34 years increased by 500, while the corresponding female population decreased by 1,700. This reflects a net inflow of young male workers.[13]

Between June 2010 and June 2011, Selwyn district was the fastest-growing territorial authority in New Zealand with a 3.9 per cent increase in its population. Selwyn district remained the fastest-growing territorial authority area in the year to June 2012, when it increased a further 2.9 per cent (1,200). Waimakariri district increased by 2.1 per cent (1,000) in the year to June 2011 and 1.2 per cent (600) in the year to June 2012 (see *What are the indicators telling us?* below for the 2013 population estimate).

What is happening now?

Population movement across greater Christchurch has been significant. Some of this movement is due to owners of property in the residential red zone accepting the Crown's offer to purchase their property.

In June 2011 the Government announced that, due to the scale of land damage and in order to provide residents with certainty about the future, areas in greater Christchurch would be mapped into land zones, which were identified through geotechnical investigations.

Green zone areas are generally considered to be suitable for residential construction. Green zone land has been divided into three technical categories by the Ministry of Business, Innovation and Employment – TC1 (grey), TC2 (yellow) and TC3 (blue). Ministry of Business, Innovation and Employment guidelines for each technical category describe the foundation systems most likely to be required if there is a need to repair or rebuild foundations. 'Technical category not applicable' applies to properties in urban areas, properties in rural areas or beyond the extent of land damage mapping and properties in parts of the Port Hills and Banks Peninsula. Normal consenting procedures apply to these.

Residential property in the flat land has been zoned red when the land has been so badly damaged by the earthquakes it is unlikely it can be rebuilt on for a prolonged period. The criteria for defining areas as residential red zone are:

- there is significant and extensive area wide land damage;
- the success of engineering solutions may be uncertain in terms of design, its success and possible commencement, given the ongoing seismic activity; and
- any repair would be disruptive and protracted for landowners.

In the Port Hills, properties affected by cliff collapse have been zoned red where they face an immediate risk to life. Properties affected by rock roll have been zoned red where they face an unacceptable risk to life (greater than 1 in 10,000 at 2016 risk levels) and an area wide engineering solution to remediate them has been determined not to be practicable for a number of reasons including uncertainty around timeliness and costs.

Insured red-zone home owners were offered two options: either the Crown may purchase their property at the 2007 rateable valuation, and take an assignment of their Earthquake Commission and insurance claims; or the Crown may purchase their property at the 2007 rateable land valuation and taking an assignment of the Earthquake Commission land claim only, with the home owner settling their house claim with the Earthquake Commission or their insurer.

As at 31 March 2014 there were 8,062 residential red zone properties (including those on the Port Hills). Of these, 7,148 home owners had settled with the Crown for the purchase of their properties.

Other population movements are underway as people are temporarily displaced from homes in the green zone that are being repaired or rebuilt. In addition, the workforce for the rebuild has continued to grow, which includes workers arriving from other parts of New Zealand and overseas.

CERA and other agencies are working to ensure that social services meet the changing needs of the population. Government and non-government agencies are also supporting communities through this resettlement process. Through their work, there is a focus on community resilience, safety and wellbeing and on enhanced quality of life for residents and visitors.

Limited data are available regarding people's intentions to stay in the greater Christchurch region. However, the CERA Wellbeing surveys do provide some insight into how connected residents feel to the region in general and their local community. According to the April 2014 CERA Wellbeing Survey, 35 per cent of the respondents reported a stronger personal commitment to the region as a result of the earthquakes.[14] In addition, 39 per cent of respondents reported a heightened sense of community since the earthquakes. However, 27 per cent indicated that they have continued to experience uncertainty about their future in Canterbury which is having a negative impact on their everyday lives. This uncertainty was most strongly felt in Christchurch city (31 per cent), where 17 per cent of respondents said the impact was moderate or major. This result may reflect the impact of secondary stressors on many residents in the post-earthquake period.

What are the indicators telling us?

This report examines population using the following indicators:

- change in estimated resident population
- change in the number and proportion of usual residents
- change in the number and proportion of occupied and unoccupied private dwellings
- population movement to and from greater Christchurch
- cultural diversity – change in the ethnic makeup of residents.

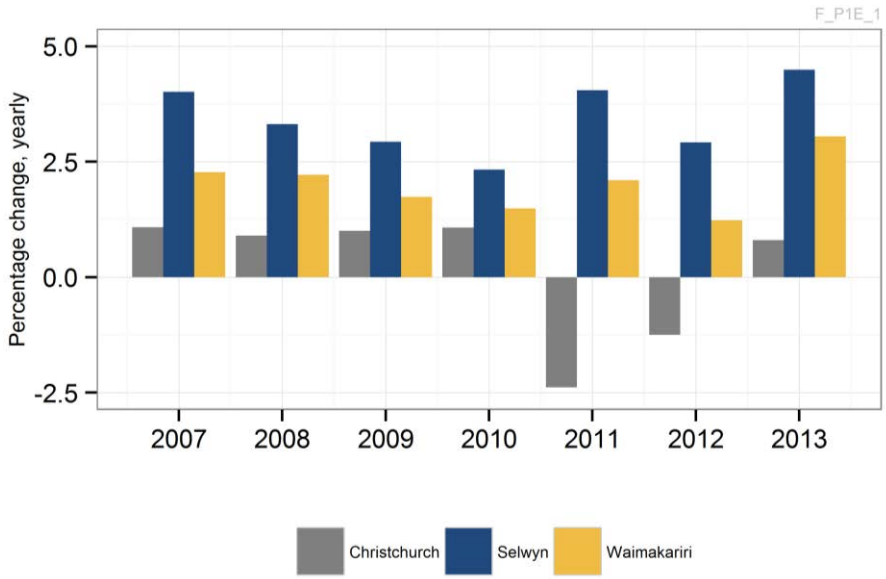
Population estimates

Population estimates produced by Statistics New Zealand measure the estimated annual change in the resident population. It is the best available measure for the years between each population Census.[15] Estimates for 2013 (provisional) suggest that Christchurch city's population grew in the year to June 2013 after two years of decline during the period following the earthquakes (see *How was the population impacted by the earthquakes?* above for earlier population estimates).[16]

Figure 1 shows that in the year to June 2013, Christchurch city's population increased by 2,900 (0.8 per cent). This increase was due to a net migration gain of 1,300 and a natural increase of 1,500.[17] In contrast between 2010 and 2012, the population of Christchurch city decreased by about 13,500.[18]

The populations of Waimakariri and Selwyn districts also continued to grow in the year to June 2013, increasing by 3 per cent and 4.5 per cent respectively.

Figure 1: Statistics New Zealand population estimates by territorial authority within greater Christchurch – annual percentage change 2007–2013



Usually resident population change

The 2013 Census is the most up-to-date and detailed source of information about people who live in greater Christchurch. It shows that overall the region's population grew between 2006 and 2013 despite the series of earthquakes from 2010. However, the change in population varied within the three territorial authorities that make up greater Christchurch.

In 2013 there were 436,056 people living in greater Christchurch compared with 424,935 at the 2006 Census. Table 1 shows that the usually resident population grew by 11,121 or 2.6 per cent during this seven-year period. Nationally the population increased by 5.3 per cent.

Of the three territorial authorities within greater Christchurch, Selwyn district experienced the highest population increase, growing by 32.6 per cent between 2006 and 2013. Waimakariri district increased by 16.7 per cent and Christchurch city's population dropped by 2 per cent over the same period. However, these overall population changes followed a period of steady growth for all three areas between the previous Census years (2001–2006).

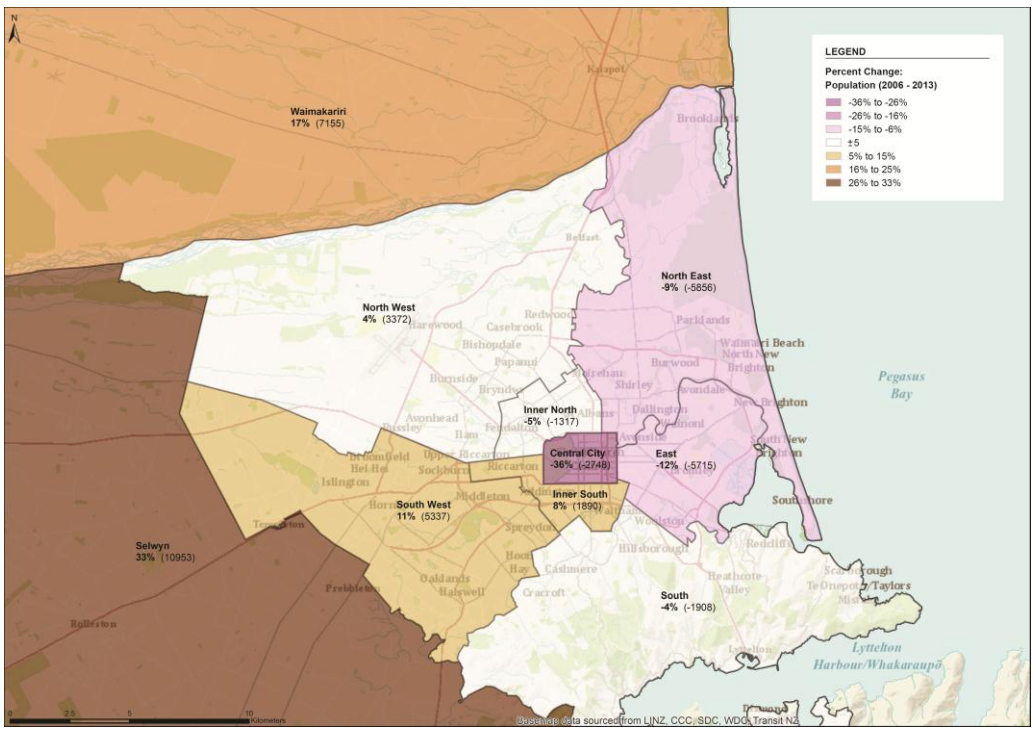
Selwyn district was the fastest-growing territorial authority nationally while Waimakariri district had the third-fastest growth rate.

Map 1 shows the population change in the geographic areas which make up greater Christchurch. As mentioned, Waimakariri and Selwyn districts had the greatest percentage population increases in the greater City between 2006 and 2013. Within Christchurch city, the strongest growth was felt in the South West (11 per cent) and Inner South (8 per cent). In contrast, the Central City (-36 per cent), the East (-12 per cent) and North East (-9 per cent) had the greatest declines in population reflecting the considerable earthquake damage in these areas.

Table 1: Usually resident population change by territorial authority within greater Christchurch 2001–2013

Area	Population			Change 2001–2006		Change 2006–2013	
	2001	2006	2013	Number	%	Number	%
Waimakariri district	36,903	42,834	49,989	5,931	16.1	7,155	16.7
Christchurch city	324,081	348,459	341,469	24,378	7.5	–6,990	–2.0
Selwyn district	27,291	33,642	44,595	6,351	23.3	10,953	32.6
Greater Christchurch	388,272	424,935	436,056	36,663	9.4	11,121	2.6

Map 1: Percentage change in population within greater Christchurch 2006-2013



Change in occupied and unoccupied dwellings

Table 2 shows that between 2006 and 2013 the number of private dwellings grew by 1.2 per cent in greater Christchurch from 162,207 to 164,229.

The number of dwellings increased substantially in Waimakariri district (17.2 per cent) and in Selwyn district (31.1 per cent), while numbers fell in Christchurch city (–3.2 per cent), reflecting the population movements in recent years. Notably, Selwyn district had the highest percentage increase in occupied private dwellings between 2006 and 2013 in New Zealand.[19]

Table 2: Occupied private dwellings by territorial authority within greater Christchurch 2006–2013

Area	Occupied private dwellings			
	Number in 2006	Number in 2013	Change number	Change %
Waimakariri district	15,918	18,651	2,733	17.2
Christchurch city	134,727	130,428	–4,299	–3.2
Selwyn district	11,559	15,150	3,591	31.1
Greater Christchurch	162,207	164,229	2,022	1.2

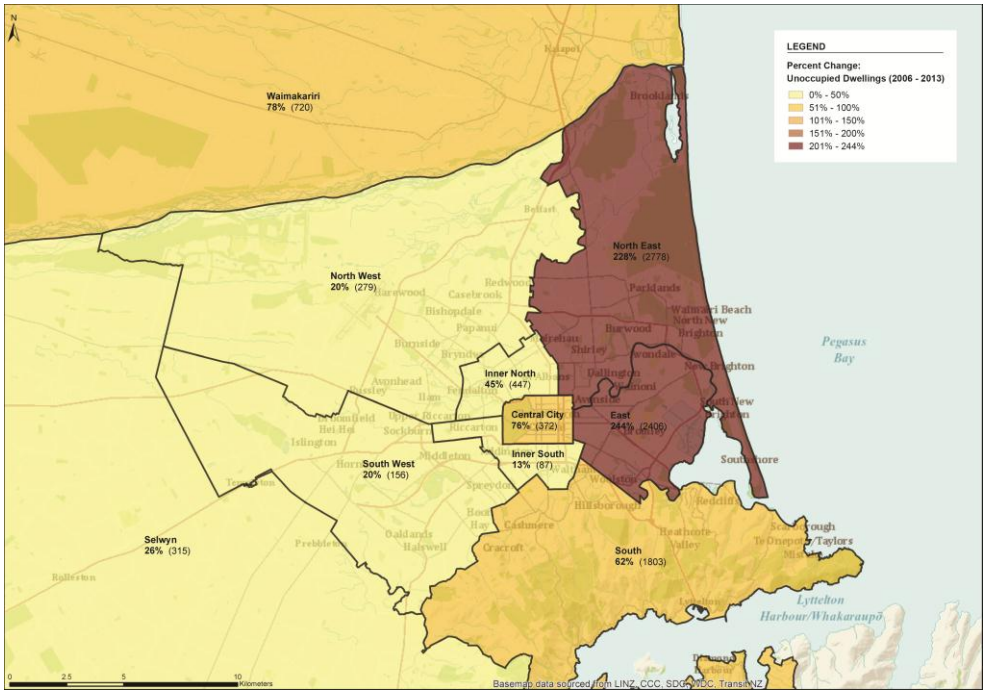
The latest Census also recorded a significant increase in the number of unoccupied dwellings in greater Christchurch. This reflects the large number of dwellings that were deemed uninhabitable, both in and outside the residential red zones, and those homes that had to be vacated for temporary repairs at the time of the 2013 Census. As Table 3 shows, in 2013 unoccupied dwellings had increased by 81.1 per cent in greater Christchurch from 11,568 seven years earlier to 20,949. The greatest increase was in Christchurch city (8,343 or 88.4 per cent).

Map 2 shows the change in unoccupied dwellings in greater Christchurch. Overall the greatest percentage increase in unoccupied dwellings occurred in the East (244 per cent) and North East (228 per cent) of the City.

Table 3: Unoccupied dwellings by territorial authority within greater Christchurch 2006–2013[20]

Area	Total unoccupied dwellings		Change 2006–2013	% change for unoccupied dwellings 2006–2013
	2006	2013		
Waimakariri district	927	1,647	720	77.7
Christchurch city	9,441	17,784	8,343	88.4
Selwyn district	1,200	1,515	315	26.3
Greater Christchurch	11,568	20,949	9,381	81.1

Map 2: Percentage change in unoccupied dwellings within greater Christchurch 2006-2013



Population movement to and from greater Christchurch

Table 4 shows the main population movements in and out of greater Christchurch between 2008 and 2013. In 2013, 89.2 per cent of those who lived in greater Christchurch in 2008 remained there.[21]

Of those who left greater Christchurch, most moved to Auckland city (8,139), Dunedin city (3,300) and Wellington city (2,754). However, there were also some other key South Island destinations including Ashburton district (1,863), Timaru district (1,593) and Nelson city (1,560).

Auckland city was also a contributor to greater Christchurch's population between 2008 and 2013 with 5,454 people moving to greater Christchurch from Auckland city. Other main sources of population for greater Christchurch include Dunedin city (2,256), Wellington city (1,752) and Ashburton district (1,674). Notably the migration gains to greater Christchurch from these areas between 2008 and 2013 were less than the gains between 2001 and 2006 Censuses.

Table 4: Migration of more than 1,000 people to and from territorial authority areas for greater Christchurch[22]

Moved from greater Christchurch		Moved to greater Christchurch	
Destination territorial authority area of residence at 2013 Census	Number	Source territorial authority area of residence in 2008	Number
Auckland city	8,139	Auckland city	5,454
Dunedin city	3,300	Dunedin city	2,256
Wellington city	2,754	Wellington city	1,752
Ashburton district	1,863	Ashburton district	1,674
Timaru district	1,593	Timaru district	1,569
Nelson city	1,560	Marlborough district	1,509
Hurunui district	1,533	Hurunui district	1,167
Marlborough district	1,485	Invercargill city	1,116
Tasman district	1,389	Nelson city	1,062

Cultural diversity

The population of greater Christchurch is largely European; however, the region is becoming more ethnically diverse. The European group includes people who have migrated to New Zealand from countries such as Australia, the United Kingdom and Europe as well as residents who were born in New Zealand and are descendants of European settlers and migrants.

As Table 5 shows, 85.9 per cent of people living in greater Christchurch in 2013 identified as European, 8.2 per cent were Māori, 2.6 per cent identified with one or more Pacific peoples and 7.9 per cent were Asian.

Table 5: Ethnic group (grouped total responses)(1) by New Zealand–born or overseas-born, for greater Christchurch 2013[23]

Ethnic group	New Zealand–born	Overseas-born	Total stated
European	300,012	54,288	354,303
Māori	33,327	657	33,984
Pacific peoples	6,864	4,017	10,881
Asian	6,825	25,764	32,589
Middle Eastern, Latin American, African	798	2,895	3,693
Other ethnicity(2)	7,647	537	8,184
Total stated	325,890	86,592	412,482

1. Includes all people who stated each ethnic group, whether as their only ethnic group or as one of several. Where a person reported more than one ethnic group, they have been counted in each applicable group.
2. Consists of responses for a number of small ethnic groups and for New Zealander.

The 2013 Census recorded more people living in greater Christchurch who had been born overseas. In 2013, 21.1 per cent of people living in greater Christchurch were born overseas (87,312 people) compared with 19.6 per cent in 2006. This was slightly lower than the national trend where 25.2 per cent were born overseas, compared with 22.9 per cent in 2006.[24]

Table 6 shows that people from England (24,750) made up the largest immigrant group in greater Christchurch in 2013, followed by those from Australia (7,077) and the People's Republic of China (6,717) (note: data are from Table 6 – the total of those who did or did not state number of years in New Zealand).

The Census also identifies that there have been many new immigrants in greater Christchurch, reflecting the demand for workers as the rebuild picks up pace. These people had lived in the Christchurch area for two years or less at the time of the last Census (that is, they had arrived since the 2010/11 earthquakes). Table 6 shows that this group includes people from England (2,085), the People's Republic of China (1,320) the Philippines (1,080), India (942), Australia (915) and Ireland (867).

Table 7 shows that of those born overseas and stating their years since arrival in New Zealand, 15.3 per cent (12,960) had been in greater Christchurch for two years or less. Males comprised a greater proportion of recent migrants at 54.1 per cent (7,011) compared with 45.9 per cent (5,952) for females.

Table 6: Selected countries of birth by years since arrival in New Zealand for people whose area of usual residence is greater Christchurch[25]

Country of birth	Total in greater Christchurch (those who did or did not state the number of years living in New Zealand)	Total in greater Christchurch (those who stated the number of years living in New Zealand)	Those living two years or less in New Zealand	
			Number	%
England	24,750	24,279	2,085	8.6
Australia	7,077	6,804	915	13.4
People's Republic of China	6,717	6,423	1,320	20.6
Philippines	3,576	3,468	1,080	31.1
South Africa	3,435	3,378	450	13.3
India	2,634	2,544	942	37.0
Ireland	1,644	1,590	867	54.5

Table 7: Years in greater Christchurch since arrival in New Zealand for overseas-born residents [26]

Years since arrival in New Zealand	Greater Christchurch				
	Male	Female	Total people	Male %	Female %
0–2 years	7,011	5,952	12,960	54.1	45.9
3 years or more	34,926	36,561	71,487	48.9	51.1
Total people who stated their years since arrival	41,940	42,510	84,450	49.7	50.3
Not elsewhere included	1,467	1,398	2,865	51.2	48.8
Total people	43,404	43,908	87,312	49.7	50.3

Find out more

Find out more about the Canterbury Wellbeing Index: www.cera.govt.nz/cwi

Find out more from Statistics New Zealand about estimating population change after the earthquakes: www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/estimating-pop-after-chch-quakes-paper.aspx

Find out more from Statistics New Zealand about annual population estimates: www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/subnational-population-estimates-info-releases.aspx

Find out more about the land zone decisions: www.cera.govt.nz

Find out what land zone your greater Christchurch property is in: www.cera.govt.nz

Find out more about population movement from GNS Science: www.massey.ac.nz/massey/fms/Colleges/College%20of%20Humanities%20and%20Social%20Sciences/Psychology/Disasters/pubs/GNS/2012/Misc_Series_44.pdf

Find out more about Census information: http://www.stats.govt.nz/

Find out more about Statistics New Zealand's 2013Quickstats about greater Christchurch: www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-greater-chch.aspx

Technical notes

CERA Youth Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Two yearly (2013 and another planned for late 2015)
Data complete until:	2013

Notes: The aim of the CERA Youth Wellbeing Survey 2013 is to measure the progress of earthquake recovery by collecting data on the self-reported wellbeing of those aged 12–24 years.

CERA worked with the Ministry of Education, Canterbury District Health Board, the Ministry of Youth Development, Christchurch City Council, Waimakariri District Council, Selwyn District Council, Ngāi Tahu, the Natural Hazards Research Platform and The Collaborative for Research and Training in Youth Health and Development to develop and implement the Youth Wellbeing Survey.

Survey questions were adapted from the CERA Wellbeing Survey and were tested with panels of young people to ensure that the wording and content were relevant.

The Youth Wellbeing Survey was open between 23 September and 13 December 2013 for responses from young people aged 12–24 years, living in greater Christchurch.

Methodology

An online survey aiming to generate a sample of young people in greater Christchurch that was as large and diverse as possible was undertaken between September and December 2013. Advertising through greater Christchurch youth networks and targeted promotional activities were the main recruitment strategies. Some hard copy responses from targeted groups of young people were also received.

The survey period included high school and university exams, and meant efforts to attract responses from different age groups needed to take the timing of study leave and exams into account.

Recruitment during this period may also have had some impact on the responses given by students who may have been experiencing greater stress than usual due to exam pressure.

CERA Wellbeing Survey

Data source:	Canterbury Earthquake Recovery Authority
Data frequency:	Six-monthly September 2012, April 2013, September 2013 and April 2014
Data complete until:	April 2014

Notes: The April 2014 CERA Wellbeing Survey is the fourth survey in the series providing information about the residents of greater Christchurch. Respondents were randomly selected from the Electoral Roll. The survey was delivered online and by hard copy from 19 March to 4 May 2014. The response rate was 38 per cent. Weighting was used to correct for imbalances in sample representation. The survey was developed in partnership with Christchurch City Council, Waimakariri District Council, Selwyn District Council, the Canterbury District Health Board, Ngāi Tahu and the Natural Hazards Research Platform. For results from the September 2012, April 2013 September 2013 and April 2014 surveys, see: www.cera.govt.nz/wellbeing-survey

Subnational population estimates

Data source:	Statistics New Zealand, Subnational Population Estimates
Data complete until:	30 June 2013 (provisional)

Notes: These are the **provisional** estimates of the 'resident population' for territorial authority areas within greater Christchurch.

See www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/subnational-population-estimates-info-releases.aspx

Population and dwellings

Data source:	Statistics New Zealand, Census of Population and Dwellings
Data frequency:	5 yearly (7 years for the 2013 Census)
Data complete until:	2013

Notes: The 2011 Census was not held on 8 March 2011 as planned, due to the Christchurch earthquake on 22 February 2011. At that time the 2011 Census could not have been successfully completed given the national state of emergency and the probable impact on Census results.[27]

The 2013 Census was held on 5 March 2013 and results were available from late 2013.

See www.stats.govt.nz/Census/2013-census/info-about-the-census.aspx

Endnotes

[1] Christchurch City Council. (2003). *Christchurch city social trends report 2003*. Retrieved from www.resources.ccc.govt.nz/files/SocialTrendsReport2003-docs.pdf

[2] Love, T. (2011). *Population movement after natural disasters: a literature review and assessment of Christchurch data*. Sapere Research Group. Retrieved from www.srgexpert.com/publications_two.html

[3] See note 2.

[4] See note 2.

[5] See note 2.

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[7] Thomas, J. (2011). *Preliminary report on household relocation from and within the Canterbury region.* Wellington: Opus Central Laboratories.

[8] Year 10 ASH Snapshot Survey unpublished data. Retrieved from ash.dmd.co.nz/research-and-information/ash-research/ash-year-10-snapshot-survey

[9] Statistics New Zealand. (2011). *Subnational population estimates: at 30 June 2011*. Retrieved from www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/subnational-population-estimates-info-releases.aspx

[10] Statistics New Zealand. (2012). *Subnational population estimates: at 30 June 2012*. Retrieved from www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationEstimates_HOTPYe30Jun12.aspx

[11] See note 9.

[12] Statistics New Zealand. (2012). *Subnational population estimates: at 30 June 2012* – Media release. Retrieved from www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationEstimates_MRYe30Jun12.aspx

[13] See note 9.

[14] For information on the CERA Wellbeing Survey, refer to the technical notes.

[15] Population estimates based on the 2013 Census are scheduled for release from August 2014.

[16] Statistics New Zealand (2013). *Subnational population estimates: at 30 June 2013 (provisional).* Retrieved from www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationEstimates_HOTPAt30Jun13/Data%20Quality.aspx

[17] See note 16.

[18] See note 16.

[19] Retrieved from Statistics New Zealand www.stats.govt.nz/~/media/Statistics/Census/2013%20Census/profile-and-summary-reports/quickstats-about-housing/quickstats-housing.pdf

[20] Statistics New Zealand. (2014). *2013 Census QuickStats about greater Christchurch*. Retrieved from www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-greater-chch.aspx and QuickStats excel tables.

[21] See note 20.

[22] See note 20.

[23] See note 20.

[24] See note 20.

[25] See note 20.

[26] See note 20.

[27] See www.stats.govt.nz/Census.aspx

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