MONITORING
GREATER CHRISTCHURCH
REGENERATION

June 2017

Greater Christchurch Group
Monitoring Team
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ABOUT THE REPORT

1. The Department of the Prime Minister and Cabinet (DPMC) is charged with leading and coordinating central government’s role, and provide advice to Ministers and the Government on the regeneration of greater Christchurch. As such, DPMC plays a key role in monitoring and reporting on the overall progress of the regeneration of greater Christchurch.

2. The report provides a summary of regeneration progress, drawing on numerous sources of information collected and published by other agencies. The report is intended to provide the public with an easily accessible account of progress in greater Christchurch, based on data available as at 31 May 2017.

3. The six areas of focus for reporting have been adapted from the priority areas identified in the plan Greater Christchurch Earthquake Recovery: Transition to Regeneration (October 2015).

OVERVIEW

4. More than six years since the devastating impacts of the Canterbury earthquakes, greater Christchurch\(^1\) has entered a new and exciting phase as the region transitions from recovery to regeneration. The regeneration of greater Christchurch remains a priority for the government, and the monitoring of regeneration highlights the progress greater Christchurch is making in its journey and ensures that all critical issues are noted and addressed by the relevant agencies in a timely manner.

*Changing demographics in greater Christchurch*

5. The population of greater Christchurch dropped sharply in the first two years following the initial 2010 earthquake. Widespread damage across Christchurch prompted some residents to move to areas outside of the city, with the Waimakariri and Selwyn districts experiencing the largest population movements. By 2016, the population in greater Christchurch had fully recovered and exceeded the 2010 population by 5.2 per cent (24,100 additional residents). In the central city, however, there are still 32.3 per cent fewer residents (2,670). Age and gender distribution in Canterbury has also changed since the earthquakes. The influx of construction workers may have contributed to the demographic changes. Similar to the rest of New Zealand, greater Christchurch has become more culturally diverse.

*Diverse and sustainable local economy*

6. Economic activity in greater Christchurch (measured through real GDP) remains high. Construction continues to play an important role in the local economy, although the total level of activity is declining slowly with the reduction of residential construction activity. Both construction and non-construction industries are crucial to the future sustainability of the local economy. In the labour market, the unemployment rate in Canterbury remains favourable and is below the national average, while the earning gap between Canterbury and the national average has reduced between 2014 and 2016. It’s anticipated that the gradual slowdown in construction will free up workers to pursue job opportunities in other sectors, assisting the diversification of the local economy. Alternatively, they may move to other parts of the country where there is greater demand for their skills.

*Christchurch as an attractive city to visit*

7. Tourism numbers in greater Christchurch have improved since the initial decline following the earthquakes. Visitor accommodation capacity and guest nights in greater Christchurch have both increased to over 80

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\(^1\) In this report greater Christchurch consists of Christchurch City, Selwyn and Waimakariri districts. This does not directly correspond to the definition of greater Christchurch in the Greater Christchurch Regeneration Act 2016.
per cent of the pre-quake level. Since 2014, occupancy rates in greater Christchurch have exceeded their pre-earthquake levels (March 2010). Progress with central city projects such as the Performing Arts Precinct and the nearby Terraces along the Avon River are increasing the appeal of Christchurch, although a significant amount of construction work is still underway. Greater Christchurch has made very good progress in terms of tourism recovery, however there is potential for further growth.

**Housing in greater Christchurch**

8. Housing affordability in greater Christchurch has been improving since 2014. In particular, the average weekly rent has continued to fall and the proportion of private bonds lodged for lower cost rentals (i.e. rentals with a weekly rent below $400) has been increasing. Christchurch experienced the lowest house price growth among 15 selected main areas in New Zealand between April 2014 and April 2017. Since December 2012 quarter, housing has been more affordable in Canterbury when compared with New Zealand as a whole.

9. The earthquakes of 2010 and 2011 damaged about three quarters of Canterbury’s housing stock. The Earthquake Commission (EQC) reported that, as at the end of March 2017, all under-cap first time claims that are under their operational control (e.g. those not under litigation) have completed their first-time claim settlement procedure, and that their focus is on dealing with call-back (re-opened) claims. In total, there are 3,318 first time dwelling claims outstanding (2.0 per cent of the total household claims), all of which are over-cap and being managed by private insurers.

**The wellbeing of greater Christchurch communities and individuals**

10. The overall wellbeing of greater Christchurch residents has improved since the initial impact of the earthquakes, according to the latest Wellbeing Survey data. However, residents are more likely to have a lower quality of life score if they rent, are on a low income, have a health condition or disability, or if they have unresolved insurance claims. The Canterbury Wellbeing Index shows the majority of indicators are similar to, or better than, national averages. As the rebuild activity declines some of the indicators will gradually change, some positively and some negatively (e.g. increased unemployment and youth Not in Employment, Education or Training (NEET)).

**Infrastructure and transportation in greater Christchurch**

11. The commercial rebuild activity continues to pick up momentum (while residential activity declines), and it is forecast to peak during mid-2017 and mid-2018. The public sector rebuild has taken longer than originally anticipated. This was driven by a number of factors, including construction market capacity constraints and the timeframe required for demolition, planning, financing and construction. However, this delay has helped some projects receive more competitive pricing, and will result in a more gradual decline in construction activity.

12. The Stronger Christchurch Infrastructure Rebuild Team programme is more than 99 per cent complete as at April 2017, and 87 per cent of projects have been handed over to the Christchurch City Council.

13. The public transport network was severely disrupted after the earthquakes and the use of public transport has yet to return to pre-earthquake level. In the 12 months to April 2017, 13.4 million trips were reported, this is 22.1 per cent lower than the number of trips pre earthquake.
Population

- Greater Christchurch’s population exceeded its pre-quake (2010) level in 2014 and has continued to grow. However, growth has been varied within the region. For example, the resident population in Christchurch’s central city has not yet reached pre-quake levels, while between 2010 and 2016, the Selwyn District experienced the highest percentage increase in population among all territorial authorities (including Auckland).
- The gender split in greater Christchurch has changed between 2010 and 2016, with males now out numbering females in the overall population. This change is most noticeable in the 15-39 age group where the number of males increased 2.4 percentage points to make up 52.7 per cent of the age group. It is likely that the demand for construction workers during the rebuild has contributed to the change.

Change in resident population 2010 - 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>Change 2010-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central city</td>
<td>-2,700 (-32.3%)</td>
</tr>
<tr>
<td>Waimakariri</td>
<td>+10,200 (+21.5%)</td>
</tr>
<tr>
<td>Rest of Christchurch</td>
<td>+1,400 (+0.4%)</td>
</tr>
<tr>
<td>Christchurch</td>
<td>-1,300 (-0.3%)</td>
</tr>
<tr>
<td>Greater Christchurch</td>
<td>+24,100 (+5.2%)</td>
</tr>
<tr>
<td>Rest of Canterbury</td>
<td>+8,100 (+7.9%)</td>
</tr>
<tr>
<td>Canterbury</td>
<td>+32,200 (+5.7%)</td>
</tr>
<tr>
<td>Auckland</td>
<td>(+12.2%)</td>
</tr>
<tr>
<td>Wellington Region</td>
<td>(+5.3%)</td>
</tr>
<tr>
<td>Rest of NZ</td>
<td>(+5.9%)</td>
</tr>
<tr>
<td>National average</td>
<td>(+7.9%)</td>
</tr>
</tbody>
</table>

Gender distribution in greater Christchurch 2010 - 2016

<table>
<thead>
<tr>
<th>Age</th>
<th>0-14</th>
<th>15-39</th>
<th>40-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>51.2%</td>
<td>50.3%</td>
<td>49.0%</td>
<td>44.4%</td>
</tr>
<tr>
<td>2016</td>
<td>51.1%</td>
<td>52.7%</td>
<td>49.4%</td>
<td>45.7%</td>
</tr>
<tr>
<td>Change</td>
<td>-0.0</td>
<td>+2.4</td>
<td>+0.3</td>
<td>+1.2</td>
</tr>
</tbody>
</table>

Age distribution in greater Christchurch 2010-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>0-14</th>
<th>15-39</th>
<th>40-64</th>
<th>65+</th>
<th>65 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>13.5%</td>
<td>33.2%</td>
<td>14.1%</td>
<td>14.6%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2011</td>
<td>13.7%</td>
<td>33.5%</td>
<td>14.4%</td>
<td>14.6%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2012</td>
<td>14.1%</td>
<td>33.7%</td>
<td>14.5%</td>
<td>14.6%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2013</td>
<td>14.6%</td>
<td>33.8%</td>
<td>14.6%</td>
<td>14.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2014</td>
<td>14.6%</td>
<td>33.5%</td>
<td>14.6%</td>
<td>14.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2015</td>
<td>14.6%</td>
<td>33.1%</td>
<td>14.6%</td>
<td>14.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2016</td>
<td>14.7%</td>
<td>32.5%</td>
<td>14.6%</td>
<td>14.7%</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

Cultural diversity

- Between 2006 and 2013, greater Christchurch has become more culturally diverse. Proportionally fewer people identified themselves as belonging to the European ethnic group, while the number of Maori and Pacific peoples in greater Christchurch has been growing at a faster rate than the national average.

Changes in ethnicity 2006 - 2013

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>% of population 2006</th>
<th>% of population 2013</th>
<th>Change between 2006-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>European/Other ethnicity</td>
<td>88.2%</td>
<td>86.9%</td>
<td>+7,300 (+2%)</td>
</tr>
<tr>
<td>Maori</td>
<td>7.6%</td>
<td>8.6%</td>
<td>+5,800 (+17%)</td>
</tr>
<tr>
<td>Pacific Peoples</td>
<td>2.5%</td>
<td>2.8%</td>
<td>+1,600 (+15%)</td>
</tr>
<tr>
<td>Asian</td>
<td>7.1%</td>
<td>8.4%</td>
<td>+7,000 (+22%)</td>
</tr>
<tr>
<td>Middle Eastern/Latin American/African</td>
<td>0.8%</td>
<td>0.9%</td>
<td>+900 (+25%)</td>
</tr>
</tbody>
</table>

New Zealand

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>% of population 2006</th>
<th>% of population 2013</th>
<th>Change between 2006-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>European/Other ethnicity</td>
<td>76.8%</td>
<td>74.6%</td>
<td>+98,800 (+3%)</td>
</tr>
<tr>
<td>Maori</td>
<td>14.9%</td>
<td>15.6%</td>
<td>+67,900 (+11%)</td>
</tr>
<tr>
<td>Pacific Peoples</td>
<td>7.2%</td>
<td>7.8%</td>
<td>+42,700 (+14%)</td>
</tr>
<tr>
<td>Asian</td>
<td>9.7%</td>
<td>12.2%</td>
<td>+36,900 (+34%)</td>
</tr>
<tr>
<td>Middle Eastern/Latin American/African</td>
<td>0.9%</td>
<td>1.2%</td>
<td>+14,600 (+38%)</td>
</tr>
</tbody>
</table>

1. Ethnic groups are not mutually exclusive. People who identify with more than one ethnicity have been included in each ethnic group.
2. Estimated resident population at 30 June, based on the census usually resident population counts with demographic adjustments.

Source: Subnational population estimates, Statistics New Zealand

Source: Estimated resident population, Statistics New Zealand
14. The population of greater Christchurch dropped sharply in the first two years following the first major earthquake in 2010. However, by 2016 the population had fully recovered and exceeded the 2010 population by 5.2 per cent (2016 population was 488,900). This is slightly lower than the national growth of 7.9 per cent over the same period. Christchurch city’s population has increased over the same period, but remains 0.3 per cent below its 2010 level in 2016. In the central city, recovery has been slower, resulting in the population being 32.3 per cent below its 2010 level.

15. The widespread damage across Christchurch from the earthquakes drove many residents to move to areas outside of the city. The Waimakariri and Selwyn districts have seen the largest population movements, with their populations increasing by 21.5 per cent and 37.2 per cent respectively between 2010 and 2016 (see Table 1-1). These population increases have benefitted the district Councils through an increased collection in rates. For example, in the year ending 30 June 2011, the Waimakariri District Council collected $33.6 million from rates, and in the year ending 30 June 2016, it collected $49.5 million from rates. Population growth in the Waimakariri district slowed in 2015 and 2016, possibly driven by the advanced progress of the residential repairs and rebuilds of Christchurch’s housing stock. Selwyn district’s population growth remains strong, although it should be remembered that Selwyn was the fastest growing territorial authority before the earthquakes.

Table 1-1: Population estimates – year-on-year growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Waimakariri</td>
<td>3.9%</td>
<td>2.2%</td>
<td>3.5%</td>
<td>4.1%</td>
<td>3.6%</td>
<td>2.6%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Christchurch</td>
<td>-3.7%</td>
<td>-2.0%</td>
<td>0.4%</td>
<td>1.5%</td>
<td>1.6%</td>
<td>2.0%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Selwyn</td>
<td>4.7%</td>
<td>3.6%</td>
<td>5.1%</td>
<td>5.9%</td>
<td>6.5%</td>
<td>6.6%</td>
<td>37.2%</td>
</tr>
</tbody>
</table>

Source: Subnational Population Estimates, Statistics New Zealand

16. Following the earthquakes, net international permanent and long term migration to greater Christchurch fell by 2,843 people in the 12 months to March 2012 (See Figure 1-1). There was a subsequent reversal, partially driven by the demand for construction workers. The Government introduced a number of policies to encourage greater migration to the Canterbury region. This included changing immigration policy by extending the maximum length of Essential Skills visas for lower-skilled workers from one year to three years. In the 12 months to March 2016, net migration peaked at 6,468.

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17. The influx of construction workers may have contributed to the demographic changes in greater Christchurch. For example, between 2010 and 2016 the proportion of people aged between 15 to 39 years had increased slightly to 34.9 per cent; with the percentage of males in this age group increasing from 50.3 per cent to 52.7 per cent. Like the rest of New Zealand, greater Christchurch has become more culturally diverse, with proportionally fewer people identifying as ‘European,’ while the number of people identifying as either ‘Maori’ or ‘Pacific Islander’ has grown at a faster rate than the national average.

18. While the above-average population growth in the Waimakariri and Selwyn districts may continue, we anticipate that residents will return to Christchurch in greater numbers. This is due to the completion of earthquake repairs and rebuilds and new public facilities, particularly in the central city, which we expect will support future population growth in Christchurch. In addition, other initiatives which the Government has put in place to support the residential recovery in the central city, including the East Frame Residential Anchor Project (see Case Study 1-1), are likely to boost local economic growth and encourage regeneration in greater Christchurch.

19. Over the coming years the age distribution in greater Christchurch is projected to change like the rest of New Zealand. By 2043, those aged 65 and over will make up 23.6 per cent of the greater Christchurch population, up from 14.7 per cent in 2016, similar to national projections. The long term impact of the increase in those aged 15-39 in greater Christchurch during the rebuild is difficult to predict.

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**Figure 1-1: Net migration to greater Christchurch, 12 months to March**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-10</td>
<td>2,297</td>
</tr>
<tr>
<td>Mar-11</td>
<td>93</td>
</tr>
<tr>
<td>Mar-12</td>
<td>-2,843</td>
</tr>
<tr>
<td>Mar-13</td>
<td>1,421</td>
</tr>
<tr>
<td>Mar-14</td>
<td>4,821</td>
</tr>
<tr>
<td>Mar-15</td>
<td>5,697</td>
</tr>
<tr>
<td>Mar-16</td>
<td>6,468</td>
</tr>
<tr>
<td>Mar-17</td>
<td>6,302</td>
</tr>
</tbody>
</table>

Source: International Travel and Migration, Statistics New Zealand

**Case Study 1-1: East Frame Residential Project**

The East Frame Residential Anchor Project will be a new residential area in the central city. Around half of the site will be used for housing, with around 900 homes for over 2,000 people. A 600 meter long East Frame public space will sit in the middle of the residential development, making it the third largest park in the central city.

Construction of first 20 terraced homes in the East Frame residential development began in April 2017 and are expected to be ready by May 2018; five months ahead of the original schedule. It is expected that 200 homes will be constructed by mid-2019.

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### Economy

- In 2016, economic activity in greater Christchurch remains high in 2016, but grew slower than the national average. The growth rate is forecast to grow at a similar rate to the national average, between 2017 and 2021.
- Real GDP per person in greater Christchurch has converged to the national average since 2010, but there was a slight reversal of the trend in 2016.

#### Real GDP growth (2010 Price)

<table>
<thead>
<tr>
<th>Year</th>
<th>Greater Chch</th>
<th>Rest of Canterbury</th>
<th>Rest of NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>-0.9%</td>
<td>1.8%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>2015</td>
<td>4.8%</td>
<td>4.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>2016</td>
<td>2.2%</td>
<td>1.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2017</td>
<td>3.6%</td>
<td>2.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>2021</td>
<td>2.4%</td>
<td>1.7%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

#### Real GDP per person

- Source: Infometrics. Estimates have been developed from Statistics New Zealand and other data sources.

### Work and income

- The unemployment rate in Canterbury has been consistently lower than the rate for the rest of New Zealand since 2010. Since the March quarter 2010, total employment in the region has increased by 14.2%, while employment in the rest of New Zealand increased by 19.2%.
- Between 2010 and 2017, the growth in average weekly earnings in Canterbury (+28.7%) was higher than the national average (+22.1%). However, the actual earnings is still 4.2% less than the national average.

#### Unemployment rate (Actuals, Mar quarter)

- Source: Labour Market Statistics, Statistics New Zealand

#### Employment growth (Mar quarter 2010 - Mar quarter 2017)

#### Average weekly earnings in Canterbury (Mar quarter)

- Source: Labour market statistics, Statistics New Zealand

### Diversity of the workforce

- Between 2010 and 2017, the construction industry in Canterbury experienced the highest growth, with 88.3% growth in employment. However, construction employment fell by 5,100 (-11.7%) between 2016 and 2017.
- Between 2010 and 2017, the information media and telecommunication industry experienced the largest drop (-19.3%) in employment, followed by public administration and safety (-5.2%) and transport, postal and warehousing (-4.4%).

#### Employment by industry grouping in Canterbury (Mar quarter)

- Source: Labour market statistics, Statistics New Zealand
SECTION 2: DIVERSE AND SUSTAINABLE LOCAL ECONOMY

2.1. ECONOMY

20. Since the Canterbury earthquake sequence, the high level of economic growth in greater Christchurch and Canterbury has been largely driven by rebuild-related construction activity. Since 2012, the construction industry has been the largest contributor towards Canterbury Gross Domestic Product (GDP). This growth has seen Canterbury close the gap with the Wellington region, the country’s second largest regional economy, from 3.3 billion to 0.9 billion. In 2016, Canterbury’s share of national GDP was 13.2 per cent, up from 12.3 per cent in 2010.

21. In terms of contribution to regional gross domestic product (GDP), other important industries in Canterbury alongside construction (10 per cent) are Manufacturing (11 per cent), Professional, scientific and technical services (7 per cent), Health care and social assistance (6 per cent), and Agriculture (5 per cent).

22. Economic activity in greater Christchurch remains high, with real GDP reaching $22.9 billion (2010 prices) in 2016, up 1.7 per cent from 2015 (Figure 2-1). Between 2011 and 2016 real GDP in greater Christchurch increased by 19.3 per cent. This compares favourably to the 13.9 per cent increase in rest of New Zealand. Although, as expected during the regeneration phase, growth in 2016 has eased from the peak period between 2013 and 2015 (Figure 2-2), and was lower than the growth in the rest of New Zealand in 2016 (3.4 per cent). Real GDP growth in greater Christchurch is forecast to remain similar to the rest of New Zealand over the next two years and will continue to be supported by rebuild-related construction activity.

Figure 2-1: Real GDP in greater Christchurch and Canterbury (2010 prices, calendar year)

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23. Since 2011 real GDP per person in greater Christchurch has been converging to the rest of New Zealand average\textsuperscript{10}, increasing 9.0 per cent to reach $46,262, while the rest of New Zealand rate increased 5.8 per cent to $48,542 over the same period (2011 to 2016). However, in 2016 there was a slight reversal of the trend with real GDP per person decreasing $361 in greater Christchurch as the population grew at a greater rate than real GDP, while in the rest of New Zealand it increased by $639.

2.2. WORK AND INCOME

24. The earthquakes’ impact on the economy and the subsequent rebuild was reflected in Canterbury’s labour market conditions. In addition to the immediate negative effect caused by the widespread damage, there was widespread damage and disruption to businesses. An Earthquake Support Subsidy was launched to support small to medium businesses facing financial pressures. A second subsidy for employees was also launched, to provide support for those whose employers were no longer able to operate. Like economic growth, business conditions are showing signs of returning to a less extraordinary state.

\textsuperscript{10} DPMC derived from Infometrics and Statistics New Zealand data.
25. The Canterbury unemployment rate has, in the main, been historically lower than the national average. During the peak rebuild period (2013 to 2015) the gap increased further, with the unemployment rate between this period averaging 3.3 per cent compared to the rest of New Zealand average of 6.4 per cent (Figure 2-3). In the March 2017 quarter the unemployment rate in Canterbury had increased to 4.0 per cent, which was lower than the rest of New Zealand average of 5.4 per cent, but up from the 2.7 per cent reported for the same period in 2016. This increase in the unemployment rate over the last 12 months is to be expected as the key drivers of employment in the recovery phase – residential construction and horizontal infrastructure repairs – have passed their peak levels of annual activity (see Section 4 for further information on construction activity).

Figure 2-3: Unemployment rate (actual quarterly rate)

![Unemployment Rate Graph]

Source: Labour Market Statistics, Statistics New Zealand

26. Employment in Canterbury fell 4.1 per cent, or by 12,100, over the Canterbury earthquake sequence (year ended March 2012 compared to year ended March 2011). Subsequently, employment increased between 2012 and 2017 by 18.4 per cent to reach 338,700 in the March 2017 year, an increase of 3.1 per cent on the previous 12 month period (see Table 2-1). In the rest of New Zealand, employment increased 13.4 percent between 2012 and 2017, and 5.9 percent between 2016 and 2017.

| Table 2-1: Total employment and annual growth (12 months to 31 March) |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Canterbury (000’s) | 295.2 | 298.2 | 286.0 | 293.3 | 308.6 | 325.7 | 328.6 | 338.7 |
| Annual growth    | -0.7% | 1.0%  | -4.1% | 2.5%  | 5.2%  | 5.6%  | 0.9%  | 3.1%  |
| New Zealand (000’s) | 1850  | 1867.4| 1905.7| 1891.3| 1939  | 1998.1| 2040.4| 2161.3|
| Annual growth    | -1.7% | 0.9%  | 2.1%  | -0.8% | 2.5%  | 3.0%  | 2.1%  | 5.9%  |

Source: Labour Market Statistics, Statistics New Zealand

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11 As Statistics New Zealand do not publish seasonally adjusted regional unemployment rates, actual values are reported.
14 Annual employment totals have been used instead of quarterly data due to the higher variability in the Canterbury results and the potential to hide longer term trends.
AVERAGE WEEKLY EARNINGS

27. Reflecting the economic conditions, the gap between average earnings in Canterbury and the national average reduced from $73 (9.1 per cent) to $41 (4.2 per cent), between the September 2010 quarter and the March 2017 quarter (see Figure 2-4). Over this period the average earnings in Canterbury increased by $196 (26.5 per cent) to $935, compared to the national increase of $170 (21.1 per cent) to $976. However, as seen in other indicators, growth in Canterbury is easing, resulting in national growth between the March 2017 quarter and the March 2016 quarter being 2.1 per cent compared to an increase of 1.2 per cent in Canterbury.

Figure 2-4: Average weekly earnings (March quarter)

2.3. DIVERSITY OF THE LABOUR MARKET

Case Study 2-2: Christchurch Innovation Precinct

The Christchurch Innovation Precinct is a central city hub of entrepreneurs and idea generators. The core of the Precinct makes up three city blocks within Manchester, St Asaph, Madras and Lichfield Streets. It creates a vibrant new heart of Christchurch by bringing together businesses and innovators alongside residential, retail, hospitality and cultural institutions.

Supported by two tertiary institutions in close proximity (i.e. SIGNAL ICT Grad School is within the Precinct and Ara Institute of Technology is adjacent) the innovation hub has not only attracted innovative corporates such as Vodafone and Kathmandu, it has also become a focal point and prime location for fast growing knowledge-rich and creative businesses in Christchurch. Current tenants include Vodafone, Kathmandu and Signal ICT graduate school.

28. In the March 2017 quarter, the diversity, or make up, of the Canterbury economy closely matches New Zealand’s (as measured through employment by industry type). The notable exception is the construction sector which has the second largest share of employment at 12.8 per cent, whereas in the rest of New Zealand it is the fifth largest with 9.2 per cent. Since the March 2010 quarter, the construction sector has increased by 88.3 per cent or 20,400 employees, although it fell 11.7 per cent between 2016 and 2017 (March quarters).

29. The future sustainability of the local economy relies, in a big part, on expansion in other non-construction sectors. Since the

---

March 2010 quarter, the total number of employees has increased by 42,400, with almost half this growth occurring in the Construction sector (48.1 per cent). Results in the other sectors are mixed. Behind Construction, the second largest increase in employees is the Professional, Scientific, Technical, Administrative and Support Services, which now employs 37,700 people, 6,500 (20.8 per cent) more than in the March 2010 quarter. The Retail Trade and Accommodation sector now employs 3,700 (7.5 per cent) more employees over the same period. While the second largest employer group in 2010, Manufacturing and Electricity, Gas, Water, and Waste Services has only returned to the same size (41,700 in 2010 compared to 41,600 in 2017) and is now the third largest. The Information Media and Telecommunications sector has 1,000 fewer people (-19.3 per cent).

30. Diversity can also be measured through the distribution of GDP attributable to each of the sectors. Similar to employment, in 2010 the Canterbury construction sector was of a similar relative size to the national construction sector, accounting for 5.8 per cent and 5.3 per cent of their respective GDP\textsuperscript{17}. In 2015 the construction sector has increased to 10.3 per cent in Canterbury, an increase of $1.90 billion or 135.6 per cent, while in the rest of New Zealand it had decreased its share to 5.1 per cent, although the overall did increase $1.69 billion or 18.6 per cent.

2.4. LOOKING AHEAD

31. With building activity expected to return to business-as-usual levels by 2021, attention should turn to how the Canterbury economy will transition to this new phase. The declining building activity will also impact on employment in related sectors, increasing the potential of higher unemployment in the region. However, this also provides an opportunity for surplus employees to move into the wider economy, both local and national. The transition is likely to be gradual with construction activity forecast to decline slowly\textsuperscript{18}.

\textsuperscript{17} Regional Gross Domestic Product: Year ended March 2016, Statistics New Zealand.

\textsuperscript{18} The Canterbury Rebuild by the Numbers, Ministry of Business, Innovation and Employment.
Tourism

- Accommodation capacity (stay units, e.g. hotel rooms) in Christchurch dropped sharply after the 2011 earthquakes, while the capacity in Selwyn and Waimakariri was largely unaffected. As at March 2017, the number of rooms in Christchurch has recovered from 57.8% in March 2010 to 80.0% of its pre-earthquake level.
- Greater Christchurch has had a higher rate of guest nights growth than the rest of New Zealand since 2012, resulting in total guest nights increasing to 83.6% per cent of their pre-earthquake volume of 877,405 in the March 2010 quarter.
- Since 2014, accommodation occupancy rates in greater Christchurch have exceeded those of pre-quake levels.
- New Zealand’s tourism sector has grown substantially since 2010, resulting in greater Christchurch’s current share of New Zealand’s domestic and international guest nights falling below pre-earthquake levels.

Number of accommodation stay units in greater Christchurch
(as % of pre-quake level – Sept 2010 = 100%)

<table>
<thead>
<tr>
<th></th>
<th>Christchurch</th>
<th>Selwyn</th>
<th>Waimakariri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms in Sept 2010</td>
<td>10,331</td>
<td>483</td>
<td>1,662</td>
</tr>
<tr>
<td>Feb2011</td>
<td>93.9%</td>
<td>106.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Month of March</td>
<td>2011</td>
<td>57.8%</td>
<td>106.0%</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>59.9%</td>
<td>107.0%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>64.7%</td>
<td>103.3%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>72.8%</td>
<td>106.6%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>72.4%</td>
<td>111.4%</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>75.7%</td>
<td>108.9%</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>80.0%</td>
<td>103.5%</td>
</tr>
</tbody>
</table>

Accommodation occupancy rate (Month of March)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Christchurch</td>
<td>63.0%</td>
<td>52.3%</td>
<td>57.4%</td>
<td>62.2%</td>
<td>63.1%</td>
<td>69.7%</td>
<td>68.3%</td>
<td>65.3%</td>
</tr>
<tr>
<td>Selwyn</td>
<td>23.9%</td>
<td>26.8%</td>
<td>23.7%</td>
<td>30.9%</td>
<td>25.3%</td>
<td>33.9%</td>
<td>33.0%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Waimakariri</td>
<td>9.6%</td>
<td>10.7%</td>
<td>15.5%</td>
<td>15.1%</td>
<td>16.0%</td>
<td>17.5%</td>
<td>10.3%</td>
<td>11.5%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>43.7%</td>
<td>42.6%</td>
<td>42.2%</td>
<td>45.7%</td>
<td>44.9%</td>
<td>48.6%</td>
<td>52.0%</td>
<td>53.0%</td>
</tr>
</tbody>
</table>

¹. Easter occurred in March

Share of New Zealand’s domestic & international guest nights in greater Christchurch (12-month moving average)

Source: Accommodation Survey, Statistics New Zealand
32. The Canterbury earthquake sequence had a significant impact on tourism-related industries across greater Christchurch. Multiple tourist accommodation facilities and attractions were damaged, some beyond repair. Out of the 309 scheduled heritage buildings in Christchurch’s central city, for example, 48 per cent did not survive the earthquake and some that did were found to be in a poor state of repair\(^{19}\). The Christ Church Cathedral is an example of one of the city’s heritage landmarks that was badly damaged in the earthquakes and remains closed to this day.

33. The many heritage buildings that survived, and are open to the public, include the Christchurch Arts Centre (undergoing a staged opening), the Canterbury Museum and the Isaac Theatre Royal. Other central city tourist attractions such as the Christchurch Art Gallery and the Christchurch Tramway were repaired and are also now operating.

34. Recognising the importance of the central city’s recovery, the Christchurch Central Recovery Plan was developed. The plan included a spatial framework, known as the Blueprint, identifying locations of precincts and ‘anchor’ projects for the city. For example, the Blueprint identified a convention centre and a performing arts precinct for the central city.

INTERNATIONAL VISITORS

35. International visitor arrivals through Christchurch Airport fell following the earthquakes. In the 12 months to April 2013, international visitor arrivals to Christchurch Airport reached a post-earthquake low of 396,672 (72.0 per cent of the number recorded in the 12 months to April 2010). Visitor arrivals have since shown signs of improvement (see Figure 3-1). In the 12 months to April 2017, 504,928 international visitors entered New Zealand through Christchurch Airport, 91.6 per cent of the arrivals recorded before the earthquakes (in the 12 months to April 2010)\(^{20}\). This is an increase of 7.2 per cent from the previous 12 month period (compared with a 9.6 per cent national growth in international visitor arrivals).

**Figure 3-1: International visitor arrivals to Christchurch Airport (12 months to 30 April)**

![Bar chart showing international visitor arrivals to Christchurch Airport from 2010 to 2017](chart.png)

Source: International Travel and Migration, Statistics New Zealand

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\(^{20}\) International Travel and Migration: Statistics New Zealand.
36. Prior to the earthquakes (in the 12 months to April 2010), 57.6 per cent of international visitor arrivals to Christchurch Airport were Australian residents. Australian arrivals remain the primary visitors, however in the 12 months to April 2017 their share of total non-resident visitor arrivals has fallen to 47.3 per cent. Conversely, residents from the People’s Republic of China represented 8.5 per cent of visitor arrivals in the 12 months to April 2017, up from 1.3 per cent share before the earthquakes.

COMMERCIAL ACCOMMODATION

37. Visitor accommodation also faced falling guest numbers after the earthquakes, however the number of guest nights stayed across greater Christchurch has since risen from 2.26 million over the 12 months to March 2012 to 2.93 million in 2017, reaching 83.6 per cent of the guest nights in the 12 months to March 2010 (3.51 million).

38. In the 12 months to March 2017, the total guest nights in Christchurch experienced a 1.1 per cent decline from the previous 12-month period, driven by an 8.0 per cent decrease in domestic guest nights (international guest nights increased 7.6 per cent). It is possible that this shorter term trend may be related to a reduction in rebuild activity and a corresponding decline in both government and private sector workers staying overnight in Christchurch.

39. Accommodation capacity in Christchurch dropped sharply after the 2011 earthquakes, while the capacity in Selwyn and Waimakariri was largely unaffected. As at March 2017, the number of stay units (i.e.

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21 International Travel and Migration: Statistics New Zealand.
22 Accommodation Survey: Statistics New Zealand. The Accommodation Survey covers most short-term commercial accommodation in New Zealand. A few notable exceptions are hosted accommodation (such as ‘bed & breakfast’ establishments), marine vessels (such as cruise ships), private dwellings etc.
24 Units are defined as units of accommodation that are available to be charged out to guests such as a room in a motel or hotel, a bed in a backpacker establishment, or a site in a caravan park.
rooms) in Christchurch has recovered from 54.6% in March 2011 to 75.6% of its pre-quake level. The number of motel units in Christchurch has returned to 93.3 per cent of the pre-earthquake level. Hotel accommodation has faced a slower recovery, with the number of total units at 56.5 per cent of the pre-earthquake level. This is largely due to the higher concentration of these establishments being in the central city, as well as the rebuilds being generally more complex and taking longer to progress (see Figure 3-2).

40. Prior to the earthquakes, the number of commercial accommodation units available in the central city was 5,279 (March 2010), and two years later this fell by 88.2 per cent to 621 (March 2012). The number of guest nights similarly fell from 178,626 to 16,611 over the same period. The central city has seen some recovery in guest night numbers, albeit at a slower pace compared to greater Christchurch as a whole. In part, this is due to the final central city cordon only being lifted in mid-2013 and the intense horizontal infrastructure and other construction activity taking place. In the central city there were 2,042 units in commercial accommodation reported in March 2017, however this is still under half the number of units available in March 2010 (5,279). Similarly, the number of guest nights for the central city over the 12 months to March 2017 (see Figure 3-3) has only reached 44.5 per cent of the level reported in 2010.

Figure 3-3: Christchurch central city guest nights (12 months to 31 March)

41. It is anticipated that the number of units available in the central city will continue to improve, as more hotels and other accommodation types complete construction. For example, repairs are underway on the 200 room Crown Plaza hotel in the Performing Arts Precinct and the former 180 room Millennium Hotel in Cathedral Square that is to be repaired and reopened under a new brand (Distinction).

TOURISM EXPENDITURE

42. Visitors to the Christchurch area play an important role in the local economy. Total tourism expenditure in the greater Christchurch area was estimated at $2.3 billion in the 12 months to April 2017, approximately 8.8 per cent of total tourism expenditure in New Zealand (see Figure 3-4). In the 12 months to April 2017,
tourism expenditure in greater Christchurch grew by 2.3 per cent compared with the 12 months to April 2016. Nationally, tourism expenditure outpaced Christchurch, growing by 5.0 per cent over the same period\textsuperscript{29}.

**Figure 3-4: Greater Christchurch Regional Tourism Estimates (12 months to 30 April)**

\[\text{Source: Regional Tourism Estimates, Ministry of Business, Innovation and Employment}\]

### 3.2. LOOKING AHEAD

43. Although greater Christchurch has yet to regain its pre-quake share of New Zealand’s domestic and international guest nights, the overall outlook for the region is positive. It is expected that tourists will return to greater Christchurch at a higher rate, with the completion of accommodation and major facilities. A number of hotels are under repair or construction in the central city, and there are many new developments in the retail precinct and other new projects that will bring tourist revenue into Christchurch (for example, the convention centre precinct). It is also encouraging to see that China Southern Airlines has begun services direct to Christchurch. Christchurch should continue to leverage opportunities to rebuild its reputation as one of main tourist destinations in New Zealand.

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\textsuperscript{29} Regional Tourism Estimates: To 31 March 2017, Ministry of Business, Innovation and Employment.
In April 2017, Christchurch experienced the lowest annual house price growth (1.4 per cent) among 15 main areas reported on in New Zealand.

Since February 2015, the average rent for newly tenanted properties in greater Christchurch has generally decreased, and the rent level as percentage of the national average has returned to a similar level as pre-quake ($386 per week in April 2017).

During the 3 months to April 2017, the total number of private bonds lodged in greater Christchurch was 93.4 per of the level during the same period in 2010. However, lower-cost rental (less than $400 per week) are still well below pre-quake levels.

### Average house value growth (Apr 2016 - Apr 2017)

<table>
<thead>
<tr>
<th>Area</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>National average</td>
<td>11.1%</td>
</tr>
<tr>
<td>Auckland</td>
<td>10.7%</td>
</tr>
<tr>
<td>Queenstown Lakes</td>
<td>23.7%</td>
</tr>
<tr>
<td>Tauranga</td>
<td>17.5%</td>
</tr>
<tr>
<td>Wellington Region</td>
<td>21.2%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>14.4%</td>
</tr>
<tr>
<td>Nelson</td>
<td>16.9%</td>
</tr>
<tr>
<td>Christchurch</td>
<td>1.4%</td>
</tr>
<tr>
<td>Whangarei</td>
<td>20.1%</td>
</tr>
<tr>
<td>Napier</td>
<td>17.2%</td>
</tr>
<tr>
<td>New Plymouth</td>
<td>8.8%</td>
</tr>
<tr>
<td>Hastings</td>
<td>22.8%</td>
</tr>
<tr>
<td>Rotorua</td>
<td>27.8%</td>
</tr>
<tr>
<td>Dunedin</td>
<td>17.0%</td>
</tr>
<tr>
<td>Palmerston North</td>
<td>14.9%</td>
</tr>
<tr>
<td>Invercargill</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

### Average weekly rent from newly tenanted properties in greater Christchurch (monthly, as % of national average)

- **Aug-10**: 93.6%
- **May-12**: 101.4%
- **Jul-14**: 117.2%
- **Sep-15**: 99.5%
- **Apr-17**: 90.3%

### Private bonds lodged in greater Christchurch (3 months to April)

<table>
<thead>
<tr>
<th>Year</th>
<th>Less than $400 per week</th>
<th>$400+ per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>88.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>2011</td>
<td>82.9%</td>
<td>17.1%</td>
</tr>
<tr>
<td>2012</td>
<td>78.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>2013</td>
<td>65.8%</td>
<td>34.2%</td>
</tr>
<tr>
<td>2014</td>
<td>52.7%</td>
<td>47.3%</td>
</tr>
<tr>
<td>2015</td>
<td>50.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>2016</td>
<td>55.8%</td>
<td>44.2%</td>
</tr>
<tr>
<td>2017</td>
<td>61.0%</td>
<td>39.0%</td>
</tr>
</tbody>
</table>

Source: Quotable Value NZ and Ministry of Business, Innovation and Employment
44. Market indicators suggest that the balance between supply and demand for residential housing has been improving since the housing shortage after the earthquakes, which contributed to a sharp increase in residential property prices and rents. The average weekly rent for newly tenanted dwellings in greater Christchurch continues to fall, while Christchurch city experienced the lowest property value growth of the 15 selected main areas in New Zealand between April 2016 and April 2017. Both indicators suggest that the undersupply of property is no longer a major concern in greater Christchurch.

45. Property values in Christchurch city have continued to stabilise, with an average value in April 2017 of $495,855, up 1.4 per cent from April 2016 (compared to the national average value of $631,147 and growth rate of 11.1 per cent). The second lowest growth of the 15 selected main areas in New Zealand was 8.8 per cent for New Plymouth.

46. Between August 2010 and April 2017, the average property value in Christchurch city increased by 36.6 per cent, while nationally the increase was 59.8 per cent (see Figure 4-1). Property values in Selwyn and Waimakariri followed a similar pattern of growth to Christchurch city, but at a higher rate. The majority of the value growth in Christchurch city occurred in 2012, 2013 and 2014, when year on year growth was the highest.

Figure 4-1: Cumulative growth in average property value (base month August 2010)

![Diagram showing cumulative growth in average property value](image)

Source: Residential House Values, Quotable Value

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30 Rental bond data, Ministry of Business, Innovation and Employment.
31 Residential House Values are obtained from the QV website, the 15 areas are those reported in the monthly QV House Price Index.
47. One factor that may play a role in the greater Christchurch housing market is the number of cash settled insurance claims, as it is unclear whether a cash settled property has been or will be repaired or rebuilt.

48. Improved availability of rentals and lower demand from households temporarily displaced by the earthquakes has eased the pressure on average rental prices in greater Christchurch. In April 2017, the average weekly rent of new bonds lodged in greater Christchurch was $386 per week, which was 9.7 per cent less than the national average of $428 per week (see Figure 4-3), and 11.6 per cent lower than the greater Christchurch peak of $437 in February 2015.

**Figure 4-3: Average weekly rent from new bonds lodged**

Source: Residential House Values, Quotable Value

Source: Rental bond data, Ministry of Business, Innovation and Employment
In terms of rental demand there were 41,618 active bonds in greater Christchurch during the month of April 2017, a 12.5 per cent increase on August 2010, with most of the growth occurring after 2014. However, the number of active bonds has been relatively stable over the last eight months (see Figure 4-4). Since 31 March 2015, the number of bonds lodged for rentals less than $400 a week (an indicator for lower cost housing) has been increasing, but is still below pre-earthquake levels (63 per cent of new bonds in April 2017 vs 88 per cent in April 2010).

Figure 4-4: Number of active bonds in greater Christchurch

4.2. HOUSING AFFORDABILITY MEASURE

In May 2017, the Ministry of Business, Innovation and Employment released, for the first time, its Housing Affordability Measure (HAM), covering the period from the March 2003 quarter to the June 2015 quarter. The HAM is a relative measure and currently includes two indicators, ‘HAM Buy’ and ‘HAM Rent’. HAM Buy estimates the percentage of renters who would be under the median affordability threshold should they...
purchase a lower quartile house in their geographic area. While, HAM rent estimates the percentage of renters who would be below the median affordability threshold in their geographic area.

51. Both HAM indicators for Canterbury show that housing has become more affordable since 2011 and that affordability in Canterbury has been improving at a greater rate than in New Zealand as a whole (see Figure 4-5). In 2012, housing became more affordable in Canterbury than in New Zealand (June 2012 quarter for HAM buy and September 2012 quarter for HAM rent).

**Figure 4-5: HAM for national and Canterbury (higher numbers indicate less-affordable housing)**

![Graph showing HAM for national and Canterbury](source)

Source: Housing Affordability Measurement, Ministry of Business, Innovation and Employment

52. The HAM Buy indicator shows that for 77.8 per cent of renting households in Canterbury, buying is unaffordable in the June 2015 quarter (nationally the rate is 81.4 per cent), down from 84.3 per cent in the September 2010 quarter. The increasing affordability for first home buyers in Canterbury between 2011 and 2015 was due to average household incomes in Canterbury growing faster than housing cost after 2010 and 2011 earthquakes. Similarly, HAM Rent shows renting conditions in Canterbury are more affordable than it is nationally and that renting in Canterbury is more affordable than buying (consistent with nationwide trends). In the June 2015 quarter, renting is reported to be unaffordable for 60.9 percent of households (nationally the rate is 66.6 per cent), down from 72.7 per cent in the September 2010 quarter. The improvement in affordability for renting households in Canterbury after the Christchurch earthquakes is related to median household incomes growing faster than average rents.

**PERCEPTIONS ON HOUSING AFFORDABILITY – QUALITY OF LIFE SURVEY**

53. The Quality of Life Survey measures the perceptions of residents in nine councils around New Zealand. One focus of the Quality of Life Survey is housing affordability, where respondents are asked their level of agreement with the statement: *Your housing costs are affordable (by housing costs we mean things like rent or mortgage, rates, house insurance and house maintenance)*. Figure 4-6 presents the 2014 and 2016 results for this question.

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32 A household with a residual income (income less housing costs) that is less than the national affordability benchmark is classified as not being able to afford to buy or rent in their geographic area. A decreasing HAM Buy or HAM Rent indicates that the proportion of households with a residual income below the national affordability benchmark is decreasing and therefore housing affordability is improving in the geographic area.

33 Housing Affordability in New Zealand: Results (May 2017); Ministry of Business, Innovation and Employment; p. 9.

34 Housing Affordability in New Zealand: Results (May 2017); Ministry of Business, Innovation and Employment; p. 9.
54. Although the HAM indicators and the survey results are produced very differently and represent affordability for different groups of people (HAM renting households, Quality of Life survey all residents), they both show housing affordability in Christchurch/Canterbury has improved since 2014.

Case Study 4-2: Residential Advisory Services

The Residential Advisory Service was launched in May 2013 to provide free, independent advice to residential property owners facing challenges in getting their home repaired or rebuilt following the Canterbury earthquake sequence. The service has offered Earthquake Commission and insurance support to over 4,600 homeowners.

In December 2016 the service transitioned to a brokering model to respond to the increasing complexity of the cases remaining. Funding for the service has been extended to at least December 2017 at which point the service would continue to be funded by the Ministry of Business, Innovation and Employment, subject to need.

4.3. INSURANCE

55. Nearly 170,000 properties were damaged in the earthquakes, about three quarters of Canterbury’s housing stock, resulting in 167,677 first-time residential claims. As at 31 March 2017, approximately 84 per cent of these claims (141,005) were under-cap and managed by the Earthquake Commission and the remaining 16 per cent (26,672) were over-cap and managed by private insurers. The Ministry of Business, Innovation and Employment estimate that the total value of residential earthquake-related construction is approximately $13 billion (in 2012 dollars).

56. In 2017, dwelling insurance settlement in greater Christchurch focuses on complex claims and those callback (reopened) claims. As at 31 March 2017, there are 3,318 first time dwelling claims outstanding (2.0 per cent of the total first time household claims), all of which are over-cap and being managed by insurers.

57. As at 31 March 2017, the Earthquake Commission reports that of the 141,005 first time under-cap claims, they have completed all that are within their operational control, i.e. excluding those under litigation. The Earthquake Commission is focusing on dealing with an estimated 6,578 callback claims (4.7 per cent of the Earthquake Commission’s total claims). Of these, an estimated 600 to 1,500 could transfer to insurers as the value of the claim moves past the $100,000 settlement cap threshold. However, the number of call-

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35 Quality of Life Survey, 2014 and 2016. Combined cities includes Auckland Council, Christchurch City Council, Wellington City Council, Dunedin City Council, Porirua City Council, Hutt City Council and Hamilton City Council (2016 only).

36 The Canterbury rebuild five years on from the Christchurch earthquake, Reserve Bank of New Zealand.

37 Under-cap callback claims include remediation of first-time repairs; work identified through the Earthquake Repairs to Canterbury Homes – Home Inspection Survey Report and the subfloor review programme; and claims where customers are in dispute with the Earthquake Commission following initial settlement.
back claims may further rise as any claim lodged with the Earthquake Commission can be re-opened, at any
time, as new information becomes available.

58. The delay in overall settlement (the long tail of unsettled claims) has been in part due to the number of
repairs in the over-cap claims to be cash settled (repairs can take longer to determine and agree strategy,
scope and price than rebuilds) and multi-unit dwelling claims (due to the complexity of the claim).

59. Of the 3,318 unsettled over-cap claims, 814 or 25 per cent are in construction and have a clear pathway to
settlement (see Table 4-1). Claims transferring to over-cap from the Earthquake Commission are reflected
in the ‘new claims assessment’ category, with 277 or 8 per cent of unsettled claims. Insurers report that
with 182 or 5 per cent of the unsettled claims, the homeowner is undecided. The balance of unsettled
claims (2,045 or 62 per cent) are progressing through work with both insurers and homeowners.

Table 4-1: Current status of unsettled over-cap dwelling claims (As at 31 March 2017)

<table>
<thead>
<tr>
<th>Number of claims</th>
<th>% of unsettled</th>
</tr>
</thead>
<tbody>
<tr>
<td>New claims assessment</td>
<td>277</td>
</tr>
<tr>
<td>Design and/or pricing</td>
<td>1,064</td>
</tr>
<tr>
<td>Cash settling, not finalised</td>
<td>981</td>
</tr>
<tr>
<td>Customer undecided</td>
<td>182</td>
</tr>
<tr>
<td>In construction</td>
<td>814</td>
</tr>
<tr>
<td><strong>Total unsettled</strong></td>
<td><strong>3,318</strong></td>
</tr>
</tbody>
</table>

Source: Residential Insurance Progress, Ministry of Business, Innovation and Employment

60. It should be noted that a cash settlement does not mean that the property has been repaired or rebuilt, and
there is limited visibility of when, or if home owners repair or rebuild their properties. Unrepaired
properties could pose a number of risks. Among these are the quality of local housing stock, and health and
safety issues for the occupiers.

4.4. LOOKING AHEAD

61. Unresolved dwelling claims, both first time claims and call-back claims, can have an ongoing negative impact
on wellbeing for dwelling owner/occupiers. Continued support through the Residential Advisory Service
and a focus on these claims from the Earthquake Commission and insurers is advisable to ensure the tail
end of claims does not continue to extend.

62. Housing affordability, although improving, should continue to be monitored in greater Christchurch. Some
of the inputs into the HAM will assist in improving housing affordability in greater Christchurch (such as low
house price growth and decreasing average weekly rents), while others will have the opposite affect (such
as increasing interest rates and lower earnings growth).
The wellbeing of greater Christchurch communities and individuals

- The overall wellbeing of greater Christchurch residents has improved since the initial impact of the earthquakes, with 82% of the population rating their quality of life as ‘very good’ or ‘good’ in April 2016.
- The Canterbury Wellbeing Index (2016) shows that many of the indicators are similar to or better than, national averages.

### Canterbury Wellbeing Index (2016) – Greater Christchurch

Note: The reproduction of the Canterbury Wellbeing Index below does not incorporate more recent changes in the indicators, for example the increase in the unemployment rate reported in section 2 of this report.

<table>
<thead>
<tr>
<th>Positive annual change in greater CHCH</th>
<th>Positive annual change nationally</th>
<th>Better than pre-quake</th>
<th>Better than National average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous drinking</td>
<td>No Change</td>
<td>No Change</td>
<td>No Difference</td>
</tr>
<tr>
<td>Adult smoking</td>
<td>No Change</td>
<td>✓</td>
<td>No Difference</td>
</tr>
<tr>
<td>Problem accessing GP</td>
<td>✓</td>
<td>✓</td>
<td>No Change</td>
</tr>
<tr>
<td>Mean weekly rent</td>
<td>✓</td>
<td>x</td>
<td>No Change</td>
</tr>
<tr>
<td>Mean house prices</td>
<td>No Change</td>
<td>x</td>
<td>No Change</td>
</tr>
<tr>
<td>Child investigations</td>
<td>No Change</td>
<td>No Change</td>
<td>No Difference</td>
</tr>
<tr>
<td>Theft, Burglary, Robbery &amp; extortion</td>
<td>x</td>
<td>No Change</td>
<td>No Difference</td>
</tr>
<tr>
<td>Assault, Sexual assault, Abduction &amp; Kidnapping</td>
<td>No Change</td>
<td>No Change</td>
<td>No Difference</td>
</tr>
<tr>
<td>NCEA level 2 achievement - 16 yr olds</td>
<td>No Change</td>
<td>No Change</td>
<td>✓</td>
</tr>
<tr>
<td>Youth not in employment education or training</td>
<td>No Change</td>
<td>No Change</td>
<td>✓</td>
</tr>
<tr>
<td>Weekly household income</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Youth unemployment rate, 15-24 years</td>
<td>No Change</td>
<td>No Change</td>
<td>✓</td>
</tr>
<tr>
<td>Overall unemployment rate</td>
<td>No Change</td>
<td>No Change</td>
<td>✓</td>
</tr>
<tr>
<td>WHO-5</td>
<td>✓</td>
<td>1</td>
<td>No Change</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>✓</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>Stress</td>
<td>No Change</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Quality of life</td>
<td>✓</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Change is between Sep 2015 and Apr 2016 surveys.  
2. Change is between Sep 2012 and Apr 2016 surveys.  
Note: "No Change" implies there was no statistically significant change. "No Difference" implies there was no statistically significant difference.

**Quality of life in greater Christchurch** (% of population with a rating of ‘very good’ or ‘good’)

- Sep-12, 74%  
- Sep-13, 76%  
- Sep-13, 73%  
- Sep-14, 75%  
- Sep-14, 77%  
- Apr-15, 79%  
- Sep-15, 77%  
- Apr-15, 82%  
- Sep-16, 82%

Source: Canterbury Wellbeing Survey, Canterbury District Health Board
SECTION 5: THE WELLBEING OF GREATER CHRISTCHURCH COMMUNITIES AND INDIVIDUALS

63. The overall wellbeing of greater Christchurch residents has improved since the initial impact of the earthquakes and many of the indicators are similar to, or better than, national measures. As rebuild-related construction activity declines, some of the indicators in the Canterbury Wellbeing Index could move or have moved, in a negative direction, for example, increased unemployment.

5.1. CANTERBURY WELLBEING INDEX 2016

64. The Canterbury Wellbeing Index\(^{38}\) tracks the progress of the social recovery, using indicators to provide information on the impacts of the earthquakes on wellbeing and to identify emerging social trends and issues. The Canterbury Wellbeing Index consists of a range of indicators structured around health, knowledge and skills, economic wellbeing, social connectedness, civil participation, housing, safety and people\(^{39}\).

65. Of the 11 indicators that provide a comparison to pre-earthquake environment, seven show conditions are better than they were prior to the earthquakes, and two are at a similar level. The two indicators that show conditions have deteriorated (higher mean weekly rent and mean house prices need to be considered within the context of increasing median weekly household income (see Figure 5-3)).

66. Improvement in wellbeing has slowed between 2015 and 2016, with only five of the 17 primary indicators showing a positive change, although one of these indicators is the self-reported quality of life result from the wellbeing survey, which had a statistically significant positive increase. Nine indicators showed no change (either there was no change or the significance of the change was unknown), while three showed a negative change (Hazardous drinking, Weekly household income, and Theft, burglary, robbery and extortion).

67. Where national comparisons are available (13 of the 17 indicators), eight of the indicators show that conditions in greater Christchurch are more favourable than the national result, five show conditions are similar, while none show conditions are worse.

68. Although the index paints an overall positive picture for wellbeing and social recovery in greater Christchurch, population level results should not be read in isolation to results about particular vulnerable communities (see Figure 5-1).

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\(^{38}\) The Canterbury Wellbeing Index is based on administrative and survey data from a variety of sources, as a result not all data is directly comparable, for example, geographic areas are not consistent across data sets nor are the reporting periods.

\(^{39}\) Sourced from: [https://www.cph.co.nz/your-health/canterbury-wellbeing-index/](https://www.cph.co.nz/your-health/canterbury-wellbeing-index/).
Figure 5-1: Those more likely to say their quality of life has decreased over the past 12 months

![Figure 5-1: Quality of Life Decrease](image)

Source: Canterbury Wellbeing Survey September 2016, Canterbury District Health Board

69. A summary of the Canterbury Wellbeing Index is provided in the dashboard (based on the index wheel diagram). Further information on the Canterbury Wellbeing Index and the 2016 report can be found on the Community & Public Health website (https://www.cph.co.nz/your-health/canterbury-wellbeing-index/).

Case Study 5-2: Community in Mind

Community in Mind was developed in 2014 to help people and communities in greater Christchurch rebuild their health and wellbeing following the earthquakes. The Community in Mind Strategy provides the context, shared vision and principles for psychosocial recovery in greater Christchurch, and the Shared Programme of Action outlines activities various agencies are delivering, or will deliver, to help achieve psychosocial recovery. Together they guide agencies, organisations and community groups to develop, target and coordinate their activities.

As a practical tool for the local Psychosocial Committee, the Shared Programme of Action was revised in December 2016 to ensure that the right tools are available to meet the psychosocial needs of residents.

PUBLIC SAFETY SHOWS RECENT IMPROVEMENT

70. The 2016 Wellbeing Index reports that the number of victims from Theft, Burglary, and Robbery and extortion in the Canterbury metro area have been increasing from July 2014 to May 2016. Comparing the 12 months to May 2016 to the previous 12 months, there was a 14.8 per cent increase in Theft, burglary, and robbery and extortion victimisations compared with a 4.4 per cent increase for New Zealand.

71. Since May 2016, the latest period reported in the index, there has been a steady decline in the number of victimisations in the Canterbury metro area. In the 12 months to February 2017, there were 1,083 (4.6 per cent) fewer victimisations related to theft, burglary, robbery and extortion in the Canterbury metro area, compared to the previous 12 month period. The same comparison nationally shows there were an additional 8,521 victimisations (3.9 per cent). The decrease in the Canterbury metro area is driven by a fall in the number of theft victims (see Figure 5-2).

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40 Community & Public Health is a division of the Canterbury District Health Board.
41 Canterbury Metro Area is a Policing boundary that most closely matches the greater Christchurch and Hurunui districts. It is made up of the Southern Canterbury, Northern Canterbury, and Christchurch Central Police boundaries.
42 Additional historical data is provided for the years 2010 to 2014, however due to changes in collection and reporting this information is not comparable to the latest data.
Figure 5-2: Theft, burglary, and robbery and extortion victimisations (Canterbury Metro Area)

Source: Recorded Crime Victims and Offenders Statistics, New Zealand Police

72. Canterbury households have seen their incomes increase over the rebuild period, with the Wellbeing index reporting increasing median equivalised\(^{43}\) gross weekly household income up to 2014. However, in 2015 the median equivalised gross weekly household income decreased (while nationally it continued to increase), narrowing the gap between greater Christchurch and the national average to $97 from the peak of $178 in 2014.

73. Between 2015 and 2016, the related indicator, ‘non-equivalised median gross weekly household income’, shows household income in Canterbury has increased by $63 (4.1 per cent) compared to a national increase of $116 (8.2 per cent) (see Figure 5-3). Similar to economic indicators in section 1, household income in Canterbury has benefited from the rebuild activity, but is showing signs of returning to the historic pattern of following national trends.

Figure 5-3: Median weekly household income

\[^{43}\text{Gross weekly household income is equivalised by adjusting the dollar amounts based on the number of adults and age and number of children in the household.}\]
5.2. CANTERBURY WELLBEING SURVEY SEPTEMBER 2016

74. The results of the September 2016 Canterbury Wellbeing Survey show that the wellbeing of greater Christchurch residents is largely unchanged from April 2016. Just over eight in ten (82 per cent) greater Christchurch residents rate their quality of life positively (while five per cent rate it negatively). This is the same response as in April 2016 and is up from 77 per cent in September 2015. These results are supported by the Quality of Life Survey (2016) which reports that 78 per cent of Christchurch city residents rate their overall quality of life positively, while four per cent have a negative rating (the corresponding seven city averages are 81 per cent positive and four per cent negative).

75. In addition to the quality of life measure, the index also reports the following from the survey:

- WHO-5 Wellbeing Index – like quality of life, the September 2016 result is unchanged from April 2016, with an average score of 14.4. Over time there has been small but significant improvement in this measure.

- Sense of community – this positive outcome from the Canterbury earthquake sequence continues to decrease over time. A heightened sense of community as a result of the earthquakes continues to have a moderate or major positive impact on the everyday lives of 14 per cent of residents. This is down from 16 per cent in April 2016 and 34 per cent in September 2012.

- Stress – the proportion of residents who experienced stress at least sometimes in the past 12 months that has had a negative effect on them remains stable at around 72 per cent, having first reached this level in September 2014. In September 2012, when the survey was first conducted, the response was 80 per cent.

5.3. LOOKING AHEAD

76. The overall wellbeing of greater Christchurch residents is expected to continue to improve as the remaining physical environment, facilities, and regeneration plans progress. However, investigating results for specific vulnerable population groups is important, as they will often need ongoing support. These groups include owner-occupiers who still have outstanding insurance claims, those with a health condition or disability, living in temporary housing, or with household incomes less than $30,000. There is a particular focus on monitoring these groups.

77. The results of the September 2016 Canterbury Wellbeing Survey will provide further information on how residents are progressing and where additional assistance may is required.

44 Auckland, Hamilton, Hutt, Porirua, Wellington, Christchurch and Dunedin.
Construction Activity

- The total construction cost for the rebuild of Christchurch is currently estimated at around $31.5b (in 2012 prices), with 65% of total expenditure spent at the end of 2016. Heavy commercial construction started later than other sectors, but commercial quarterly expenditure may soon supersede residential.
- The consenting patterns within greater Christchurch reflect the higher proportion of commercial buildings in the central city. The proportion of residential consents issued is likely to increase as residential development in the central city gains momentum.
- Between October 2010 and December 2016, $19.7b of construction work has been carried out in Canterbury, of which 57.6% was for residential buildings.

Total cost of rebuild (construction activity only) (2012 price, end of 31 Dec 2016)

<table>
<thead>
<tr>
<th>Category</th>
<th>Completed</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Commercial</td>
<td>41.6%</td>
<td>58.4%</td>
</tr>
<tr>
<td>Light Commercial</td>
<td>63.1%</td>
<td>36.9%</td>
</tr>
<tr>
<td>Civil</td>
<td>69.9%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Residential</td>
<td>77.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Total</td>
<td>65.2%</td>
<td>34.8%</td>
</tr>
</tbody>
</table>

Source: Ministry of Business, Innovation and Employment and SCIRT

Building consents (Oct 2010 – Apr 2017)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value of consents</th>
<th>% Residential</th>
<th>% Non-residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central City</td>
<td>$2.5b</td>
<td>11.8%</td>
<td>88.2%</td>
</tr>
<tr>
<td>Christchurch</td>
<td>$12.9b</td>
<td>52.7%</td>
<td>47.3%</td>
</tr>
<tr>
<td>Greater Christchurch</td>
<td>$18.1b</td>
<td>59.9%</td>
<td>40.1%</td>
</tr>
<tr>
<td>Canterbury</td>
<td>$20.5b</td>
<td>60.4%</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

Source: Building Consents, Statistics New Zealand

Quarterly value of building work put in place – Canterbury (Oct 2010 – Dec 2016)

Public sector/horizontal infrastructure rebuild

- As at 31 December 2016, 10 public sector rebuild projects have completed construction and 27 are underway. Of the total planned expenditure, 41% has been spent.
- As at 30 April 2017, 99% of the SCIRT rebuild programme had been completed. In the same period, 87.0% of all SCIRT projects (valued at $1,241m) have been completed and handed over to the Christchurch City Council.

Canterbury Public Sector Rebuild progress (as at 31 Dec 2016)

<table>
<thead>
<tr>
<th>Projects</th>
<th>In planning</th>
<th>In construction</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>13 Projects</td>
<td>27 Projects</td>
<td>10 Projects</td>
</tr>
<tr>
<td>Value($m)</td>
<td>$2,545</td>
<td>$1,251m</td>
<td>$1,065m</td>
</tr>
<tr>
<td>SCIRT progress</td>
<td>41% total</td>
<td>99% total</td>
<td>74.7%</td>
</tr>
</tbody>
</table>

Source: Ministry of Business, Innovation and Employment and SCIRT

Transport

- As a result of the Canterbury earthquake sequence, roads were badly damaged and public transport was severely disrupted. While in 2015 the number of individual bus trips grew to 82.2% of pre-quake level (2010), there has been a slight decrease in the past two years, to 78.3% of pre-quake level.
- Residents’ satisfaction with the condition of Christchurch roads has improved between the 2014/2015 financial year and 2015/2016, however the majority of residents remain dissatisfied.

Annual bus passenger numbers (Thousands individual trips, year end April)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17,166</td>
<td>14,253</td>
<td>10,679</td>
<td>13,168</td>
<td>13,913</td>
<td>14,110</td>
<td>13,686</td>
<td>13,434</td>
</tr>
</tbody>
</table>

Source: Environment Canterbury

Satisfaction with condition of Christchurch roads (Excluding the residential red zone)

<table>
<thead>
<tr>
<th>Year</th>
<th>Satisfied</th>
<th>Neither satisfied, nor dissatisfied</th>
<th>Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>30%</td>
<td>52%</td>
<td>18%</td>
</tr>
<tr>
<td>2016</td>
<td>37%</td>
<td>50%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: Christchurch City Council, General Service Satisfaction Survey
SECTION 6: INFRASTRUCTURE AND TRANSPORTATION IN GREATER CHRISTCHURCH

6.1. CONSTRUCTION

78. The Canterbury earthquake sequence resulted in widespread physical damage across greater Christchurch. A large proportion of public facilities required demolition, including the convention centre, and sports and recreation centres. There was also extensive damage to greater Christchurch’s horizontal infrastructure network, including damage to hundreds of kilometres of underground pipes (fresh water, wastewater and stormwater), and to an estimated 52 per cent of Christchurch’s sealed roads.

79. The rebuild of greater Christchurch has largely been funded through insurance. The Ministry of Business, Innovation and Employment estimates that the total value of rebuild-related construction activity is $31.5 billion\textsuperscript{45}. To put this into context, the total GDP in greater Christchurch was reported as $22.7 billion for 2016\textsuperscript{46}.

80. Of the estimated total value of rebuild construction activity in greater Christchurch, $20.6 billion (or 65.2 per cent) has been spent. Although a large volume of rebuild activity remains, the activity appears to have peaked and it is anticipated that construction activity will gradually fall\textsuperscript{47}. Since October 2010, building consents worth $18.1 billion\textsuperscript{48} have been issued.

81. The advanced progress of the rebuild is reflected in the fall-off in the number of rebuild-related work visa arrivals (See Figure 6-1). In the March 2017 quarter, a total of 136 people arrived in New Zealand with a rebuild-related work visa. This is 570 fewer than the peak in the September 2015 quarter (when 706 rebuild-related work visa arrivals were recorded)\textsuperscript{49}. Compared with the December 2016 quarter, the rebuild-related visa arrivals in the March 2017 quarter have fallen by 7.5 per cent.

Figure 6-1: Number of rebuild-related work visa arrivals

82. Rebuild-related construction expenditure is expected to pass 80 per cent in the quarter ending September 2018\textsuperscript{50}.

\textsuperscript{45} Construction Forecast Model: In 2012 dollars, as at 31 December 2016, Ministry of Business, Innovation and Employment.
\textsuperscript{46} Real GDP (2010 prices): Infometrics.
\textsuperscript{47} Construction Forecast Model: As at 31 December 2016, Ministry of Business, Innovation and Employment.
\textsuperscript{49} Rebuild-related work visa arrivals: To 31 March 2017, Ministry of Business, Innovation and Employment.
\textsuperscript{50} Construction Forecast Model: As at 31 December 2016, Ministry of Business, Innovation and Employment.
6.2. REBUILD ACTIVITY

PUBLIC SECTOR REBUILD

83. The Ministry of Business, Innovation and Employment is responsible for monitoring the progress of the public sector rebuild (publicly reported through the Treasury’s ‘Major Projects Performance’ reports). The Canterbury Public Sector Rebuild monitoring comprises 50 publicly funded construction projects across health, education, social housing, horizontal infrastructure and community facilities (see Figure 6-2), with a total value of $6.3 billion (in current dollars). A number of projects have been completed: Christchurch now has a new bus interchange and hospital (Burwood Hospital), and construction has finished on 10 schools in the Christchurch Schools Rebuild programme. More recently the Canterbury Earthquake National Memorial opened in time for the sixth anniversary commemoration event on 22 February 2017. Looking ahead, the Justice and Emergency Services Precinct and Ara’s Engineering and Architectural Studies are expected to complete construction in mid-201751.

Figure 6-2: Major projects of the public sector rebuild construction timeframes (As at 31 Dec 2016)52

51 Public Sector Rebuild: As at 31 December 2016, Ministry of Business, Innovation and Employment.
52 Construction timelines for public sector projects over $30m (projects under $30, such as the Canterbury Earthquake National Memorial, are excluded). The timelines for the Christchurch Schools Rebuild programme and the multi-use arena (Stadium) are not included.

Source: Public sector rebuild timelines, Ministry of Business, Innovation and Employment
The public sector rebuild has taken longer than originally anticipated (for example, compared to the pre-business case timeframe estimates published in the Christchurch Central Recovery Plan). This was driven by a number of factors, including construction market capacity constraints and the timeframe required for demolition, planning, financing and construction. However the delay has delivered benefits for some of the public sector rebuild projects. The recent easing in residential and light commercial construction appears to have freed up market capacity for the public-sector projects, resulting in stronger competition and attractive pricing for those projects that rely on smaller construction companies.\footnote{Public Sector Rebuild: As at 31 December 2016, Ministry of Business, Innovation and Employment.}

As at 31 December 2016, $2.5 billion has been spent on the public sector rebuild (or approximately 40.5 per cent of the $6.3 billion total value)\footnote{Public Sector Rebuild: As at 31 December 2016, Ministry of Business, Innovation and Employment.}. The remaining public sector rebuild activity is expected to cushion the decline in construction activity.

HORIZONTAL INFRASTRUCTURE

86. In September 2011, an unincorporated joint venture was formed (called the ‘Stronger Christchurch Infrastructure Rebuild Team’) to undertake the repair and rebuild of earthquake damaged horizontal infrastructure. The programme is nearing its completion and 696 completed projects, with a total construction value of $1.2 billion (approximately 87.0 per cent of total planned expenditure), have been handed over to the Christchurch City Council (the asset owner), as at 30 April 2017.\footnote{Horizontal Infrastructure Progress: As at 30 April 2017, Stronger Christchurch Infrastructure Rebuild Team.} It is expected that the remaining projects will be handed over by the end of June 2017.\footnote{Following the handover of each project, there is a 12 month defects liability period and during this time the construction contractor has a contractual obligation to remedy any defects in the construction work it has performed.}

87. The advanced progress of the programme may have contributed to the positive movements reported in the September 2016 Canterbury Wellbeing Survey (see Table 6-1). In September 2012, 30 per cent of respondents indicated that “being in a damaged environment and/or surrounded by construction work” was having a moderate or major negative impact on their everyday lives. This has fallen to 10 per cent in September 2016. Those reporting “transport related pressures” as having a negative impact has also fallen from 20 per cent to 10 per cent over the same periods.\footnote{September 2016 Canterbury Wellbeing Survey: Canterbury District Health Board.}
Table 6-1: Proportion indicating that an infrastructure issue continues to have a moderate or major negative impact on their everyday lives, over time

<table>
<thead>
<tr>
<th></th>
<th>Sep-12</th>
<th>Apr-13</th>
<th>Sep-13</th>
<th>Apr-14</th>
<th>Sep-14</th>
<th>Apr-15</th>
<th>Sep-15</th>
<th>Apr-16</th>
<th>Sep-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being in a damaged</td>
<td>30%</td>
<td>21%</td>
<td>20%</td>
<td>24%</td>
<td>19%</td>
<td>20%</td>
<td>14%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>environment and/or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>surrounded by construction work</td>
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<td>Transport related</td>
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Source: Canterbury Wellbeing Survey September 2016, Canterbury District Health Board

Note: A green figure indicates a positive movement, while a red figure indicates a negative movement.

Case Study 6-2: Women in employment in the construction sector

In June 2013, government and industry leaders co-produced the Canterbury Construction Sector Workforce Plan, which identified women as one of a number of population groups that were underemployed in the construction sector. The Ministry for Women supported SCIRT, Te Rūnanga o Ngaï Tahu, academic institutions, and other construction firms formed a working group to increase the number of women in trades in Canterbury. Actions included setting targets and increasing the visibility of women in frontline operational roles.

In Canterbury, between 2013 and 2017, the number of women employed in construction increased by 3,800 (109 per cent) to 7,300. Nationally the increase was 11,800 (60.8 per cent).

6.3. TRANSPORT

88. The most frequently used mode of transport, as reported by Christchurch Residents in Christchurch City Council's 2016 Life in Christchurch survey, was the car. Walking is the second most popular mode of transport, followed by cycling. Travel by bus is the fourth most popular mode of transport.

89. Prior to the September 2010 earthquake (in the 12 months to April 2010) 17.2 million bus trips were taken and in the 12 months to April 2012 the number of bus trips taken fell by 37.8 per cent, to 10.7 million.

90. As much of the central city was inaccessible to the public for a long period following the earthquakes, temporary bus transport hubs were established outside of the central city (for example, on Bealey Avenue). With the lifting of the cordon, a temporary bus interchange was established in the central city. Acknowledging the growth of commercial hubs around the city (for example in Addington), and population movements, Environment Canterbury (responsible for the bus routes) launched a remodelled network with refreshed bus routes in December 2014. A new Bus Interchange in the city centre also began operating on 25 May 2015, with construction costing a total of $53 million.

91. The number of bus trips taken has improved since the post-earthquake low-point of 10.7 million in the 12 months to April 2012, with 13.4 million trips reported in the 12 months to April 2017. Nevertheless, this is still 21.7 per cent lower than the trip numbers reported prior to the Canterbury earthquakes.

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58 Bus trips: 12 months to April 2010 Environment Canterbury.
59 Bus trips: 12 months to April 2017 Environment Canterbury.
60 Public Sector Rebuild: As at 31 December 2016, Ministry of Business, Innovation and Employment.
61 Bus trips: 12 months to April 2017 Environment Canterbury.
Figure 6-3: Frequency of use of public transport (2016)

'Over the past 12 months, how often did you use public transport? If your usage changes on a weekly basis, please provide an average' - Quality of Life survey 2016

* Auckland, Hamilton, Hutt, Porirua, Wellington, Christchurch, Dunedin

92. In 2010, the Quality of Life survey reported that 20 per cent of respondents used public transport on average at least once a week, compared with 11 per cent reported in the 2016 survey (see Figure 6-3). In comparison, the aggregated total of the seven councils included in the 2016 survey reported 25 per cent of respondents using public transport on average at least once a week.

93. The majority of those surveyed responded that they agree or strongly agree that public transport in Christchurch is easy to get to (73 per cent) and is safe (67 per cent).

63 Quality of Life Survey: 2016.

6.4. LOOKING AHEAD

94. The public sector rebuild has taken longer than initially anticipated and this has proved advantageous in some respects. For example, the reduced overall rebuild activity is resulting in some projects receiving competitive pricing, and the large projects yet to start construction may provide the market with a softer landing. We expect that the public sector rebuild will continue to gain momentum, with major projects such as the convention centre soon starting construction.

95. While the road network performance has greatly improved through the horizontal infrastructure programme, public transport has yet to fully recover to pre-earthquake trip numbers. We expect to see public transport usage increase, as the central city regeneration continues and more businesses move in.