Canterbury Employment & Skills Board

EMPLOYMENT OPPORTUNITIES IN CANTERBURY

December 2011

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Executive Summary

The earthquakes' full economic impact is still emerging, with some industries badly affected, while others have proved resilient.

The Christchurch and Canterbury economies are currently recovering from two major events: the economic recession and the Canterbury earthquakes. The full economic impacts are still emerging, and estimates vary substantially between economists. A conservative estimate puts the fall in annual gross domestic product (GDP) in the region at around 1.3%, and by 1.8% in Christchurch, in the year to June 2011[1].

The earthquake on 22 February 2011 had a greater economic effect on Christchurch than the 4 September 2010 earthquake, but many businesses responded quickly, relocating and recommencing trading in a short period of time. Some sectors, such as hospitality and tourism, have seen a downturn in activity following the earthquakes, with a significant decrease in the number of employees in retail and accommodation. However, the key information and communications technology (ICT) and manufacturing sectors have been more resilient.

Population flows out of Canterbury have resulted.

The Canterbury working age population[2] fell by 13,500, or 2.7%, in the year to September 2011. There was a decline in the number of people of prime working age (25—54 years) of 17,700 or 6.8%, but an increase in those aged 55 years and over[3]. Those aged 15—24 years left the region at a noticeably high rate. This loss of people of working age could exacerbate skills shortages in the medium-term when workers in some sectors, particularly construction, will be in high demand.

The Canterbury labour market has felt the impact, with fewer people working and increased unemployment.

Nationally, employment increased by 1.1% during the year to September 2011, while employment in the Canterbury region decreased by 26,800 or 8.0%. There were particularly large falls in Canterbury employment in accommodation (down 8,300 workers) and retail trade (down 4,300). However, the construction industry, which is gearing up for the rebuild, has shown the most growth in the year, up 4,500 workers.

The number of unemployed people in Canterbury grew by 900 or 5.3% over the last year, compared to the 4.7% growth in unemployment seen nationally. The Canterbury unemployment rate increased from 4.8% to 5.5%. A smaller working age population and falls in participation have resulted in a rise in unemployment that is much less than the drop in employment.

Fewer people are participating in the labour market…

The labour force participation rate is another way of assessing the health of a labour market. It indicates how many people are working or actively looking for work. The Canterbury labour force participation rate fell sharply from 70.0% in September 2010 to 66.7% in September 2011, compared with a modest increase in participation nationally (to 68.4%).

…with young people and women particularly affected.

In the year to September 2011, employment fell sharpest for young people (22.0%), in part due to the large numbers employed in the accommodation and retail industry and their vulnerability in times of labour market downturn. In contrast, employment in the 55 years and over age group grew by 4.8%. Participation rates fell most for those aged 15—24 years.

Female employment in Canterbury fell by 12.2%, compared with a 4.3% fall for male employment. This was largely because the traditionally female-dominated retail and hospitality sectors have seen big employment falls, reflecting the extensive damage to the Christchurch central business district (CBD). Over the year, the female unemployment rate in Canterbury increased from 5.5% to 6.7%, while male unemployment increased from 4.2% to 4.5%. The female labour force participation rate fell from 64.5% to 59.2% in Canterbury, compared with a modest increase for women nationally (to 62.4%).

[1] Infometrics' estimates. There are no official statistics on regional GDP produced by Statistics New Zealand.
[2] People aged 15 years and over.
[3] Household Labour Force Survey (HLFS), September 2011 quarter, Statistics New Zealand.

Fewer people have moved on to unemployment benefits than were anticipated...

Since the 22 February 2011 earthquake, the number of unemployment beneficiaries rose from 5,500 on 18 February[4] to a peak of 6,300 in late April. The number of beneficiaries was 5,300 as at the end of October 2011. Significantly, the number of unemployment beneficiaries has been in decline since early July and below the expected increase. Young people accounted for a disproportionately high share of new registrations.

Since 18 February 2011, the number of sickness, domestic purposes, and invalids beneficiaries has declined in the region. While some of these people will have left Canterbury, some will have entered or re-entered the workforce.

...and there is strong demand for workers in some industries.

In spite of delays to the rebuild, jobs have already been created. A lot of these are associated with assessing Earthquake Commission (EQC) claims and demolition of buildings in Christchurch's CBD. A further 600 workers are repairing roads, a ten-fold increase on the level prior to the earthquakes.

Indirectly, a number of business professionals are seeing increased demand for their services, including law and accountancy firms. The New Zealand Institute of Chartered Accountants indicated that many of its Christchurch members had hired additional staff or were considering doing so. This increase in work is related to catching up on work delayed by the earthquakes and assisting clients with insurance claims.

Canterbury online vacancies have slowed after strong growth.

Within Canterbury, only the healthcare and medical industry experienced a growth in online advertised skilled vacancies between July and October 2011, according to the Department of Labour's (the Department) Jobs Online index[5]. Notably, Auckland and Wellington recorded larger total falls in advertisements over this time.

However, when October 2011 figures are compared with October 2010, Canterbury had an increase of 46.7% in advertised vacancies, higher than the rate for any other region. Over the last year, construction and engineering online vacancies increased by 68.5%, the second highest growth rate by industry. This suggests forward-planning in preparation for the rebuild.

Following the earthquakes, there are signs that the Canterbury labour market is having trouble re-adjusting, with vacancy and unemployment rates both higher than seen in recent years.

Demand for construction-related workers will be particularly strong.

The labour demand model developed by the Canterbury Development Corporation (CDC) and Market Economics, in conjunction with the Department, means the labour needs for the Canterbury rebuild can be modelled in detail to reflect different timing and damage scenarios. Depending on the pace of the recovery, and the emergence of damage information as claims are assessed, the estimated demand for workers can vary significantly.

The modelling of the Canterbury labour market is very sensitive to the assumptions used about the pace and scale of the rebuild. Based on a rebuild scenario that some industry leaders suggest is the most likely, around 24,000 additional construction-related workers will be required at the peak of the rebuild. Alternative scenarios project a range from between 13,000 [6] and 48,000[7] additional construction-related workers being required for the rebuild at its peak. In all scenarios, demand is greatest for carpenters and joiners, painting trade workers, concreters, and plasterers. General labourers will also be in high demand, and this may provide opportunities, after training, for some beneficiaries or those who have not previously worked in the construction industry.

[4] This is the closest date prior to the 22 February earthquake for which unemployment benefit registration data in Canterbury is available.
[5] The Department's Jobs Online indicator tracks the number of vacancies advertised online by industry, occupation, and region. It is updated monthly and can be found at the following address: http://www.dol.govt.nz/publications/jol/report
[6] This figure assumes a slow reconstruction and a low end estimate of damage.
[7] This figure assumes a fast reconstruction and a high end estimate of damage.

There will also be an increased demand for workers in occupations that directly support the construction work (such as clerks in administrative positions and business services staff), as well as across other sectors as economic activity picks up more broadly (such as sales workers).

Job opportunities exist throughout the region, not just in Christchurch.

Much of Canterbury was only lightly impacted by the recession, with Selwyn District rated as New Zealand's best performing territorial authority in 2010 against a range of social and economic indicators, and with Ashburton, Waimakariri, and Hurunui ranked in the top ten. Some districts were not directly affected by the earthquakes.

The influx of people from Christchurch following the earthquakes has stimulated businesses elsewhere in Canterbury. It is estimated that the population of Canterbury, excluding Christchurch, grew by 3,900 in the year to June 2011[8].

There may be long-term gains for some of these areas as people migrate from the city into rural areas and outlying towns, stimulating employment growth that was previously in decline. However, once the Christchurch rebuild gains momentum, the flow of workers into the city may hinder regional economic development outside of Christchurch and constrain growth in agriculture.

Agriculture is central to the Canterbury economy, creating seasonal work opportunities throughout the region, with some farms or vineyards desperate for low-skilled workers. Major irrigation developments will further expand agricultural output and employment opportunities across the region.

The rebuild will challenge the Canterbury labour market.

The rebuild will put pressure on regional economic development outside of Christchurch. However, the large number of general labouring positions is positive for young people in particular, who are over-represented in unemployment statistics. Construction is predominantly male-oriented, so increasing female participation is an important challenge.

The Canterbury Labour Market Strategy is being led by the Canterbury Employment and Skills Board (CESB), and will support the region's Economic Development Strategy and the Canterbury Earthquake Recovery Authority's (CERA) Economic Recovery Plan.

[8] Statistics New Zealand subnational population estimates for the year to June 2011.

Purpose of report

Employment Opportunities in Canterbury brings together a wide range of economic indicators, modelling results and qualitative information to tell the story of the economic impact of the earthquakes on Canterbury. It also focuses on employment prospects throughout the region and principally on the reconstruction in the short term, but also employment in other industries.

The report presents the latest results of the Department-Canterbury Development Corporation earthquake labour demand modelling programme, highlighting occupations most in demand for the rebuild. Most data is presented at either a Canterbury or Christchurch level, depending on availability, drawing on the CDC's extensive analysis of the Christchurch economy. Where possible, both Canterbury and Christchurch level data is used throughout this report.

The research is a key output of the CESB's 'Developing Knowledge' objective. The report will also inform the development of a Canterbury Labour Market Strategy, which is being led by CESB, that will address the needs of the recovery and also long-term business growth.

This report is the start of on-going research that will monitor the Canterbury labour market to provide advice on what the government can do to help. In particular:

- to what extent can the Canterbury labour market respond to the increased demand for labour and skills from the rebuild work?
- are there people at risk of missing out on employment opportunities associated with the rebuilding of Canterbury?

In addition, the research will monitor the impact of the rebuild in Canterbury across the rest of the country, as well as in competing industries within the Canterbury region (such as agriculture and manufacturing). This work will include:

- monitoring the construction industry across New Zealand using labour market and economic statistics, and
- liaising with the construction industry and competing industries to identify peaks in labour demand within Canterbury and across New Zealand.

Outline

Pages 9 - 14 of this report focuses on the performance of the Canterbury economy and the labour market, as measured by the Household Labour Force Survey (HLFS) and unemployment beneficiary figures.

Pages 28 - 33 looks at labour demand, as revealed in Jobs Online and by vacancies at Work and Income offices.

Pages 34 - 38 provides the results of the Department and Canterbury Development Corporation's earthquake labour demand modelling programme, outlining demand for construction-related, supporting, and indirect jobs related to the rebuild.

Pages 39 - 42 reveals employment opportunities and broader labour market issues across the Canterbury region.

Finally, pages 43 - 46 presents a range of issues and challenges facing the Canterbury labour market.

Current Canterbury Economic and Labour Market Performance

Key points:

- The Christchurch and Canterbury economies are currently recovering from two major events: the economic recession and the Canterbury earthquakes. The full economic impacts from both events are still emerging. However, many key indicators suggest resilience.
- Some industries, such as accommodation, retail trade, and agriculture, have experienced a significant decrease in the number of employees.
- Other industries, especially manufacturing and agriculture, are likely to see long-term growth. The construction industry will experience significant increases as the rebuild gains pace.
- There is evidence of people moving outside of the region, with the Canterbury working age population (people aged 15 years and over) having decreased by 13,500 people, or 2.7%, in the year to September 2011. The number of people in the prime working age group (25—54 years) declined by 17,700, or 6.8%.
- In the year to September 2011, total employment in Canterbury decreased by 8.0% or 26,800 workers. Regional unemployment grew by 900 people (or 5.3%) the over the same period, with the unemployment rate increasing from 4.8% to 5.5%.
- Since the 22 February 2011 earthquake, the number of unemployment beneficiaries rose from 5,500 on 18 February 2011 to a peak of 6,300 in late April 2011. The number of unemployment beneficiaries has been in decline since early July 2011. Young people aged 18—24 years accounted for a disproportionately high share of new unemployment benefit registrations.

Canterbury is New Zealand's second largest region in terms of population. To understand its labour market, this report examines Canterbury's broader economic performance. Measures such as regional GDP, migration patterns, and current retail, tourism, and construction activity reveal much about how Canterbury is recovering.

The second part of this section examines official labour force measures such as unemployment and participation rates. This tells us how efficiently the labour market is performing. Looking at those registered on unemployment benefits also indicates the size of the potential pool of workers available to help with the rebuild or other work.

This section ends with a detailed examination of two key sectors, manufacturing and agriculture, to see how each is performing and the future opportunities and challenges each face. Both of these industries are large employers and significant contributors to the Canterbury economy.

Table 1: Population distribution in Canterbury and New Zealand by age, June 2010

Age group (years)	0—14	15—24	25—39	40—64	65+	Total
Canterbury (No.)	107,200	81,170	105,870	189,100	82,300	565,700
Canterbury (%)	18.9	14.3	18.7	33.4	14.5	100
New Zealand (%)	20.5	14.6	19.7	32.2	13.0	100

Source: Statistics New Zealand

The Canterbury population

Canterbury was home to an estimated 565,700 people in June 2010 (see Table 1). Canterbury has a similar population distribution to the overall New Zealand population, with slightly fewer children aged 14 years or younger (18.9% compared with 20.5%) and slightly more people aged 65 or over.

Qualification level

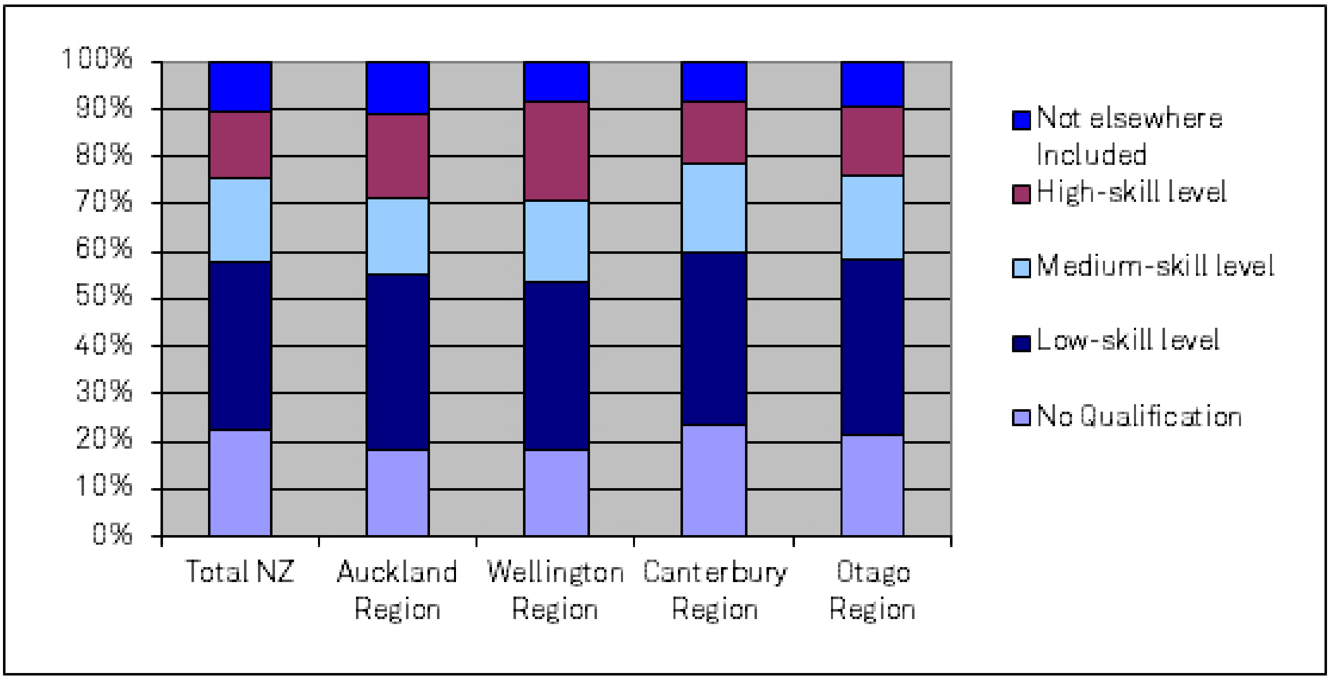
A large number of people in the Canterbury region have low-level or no qualifications (see Chart 1).

According to the 2006 Census, one in five people in Christchurch (21.4%) were without formal qualifications. Christchurch trailed behind Auckland (13.4%) and Wellington (10.5%). For the Canterbury region as a whole, 70,842 people (23.5%) aged between 15 and 64 years had no formal qualification. This was similar to the national population of 22.4%.

Canterbury had a smaller proportion of people with a degree or higher qualification than the rest of the country (13.1% and 14.2%, respectively). Again, Christchurch performed slightly better, with 15.3% of residents aged over 15 years having a degree level qualification or higher, but trailed behind Auckland (26.1%) and Wellington (32.9%). This is in part due to the concentration of head offices in Auckland and central government in Wellington.

For Christchurch in particular, future growth based on ICT, business services, and specialised manufacturing will require more degree holders. Christchurch trails behind Auckland and Wellington in terms of the proportion of its workforce employed in non-government knowledge-intensive sectors.

Chart 1: Highest qualification of Canterbury and selected populations[10], 2006



Source: 2006 Census of Population and Dwellings, Statistics New Zealand.

Employment by industry

Canterbury's workforce mirrors the national workforce, with the largest industries in terms of employment being manufacturing (12.7%) of all workers), health care and social assistance (10.0%), and education and training (9.4%) – see Table 2. However, Canterbury has slightly lower employment in key knowledge-intensive industries, such as the information media and telecommunications industry and the professional, scientific, and technical services industry.

[10] High-skill level is defined as a bachelor or post graduate degree. Medium-skill comprises Level 3 certificate gained post school, Level 5 diploma, and Level 6 diploma. Low-skill is defined as either no qualification or equal to or below a Level 3 certificate gained post-school.

Table 2: Employment by industry, September 2011

Industry	New Zealand (%)	Canterbury (%)
Agriculture, Forestry and Fishing	6.7	7.4
Mining, Electricity, Gas, Water and Waste Services	1.1	0.6
Manufacturing	11.1	12.7
Construction	7.9	9.6
Wholesale Trade	4.9	5.2
Retail Trade	9.4	9.4
Accommodation and Food Services	5.3	4.8
Transport, Postal and Warehousing	4.3	4.6
Information Media and Telecommunications	2.0	1.0
Financial and Insurance Services	3.1	2.5
Rental, Hiring, and Real Estate Services	1.8	1.4
Professional, Scientific, and Technical Services	7.8	7.5
Administrative and Support Services	3.1	3.6
Public Administration and Safety	5.7	4.9
Education and Training	9.3	9.4
Health Care and Social Assistance	10.5	10.0
Arts and Recreation Services	1.7	1.2
Other Services	4.1	4.0
Total Employed	100	100

Source: Household Labour Force Survey, Statistics New Zealand.

The performance of the Canterbury economy

The Christchurch and Canterbury economies are currently recovering from two major events: the economic recession and the Canterbury earthquakes. The full impacts of both events are still emerging, and continuing uncertainty in global financial markets means that the downturn in economic activity may not be over. Some industries, such as hospitality, have seen an immediate downturn in activity following the earthquakes, with a significant decrease in the number of employees in retail and accommodation. However, other industries, especially construction, are likely to experience long-term growth, with significant increases in construction as the rebuild gains pace.

Estimated Gross Domestic Product

Infometrics' estimates of regional GDP show Canterbury following a similar growth pattern to the rest of the country prior to the earthquakes, with the regional economy entering into a recession between late 2008 and early 2009. However, the impact of the earthquakes has meant that annual GDP in the region fell by 1.3% in the year to June 2011. The decline was higher in Christchurch, with a 1.8% decrease.

[11] Infometrics is a Wellington based economic consultancy company that produces estimates of regional GDP. There are no official statistics on regional GDP produced by Statistics New Zealand.

The New Zealand Institute of Economic Research (NZIER)[12] suggests that a significant fall in GDP has occurred in the region in the past year, around a 5—7% decline. This has been partially offset by strength elsewhere in the country.

The National Bank estimates[13], however, present a more positive picture of the regional economy. It estimates 1.8% growth in regional economic activity in the September 2011 quarter. Activity is likely to have been boosted by relatively strong commodity prices and high retail activity.

These provisional results suggest there is significant uncertainty around the performance of the Canterbury economy. This is partially due to lack of data and the unprecedented, and therefore largely unknown, impact of the earthquakes. Regional estimates of GDP are always problematic. More will be known of the performance of the region in the future as additional information becomes available.

Commodity prices

With the relative strength of the agricultural sector in Canterbury, fluctuations in commodity prices have direct impacts on the sector and the wider regional economy. Commodity prices began to improve after falling through much of the recession, but have since begun to decline slightly. Dairy prices, which reached lows of 169.7 in February 2009, and nearly doubled to 312.9 in August 2011 (indexed, Jan 1986=100), have since fallen back to 296.0 in October 2011.

The New Zealand dollar price index, which measures commodity prices in New Zealand dollars, did not fall as strongly in October 2011 due to the fall in the New Zealand dollar. Increased concerns about the global economy, triggered by the level of crown debt in many European countries and the slowing US economy, has led to the risk appetite of investors decreasing. This has resulted in a fall in the New Zealand dollar and has kept the NZD price index at 199.1 in October 2011 (July 1986=100); which is still well below the 225.6 in March 2011, but higher than the recessionary lows of 155.1 in June 2009.

The relatively high New Zealand dollar means that some of the benefit of the high commodity prices is being eroded. The Canterbury farming sector has seen strong growth, yet exporters who have not seen the same increase in their prices will suffer with the higher dollar. Manufacturers in Christchurch are especially sensitive to a high New Zealand dollar and the Commodity Price Index shows that horticultural product prices have not seen the same rise as other agricultural products. Conversely, the cost of imported components should have reduced.

Retail sales

Seasonally adjusted September 2011 quarterly retail sales in Canterbury held up well, increasing by 3.8%. This compares with a 2.1% increase nationally and follows a 2.7% increase in Canterbury between the March and June 2011 quarters. Some retail sub-sectors will be suffering, but it appears that retail spending has been largely redistributed around the region. Retail sales in Christchurch will also be boosted as damaged fixtures and fittings are replaced and as new shopping precincts begin to open.

Guest Nights

The hospitality sector has been particularly hard hit by recent events. In September 2011, there were 265,000 guest nights in Canterbury, down from 269,000 in August and 361,000 the previous September. The proportion of the country's guest nights spent in the region has fallen from 17% in September 2010 to 12% in September 2011. There were also significantly fewer international visitors; in September 2010 international visitors made up 41% of visitors to the region, in September 2011 this had fallen to 35%. This drop in international visitors has a huge flow-on effect for tourism activity providers. International visitors spend more money in Christchurch than domestic visitors, especially on attractions.

[12] NZIER Insight: Canterbury after the earthquakes, 4 November 2011.
[13] National Bank: Regional Trends, Economics, November 2011.

With visitor numbers down and some accommodation damaged, restaurants, bars, and activity providers are experiencing a downturn in business. This has already been reflected in employment figures, with a 12,600 decrease in people working in the retail and accommodation industries over the year to September 2011. However, the Christchurch accommodation sector, specifically motels, has benefitted marginally from increased demand from workers outside the region and local families displaced by the earthquakes.

Construction

Since the earthquakes, building activity in the region has picked up. In the second quarter of 2011, residential building activity rose by 1.1% and non-residential building rose by 35%. The number of new building consents in Canterbury dropped in September 2011, after very high August 2011 levels. There were 220 residential units authorised in September 2011, down from the 316 in August but up from 196 in September 2010.

Notably, building consents identified as being earthquake-related totalled $29 million in September 2011, compared with $20 million in August 2011. Since September 2010, about 580 earthquake-related consents have been identified, totalling $157 million. This includes 194 new dwellings.

Because of on-going insurance issues and potential skills shortages, some of this growth in building consents may take time to translate into actual building activity.

How many people have left?

It is difficult to accurately measure how many people have left the region since September 2010. Surveys or administrative data, such as school enrolments, capture different information. However, each source suggests that people have left the region as a result of the earthquakes.

Statistics New Zealand's HLFS estimates that the Canterbury working age population (people aged 15 years or over) fell by 13,500 people, or 2.7%, to 489,300 in the year to September 2011. Notably, those of prime working age (25 —54 years) declined by 17,700, or 6.8%, balanced by an increase in workers aged over 55 years . The declining working age population has implications for skills shortages in the region, and has contributed to declining labour force participation.

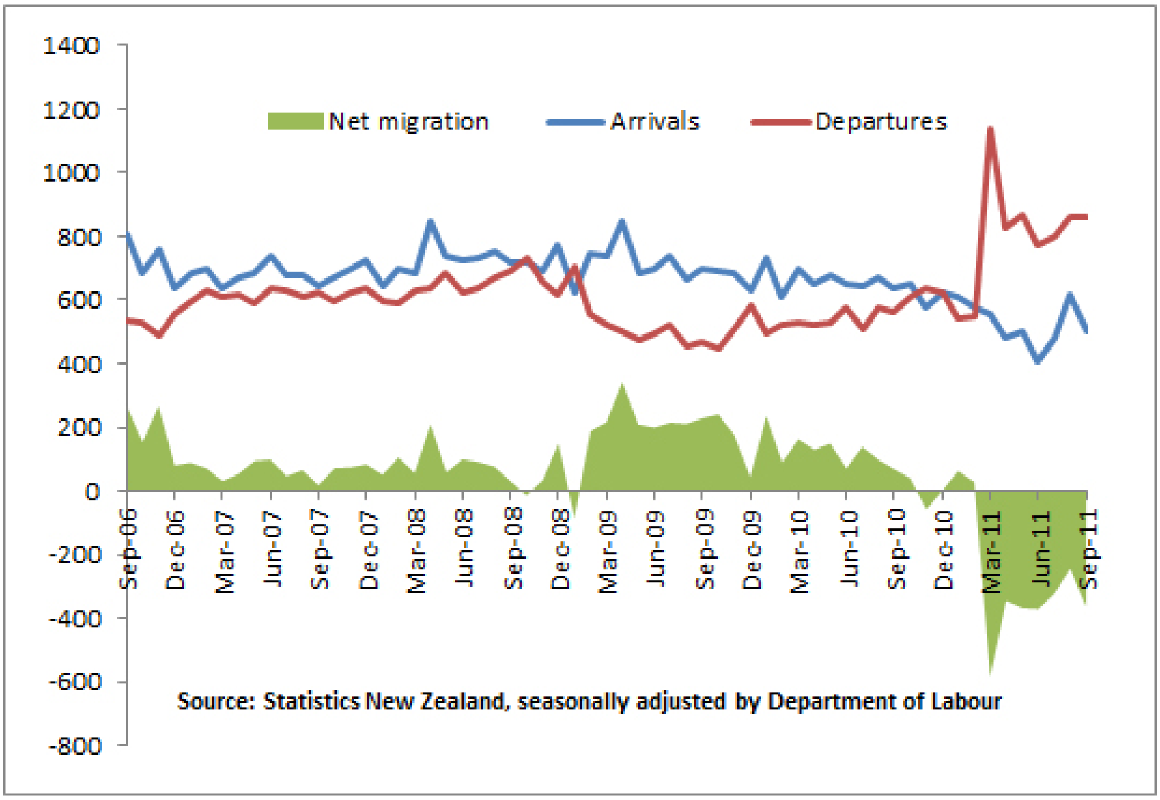
The September 2011 quarter HLFS also indicates that 23,500 people had moved addresses as a result of the 22 February 2011 earthquake. Of these, 17,100 remained within Canterbury and 6,400 moved elsewhere. Of those who remained in the region, 3,100 intended to return to their pre-earthquake address.

Seasonally adjusted migration figures compiled by Statistics New Zealand showed 860 permanent and long-term (PLT) departures and 500 PLT arrivals in the Christchurch area (Christchurch city, Selwyn district, and Waimakariri district), resulting in a net outflow of 360 people in September 2011 (see Chart 2). Monthly net migration has been negative since March 2011, following the 22 February 2011 earthquake. Fewer international people are relocating to Christchurch and the wider region, and more people are choosing to leave. On-going seismic activity is likely to further influence population movements into and out of the city and wider region, and as the pace of the rebuild picks up this could further exacerbate skills shortages.

Although fewer people left greater Christchurch in September 2011 compared with March 2011 (down by 280), the number of people leaving is still high and above the five-year average (600 people). Nevertheless, the number of people arriving increased over the past three months after reaching a five-year low of 400 in June. In September 2011, there was a net outflow of 470 New Zealand citizens and a net inflow of 100 non-New Zealand citizens.

[14] HLFS, Statistics New Zealand.
[15] Seasonally adjusted by the Department of Labour. The numbers are rounded to the nearest 10.

Chart 2: Greater Christchurch area permanent and long-term migration (seasonally adjusted), 2006—2011



Statistics New Zealand's subnational population estimates for the year to June 2011[16] reveal that the total population of Christchurch City decreased by 8,900 (2.4%), while the whole of Canterbury population decreased by 5,000 (0.9%). This means that the rest of Canterbury, outside of Christchurch, grew by 3,900 people, which reinforces claims of sub-regional economic growth as outlined in Sub-Regional Opportunities. Of those who have left Christchurch City most were aged under 40 years, with a decrease in the under 14 years population of 6.9% and a 3.8% fall in people aged 15 to 39 years.

Current Canterbury labour market measures

The September 2011 quarter HLFS results are the latest official data on the health of the Canterbury labour market[17]. This section focuses on changes in employment, labour force participation, unemployment, and young people Not in Employment, Education, or Training (NEET), and ends with a discussion of the labour market impacts on women and youth. Due to the small samples involved, a robust analysis of Maori and Pacific labour market performance in Canterbury was not possible.

Employment

Nationally, employment increased by 1.1% in the year to September 2011, while employment in the Canterbury region decreased by 8.0%, or 26,800 people.

[16] For more see, http://www.stats.govt.nz/~/media/Statistics/Browse%20for%20stats/SubnationalPopulationEstimates/HOTPJun11/SubnationalPopulation-EstimatesJun11HOTP.pdf
[17] For statistical reasons, such as a limited sampling of Canterbury residents in the March 2011 HLFS, comparisons of Canterbury data from quarter-to-quarter are not provided. Instead, comparisons of June 2011 with June 2010 are shown.

Employment growth in the Canterbury region had been slow in late 2010, but had looked set to recover prior to the September 2010 earthquake.

While employment growth was hampered by the September earthquake, the February 2011 earthquake caused much more disruption and led to greater job losses.

Table 3 reveals that a disproportionate share of the fall in Canterbury employment was among those aged 15—24 years. Young people have been hit hard, in part due to the large numbers employed in the accommodation and retail industries, and the vulnerability of these industries in times of labour market downturn. There was a greater decline in the number of people aged 25—54 years who were employed, but this was a considerably lower percentage decrease than for young people. Employment in the 55 years-or-over age group grew by 3,400, in line with the trend of recent years.

There were particularly large falls in employment in the accommodation industry (down 8,300 workers) and the retail trade (down 4,300).This is likely to reflect the extensive damage to the centre of Christchurch.

The construction industry has shown the most growth in the year, up 4,500 workers, ahead of public administration and safety (up 1,600) and administration and support services (up 1,000).

Table 3: Changes in employment by age group in the year to September 2011

Age group	Change (No.)	Change (%)
15—24 years	-11,100	-22.0%
25—54 years	-19,300	-9.0%
55 years or over	3,400	4.8%
Total all ages	-26,800	-8.0%

Source: Statistics New Zealand, Household Labour Force Survey

Industry comparisons with the rest of New Zealand

The damage and disruption of the recent earthquakes has had differing impacts across key industries in the year to September 2011, as shown in Table 4:

- **Agriculture, forestry and fishing** – Canterbury experienced a 13.3% employment contraction in this sector compared with static growth in the rest of New Zealand, excluding Canterbury. However, industry insiders have confidence in current and future performance, as outlined in the Agriculture section later in this chapter.
- **Retail trade** – employment fell more sharply in the retail sector in Canterbury (down 12.9%) compared with the rest of New Zealand (up 0.2%), reflecting the traditional concentration of retail activity in central city locations.
- **Accommodation and Food Services** – hospitality experienced an even greater absolute and relative loss of jobs, down by 35.9% compared with a 2.6% increase across the rest of New Zealand. Again, this reflects the damage to Christchurch's CBD. Both hospitality and the retail trade have a high share of young, part-time, and female employment.
- **Construction** – employment in the Canterbury construction industry has grown strongly (up 18.0%) in contrast to a decline in the rest of New Zealand (down 3.1%). This suggests that the rebuild is already having an impact on employment demand within the Canterbury construction sector.
- **Manufacturing** – employment in the Canterbury manufacturing sector declined by 1.0%, compared with static growth for the rest of New Zealand (up 0.1%). Qualitative evidence presented as outlined in the Manufacturing section later in this chapter suggests the manufacturing industry has proven resilient in the aftermath of the 22 February 2011 earthquake and is well positioned for future growth.

Table 4: Employment in Canterbury and the rest of New Zealand by industry, September 2011

	Canterbury	Rest of New Zealand	Canterbury	Rest of New Zealand
Industry	**Number (000)**		**Annual % change**	
Agriculture, Forestry and Fishing	22.8	124.9	-13.3	0.2
Mining Electricity Gas Water and Waste Services	2	21.6	-47.4	-1.4
Manufacturing	39.2	205.6	-1.0	0.1
Construction	29.5	144.2	18.0	-3.1
Wholesale Trade	15.9	92.5	-10.2	6.9
Retail Trade	29.1	178.7	-12.9	0.2
Accommodation and Food Services	14.8	102.3	-35.9	2.6
Transport Postal and Warehousing	14.3	81.5	-9.5	3.6
Information Media and Telecommunications	3.2	41.5	-44.8	9.5
Financial and Insurance Services	7.7	60.3	-8.3	13.8
Rental, Hiring and Real Estate Services	4.4	34.7	-44.3	15.3
Professional Scientific and Technical Services	23	149.5	-7.6	-0.5
Administrative and Support Services	11	57	10.0	8.2
Public Administration and Safety	15.1	110.6	11.9	0.7
Education and Training	29.1	176.1	-7.6	7.6
Health Care and Social Assistance	30.8	199.8	3.0	5.0
Arts and Recreation Services	3.6	33.7	-29.4	7.7
Other Services	12.4	77.5	-4.6	0.5
Total Employed (incl. not elsewhere included)	308.4	1897.9	-8.0	2.8

Source: Statistics New Zealand, Household Labour Force Survey

Table 5: Labour force participation by age group in the year to September 2011

Age group	September 2011 Rate	Change in participation rate: Sept 2010–Sept 2011
15—24 years	53.7	-9.6
25—54 years	84.4	-1.1
55 years or over	47.1	-0.6
Total all ages	66.7	-3.3

Source: Statistics New Zealand, Household Labour Force Survey

Hours worked

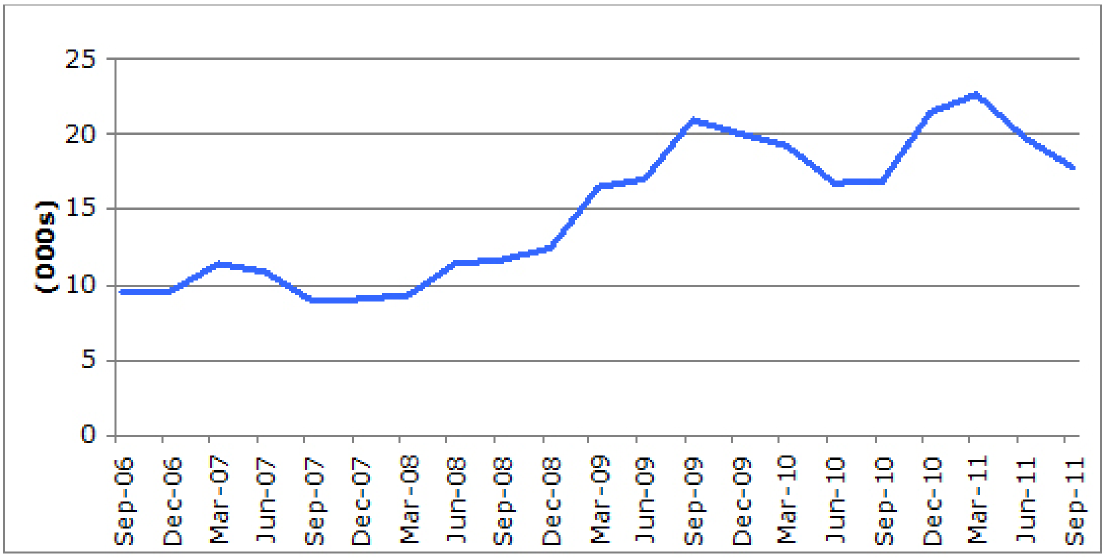
The September 2011 quarter HLFS also reveals that of those living in Canterbury at the time of the 22 February 2011 earthquake, an estimated 2,100 people (some 3.6%) did not work their usual hours as a result of the earthquake. Furthermore, some 4,300 people (or 5.8%) left their jobs due to the earthquake.

Labour force participation

The labour force participation rate is another way of assessing the health of a labour market. It indicates how many people are working or actively looking for work. Those not participating include the retired and students who are not working or looking for work. In the year to September 2011, the Canterbury labour force participation rate fell by 3.3 percentage points from 70.0% in September 2010 to 66.7% in September 2011. This compares with a modest increase in the labour force participation rate nationally, from 68.3% to 68.4%.

Over the year to September 2011, the Canterbury labour force participation rate for young people dropped by 9.6 percentage points (see Table 5). Similarly, there was a fall in the participation rate for prime-age people (down 1.1 percentage points), which was above the fall for those aged over 55 years (down -0.6%). It is likely that participation for prime working age people has dropped since the earthquakes due to such factors as changed family commitments, particularly parents caring for children from home.

Chart 3: Unemployment in Canterbury, 2006—2011



Source: Statistics New Zealand, Household Labour Force Survey

Unemployment

Unemployment[18] in Canterbury doubled between early-2008 and late-2009, due to the recession, before beginning to slowly recover. This recovery was interrupted by the earthquakes, with unemployment again increasing throughout late-2010 and early-2011 (see Chart 3).

Recent decreases in the working age population and falling labour force participation have meant that large falls in employment have resulted in a smaller than anticipated rise in unemployment. Over the year to September 2011, the number of unemployed people in Canterbury increased by 5.3% (900 people), compared with an increase of 4.7% nationally. The unemployment rate for the Canterbury region increased from 4.8% to 5.5% over this time.

Unemployment decreased by 1,200 over the past year for Canterbury young people. This is linked to the large drop in the working population in this age group. In the prime working age group, unemployment grew by 1,300. For those aged 55 years or over, unemployment increased by 800. (see Table 6).

Table 6: Changes in unemployment by age group in the year to September 2011

Age group	Change (No.)	Change (%)
15—24 years	-1,200	-16.2
25—54 years	1,300	17.1
55 years and over	800	42.1
Total all ages	900	5.3

Source: Statistics New Zealand, Household Labour Force Survey

[18] Unemployment, as defined in the HLFS, should not be confused with Unemployment Benefit statistics as they are quite different measures, with the HLFS the official measure of unemployment. Not all people defined as unemployed in the HLFS (that is, those who are actively looking for work) register for Unemployment Benefits.

What has been the labour market impact on Canterbury women?

Female employment in the year to September 2011 fell by 19,100 (or 12.2%), from 156,000 to 136,900. This was a larger decline than the 4.3% fall for male employment. Female employment was down 32.6% in retail trade and accommodation, and 16.7% in education and training. However, female employment held up in health care and social assistance.

In the year to September 2011, female unemployment increased by 700 to 9,800 and the unemployment rate increased from 5.5% to 6.7%. Male unemployment grew from 7,800 to 8,000, and the unemployment rate increased from 4.2% to 4.5%.

The labour force participation rate for females fell from 64.5% to 59.2% in the year to September 2011, which is a greater fall than experienced by males (75.8% to 74.3%). The number of women not in the labour force who are participating in formal study decreased from 9,500 to 7,900. This suggests that only a small proportion of women are leaving the labour force to study.

There was an increase in the number of women available for, but not actively, seeking work from 5,600 to 6,500 over the year to September 2011. Damage to a number of childcare facilities around Canterbury is likely to be limiting the availability of some women for work. This increase may also indicate perceptions of a lack of job opportunities in male-oriented industries, such as construction.

What has been the labour market impact on Canterbury young people?

Employment among those aged 15—24 years in Canterbury has fallen by 11,100 in the year to September 2011. Declining employment as a result of earthquake damage in industries in which young people have traditionally been over-represented, such as retail and hospitality, is likely to have driven the fall. This means the Canterbury young people's employment rate fell 8.6 percentage points to 46.5%. This is a significantly larger drop than the 0.3 percentage points for young people's employment nationally.

The number of Canterbury young people who are unemployed has fallen by 1,200 over the last year. This is largely because young people have left the region or because 5,700 young people have left the labour force. The Canterbury young people's unemployment rate increased by 0.7 percentage points to 13.6% over this time, while the national young people's unemployment rate (16.2% in September 2011) remained reasonably stable.

The Canterbury young people's labour force participation rate dropped significantly (by 9.6 percentage points) over the last year to 53.7%, while the national rate (58.4% in September 2011) remained quite static. The fall in Canterbury participation may indicate that many young people have been discouraged from the labour market or have left the region in search of study and work opportunities.

There were an estimated 7,700 NEET young people in Canterbury in September 2011, down by 400 on the same time last year. However, the number of NEET young people without childcare or other home duties has risen by 1,100 over the year. The Canterbury NEET rate of 9.0% did increase slightly over the last year, but it too remains below the national rate of 11.7%.

When compared against the total Canterbury population, young people's employment in Canterbury has fallen 22%, compared with a fall in employment for the total Canterbury population of 8%. The young people's unemployment rate in Canterbury (13.6%) is over twice that of the total region's population (5.5%).

Table 7: Select labour market indicators for Canterbury and the rest of New Zealand, in the year to September 2011

	Canterbury	Rest of New Zealand	Canterbury	Rest of New Zealand
	September 2011 Quarter		Annual percentage change (Sep 10 - Sep 11)	
Employment rate				
15-24 years	46.5%	49.3%	-15.6%	2.2%
25-54 years	80.7%	80.1%	-2.3%	0.5%
55+	45.5%	44.5%	-2.2%	2.6%
All ages	63.0%	63.7%	-5.5%	1.0%
Participation rate				
15-24 years	53.7%	59.1%	-15.2%	1.9%
25-54 years	84.4%	84.5%	-1.3%	1.0%
55+	47.1%	45.6%	-1.3%	1.7%
All ages	66.7%	68.2%	-4.7%	1.2%
Unemployment rate				
15-24 years	13.6%	16.6%	5.4%	-1.5%
25-54 years	4.4%	5.3%	29.4%	9.2%
55+	3.5%	2.6%	34.6%	-24.6%
All ages	5.5%	6.6%	14.6%	1.6%
Employment rate				
Male	71.0%	69.5%	-2.2%	0.0%
Female	55.2%	58.3%	-9.4%	2.2%
Participation rate				
Male	74.3%	74.2%	-2.0%	0.5%
Female	59.2%	62.6%	-8.2%	1.9%
Unemployment rate				
Male	4.5%	6.4%	7.1%	8.0%
Female	6.7%	6.8%	21.8%	-4.3%

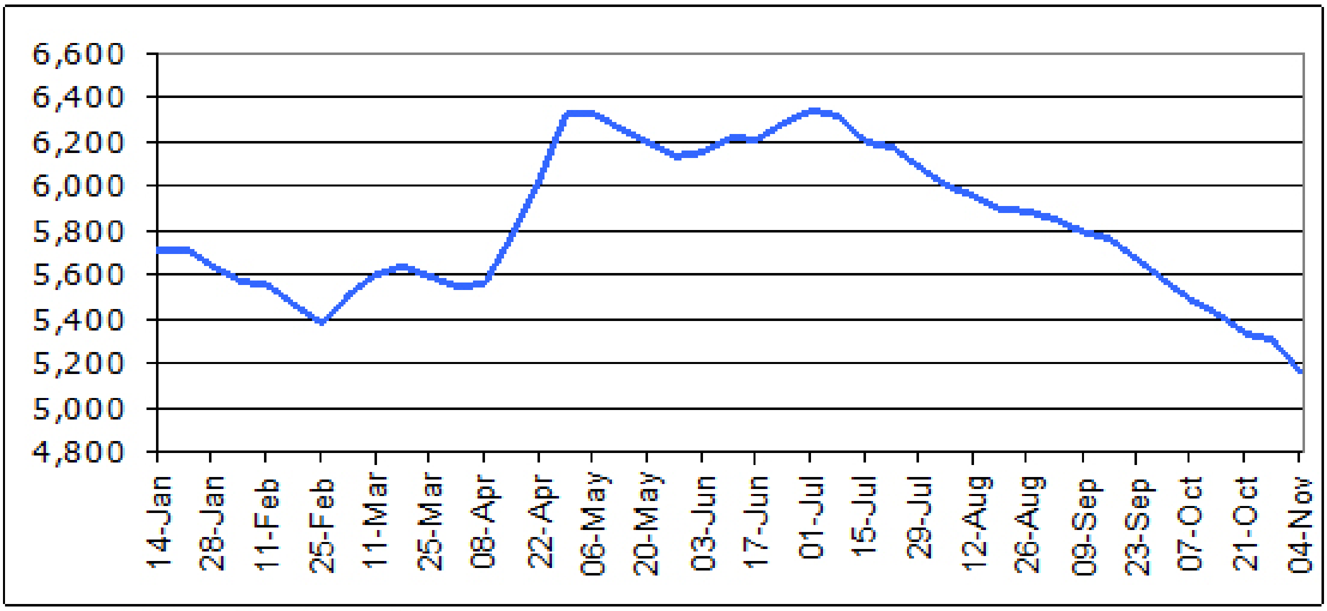
Source: Statistics New Zealand, Household Labour Force Survey

Comparing Canterbury with the rest of New Zealand

Table 7 indicates that in Canterbury young people and women have been particularly impacted by the earthquakes, with falls in employment and participation rates, and increased unemployment rates. All three rates went against the trend seen over the year to September 2011 in the rest of New Zealand.

Canterbury men have been less affected than women, with an unemployment rate well below that of men in the rest of the country. The Canterbury male unemployment rate decreased marginally over the year. For both females and males, the Canterbury employment and participation rates are very similar to rates seen elsewhere in New Zealand, although these have slightly worsened over the last year.

Chart 4: Canterbury Unemployment Benefit registrations, 2011



Source: Ministry of Social Development.

Canterbury beneficiaries

Information about people who are receiving unemployment benefits[19] or other benefits informs our understanding of the potential supply of labour for those industries and occupations expected to grow in the coming years. This section focuses on people who are receiving unemployment benefits in Canterbury[20], including demographic characteristics and previous work histories. It concludes by examining new grants of the unemployment benefit and the types of jobs these beneficiaries are looking for.

Since the 22 February 2011 earthquake, the number of unemployment beneficiaries rose from 5,500 on 18 February (the closest data to the 22 February earthquake), to 6,300 in late April 2011, as shown in Chart 4. However, the number of unemployment beneficiaries in Canterbury has been in decline since early July 2011 and is lower than expected. The number at the end of October 2011 was 5,300.

Since 18 February 2011, the number of people on each of the sickness, domestic purposes, and invalids benefits has declined in the region. Some of these people will have left Canterbury.

[19] Includes the Unemployment Benefit and Unemployment Benefit Hardship. For more information on MSD data, see Appendix 1.
[20] Note that the definition of 'Canterbury' used in this section is based on MSD's own administrative region, and is not the Canterbury Regional Council area used in other data publications produced by the Department.

Table 8: Canterbury unemployment beneficiaries, September 2011

	Current benefits		New grants (April-September 2011)	
	No.	%	No.	%
Male	3,696	66	3,482	63
Female	1,870	34	2,064	37
Māori	946	17	927	17
Pacific people	206	4	161	3
18—24 years	1,937	35	2,488	45
25—39 years	1,636	29	1,525	27
40—54 years	1336	24	1,084	20
55—64 years	651	12	449	8
Total	5,566	-	5,546	-

Source: Ministry of Social Development.

Existing Canterbury unemployment beneficiaries

Table 8 shows that in Canterbury those receiving unemployment benefits were:

- Two-thirds male (66%), this is consistent with the national proportion of 71% male.
- 17% Maori and 4% Pacific peoples.
- 35% young people aged 18—24 years (compared with 28% nationally) and 29% aged 25–39 years

New Canterbury unemployment beneficiaries

In the period between April and September 2011 (i.e. post-earthquakes)[21], new grants of unemployment benefit mostly reflected the current distribution of unemployment beneficiaries, with males accounting for almost two-thirds (63%) of the 5,546 new registrations. The exception to this was for young people aged 18—24 years[22], who accounted for 45% of new grants, compared with 25% of current beneficiaries.

As shown in Table 9, 40% of Canterbury people granted an unemployment benefit between April and September 2011 had not been recently employed. Out of the new Canterbury unemployment beneficiaries, 27% had previously been service workers (compared with 20% nationally), while 6% were previously sales workers. People who had previously worked in lower-skilled jobs were over-represented among new unemployment benefit grants.

[21] The Earthquake Support Subsidy, which helped keep workers employed, was still operating for part of this quarter, before ending in May 2011.
[22] Young people are defined in this discussion on unemployment beneficiaries as people aged 18-24 years. This is because 16 and 17 year-olds are generally ineligible for the unemployment benefit

Table 9: New people granted an unemployment benefit by previous occupation, April—September 2011

Previous Occupation	Canterbury		National	
	No.	%	No.	%
Not recently employed *	2,206	40	20,713	36
Service workers	1,493	27	11,375	20
Sales workers	327	6	2,766	5
Agricultural, forestry workers, fishermen and hunters	283	5	5,087	9
Never employed	257	5	4,318	8
Professional, technical and related workers	236	4	1,725	3
Skilled production and related workers, transport, and equipment operators	210	4	3,416	6
Unskilled production and related workers, transport, equipment operators, and labourers	197	4	2,332	4
Unspecified	123	2	1,964	3
Administration and management workers	75	1	1,136	2
Clerical and related workers	71	1	455	1
Freezing workers	68	1	2,286	4
Grand Total	5,546	-	57,573	-

Source: Ministry of Social Development. Note: Examples of jobs within the service worker category are waiters, petrol station forecourt attendants, and hairdressers[23].

*Includes people transferred from other benefits or from ACC.

Prospects in key industries

This report shows that the earthquakes have had considerable impact on a number of industries within Canterbury. It is useful to examine two key sectors, manufacturing and agriculture, in more detail to see how each is performing and the future opportunities and challenges each face. Both industries are large employers and significant contributors to the Canterbury economy. Around one-third of manufacturing in Canterbury is primary sector manufacturing (e.g. food processing) and nearly all New Zealand's primary sector exporting is done via the manufacturing sector, so the performance of agriculture has a significant bearing on manufacturing prosperity.

[23] The table is for working age peoples aged 18-64 years.

The information contained in this section is based largely on interviews with key industry figures[24].

Manufacturing

The manufacturing industry is Canterbury's largest employer, employing 39,200 people in September 2011, 12.7% of Canterbury's workforce[25]. The region also has the second largest manufacturing sector in New Zealand. As well as agricultural processing, the region is home to some world-renowned niche exporters, such as Tait Electronics, Hamilton Jet, Mace Engineering, and A.W. Fraser, with other highly successful local businesses producing items ranging from communication devices to plastic goods.

Notably, Canterbury manufacturing is proving fairly resilient in terms of continued output in the aftermath of the earthquakes, despite significant job losses (4,800, or 11%, over the year to June 2011). Following the 22 February 2011 earthquake, the industry was back up and running quickly. There was little manufacturing within Christchurch's CBD before the earthquakes, and manufacturing businesses in the city's north and west were relatively unaffected. While businesses towards the south and east of the city experienced the greatest impact, many of these have proved the most resilient. Initiatives such as the New Zealand Trade and Enterprise Market Connections Grants have helped affected manufacturers to travel offshore and get in front of key customers, distributors, and suppliers to let them know that they were up and operating normally.

The rebuild will lead to employment opportunities, but training challenges.

The largest boost to the manufacturing sector over the next decade is likely to come from the earthquake rebuild. In the short-term, the greatest prospects are for "anything building", including building supplies, woodwork, joinery, and metal fabrication production. Many local manufacturing companies are already active producers of much of the steel work (such as beams and piles), roofing, windows, piping, and furnishings. However, there is a risk that manufacturing could lose workers to construction, as the manufacturing sector has historically been the largest source of workers entering the construction sector[26]. It is also unknown whether the local manufacturing industry has the capacity to cope with the demand related to the rebuild.

Key industry leaders have noted that the rebuild offers the opportunity to strengthen the manufacturing base of Canterbury and New Zealand as a whole, with one spokesperson predicting that over 3,000 manufacturing jobs could be created – almost 10% growth in the manufacturing workforce. While such a large increase may be optimistic, increased employment opportunities in manufacturing will boost the demand for training in the education sector, as well as having a positive knock-on (multiplier) effect for other local businesses. However, the level of training in the sector has decreased following the global financial crisis.

In some sub sectors of the industry, such as metal casting, the skills needed have not traditionally been available in New Zealand, which means workers have been brought in from overseas for some years. There is a concern that the rebuild will occur at a quicker rate than increases to the industry's local skill base, and this will mean fewer opportunities for local workers. The industry also lacks good marketing managers and skilled machine operators, with many having to be sourced from overseas.

[24] Views on manufacturing were gathered from John Walley, Chief Executive of the New Zealand Manufacturers' and Exporters' Association, and John Hamilton, Sector Manager Specialised Manufacturing and SMEs, CDC. Professor Caroline Saunders, Professor of Trade and Environment Economics, and Director of Agribusiness and Economic Research Unit at Lincoln University, and Jim Grennell, Sector Leader Agribusiness, CDC, provided their views on agriculture. Their views do not necessarily reflect those of employers.
[25] Statistics New Zealand, Household Labour Force Survey, June 2011 quarter.
[26] For more, see http://www.dol.govt.nz/publications/lmr/lm-adjustment-construction-industry/index.asp

The longer-term future is relatively optimistic, led by specialised exporting.

Much of what is manufactured in Canterbury is traditionally exported. This makes the sector particularly vulnerable to a high New Zealand dollar, global demand and economic conditions, and competition from some emerging, lower cost countries such as Vietnam.

Specialised production is generally regarded as the future for the manufacturing sector in New Zealand. The region is doing well at specialising, and Canterbury has become "the Silicon Valley of New Zealand" in terms of electronics. Precision engineering is doing well, with local businesses heavily involved in the production of engine, aircraft, and medical parts. Plastics and sheet metal manufacturing are also prominent locally.

Increasing demand for high-skilled workers.

While the manufacturing industry is forecast to grow in the future, the nature of its workforce is likely to change. The industry does not have as many low-skilled positions as previously, due largely to technological improvements. Fish processing, for instance, can now be done at sea. Many roles operating precision machinery now require computer skills. Cheaper production costs in other countries have also led to a reduction in roles for low-skilled workers. It is also proving a challenge to convince people to enter the industry, especially young people.

In some ways manufacturing is seen as a "forgotten industry", with few school leavers aware of the industry's potential and its career progression prospects. Increasingly, the manufacturing workforce of the future will see the number of people with a narrow, low-skill base decline. For many high-tech producers, specialised but transferrable skills, requiring tertiary qualifications, will increasingly become the norm.

Agriculture

Agriculture is an integral part of the Canterbury economy, and will remain so, well into the future. Natural advantages in terms of climate and soils mean the region is home to a wide variety of agriculture, including sheep, beef, dairy, crop, and seed production.

The agriculture, forestry, and fishing sector, which is dominated by agriculture, employed 22,800 people in September 2011, some 7.4% of Canterbury's workforce. While some farms close to the Darfield epicentre of the September 2010 earthquake did suffer damage to land and farm buildings, the industry has largely been unaffected. Short-term employment prospects are very good, with a demand for workers of all skill levels, particularly managers and farm hands.

Dairying has overtaken sheep farming on the Canterbury Plains and is increasing everywhere, including the Mackenzie District, which was previously considered an unsuitable dairying region. The dairying boom has led to significant demand for workers, but also anyone with practical skills who could acquire skills associated with milking, nutrition, and animal welfare. Such roles would be suitable for low-skilled workers or young people, and there are prospects for "instant jobs" for those interested. However, farmers have had trouble finding local workers, and this means many dairy farm workers, for instance, are sourced from overseas. Some farms are increasing their level of mechanisation in the absence of low-skilled workers.

[23] The table is for working age peoples aged 18-64 years.
[24] Views on manufacturing were gathered from John Walley, Chief Executive of the New Zealand Manufacturers' and Exporters' Association, and John Hamilton, Sector Manager Specialised Manufacturing and SMEs, CDC. Professor Caroline Saunders, Professor of Trade and Environment Economics, and Director of Agribusiness and Economic Research Unit at Lincoln University, and Jim Grennell, Sector Leader Agribusiness, CDC, provided their views on agriculture. Their views do not necessarily reflect those of employers.

The dairying boom has led to increased agricultural science research and innovations, spearheaded by Lincoln University, a leading employer in the Selwyn District. Farm support services, including irrigation, fertiliser, and companies offering monitoring services have also flourished. Business services have also benefitted, including consultants, researchers, software developers, specialist auditors, lawyers, and accountants.

A strong future led by dairying, with increased diversification.

Agriculture in Canterbury is not only about dairy farming. Sheep and beef farming are also doing well, aided largely by strong commodity prices, but both are likely to become less dominant. While dairying is likely to offer more job prospects, there is also a demand for workers with good managerial and practical skills, which are seen as quite transferable from one type of farming to another.

Seed production is worth an estimated $250m to the Canterbury economy, as the region is home to some of New Zealand's prime arable land. A lot of seed grown in the region is exported to the northern hemisphere. Much of this work is very specialised and highly-skilled in nature, with many workers having tertiary qualifications.

The prospects for Canterbury agriculture are closely linked with technology and irrigation. Bringing together agriculture with innovation in Canterbury's specialised manufacturing sector and ICT is where some see Canterbury's greatest potential economic growth. Major irrigation developments are underway across the region, with some expected to be operational within five years. These will principally see an extension of dairying, but also additional seed and fresh vegetable production. Major fresh vegetable companies have also noted an increasing demand for locally produced vegetables. Scientific innovations are likely to see significant growth in smaller sectors, such as seed multiplication. Such developments should lead to increased on-farm employment and employment in supporting businesses, and tertiary and research institutions that develop the technology.

Climate change could have an enormous impact on Canterbury agriculture. The South Island could end up supplying the bulk of exported dairy products. Prospects for seed production are also considered to be promising, and viticulture, kiwi fruit, and berry growing may also benefit.

The future farm workforce will be more skilled.

The nature of farming is changing and so is the nature of skills needed by the workforce. The proportion of low-skilled jobs has traditionally been high in agriculture compared to most other industries, but this may change in the future. For lower-skilled farm workers, the right attitude and 'soft skills' will always be important, but there will be increasing demands on them to increase their skill base, particularly basic computer skills. Farming is becoming more scientific, and there is also a movement towards sustainable farming. This means there will be a need for workers with computer skills for such tasks as planning fertiliser placement, irrigation, operating 'smart milking sheds', and other enabling technologies that enhance productivity. A greater understanding of policies relating to water use and animal welfare, for example, is also something the future farm worker will need.

Current Job Openings

Key points:

- While the rebuild is largely yet to begin, a number of jobs have already been created, including claim assessors and demolition and road repair workers. Media reports suggest business professionals such as lawyers and accountants have experienced increased demand.
- Within Canterbury, only the healthcare and medical industry experienced a growth in the number of advertised skilled vacancies between July and October 2011.
- However, Auckland and Wellington had larger falls in online job advertisements over this time.
- Following the earthquakes, the Canterbury region saw both high unemployment and high vacancy rates, indicating a labour market that is having difficulty readjusting.

While the rebuild is largely yet to begin, a number of jobs have already been created. A lot of these are associated with assessing Earthquake Commission (EQC) claims and demolition of buildings in Christchurch's CBD. An estimated 600 workers are repairing roads, a ten-fold increase.

Indirectly, a number of business professionals are seeing increased demand for their services, including law and accountancy firms. The New Zealand Institute of Chartered Accountants indicated that many of its members had hired additional staff, or were considering doing so, primarily to catch up on work delayed because of the earthquakes and assisting clients with insurance claims.

There are Canterbury job openings that are unrelated to the earthquakes. This section focuses on two sources of job vacancies: online job vacancies and those listed at Work and Income offices. Online job vacancies are an important indicator of labour demand, particularly for skilled workers. Work and Income vacancies also tell us much about demand for largely lower-skilled occupations.

Section three begins by examining trends in online skilled job advertisements within Canterbury, comparing trends in the region with New Zealand and outlining changes in vacancies across industries. A detailed examination of skilled vacancies within Canterbury is presented, with detailed industry and occupation breakdowns. This is followed by a discussion of the relationship between job vacancies and unemployment in the overall economy, which tells us a lot about how the labour market is adjusting. This section concludes by identifying Work and Income vacancies throughout the Canterbury region.

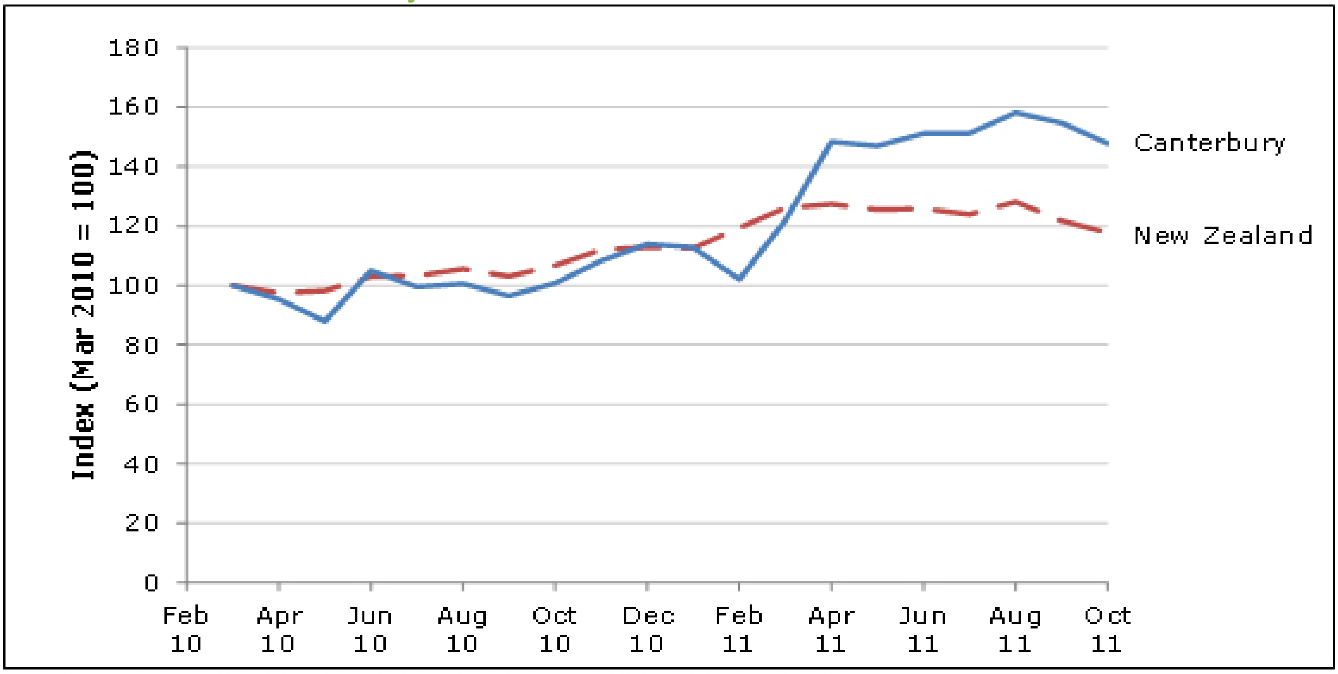
Jobs Online Vacancies

The Department's Jobs Online indicator tracks the number of vacancies advertised online by industry, occupation, and region. It provides a useful indication of where employment growth may be about to pick up in the short-term. However, it is important to note that higher-skilled positions are more likely to be advertised on internet job boards than lower-skilled vacancies.

Skilled vacancies in Canterbury

Between February and October 2011, growth in Canterbury online skilled job advertisements (up 44.9%) was significantly above the New Zealand rate (down .4%). Canterbury experienced a sharp drop in advertisements in February 2011, followed by a strong recovery. However, between July and October 2011 Canterbury decreased by 2.3%. This was less of a decrease than seen nationally over this time (down 5.0%), as shown in Chart 5.

Chart 5: Growth in online skilled job advertisements



Source: *Jobs Online* seasonally adjusted series, Department of Labour.

Skilled vacancies in Canterbury compared to other regions

Canterbury had a smaller fall (down 2.3%) in skilled online job advertisements than Auckland (down 4.9%) and Wellington (down 8.7%) over the period July to October 2011. The only region to experience positive growth was the South Island (excluding Canterbury).

Comparing October 2011 figures with a year ago, Canterbury had an increase of 46.7% in advertised vacancies, higher than the rates for any other region, as Table 10 highlights.

Table 10: Skilled Vacancies Index (SVI) by region, seasonally adjusted

Region	Quarterly change (Jul 11—Oct 11)	Annual change (Oct 10—Oct 11)
Auckland	-4.9%	6.3%
Wellington	-8.7%	-0.5%
North Island - Other	-7.4%	8.1%
Canterbury	-2.3%	46.7%
South Island - Other	6.8%	23.5%
Nationwide	**-5.0%**	**10.2%**

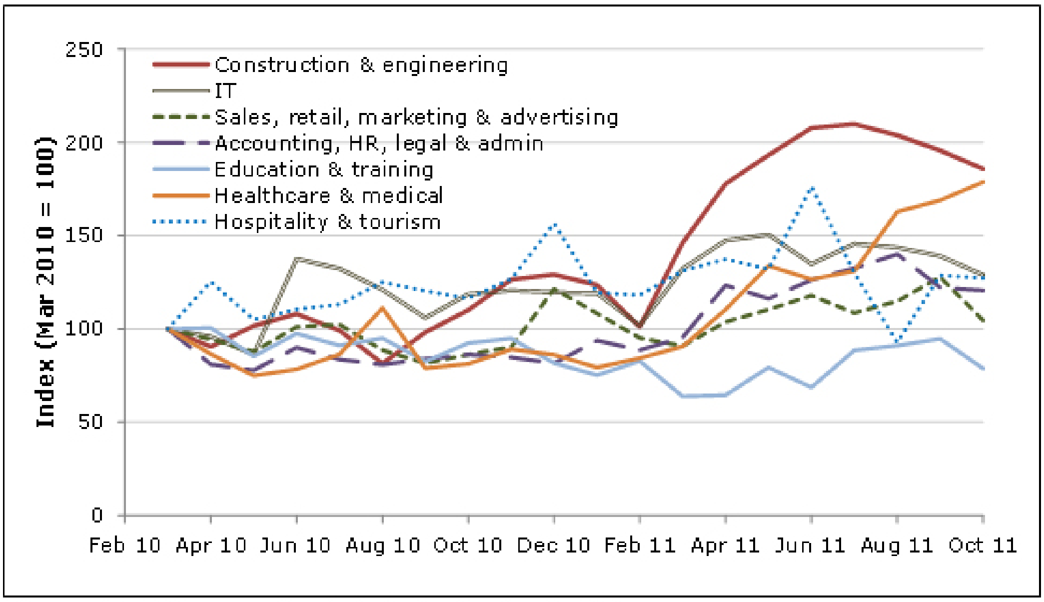
Source: *Jobs Online* seasonally adjusted series, Department of Labour.

Skilled vacancies in Canterbury by industry

In the period between July and October 2011, the number of skilled online job vacancies in Canterbury increased only in the healthcare and medical industry, with 36.3% growth (see Chart 6). Industries in the region showing the largest falls in job vacancies were IT (down 11.5%), construction and engineering (down 11.4%), and education and training (down 10.9%).

In the year to October 2011, the strong growth in skilled job vacancies in the region was driven by high growth in healthcare and medical (up 119.6%). Construction and engineering increased by 68.5%, making it the second highest growth rate by industry. This is expected given the reconstruction activity needed following the recent earthquakes in the region.

Chart 6: Canterbury skilled job advertisements by industry



Source: *Jobs Online* seasonally adjusted series, Department of Labour.

Table 11 shows growth rates in online skilled vacancies for industry groups for Canterbury compared with New Zealand over the period of July to October 2011. Both Canterbury and New Zealand as a whole have seen declines in vacancies in most industries. In the few industries nationwide to have seen more vacancies, growth over this period was modest. The growth in Canterbury's healthcare and medical industry (up 36.3%) was considerably higher than that seen nationally (up 0.4%). Falls in advertisements for jobs in accounting, HR, legal and administration, and the construction and engineering industries in Canterbury were in line with those seen nationally.

Table 11: Skilled Vacancies Index (SVI) for Canterbury by industry group, seasonally adjusted

Industry	Quarterly change (Jul 11—Oct 11)		Annual change (Oct 10—Oct 11)
	Canterbury	NZ	Canterbury
Healthcare and medical	36.3%	0.4%	119.6%
Hospitality and tourism	-2.1%	-10.9%	9.4%
Sales, retail, marketing and advertising	-3.8%	3.9%	21.1%
Accounting, HR, legal and admin	-9.0%	-9.7%	39.7%
Education and training	-10.9%	-3.6%	-14.7%
Construction and engineering	-11.4%	-14.1%	68.5%
IT	-11.5%	-6.3%	8.6%
Other	1.1%	1.2%	75.2%

Source: *Jobs Online* seasonally adjusted series, Department of Labour.

Note: It is likely that the vacancies for Canterbury are more volatile than at the national level.

Skilled advertised vacancies in Canterbury by occupation

Table 12 shows that in the period between July and October 2011 none of the monitored skilled occupations experienced growth in online job vacancies. Professionals recorded the largest loss in online job vacancies (down 6.9%). However, similar declines were also seen nationally.

While technicians and trades showed a slight decrease (down 5.3%) for the quarter, this group experienced the strongest growth in job vacancies over the past year (up 72.6%). Trade roles are the main types of jobs required for the rebuild.

Table 12: Skilled Vacancies Index (SVI) for Canterbury by major occupation, seasonally adjusted

Occupation	Quarterly change (Jul 11—Oct 11)		Annual change (Oct 10—Oct 11)
	Canterbury	NZ	Canterbury
Professionals	-6.9%	-8.1%	38.6%
Technicians and trades	-5.3%	-3.8%	72.6%
Managers	-1.2%	-0.3%	45.6%

Source: *Jobs Online* seasonally adjusted series, Department of Labour.

Chart 7: New Zealand and Canterbury Beveridge Curve

Source: *Jobs Online*, Department of Labour; Household Labour Force Survey Statistics New Zealand.

Labour market adjustment

Chart 7 plots the vacancy rate against the unemployment rate for New Zealand and Canterbury; this relationship is summarised by the black line, otherwise known as the 'Beveridge Curve' (see Appendix 3 for more detail on the Beveridge Curve). The red circles are data points since the earthquake began (i.e. December 2010 quarter – September 2011 quarter), whereas the blue points are pre-earthquake data.

The vacancy rate is measured by the advertised vacancies from Jobs Online divided by total employed persons from the HLFS. The unemployment rate comes from the HLFS.

Prior to the earthquakes, Canterbury was recovering from the recession, with falling unemployment and rising vacancies. Following the earthquakes, the region saw both high unemployment and high vacancies (as illustrated by the red points in chart 7b). This was also seen nationally (see chart 7a) and in some regions, although less pronounced than for Canterbury.

It is too early to say if this indicates a long term mismatch between vacancies and the type of people looking for work, but a structural change like that would cause the Beveridge Curve to shift.

This suggests the Canterbury and the national labour market is at a delicate stage, and the recent drop in unemployment is masking a more serious re-adjustment issue.

There are several possible explanations why the Canterbury labour market, in particular, is currently "off the curve", including:

- A fall in labour supply. The recent decline in Canterbury unemployment (from December 2010 to September 2011) was driven by a decline in labour force participation (for more, see section called Labour force participation in previous chapter).
- Different skill sets are required. The rise in vacancies is in part explained by the increase demand for construction-related workers, while the rise in unemployment can be attributed more to increased redundancies in the hospitality sector.
- Difficulty matching people to vacancies due to work location and difficulties commuting. People may be more inclined to work closer to home due to travelling issues or a desire to be closer to family. In a city with a damaged transport infrastructure and increased congestion, workplace location is more important than previously.
- Increased recruitment difficulties. Following the earthquakes, international departure data shows that Christchurch residents have been taking holidays away from home, increasing the length of time required to fill vacant positions.

Ministry of Social Development Work and Income Canterbury vacancies

In August 2011, there were 121 job opportunities at Work and Income offices in Canterbury (see Table 13), led by plasterers (18), general labourers (12), and chefs (9). This is lower than seen in recent months, but it does indicate the seasonal nature of some advertised jobs.

As at 28 October 2011, the number of job seekers at Work and Income offices in the Canterbury region totalled more than 3,600, or more than 30 times the available job opportunities at Work and Income offices.

Plastering and general labouring roles will be in high demand for the Canterbury rebuild. Notably, over 600 Canterbury job seekers have some recent construction sector work experience.

Table 13: Job Opportunities and Job Seekers at Work and Income offices (Canterbury Only)

Job Opportunities (as at 30 September 2011)	Count	Job Seekers* (as at 28 October 2011)	Count
Plasterer	18	General labourer	385
General labourer	12	Sales assistant	363
Chef	9	Factory hand	339
Shearing shed hand	9	Kitchenhand	273
Scaffolder	6	Cleaner	269
Typographer	6	Loader and/or checker	260
Sales and/or marketing manager	5	Sales and/or marketing manager	188
Restaurant or tavern manager	4	Fruit grower – worker	177
Cleaner	3	Slaughterer	171
Boiler maker	2	Housekeeper (not private)	153
Total Opportunities	121	Total Job Seekers	3,633

Source: Ministry of Social Development.

Results of the Canterbury Development Corporation - Department of Labour Earthquake Labour Demand Modelling

Key points:

- Based on the scenario that industry feedback considers most likely, an additional 23,900 construction-related workers will be required at the peak of the rebuild.
- The most in demand construction-related occupations are carpenters and joiners, paint trade workers, concreters, and plasterers.
- General labourers will be in high demand. Such work is suitable for some beneficiaries who have not previously worked in construction jobs.
- The increased economic activity arising from the rebuild will also increase demand for workers in industries other than construction.

Section Three looked at current online vacancies recorded on Jobs Online and Work and Income vacancies. This section looks specifically at the results of the Canterbury Development Corporation-Department earthquake labour demand modelling programme (for more information, see Appendix 2).

Outputs from the model indicate increased demand for construction-related workers to support the Canterbury rebuild, as well as for workers in supporting occupations, such as administrative roles.[27] In addition, there will be increased employment growth generated indirectly by the associated economic stimulus to Canterbury, for example through the retail and hospitality sectors.

The model takes into account such factors as current estimates of damage, principally from the EQC, and provides detailed estimates of the number of workers required by detailed occupation grouping. The model can also produce breakdowns for a broad range of occupations, and estimates for the time that repairs and rebuilding of residential and commercial properties, infrastructure, and land remediation might take.

The assumptions underpinning the projections presented in this report are based on the best available estimates at the time of modelling (December 2011), and should be seen as indicative only. The estimates are likely to change as more information becomes available or as decisions on the timing of the rebuild are made. Varying the timing of the rebuild substantially changes the labour demand projections, for the size of the peak and for how long the jobs will be available.

This section begins with an overview of construction labour requirements for the Canterbury rebuild, followed by information on labour shortages in other occupations.

[27] For a comprehensive analysis of the latest modelling results, see the forthcoming publication 'Canterbury Earthquake Skills Requirements: Earthquake Rebuild Scenarios, December 2011'.to be published on the CESB website.

Labour demand for construction-related occupations

How many additional construction workers will be needed?

A range of scenarios for the rebuild have been examined, and these scenarios present a range from between 13,000[28] and 48,000[29] additional construction-related workers being required for the rebuild at its peak. However, in all scenarios the same occupations are in demand.

Construction industry feedback suggests that the most likely scenario is for an additional 23,900 construction workers being required during peak demand in the third quarter of 2013. This scenario is based on the assumptions made in Table 14, below.

The greatest demand will be for carpenters and joiners, painting trade workers, concreters, and plasterers. Table 14 compares the forecast level of peak demand for each occupation, with the level of employment[30] in Greater Christchurch and New Zealand for that occupation in March 2011, which was close to the bottom of the construction business cycle. This shows, for example that the number of carpenters and joiners in Christchurch would need to nearly triple, which also equates to a nearly 40% increase in the national number of carpenters and joiners. For painting trades workers the proportional increase is even larger.

Determining that peak demand will be in 2013 was influenced by modelling conducted on temporary accommodation availability, which was supported by the EQC and Project Management Office advice from key construction sector businesses.

Table 14: Leading construction-related occupations in demand

Occupation	Peak demand	Employment as at March 2011	
		Christchurch*	New Zealand
Carpenters and Joiners	4,805	1,800	12,800
Painting Trades Workers	2,712	600	6,400
Concreters	2,422	100	1,400
Plasterers	2,105	600	4,500
Other Miscellaneous Labourers	1,740	8,800	62,600
Bricklayers and Stonemasons	1,430	400	2,800
Wall and Floor Tilers	1,231	300	1,900
Plumbers	1,120	1,200	11,100
Building and Plumbing Labourers	976	900	9,100
Truck Drivers	721	4,200	31,500

*Christchurch is defined as Christchurch City, Selwyn District, and Waimakariri District

Source: Canterbury Development Corporation – Department of Labour earthquake labour demand modelling programme.

[28] This figure assumes a slow reconstruction and a low end estimate of damage.
[29] This figure assumes a fast reconstruction and a high end estimate of damage.
[30] Department of Labour employment estimates.

Under this scenario for 23,900 additional construction-related workers, peak demand is concentrated over a relatively short period of time, around 4 years. After 4 years, employment in construction-related jobs in Canterbury is projected to reduce to the level required for the commercial rebuild. Commercial rebuilding will occur over a longer time period (15 years in the model), but will require considerably fewer workers. Some of the workers required for commercial repairs could transfer from residential construction, but many roles in commercial construction are specialised. Due to the longer timeframe involved, a much larger commercial rebuild might provide the most sustainable employment opportunities for local workers.

The on-going seismic activity will also have a major effect on when the rebuild can begin on a large scale. While this may not affect the peak number of workers required for the rebuild, the uncertainty around timing is already making employers hesitant to take on new staff in large numbers. This also reduces the number of workers in a position to take up trades-training opportunities.

More clarity is needed around the pace and extent of the rebuild, especially with regard to commercial buildings, before the employment projections can be further refined. The initial estimate from the Treasury of $3 billion of damages in the commercial sector is likely to be revised substantially upwards in the near future. The Canterbury Earthquake Recovery Authority (CERA) is to begin a programme to look at how any new damage estimate will translate into demand for new commercial construction. However, even if the damage estimates are revised, it is unclear how much of the insurance payout will be spent on commercial construction in Christchurch.

How were these figures calculated?

The estimate of 23,900 additional construction-related workers was based on the following assumptions:

Timelines

Based on industry feedback, it is assumed in the model that:

- residential new builds will occur within a four year period
- residential repairs will occur within a four year period
- infrastructure works will occur within a six year period, and
- commercial repair and new builds will occur within a 15 year period.

Number of homes to be rebuilt

- It is assumed that 10,000 homes will be re-built.

Number of houses to be repaired

- It is assumed that 105,500 homes will be repaired.

Cost

The model assumes that there has been $3 billion damage to commercial premises and $3 billion damage to infrastructure. At the time of modelling, these estimates were aligned with those of other organisations, including the Treasury.

What are the skill levels of required construction workers?

Approximately 28% of construction-related workers in demand are forecast to be low-skilled, 68% are semi-skilled, and only 4% high-skilled. Potentially, there are as many as 6,800 construction-related roles that could be suitable for lower-skilled workers, including beneficiaries, although the amount of training required would vary between occupations.

Labour demand for other occupations

How many additional non-construction workers will be needed?

The increased economic activity arising from the rebuild will also increase demand in other parts of the Canterbury workforce, but, as with construction-related jobs, these are likely to be time-limited. The model shows that approximately 12,000 non-construction workers will also be needed across a wide variety of occupations. This equates to 33% of all required jobs (construction and non-construction combined). Estimating the make-up of these jobs is difficult because the earthquake has changed the shape of the Canterbury economy, at least over the short term, and the patterns of how economic stimulus flowed from one sector to another in the past may also have shifted. However, given the above caveats, the current modelling forecast that around half of the non-construction jobs created would be suitable for low-skilled workers.

Resolving skill and labour shortages

It is certain there will be some labour shortages in various construction and non-construction occupations. Labour shortages can be solved in three ways: by training, by immigration, or by raising wages to attract workers from other industries. Highly-skilled occupations are most likely to necessitate immigration interventions. Many specialised trade roles, such as carpenters, do require lengthy training. Other roles, such as painters, can be trained more quickly. Any increase in training provision needs to be balanced against the length of time construction-related jobs will be in demand in Canterbury and projected demand elsewhere in New Zealand.

A number of the highly-skilled building and construction occupations are already listed on the Department of Labour's Canterbury Essential Skills in Demand Lists (ESID). Occupations are only included on the ESID lists where there is conclusive evidence that New Zealanders are not available to fill them.

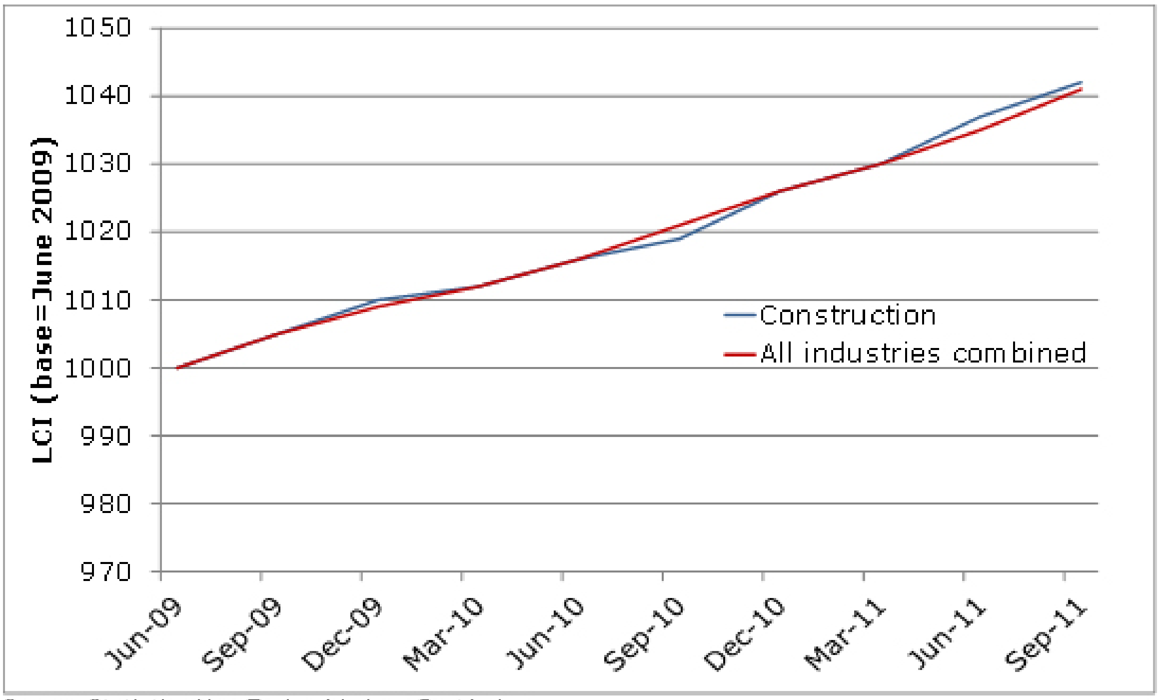
Construction sector wage adjustment

Wage adjustment will be an important part of boosting the labour supply to address expected skill shortages for the rebuild. Recent research by the Department showed that there was a 54% increase in the construction workforce between 2001 and 2008 as the construction sector boomed. The majority of inflows into the construction industry came from alternative industries, with about six out of every 10 new construction workers having worked in another industry in the previous year. However, pay increases in construction from 2001 to 2009 were only marginally higher than those across all industries comparing a number of wage growth measures.

The Labour Cost Index (LCI), which adjusts for human capital and hours of work supplied, shows that wages in construction increased by 3.0% per year over this period compared with 2.8% for all industries. In what was a strong economy of the mid-2000s, the construction industry recruited many more workers without a relatively large increase in real labour costs.

[31] Department of Labour, 2010, Labour Market Adjustment in the Construction Industry, 2001–2009, http://dol.govt.nz/publications/lmr/lm-adjustment-construction-industry/index.asp. This report extended the analysis of Menaka Saravanaperumal in Labour Market Adjustment in the Construction Industry 2001–2006, (Statistics New Zealand, 2008).

Chart 8: Movement in all salary and wage rates, 2009—2011



Source: Statistics New Zealand, Labour Cost Index

While accurate regional data for industry groups is not available from the LCI, Chart 8 shows that, at a national level, pay increases in construction have been almost exactly the same as those across all industries over the last two years. This is perhaps to be expected, as the number of construction jobs has not yet gained momentum.

However, the Christchurch situation is unique and lessons from the past can only be taken so far. The on-going seismic activity makes it difficult to estimate what level of wage premium would be required to attract new workers from elsewhere in New Zealand and overseas. Many workers within Christchurch will also be considering where they want to live as insurance pay-outs are finalised. Factors outside of Canterbury need also to be considered, especially in Auckland where increased demand for construction workers is also expected.

The Department has contacted major construction companies to seek their views about the construction labour market. Companies indicated that the significant jump in builders' wages in the earlier part of this year is having an impact on building costs. It is also of some concern that wages will continue to rise as the market tightens and the available pool of labour is exhausted. Currently wage levels are somewhat steady although at an "artificially inflated rate".

Future reports on Canterbury will continue to monitor wage trends in Canterbury as the rebuild gains momentum. Much of this information will come from employers and unions as well as from official statistics.

Sub-Regional Opportunities

Key points:

- Most of regional Canterbury was not directly affected by the earthquakes.
- There have been economic gains for regional Canterbury that have resulted from an influx of Christchurch people.
- There are seasonal work opportunities throughout the region, with some agricultural businesses desperate for low-skilled workers. The lack of workers is seen as a major constraint on the sector.
- Irrigation developments will play a key role in expanding agriculture and related jobs.
- There is evidence of developments outside of agriculture, such as in tourism, that will grow the Canterbury economy.
- The rebuild will create jobs throughout the region, but this could heighten already existing skill shortages, hampering economic growth.

This section focuses on regional Canterbury, specifically North Canterbury, Mid Canterbury, South Canterbury, Selwyn District, Kaikoura District, and Mackenzie District. Representatives from Economic Development Agencies (EDA's) or economic development officers associated with local councils were interviewed.

One common theme that emerged was the central role of agriculture to the fortunes of the region, and in particular the important economic benefits that increased irrigation could generate.

It was also notable that some Canterbury areas had experienced population gains after the earthquakes that have benefited local businesses.

North Canterbury

The North Canterbury economy is predominantly agricultural, with some manufacturing, winemaking, tourism, and forestry throughout the Waimakariri and Hurunui Districts.

North Canterbury was more affected by the September 2010 earthquake than the February 2011 event.

Initial job losses in hospitality and retail have been balanced by growth in these two sectors in recent months.

The earthquakes have had some surprising impacts on the North Canterbury economy. The popular tourist destination, Hanmer Springs, experienced many people seeking refuge from Christchurch. Local houses are selling quickly to Christchurch buyers, and there may have been as much as a 30% increase in Rangiora's population, which has meant retail and hospitality businesses have flourished. However, the cancellation of the Rugby World Cup games in Christchurch is likely to have had a big impact on international tourist numbers.

Currently, there are plenty of opportunities for low-skilled workers in the wine industry to pick grapes and prune vines. There were as many as 300 workers needed at the peak of 2010. While there are more locals filling these roles now, wineries have been resorting to sending mini buses to Christchurch for workers.

Employers in the wine industry are flexible as to hours worked, and this is likely to encourage local parents with childcare commitments to work in this industry.

A major housing and shopping development in Amberley is due to begin. The associated supermarket, retail, and restaurant complex is expected to create up to 200 jobs.

Agriculture will continue to be a key industry. Irrigation developments are likely to shape the region's future prosperity. Dairying will grow, but there will be increased diversification of farming. Residential settlements, such as Pegasus, are likely to bring many more people into the region. A major wine village at Waipara, complete with conference facilities and a wine school, is also proposed.

Mid Canterbury

The Mid Canterbury economy is predominantly centred on agribusiness, with tourism secondary. While dairying is a key economic component, the region accounts for approximately half of New Zealand's arable production and two-thirds of seed production, with a strong vegetable processing industry. Mid Canterbury is also home to an international ski field, and a smaller but not insignificant manufacturing sector.

The strength of Mid Canterbury's food production meant the recession was not felt as it was in other parts of the country, and the region has maintained low unemployment levels. In the short-term, tourism development and increased manufacturing should increase the demand for workers, ranging from factory workers to tradespeople.

The earthquake rebuild will provide opportunities for the area's tradespeople, but this will increase local skills shortages, and may see lower-skilled farm workers attracted to labouring roles in Christchurch. This could have an adverse effect on local production. As a result, more tradespeople will be needed, and possibly more low-skilled farm workers. There are also serious shortages of highly-skilled workers, particularly General Practitioners.

High level agri-tech, food production, and tourism are likely to expand, creating opportunities for higher skilled workers, particularly those with a scientific background.

South Canterbury

The aftermath of the 22 February 2011 earthquake is having a range of unanticipated benefits for the Timaru economy. Anecdotal evidence suggests that as many as 2,000 people from Christchurch have relocated to Timaru. Some Christchurch businesses are working remotely from Timaru and as far south as Waimate, particularly businesses in the IT sector. Several nationwide retailers have relocated staff from Christchurch to Timaru.

Many local trades-people are commuting to Christchurch to work on the earthquake rebuild, with some of these workers staying in Christchurch from Monday to Friday. While it is mainly trades like plumbing that are seeing this weekday exodus, it is likely that carpenters will also be attracted to Christchurch once the rebuild intensifies.

While agriculture is the dominant industry in South Canterbury, with dairy generating over $330 million to the local economy, there are a number of other industries that are doing well. In the manufacturing sector, a major warehouse construction project will significantly boost the district's storage, particularly cold storage. Dominion Breweries has upgraded its brewery and is taking on local staff. The construction sector is benefitting from the building of the Caroline Bay Aquatic Centre, due for completion in July 2012. This project has absorbed local tradespeople.

Retail is doing reasonably well, with some businesses attracting Christchurch shoppers, such as Ballantynes department store, which is bussing shoppers to its renowned sales.

Local freezing works are major employers of lower-skilled workers.

Recent upgrades have meant a 10-month freezing work season is now possible, and this has provided much more employment for freezing workers, who had previously worked a 6-month season. The local salmon farming industry is also growing.

Agriculture will remain the mainstay of the South Canterbury economy, and if water issues are resolved the potential for the industry to expand is enormous. Work is underway on the Rangitata South Irrigation Scheme, which will create jobs for locals, with other major schemes proposed. Manufacturing will increase after recent zoning changes have opened up more land for manufacturing. This may enable Christchurch manufacturers to extend their operations, and is likely to attract manufacturers from other regions who are attracted by potentially lower production costs. Niche foodstuff production is seen as a growth sub-sector on the back of increased recognition of a distinct South Canterbury brand. Construction will benefit significantly from earthquake reconstruction, and other developments such as the Temuka North residential housing project that will see 220 new homes built.

Selwyn District

Selwyn District is New Zealand's best performing Territorial Authority, with the fastest growing population and a ranking of second for employment and GDP growth[32]. Selwyn has a highly-skilled workforce and comparatively low unemployment. Over half of local residents work in Christchurch, with approximately 10% in Christchurch's CBD. However, despite this, there has not been a noticeable increase in the number of unemployment benefit recipients since February.

Post 4 September 2010, tourism has been the most affected industry, although it is not a leading employer in the district. Significantly, agriculture is expanding, led by dairying, and there is a demand for farm workers. Agribusiness and associated services are performing the best. The seed sector is also doing well.

The rebuild could potentially provide many job opportunities for Selwyn workers. Demolition work has already absorbed lots of young local males. Local engineering firms could play an active role in supporting the reconstruction effort. The comparatively large local construction industry is also looking to the rebuild to provide stimulus on the back of a low number of residential consents. It has recently built heavily in townships such as Rolleston, demonstrating the sector's ability to undertake significant construction projects.

The earthquakes' impact on seasonal workers is still to be seen. However, more opportunities for locals may emerge for seasonal work over summer. Many farmers had relied on seasonal fruit and vegetable pickers from Aranui in Christchurch, a large number of whom live in the 'red zone'.

[32] Business and Economic Research Limited (BERL), Regional Performance Indicators 2010.

Whether this supply of labour is easily mobilised again remains unknown, but there will be prospects for locals to fill these roles.

In the future, water-related jobs such as dairy farming and irrigation systems supply and support are expected to grow significantly. Tourism is also seen as an industry likely to flourish.

Kaikoura

In the Kaikoura District, agriculture is the best performing industry and is likely to maintain that status in the future. Tourism remains a leading industry, but it has been suffering since 2007, despite a short boom after 22 February 2011.

Several developments could provide a significant boost to the comparatively small Kaikoura labour market. An 80 bedroom hotel with conference facilities, a modernised museum, and an aquatic recreational facility are possible developments that would create construction jobs, but also longer-term employment for locals. Tourism's future successes are closely linked to these developments.

Mackenzie District

The relatively small Mackenzie District labour market, which is home to approximately 4,000 people, is dominated by two industries, with tourism and agriculture each employing about 30% of the local workforce. Agriculture is benefitting from strong wool and milk prices, and tourism is also doing very well.

Much of the work in the district is seasonal, offering opportunities for young people or lower-skilled workers who are prepared to travel. In the short-term, a new supermarket at Tekapo will provide opportunities. Tourism is likely to continue to flourish, spearheaded by developments to ski fields and the renowned Alpine Springs recreation facility in Tekapo. Agriculture will intensify, particularly if water-use issues are clarified.

Emerging Job Opportunities and Challenges

Key points:

- The rebuild will put pressure on regional economic development outside of Christchurch.
- The large number of general labouring positions is positive for young people in particular, who are over-represented in unemployment statistics.
- Construction is predominantly male oriented, so increasing female participation is an important challenge.
- The Canterbury Labour Market Strategy will address these challenges, as well as the long-term economic development of the region.

This report is the first comprehensive view of the Canterbury labour market following the earthquakes in the region. The overall impact on employment has been more modest than first thought, which partly reflects the fact that some people have left the region and that Canterbury was not as affected by the recession compared with the rest of New Zealand.

However, the analysis suggests that there are considerably fewer jobs in Canterbury than if the region's labour market had grown at the same rate as the rest of the country. In particular, it is clear that the earthquakes have had a disproportionate impact on certain industries and types of workers.

It is important that we look at some wider issues associated with these job opportunities to ensure that the people of Canterbury benefit from the new jobs being created and that the local labour market performs as efficiently as possible to prevent delays in the rebuilding work.

Job opportunities will emerge.

Strong job prospects exist, principally in the construction sector, for the reconstruction of Canterbury. There are also job openings in most other industries, judging by online vacancies, and clear evidence of seasonal and rural work opportunities in the agriculture sector.

The rebuild offers opportunities for the unemployed to gain work, particularly those with construction experience. For some of the unemployed, including those who lost their jobs because of the earthquakes, it will be relatively easy to find work in the construction industry. For example, there have been significant flows of workers from the manufacturing industry into the construction sector, when it has expanded in the past[33]. Both industries are male-oriented and it is likely that the skill needs of the two industries are similar.

The large number of general labouring positions is a positive for young people, who are over-represented in unemployment statistics. Young people have especially felt the impact of a decline in retail and tourist-related activities.

It is clear that men and older workers have been less impacted by the job losses due to the earthquakes. This is partly due to both the industries they work in suffering less disruption (such as manufacturing) and evidence of growing demand for construction workers as part of the demolition work and essential repair work that has already started.

But there may be challenges for some groups to find work.

For other people, there may be significant challenges in transitioning into new jobs created by the rebuild. The construction sector is predominantly male-oriented, so increasing female participation is an important challenge.

[33] Department of Labour (2010), Labour Market Adjustment in the Construction Industry, 2001–2009, available at http://www.dol.govt.nz/publications/lmr/lm-adjustment-construction-industry/index.asp.

The Women in Trades initiative is a move in this direction[34].

More work is needed to understand the barriers faced by women and young people and the extent to which future job creation driven by the rebuild will provide these workers with new employment opportunities. For example, the rebuilding work is likely to bring workers into the region and they will need housing and food services. This will increase job opportunities in the retail and hospitality sectors. For young workers there is likely to be a delay as employers recruit older more experienced workers before looking to hiring and developing trainees.

There is a risk that some groups of job seekers may not benefit from the creation of jobs in the short-term, which means there is a risk of longer periods of unemployment. It will be very important to reconnect people with employment as quickly as possible because:

1. People's confidence and skills can deteriorate very quickly when they are out of work. They may also have difficulties reattaching to the labour market in the future due to technological changes.
2. Many higher-skilled people out of work have portable skills that they can take to other regions.

The rebuild may hinder wider Canterbury growth.

In the short term, Canterbury's focus will largely be on the rebuild. This will provide challenges for local training providers and for those tasked with attracting workers from other regions to Canterbury. All EDAs believe the influx of workers from wider Canterbury into Christchurch needs to be balanced with regional economic development outside of Christchurch. If farm workers are enticed to become construction labourers, for instance, labour shortages in agriculture will intensify. Similarly, if tradespeople from within the region are attracted to Christchurch in too high a number, key regional projects will slow. It is important to minimise the impacts of these labour flows and to help firms across the region to plan around them.

Finding skilled trades workers may not be easy.

Tradespeople throughout the region are already in short supply. Increased international demand for construction workers in Japan and Queensland, both recovering from natural disasters, could be a major constraint. Attracting workers from elsewhere in New Zealand or from overseas may also prove difficult. Current evidence suggests that there has been a significant jump in builders' wages in the earlier part of this year. The on-going seismic activity and uncertainty makes it difficult to estimate what level of wage premium would be required to attract new workers. There is some concern within the construction industry that wages will continue to rise as the market tightens and the available pool of labour is exhausted. This could hamper the rebuild.

Long-term solutions are needed to address a range of issues.

It is critical that not all the emphasis is placed on short-term solutions. The rebuild is a time-limited event, and transitioning people who will receive construction training into jobs once the task is over needs to be considered.

Over the longer term, increased training is necessary to give workers the required skill sets to compete for jobs that are currently being filled by overseas workers; for example, in sectors such as manufacturing.

The Canterbury workforce of tomorrow, like that of New Zealand, will need to be more skilled and adaptable, and this is a long-term challenge for businesses, schools, and tertiary providers.

[34] For more, see http://www.scoop.co.nz/stories/AK1108/S00793/women-encouraged-to-look-at-trades-in-christchurch.htm

We must be cautious about employment prospects for those with low skills. Matching potential unemployment beneficiaries or low-skilled workers to new job openings in well-performing industries is by no means simple. Many will lack the previous work experience to transition into available jobs. These workers were the first to be laid off and will be among the last to be rehired. Some of the elementary jobs lost in manufacturing, a traditional employer of low-skilled workers, are unlikely to return as production methods change. Future jobs in key industries such as ICT and business services will also require more highly qualified workers.

Despite a range of job opportunities in the region, there appear to be issues connecting people with jobs. It is proving a challenge to convince people, especially young people, to consider job openings in some sectors. For instance, Competenz[35] has experienced great difficulties in filling apprenticeships. Similarly, there are "instant jobs" in agriculture, but few people want them because of the nature of the job, the pay and the conditions. These factors have meant that the only people willing to take these jobs are temporary migrants.

There is also evidence of a disconnect between schools and businesses in some parts of Canterbury, with one work experience and trialling programme in the region receiving very strong buy-in from businesses but a poor response from local schools. The tertiary education sector must also become more responsive to the needs of businesses. However, there are some encouraging signs with greater coordination between tertiary education providers in the agricultural sector, which could be mirrored by other sectors.

There have been recent improvements in how the labour market is functioning. For instance, local EDAs, such as Grow Mid Canterbury, have successfully linked locals with jobs due to the support of local schools and businesses. Similarly, in the agricultural sector, an industry group called Young Farmers is being very proactive in publicising the agricultural industry to school pupils as a viable career choice. This may help address farm worker shortages in the years ahead.

A Canterbury Labour Market Strategy will provide direction.

Such initiatives suggest that successful local models exist for linking young people with the labour market and that these need to be replicated more broadly, particularly as businesses generally report having a strong commitment to the local community.

The Canterbury Labour Market Strategy is being led by the Canterbury Employment and Skills Board (CESB), and will support the region's Economic Development Strategy and the Canterbury Earthquake Recovery Authority's (CERA) Economic Recovery Plan.

The Labour Market Strategy will need to address these challenges, as well as look to the long-term economic development of the region.

[35] The Industry Training Organisation (ITO) responsible for engineering, manufacturing, baking, and food and beverage manufacturing.

Canterbury Labour Market analysis: future steps.

The Department and other agencies, including CDC and CESB, will continue to monitor the worst hit industries and the impact on different sections of the community and provide advice on what Government can do to help. In particular, the focus will be on the following questions:

- To what extent can the Canterbury labour market respond to the increased demand for labour and skills from the rebuild work?
- Are there people at risk of missing out on employment opportunities associated with the rebuilding of Canterbury?

As the rebuilding work gets underway in earnest, agencies will continue to monitor the impact of the Canterbury rebuild on the local labour market.

In addition, it will be important to understand how the rebuild affects demand for construction-related workers across the rest of the country, as well as in competing industries within the Canterbury region (such as agriculture and manufacturing). Other areas for further investigation include:

- monitoring the construction industry across New Zealand using labour market and economic statistics, and
- liaising with the construction industry and competing industries to identify peaks in labour demand within Canterbury and across New Zealand.

[36] The CESB was established in 2011 to provide a clear understanding and combined strategic approach to the workforce demands and priorities following the Canterbury earthquakes.
The board comprises of members from the building and construction, information technology, and health sectors as well as the Canterbury Development Corporation, government agencies, tertiary education providers, industry training organisations, and unions.
CESB works closely with the Canterbury Earthquake Recovery Authority and CDC to bring together the supply and demand sides of the Canterbury labour market to influence the immediate recovery, rebuild, and long-term growth strategy for the Canterbury community and economy.

Appendix

Ministry of Social Development Benefit data

Data presented is as at the end of each quarter (or month), and unadjusted for seasonal variations.

Ministry of Social Development Vacancy Data

The labour supply side of the data reported here is gathered by Work and Income case managers from individual clients receiving an unemployment benefit. Work and Income clients fill out up to three separate work histories with their case managers, so may be included in the supply side of the data multiple times (as looking for work in several different occupations). Case managers are reliant on clients faithfully volunteering all previous employment history.

The 'not recently employed' response is the default response when the occupation field is not filled in at the data capture stage of the process. It is comprised of:

- young people who were not recently employed,
- those who had not worked recently,
- those who moved from the sickness benefit,
- those who moved from an ACC payment, or
- data capture error.

The vacancy information is collected from the positions listed with Work and Income by employers. These employers may be directed to Work and Income through Work and Income Work Brokers; through existing industry partnerships, such as those with Horticulture and Viticulture; or through the Recognised Seasonal Employer (RSE) scheme.

Appendix

The Canterbury Development Corporation–Department of Labour earthquake labour demand modelling

The results presented in Section 4 are derived from the joint Department-Canterbury Development Corporation earthquake labour demand modelling programme. The model on which they were based was developed in New Zealand by Market Economics and has been used nationally and internationally on a broad range of projects, including a simulation of a volcanic eruption in Auckland.

The model takes into account such factors as current estimates of damage drawn from places like the EQC, and provides detailed estimates of the number of workers required by detailed occupational grouping using recognised classifications. Different scenarios of the time it will take to reconstruct Canterbury are also possible. Results for repairs to infrastructure, land remediation, residential repair, and new builds and commercial reconstruction can be looked at separately.

The scenario assumptions underpinning the numbers presented in this report are based on the best available estimates at the time of modelling. These may change considerably as more information becomes available or as decisions on the timing of reconstruction are made.

Because of continued uncertainty about the nature of commercial reconstruction, the number of workers required for this type of construction is lower than any other type of construction.

These results do not include estimates of the number of workers required for land remediation.

As with all modelling, all figures should be seen as indicative only.

Future runs of the model will be undertaken as new information on the extent of the repair tasks becomes available.

Labour supply

The Department's estimates of employment have been used in the modelling to provide estimates of available supply for each occupation. The labour supply takes into account those in employment in each occupation but does not include those in training or those who may consider changing occupations.

Occupation requirements

Estimates of the specific number of construction workers required for residential new builds and repairs is derived from detailed analysis compiled by the Department of Building and Housing.

Appendix

The Beveridge Curve

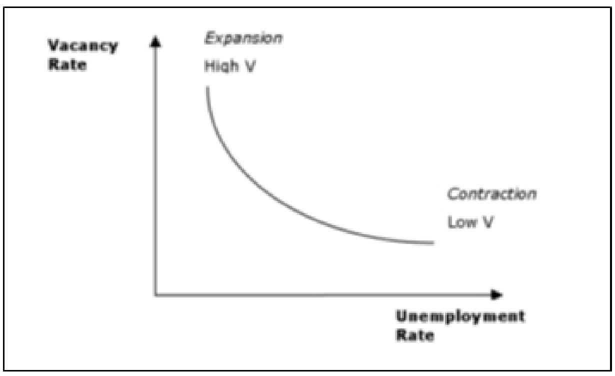
The Beveridge Curve[37] shows the relationship between job vacancies and unemployment in the overall economy. The Beveridge Curve (Chart 9) illustrates that a low vacancy rate is associated with high unemployment and a high vacancy rate is associated with low unemployment.

The Beveridge Curve shows that, when the economy is expanding, job vacancies are high; the demand for labour is high and unemployment is low as most people who are looking for work have already found employment. Alternatively, when the economy is slowing or contracting, unemployment is high with fewer job vacancies; there is little demand for additional workers and available jobs can be filled quickly. These effects result in movements along the Beveridge Curve.

During the recovery of an economy from a recession or an economic shock, such as an earthquake, the Beveridge Curve temporarily shows both a high vacancy rate and a high unemployment rate. This is because vacancies can be posted quickly, whereas unemployment adjusts sluggishly because of the frictions inherent in matching unemployed people to the new jobs. There seems to be inertia in unemployment at the tail end of a recession, but often the labour market will then make its way back to a point on the stylised curve.

However, a long term increase in both the vacancy rate and unemployment rate indicates a structural mismatch between the vacancies available and the people looking for work. This would cause the Beveridge Curve to shift upwards.

Chart 9: Example of a Beveridge Curve



[37] Named after British economist, William Beveridge.