

# Workforce behaviour and business responses Case studies of construction organisations

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## **About the Resilient Organisations Research Programme**

"Building more resilient organisations, able to survive and thrive in a world of uncertainty, through research and practice"

We live in an increasingly complex world dealing with a broad spectrum of crises arising from both natural and man-made causes. Resilient organisations are those that are able to survive and thrive in this world of uncertainty.

#### Who we are:

The Resilient Organisations Research Group (ResOrgs) is a multi-disciplinary team of over thirty researchers and practitioners that is New Zealand based and with global reach. A collaboration between top New Zealand research Universities and key industry players, including the University of Canterbury and the University of Auckland, ResOrgs is funded by the Ministry for Science and Innovation through the Natural Hazards Research Platform and supported by a diverse group of industry partners and advisors. The research group represents a synthesis of engineering disciplines and business leadership aimed at transforming organisations into those that both survive major events and thrive in the aftermath.

We are committed to making organisations more resilient in the face of major hazards in the natural, built and economic environments. Resilient organisations are able to rebound from disaster and find opportunity in times of distress. They are better employers, contribute to community resilience and foster a culture of self-reliance and effective collaboration.

#### What we do:

The ResOrgs programme of public good research is aimed at effective capability building through research activities with significant impacts on policy and practice. Activities and outputs of the group, in existence since 2004, include informing and focusing debate in areas such as Civil Defence Emergency Management, post-disaster recovery, and the resilience of critical infrastructure sectors, in addition to core activities in relation to organisation resilience capability building and benchmarking. We have produced practical frameworks and guides and helped organisations to develop and implement practical resilience strategies suitable to their environment.

#### Why we do it:

In an increasingly volatile and uncertain world, one of the greatest assets an organisation can have is the agility to survive unexpected crisis and to find opportunity to thrive in the face of potentially terminal events. We believe such resilience makes the most of the human capital that characterises the modern organisation and offers one of the greatest prospects for differentiating the successful organisation on the world stage. This resilience is typified by 20/20 situation awareness, effective vulnerability management, agile adaptive capacity and world class organisational culture and leadership. More resilient organisations lead to more resilient communities and provide the honed human capital to address some of our most intractable societal challenges.

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## **Executive summary**

This report is the fifth report in a series of Resilient Organisations reports on the changing employers' behaviour in response to employment demand and supply for the Canterbury rebuild and wider recovery. The work aims to inform decision-making and provide an improved understanding of the ongoing resourcing issues for the reconstruction in Christchurch.

#### The **main findings** are:

- Fluctuating workflows: Construction organisations are still facing fluctuating workflows.
   Although companies have expanded capacity, the expected workflows are not matching capacity. Workflow fluctuations have particularly put pressure on subcontractors and SMEs in terms of maintaining their ability to staff projects where project timelines are uncertain.
- Lack of quality of new workers and high turnover rate: The competence of newly hired employees is a concern, as is the high turnover rate. The high turnover rate has made employers of small size less willing to invest in recruiting and training new workers.
- Loss of skills and subcontractors to other sectors: The continued growth in new subdivisions in Canterbury and strong housing and infrastructure investments elsewhere, particularly Auckland, are drawing away skilled employees and subcontractors from the Canterbury rebuild. Skills retention and in-house training are becoming a main focus for large construction organisations.
- Consistent demand for certain roles: There is still a consistent demand for project managers and civil engineers in the infrastructure sector, whereas in the building sector the demand for project management and engineering professionals has declined since 2012 and 2013, respectively. For the infrastructure sector, drain layers, welders, plant/machine operators as well as safety and quality control staff are still in short supply and will be needed for the continued rebuild. For the housing rebuilds, there is continued demand for tilers, asbestos removal specialists, roofers, brick and block layers.
- Changed workforce employment strategies: Construction organisations were concerned
  about the risks of overcapacity in Christchurch. The trend of workforce resourcing
  strategies is now moving from long-term/permanent recruitment towards more temporary

contracts in the short-to-medium term; and moving from recruitment towards replacement. The risk of employing less experienced labour and questions over the training requirements of this labour, and the costs of training, were of concern.

• Temporary accommodation and wage increases: The issue of temporary accommodation still exists but seems to be absorbed by the market regardless of rent increases. Construction organisations expected the cost of labour in Canterbury to continue to increase over the coming years. There is an expectation of minor increases in plant and material prices.

Looking forward, the following **emerging issues** are likely to affect the needs of the construction sector in Canterbury.

- House repair and rebuild for cash settled home owners: The scale and scope of residential rebuild are growing due to cost escalation and house owners' intention to do other renovations or changes at the same time. Rebuild cost shortfalls may lead some home owners who receive cash settlements to hire less qualified professionals and trades who offer lower rates. There is also a risk that they may go for cheaper and unproven materials and products with consequent poor performance. In such a situation, there exist risks of cost overruns as well as technical and other project risks.
- Difficulty in matching labour to skills among younger workforce: A mismatch of labour and skills is likely to continue to occur, or worsen, if companies are less willing to invest in training new entrants. This mismatch will prevail among younger employment groups and could manifest itself in the form of a skills gap, under-qualification and increased skills shortages.
- Loss of good staff due to burnout and other well-being issues: The recovery will slow if more employees with Christchurch rebuild experience look for opportunities elsewhere. There is a related issue of good people leaving in the running down phase of projects due to burnout after three years of rebuild. Construction organisations face risks of losing human capital that is valuable for business operation as a result of staff 'burnout' or other wellbeing issues.

• Exit strategy of companies and agencies: There is a perception that employees in organisations created for recovery and reconstruction (such as CERA, SCIRT, EQR, amongst others) are feeling uncertain over their future employment situations. The Human Resource implications of exit strategies of key organisations will increasingly become an issue of concern.

Findings from these case studies show that the availability of resources needs to be seen in the wider context of an effectively functioning labour market. This is a key message from case study participants. For construction organisations, two interrelated components are needed to leverage the workforce flows: 1) a steady work flow from the construction of anchor projects and infrastructure rebuild at the regional level; and 2) company's ability to meet staff needs at the organisational level. At the employee's level, however, there is a need to regulate the labour market in terms of addressing the workforce quality issue reported in the case studies and increasing the efficiency of skills matching. It is recognised that unless such an approach to matching the labour and skills is formalised, the problems identified in the case studies will continue to affect the smooth running of the industry, and construction companies will remain frustrated while the recovery progress will remain below optimal levels.

<sup>1</sup> In literature, these organisations are also called 'emerging organisations' after a natural event.

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Taking time to reflect on learnings from rebuild resourcing experience in Christchurch is critical to our longitudinal study and so we continue to be grateful for the time given by our case study organisations. We would also like to give special thanks to Andrew Fox of Peak Recruitment and Barry Akers of Fletcher EQR for providing insights into the case studies. Additional inputs from Wayne Sharman of BRANZ are greatly appreciated.

#### 1. Introduction

## 1.1 Purpose of this report

It is important to recognise that each stage along the recovery timeline will have varied resource pressure points and therefore require different, or updated, resourcing strategies. Resilient Organisations initiated a longitudinal study of construction organisations examining ongoing resourcing challenges for the Canterbury rebuild. Case studies with 15 construction organisations in December 2012 illustrated the types of resourcing problems being faced following the earthquakes and the study provided examples of resourcing best practice (Chang-Richards et al., 2013a).

Based on updated case studies in April and May 2014, this report provides an examination of the changed employers' behaviours and perceptions in relation to employment demand and supply for the Canterbury rebuild and wider recovery. The business resourcing factors that influence workforce flows are captured from case studies. The study aims to inform decision-making and provide an improved understanding of the ongoing resourcing issues for the Canterbury rebuild.

Comparing the changes with findings in the December 2012 case studies and those of April/May 2014 case studies leads to a reappraisal of the resource risk to the Christchurch rebuild for the construction sector. Reflecting on the lessons learnt since the first case studies and the key steps towards a productive workforce and a successful rebuild, this report identifies ongoing 'pinch points' and emerging issues that concern the industry as the rebuild continues.

# 1.2 Case study methods

Longitudinal case studies of construction organisations can provide insights into how hiring strategies across the construction industry and industry strategies for workforce development will change as the rebuild progresses. In December 2012, 15 case study organisations were selected to participate in the research. The chosen case studies collectively provided an overview of current experience with regard to the resourcing of skills for building activities (Chang-Richards et al., 2013a).

Between April and May 2014, Resilient Organisations conducted a second series of interviews with the case study organisations. The focus was to examine their experiences of resourcing in Canterbury and changing business strategies in relation to workforce employment. Of 15 organisations, 10 participated in the April/May 2014 study. The reasons for the other 5 organisations not being able to participate included unavailability at the time of the case studies and absence from Christchurch operations. 3 new construction organisations took part in the study. A total of 16 interviews were undertaken across 13 organisations in Christchurch (See Table 1).

Table 1: Description of organisations used for case study data collection

13 case study organisations	Characteristics
2 Engineering consultancies	1 large size and 1 medium size
7 Contractors/builders	3 large civil contractors, 2 subcontractors, 1 home builder, 1 large construction company
2 Building supplies companies	2 large concrete product manufacturers
2 Project Management Offices	Horizontal infrastructure rebuild & EQC's residential repairs

The research design and data collection methods complied with the requirements of the Human Ethics Committee of the University of Auckland (Reference number 7520).

# 2. Case study findings

The findings reveal six key points relating to the changes in construction organisations' resource needs and initiatives. These six points were:

- Fluctuating workflows;
- Lack of quality of new workers and high turnover rate;
- Losing skills and subcontractors to other sectors;

- Consistent demand for certain roles;
- Changed workforce employment strategies;
- Temporary accommodation and wage increases.

### 2.1 Fluctuating workflows

The general sentiment across the case study organisations was that rebuilding progress has been made but that the recovery is proceeding much slower than they had expected. A lack of a Master Plan for the overall built environment reconstruction was considered by most case study organisations to be a critical obstacle to recovery. The sentiment in common was that having a Master Plan is important to establish a steady flow of work, to speed up the progression of anchor projects and to give private investors more confidence to commit to the rebuild.

In the case studies in December 2012, most organisations expected to see increased building activity to peak over the next 12 months into 2014. These expectations about the peak of rebuild have shifted in case studies in April/May 2014. Two-thirds of the organisations believed the volume of rebuild works would peak between mid-2015 and 2016, likely to come from the anchor projects in the precincts within the central city.

Examining the current recovery process, respondents pointed to an inconsistent pattern of work with peaks and troughs at various times. One interviewee noted that the perceived patchy recovery is partly as a result of a failure to plan and schedule works earlier, a shortcoming that has been exacerbated by weaknesses in understanding how earthquakes impact on the conditions of infrastructure and buildings.

However, one interviewee considered an ideal recovery curve should be gradual, based on the industry's capacity and a vision for leaving a sustainable construction workforce as well as a resilient built environment post rebuild. Another suggested that an optimised approach can be applied to consider recovery trajectory:

"For recovery ... if the demand climbs too fast to a peak, the big boom and bust is inevitable, the economic and social consequences of such a boom is that recovery won't

deliver the workforce needed for future economy. So the force and speed are key parameters for achieving an optimal recovery."

Greater visibility as to when projects are going to market and the resources they may require is beginning to happen, especially since the Christchurch Rebuild – Construction Market Engagement Forum<sup>2</sup> in January this year. However, prolonged lead times from planning to construction was another problem reported by interviewees which impacted resourcing and created inconsistent work flows.

Contractors and suppliers reported that their spare capacity was a result of the inconsistent workflows, affecting their workforce demand. For instance, some interviewees noted that the slow pace of vertical rebuild is affecting their cash flow and this then affects the rate and number of people they can take for employment.

## 2.2 Lack of quality of new workers and high turnover rate

The skills issue in terms of a workforce able to produce quality work is one of the most reported problems, especially by small-to-medium-sized organisations. Terms like 'lack of competency', 'lack of experience', 'low level of skill', 'absence of work ethic' and 'incorrect work attitude', were used by studied employers as a reason, in part, for their reluctance to recruit younger inexperienced workers.

According to Work and Income, vacancies related to the rebuild are taking longer to fill (MBIE, 2013). A continuing low unemployment rate (3.2 per cent for the December quarter of 2013) in Christchurch makes sourcing appropriate labour more difficult (CDC, 2014). The Construction Sector Leaders Group (2013), however, considered a current inhibitor to increasing the labour pool to be the lack of skilled supervisors to manage the growing crews, and suggested sourcing strategies for supervisory staff. Case study findings in this research show that resource pinch points also exist in areas of pipe laying, plant operating and building component installation.

<sup>&</sup>lt;sup>2</sup> Major clients in the Canterbury rebuild shared their forward work programmes at the Christchurch Rebuild – Construction Market Engagement Forum in Christchurch on 28 January 2014. The Forum was instigated by the Productivity Partnership and hosted by CERA with the support of MBIE.

Construction organisations find it increasingly difficult in sourcing qualified people in these occupations.

SME employers were particularly challenged by a range of staff quality issues, namely a lack of experience, skill and competence at semi-skilled and operative levels. Additionally, organisations highly valued the quality of workmanship and services, which was not always easy to achieve with the high turnover of staff. Employment of less skilled young employees and their relatively high turnover rate seem to be an expanding problem and will become more prominent as more construction work gets underway.

#### 2.3 Loss of skills and subcontractors to other sectors

Case studies of April/May 2014 found that organisations are inclined to take more work in Canterbury's new subdivision areas. Some of them have successfully secured contracts in government's housing construction and transport projects. Because of this trend, medium to large-sized infrastructure contractors reported that since mind-2013 they have been experiencing some staffing pressures as their rebuild projects gradually lose subcontractors and expertise to new building activities.

The pattern of people moving away from the rebuild to other sectors was most prominent among those who entered the rebuild sector following the earthquakes, such as overseas migrant workers and those entrant skills from outside Canterbury. This pattern can be explained by a variety of dynamics that plays out in the construction market. The following dynamics were observed by the case study organisations:

- New workers are looking for better career opportunities in other places after gaining Christchurch rebuild experience.
- Small-to-medium sized businesses are seeing work levels in housing and transport sectors
  rise over the last year and are optimistic about development prospects in buildings and
  infrastructure industry across the region.
- Large engineering and construction companies are focussing on winning contracts for large rebuild anchor projects. However, the delay or uncertainty around when these

projects will start is causing their high rates of staff turnover and problems with retaining their subcontractors who, as pointed above, are moving to new building activities. The pressures faced by some large organisations are captured in the following quote:

"This year (2014), we start seeing a significant resource pinch on our external subcontractors. For instance, we sent 100 invitations for tender, only a third got back to us as those subcontractors are busy and their resources got tied up. It will be difficult for us to find compliant tenders and keep us competitive." (Interviewee of a large contracting company)

 General changes in construction demand in different locations have an impact on the rebuild. For example, due to the increased construction demand and higher rates offered in other places (like in Auckland), some companies which established local operations in Christchurch and secured work in the rebuild following the earthquakes have now moved back to housing and building markets in Auckland. As one interviewee put it,

> "As the Auckland market picks up whereas the Christchurch market raised but is not super busy, some of those companies had pulled out their presence from Christchurch as they can survive now in other markets."

There is a general concern across organisations that with increased infrastructure investments in Canterbury, and growth pressures in other major cities, competing demands for resources between the business-as-usual projects and rebuild projects may increase over the next three years. The shortages of resources – not only skills but capitals – might be exacerbated by cost escalation in the rebuild sector. To address this concern, case study organisations suggested that Government invest in project management in terms of programme and portfolio management for the rebuild of commercial buildings in central Christchurch to protect both public and private investment from cost overruns.

#### 2.4 Consistent demand for certain roles

Consultants and contractors in the infrastructure rebuild sector reported ongoing demand for project managers and civil engineers in 2014. Companies working in the commercial building sector, however, noticed the declining trend for professionals in project management and

engineering disciplines since the end of 2012. One interviewee noted that the demand for building project managers peaked in 2011/12 (1 April 2011 to 31 March 2012) whereas the demand for engineering professionals in structural and building services peaked in 2012/13 (1 April 2012 to 31 March 2013). Contracting organisations reported drain layers, welders, plant/machine operators as well as safety and quality control staff are still in short supply and will be needed for continued infrastructure rebuild.

EQC's Canterbury Home Repair Programme is set to wrap up at the end of 2014, with up to 70,000 homes having been repaired and about 20,000 houses still requiring repair. The residential repair sector has a high proportion of small and independent contractors, many of whom have started coming to the market as EQC repair work comes to an end. However, for the remaining jobs in house repairs, some roles are still challenging to fill, such as the specialist trades (especially tilers, asbestos removal specialists, roofers, brick and block layers) and the leading hand/supervisors, and these shortages still continue.

In the building supplies sector, there is an unmet demand for experienced truck drivers. The studied building supplies organisations reported an average 30 per cent turnover rate of truck drivers. One interviewee noted that some of these turnover groups, especially young men without families, are transient. Companies had to turn to overseas migrants from the Philippines to fill local truck driving gaps. Quick turnover of other specialist trades, such as painters and plumbers, has also been reported by subcontractors as a significant risk factor for businesses working on the rebuild.

# 2.5 Changed workforce employment strategies

There were changes in skills needs since the December 2012 case studies. A general observation was that most organisations reached a certain level of capacity at the end of 2012 although some skills remained in short supply, and since then that capacity has remained stable and relatively static. The number of building structural engineers reached a plateau in 2013, but civil engineers were still generally in short supply. Since the second half of 2013, most of the studied companies have replaced staff with fewer new recruitment intakes. As mentioned earlier, the Auckland

market picked up in 2013, taking some focus away from Christchurch. Newly-entered companies also started pulling away their Christchurch operations to focus on their Auckland market.

By mid-2015, MBIE is predicting a peak of non-residential development at around \$1.3 billion per quarter and to remain above \$1 billion per quarter until mid-way through 2018 (Speirs, 2014). Case study organisations were worried that workforce mobility from the rebuild to other developments may continue to increase in response to the market growth on other areas. There is a consensus that they need to ensure they have enough resources to be able to plan for continued rebuild within their own organisations and supply chains; and the focus needs to be on skills retention and up-skilling. Strategies already implemented included employee performance review changing from annual to quarterly reviews, line manager having more frequent contact with staff, increased focus on staff development, and staying competitive in the market in terms of pay rates.

Retaining trained employees has been particularly challenging, as one interviewee highlighted:

"Finding the right people who are willing, able and motivated has been problematic. The more frustrating is you take on new people and spend a lot of time and money training them up. Once they have gained that experience, they move to another company. This is certainly not good for apprenticeship with fewer companies willing to invest in youth training."

Given the current the high turnover, construction organisations need to secure key people to maintain the core competency of their business. Competing demands for staff from other projects and other sectors have led businesses to rethink their resourcing strategies. Some of them are changing their workforce models to take account of the high staff turnover rate and the lower quality workforce. Small-to-medium sized organisations reported that it may be uneconomic to hire wage workers.

One studied organisation re-assessed their business development strategies and opted to restructure the company by replacing wage employees with sub-contractors in order to reduce their operational costs. The outcome of this approach was beneficial from an employer's point of view, with increased revenue, improved productivity and work efficiency. However, if such an employment trend prevails in the coming years, there are implications for training and workforce development in the construction industry.

### 2.6 Temporary accommodation and wage increases

Case study organisations were asked to list top resourcing problems in terms of their effect on their workforce planning and strategies. In December 2012, case study organisation's top resourcing problems were around temporary accommodation and wage escalation. The updated case studies found some changes.

Companies appeared less concerned about workers' accommodation. The issue of temporary accommodation still exists but seems to be absorbed by the market regardless of rent increases. According to Work and Income, the lack of accommodation and high rental costs continue to make it difficult for people to relocate from other areas to work in Christchurch (MBIE, 2013). Although accommodation was not raised as a major challenge facing case study organisations, this is an area in which recovery agencies need to keep alert, especially when the rebuild of anchor projects rolls out (See Resilient Organisations report Chang-Richards et al. (2013b; 2014), for a more complete study on this issue).

The rates for construction work in Christchurch continued to increase over the past year. This result is broadly in line with the results of MBIE's labour market report that the cost of labour in Canterbury construction continues to increase, but at a lower rate. In the year to the December 2013 quarter, salary and wage growth in the Canterbury construction industry increased 2.8 per cent (MBIE, 2013). Case study organisations reported two different views on wage rises for the coming years. Some expected significant wage rises will only happen to some roles that are more challenging to fill while others predicted a general wage rise by over 5 per cent across the construction sector in Canterbury.

## 3. Emerging issues: A 2014 perspective

Looking forward, case study organisations suggested the following emerging issues that are likely to affect the needs of the construction sector in Canterbury.

### 3.1 House repair and rebuild for cash settled home owners

The large number of houses with under \$100,000 worth of damage repaired under the Fletcher EQR programmes meant that many professionals and trades are coming to the market. However, some interviewees were concerned that there are not enough project managers with adequate training and knowledge for house reconstruction in coming years.

The scale and scope of residential rebuild in Christchurch are growing due to cost escalation and house owners' intention to do other renovations or changes at the same time. The rebuild costs may exceed the insurance settlement amounts, which may challenge some home owners who choose to self-manage their house rebuild.

Financial constraints faced by some cash-settled owners can lead them to hire less-qualified professionals and trades who offer lower rates. There is also a risk that they may go for cheaper and unproven materials and products with consequent poor performance. One interviewee noted that in such situations, there exist risks of cost overruns as well as technical and other project risks (See Resilient Organisations report Wilkinson et al. (2014) for a more complete analysis of this emerging issue).

# 3.2 Difficulty in matching labour to skills among younger workforce

Case study organisations suggested that a mismatch of labour and skills is likely to continue to occur or worsen if fewer companies are willing to invest in training new entrants. This mismatch will prevail especially among youth groups and manifest itself in the form of skill gaps, underqualification and skills shortages.

While there have been solid numbers of enrolments in institutes of technology and polytechnics (ITPs) and industry training organisations (ITOs) over the last year, completions do not appear to

be making a significant impact on the supply of trades workers in Canterbury (MBIE, 2013). Case study organisations indicated that there may be some time before workers from these programmes are fully productive.

Low efficiency in skills matching was more related to high staff turnover among less experienced younger workers than older employees. As a result, investing in training has become more costly and less effective. Construction employers will need to be incentivised in training those young workers to be fully productive. The real challenge is to tackle the issues of some of young workers being unmotivated. As one interviewee noted:

"Being willing should always come before being able, which is a behavioural element that can fundamentally address our industry's productivity. As employers, we can provide opportunities to enhance their ability to do the work, but without their willingness to be motivated and participate, our efforts will be in vain."

## 3.3 Loss of good staff due to burnout and other well-being issues

According to the Resilient Organisations' study on post-disaster employee needs, there is a trajectory of evolving needs at workplaces (Nilakant et al., 2013). Three years after the February 2011 earthquake, organisations reported that some employees start looking for changes outside the rebuild zone. In contrast, prospective employees who want to move to Christchurch for rebuilding work are struggling with a range of ongoing issues such as escalating house prices and/or high rents and they may also face a work environment that is different from business-as-usual. Therefore, 2014 will be a year of human resource solutions with a focus on staff retention.

There is a related issue of good people leaving in the running down phase of projects. Some construction organisations reported losing senior people and managers who after three years of 'wading through the swamp' have just had enough. Changing roles and staff also affect the state of productivity and business operation. Staff 'burnout' and other wellbeing issues, such as increasing stress, are reported to be emerging challenges facing construction organisations.

### 3.4 Exit strategy of companies and agencies

The uncertainty around staffing movement and resourcing reduction of newly created recovery organisations with set end dates will impact on resourcing for the rebuild. Proactively managing 'exit strategy' is being needed to provide a smoother transition for employees from one role to the other. There is a perception that employees in organisations created for recovery and reconstruction (such as CERA, SCIRT, EQR, amongst others) are feeling uncertain over their future employment situations. An interviewee stated:

"We're running on 'blind faith' — we don't know what we'll do once our mandate finishes and where to go. Some are panicking. Sadly nobody can make any commitment to our job security. You only have to wait and think positively that something will come up in the end."

Given that the overall rebuild may take longer than anticipated, a business case for some of these organisations extending their mandate could be made. In addition, residual work in the housing repair sector could possibly extend the existence of Fletcher EQR beyond its expiry date. CERA have reportedly experienced a high turnover of staff, and many of the existing CERA staff will need to be transitioned to Christchurch City Council, Central Government or the private sector. This requires planning and will have budget implications.

The Human Resource implications of exit strategies of key organisations will increasingly become an issue of concern. The ability of agencies and the construction sector to absorb these resources is of importance to the continued functioning of the labour market.

#### 4. Conclusion

The changes in construction demand in Canterbury since the first case studies in December 2012 have led to a reappraisal of the resource risk to the Christchurch rebuild by the construction sector. There are signs that business—as-usual, along with new developments both region-wide

and across the country, are growing stronger, to the extent that Christchurch is losing skills needed for the rebuild.

The updated case studies in this report show that the bigger issues for construction organisations to grapple with in creating a sustainable workforce lie in how to decrease staff turnover and how to create the best business environment to retain core competencies. Skills retention has, therefore, become a main focus for construction businesses operating for the rebuild.

The Government's Apprenticeship Reboot programme and the recent '\$3K to Christchurch' initiative mean that the Christchurch construction industry will experience a resurgence of growth. However, the key message from case study participants is that the availability of resources needs to be seen in the wider context of an effectively functioning labour market. An increased concern for high turnover rate and quality of new workers requires an additional education and training component to address workforce competency issues fundamentally in order to support the changing resourcing paradigm for the construction sector.

Above all, for construction organisations, two interrelated components are needed to leverage the workforce flows: 1) a steady work flow from the construction of anchor projects and infrastructure rebuild at the regional level; and 2) company's ability to meet staff needs at the organisational level. At the employee's level, however, there is a need to regulate the labour market in terms of addressing the workforce quality issue reported in the case studies and increasing the efficiency of skills matching. It is recognised that unless such an approach to matching the labour and skills is formalised, the problems identified in the case studies will continue to affect the smooth running of the industry, and construction companies will remain frustrated while the recovery progress will remain below optimal levels.

#### References

CDC. (2014). The Canterbury Report (Vol. Autumn 2014). Christchurch: The Canterbury Development Corporation (CDC),.

- Chang-Richards, Y., Wilkinson, S., Seville, E., & Brunsdon, D. (2013a). Myths and Reabilities of Reconstruction Workers' Accommodation, February 2013. Auckland: Resilient Organisations.
- Chang-Richards, Y., Wilkinson, S., Seville, E., & Brunsdon, D. (2013b). Resourcing of the Canterbury rebuild: Case studies of construction organisations (Vol. January 2013). Auckland: The University of Auckland, BRANZ, Resilient Organisations.
- Chang-Richards, Y., Wilkinson, S., Seville, E., & Brunsdon, D. (2014). Provision of temporary accommodation for construction workers: Learnings from Queensland post Cyclone Larry: Resilient Organisations Research Report 2014/01.
- Construction Sector Leaders Group. (2013). Construction Sector Workforce Plan for Greater Christchurch (Vol. June 2013): Construction Sector Leaders Group.
- MBIE. (2013). Quarterly Canterbury Job-matching Report (Vol. December 2013): Ministry of Business, Innovation and Employment (MBIE),.
- Nilakant, V., Walker, B., & Rochford, K. (2013). Post-disaster management of human resources: learning from an extended crisis, April 2013. *Resilient Organisations Research Report 2013/03*.
- Speirs, A. (2014). A weather eye on the economy. *The New Zealand Herald, March 25, 2014*(Tuesday), D21.
- Wilkinson, S., Chang-Richards, Y., Seville, E., & Brunsdon, D. (2014). Assiting self-managing rebuilding owners in New Zealand to rebuild their homes: Lessons for New Zealand from the 2009 Victoria Bushfire Recovery: Resilient Organisations Report 2014/02.
- Resilient Organisations research reports: http://www.resorgs.org.nz/Publications/research-reports.html