



**Resilient Organisations
Research Report 2011/03**

**Post-Disaster Organisational Recovery
in a Central Business District Context:
The 2010 & 2011 Canterbury Earthquakes**

Executive Summary

Joanne R. Stevenson
Erica Seville
Hlekiwe Kachali
John Vargo
Zachary Whitman

EXECUTIVE SUMMARY

This report presents the findings from two studies on organisational resilience following the 4 September 2010 earthquake in Canterbury, New Zealand to answer three core research questions related to the recovery of organisations within the context of a Central Business District:

- *How did the damage to and decisions of organisations and their neighbours within a Central Business District influence the recovery of an individual business?*
- *To what extent did pre-event characteristics of the CBD, and pre-existing plans for how the CBD would evolve into the future, influence the individual organisations' resilience and the recovery process within the CBD as a whole?*
- *How do policies and plans implemented to manage recovery at the CBD level influence individual organisations' recovery?*

The first study surveyed organisations from across Canterbury in the aftermath of the 4 September earthquake, collecting data from 366 organisations about initial impacts, disruptions, and challenges faced by organisations, as well as information about organisational attributes, relationships and strategies that may have helped mitigate the impacts of the earthquake. A cross-section of geographic areas and industry sectors were strategically selected to take part in this survey to reflect various elements of the Canterbury economy.

The results from this survey showed that organisations located in the Christchurch and Kaiapoi CBDs were more likely to close for a period of time following the disaster and stay closed for more days than organisations in other sectors. CBD organisations were also more likely to be disrupted by structural damage and more likely to relocate all or part of their organisations than most other sectors. Similarly, organisations in the two CBDs were more likely to experience revenue decreases following disasters.

These findings suggest that CBD organisations face a different set of risks and may require additional support during the response and recovery phase and better mitigation and planning prior to an event. For example, CBD organisations had more issues with site access following a disaster, therefore they should emphasize backing up critical information in multiple locations and where possible plan for and facilitate staff relocation or the ability to work from home.

The second study focused particularly on the progress of recovery for the Kaiapoi CBD since the earthquake. Although Kaiapoi suffered significantly from the 4 September earthquake, it did not experience a large amount of additional damage as a result of the 22 February 2011 earthquake. As a result, Kaiapoi is an interesting example of a recovering community in a unique position to revitalise and develop economic and organisational capacity. While recovery progress is difficult to quantify precisely, at the time of writing Kaiapoi was clearly further along in the recovery process than Christchurch. As such, Kaiapoi can potentially provide useful lessons to guide the recovery of Christchurch and other disaster-affected areas.

This study used semi-structured interviews with twelve key informants identified as having a significant influence in shaping the post-disaster environment for Kaiapoi businesses. The data from these interviews provided information about the local context for organisational recovery. Understanding the local context around organisational recovery helps to clarify the decisions and justifications that shape plans, regulations, and social, economic factors that ultimately influence how

organisations recover. Four key themes emerged during these interviews as having a significantly influence on the recovery environment within the Kaiapoi CBD, these were:

- Competition and collaboration
- Leadership, engagement and communication
- Drivers and temporal influences on recovery
- Preparing for reconstruction.

Recognising and maximising opportunities in crisis is one of the central tenets of resilience. The Canterbury earthquakes have presented organisations in Kaiapoi and throughout Canterbury with an opportunity to reinvent themselves, capture new markets, and form new partnerships. Much of the dialogue in the interviews depicted a departure from “survival-of-the-fittest” business models to one that emphasised collaboration and mutual benefit.

Within a CBD environment, organisations can work together forming economic clusters for co-promotion and support or to share resources in order to decrease the impacts and improve business post-disaster. Thus, while organisations are at risk from other organisations in close proximity and the impacts of restricted access following a disaster, they can reduce risk by forming partnerships and networks with other organisations.

An important area for further research is to investigate the nature of collaborative relationships and how they are being formed prior to and following disasters. Understanding the way organisational networks are utilised during disaster recovery, can also help identify ways these collaborations can be fostered and managed as part of mitigation and response activities.

Recovery is a complex process with many interested and interacting parties; it is therefore difficult to interpret who the “leaders” of recovery are at any point in time. There was a general acknowledgement that for recovery to be successful decisions needed to be made by working together and maintaining constant communication between government, non-government organisations (for-profit and not-for-profit), and the community. It is clear from the interviews that the Waimakariri District Council (WDC) has emerged as an influential, widely acknowledged entity in the recovery. The WDC has made efforts to engage residents and businesses in planning and decision making processes, although there were conflicting reports on the level and success of engagement with businesses.

Urban plans developed prior to the disaster are definitely playing a part in the way Kaiapoi redevelopment is being pursued, both positively and negatively. Plans had been developed and community consultation done prior to the earthquakes, planners had a head start in the aftermath of the disaster. The disaster acted as a catalyst for plans that had been made but were “sitting on the shelf” because of a lack of political and economic will. However, the pre-established plans can also be viewed as a hindrance because organisations may view the consulting process post-disaster a matter of getting buy-in to something they may or may not have had previous input on. Whilst some reported that engagement has been so extensive that community members were feeling fatigued with the process and WDC should just finalise plans and begin recovery work, others indicated that businesses were frustrated with both the engagement process and the plan put forth by the Council. In response a business advocate group was formed to develop an alternative plan for the town centre (which was eventually adopted by the WDC).

Important questions that surfaced during the analysis of these interviews were: What is the most appropriate model for business engagement in planning and recovery decision making? and; Should councils and Government move away from a “public meeting” type format towards creating collaborative partnerships with businesses and developers.

Effects of disasters differ depending on the different phases of the recovery cycle. Goods and services demanded in the response phase might not be the same (in type and quality) as those demanded in the recovery phase. Consequently, some organisations might do well immediately after, leading to a sense that they have recovered, only to experience delayed effects or the influence of a changed market months following the initial disruption. External factors that individual organisations cannot control including insurance payouts, ongoing aftershocks, and policy changes can make future planning and decision making post-earthquake particularly problematic.

Acknowledging these difficulties several respondents argued that having timeframes and a recovery program with defined goals were essential to the recovery process. Realistic timeframes and setting goals as part of a recovery programme allow people to plan, make needed arrangements, and keep the recovery process moving forward.

Significant concern was also expressed about the potential impacts of the reconstruction process on Kaiapoi organisations. If we can understand more about the way reconstruction efforts influence organisations, organisations may be able to adapt their behaviours to maximise the benefits of the environmental changes. For example, reconstruction efforts will necessarily bring many construction workers who need temporary accommodation, services, food and entertainment. How can organisations plan to adapt their marketing or product to this new demographic?

This concept of planning for the anticipated impacts of reconstruction ties in with several other themes emerging from the interviews. For example, many respondents discussed the importance of having a recovery programme that gives an indication of timelines. With approximate timelines, organisations can plan for when they will need to relocate or consider what they might do to minimise noise and vibration disruptions caused by heavy machinery. Similarly, organisations may be able to develop collaborative relationships with competitors, co-located organisations, or those providing complementary services to aid each other during the reconstruction period.

With the massive demolition and reconstruction process that will occur in Canterbury over at least the next decade, understanding how reconstruction may affect organisations or disrupt their operations will inform planning and business support decisions. Additionally, investigating and developing ways organisations can find opportunities in the reconstruction period will help Canterbury organisations recover more successfully.

The two studies discussed in this report are part of a broader longitudinal study of the resilience and recovery of organisations following the 2010 and 2011 Canterbury earthquakes. A second survey is currently underway to assess organisational impacts, planning, and mitigation information following the 22 February earthquake. More in-depth research into the challenges and opportunities emerging for different sectors is also in process. As they become available, additional research results will be released onto our website: www.resorgs.org.nz.

You can download a free copy of the full report on this research from:

www.resorgs.org.nz/pubs.shtml