

Canterbury Earthquakes Overview

In 2010 and 2011, the Canterbury region of New Zealand was affected by a series of damaging earthquakes. The two largest earthquake events on September 4th, 2010 (M7.1) and February 22nd, 2011 (M6.3) were followed by thousands of aftershocks, some of which caused additional damage or exacerbated existing damage.

The earthquakes resulted in extensive building damage from shaking and caused thousands of tonnes of silt to surface as soils liquefied. Liquefaction caused extensive damage to land, buildings, and buried infrastructure (CCC, 2011). Together, these earthquakes were the most expensive and socially disruptive disasters that New Zealand has ever experienced (Stevenson, 2014).



Figure 1 (Left) Businesses unable to access their premises in Christchurch CBD; (Right) Damage to unreinforced masonry facade in an historic street in Christchurch: the street remains inaccessible four years after the earthquakes. (Photo Credit: Dr Graham Tobin).

The unique challenges presented to organisations by the Canterbury earthquakes offered a varied landscape in which to examine organisations facing disruption scenarios. Organisations across the region experienced a range of different disruption profiles. Some organisations suffered total capital loss, while others faced a single short-term infrastructure outage.