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### **Knowledge management and tourism recovery (de)marketing: The Christchurch earthquakes 2010-2011.**

**Abstract:** New Zealand has a history of deadly earthquakes, the most recent of which in Christchurch (2010-2011) has had major consequences for the tourism sector. Tourism destinations affected by major natural disasters face significant challenges during the response and recovery phases. Christchurch lost a large proportion of its lifelines infrastructure and accommodation capacity, and experienced an unprecedented drop in domestic and international visitor arrivals. The theoretical frameworks informing this paper come from the fields of tourism disaster planning, knowledge management and recovery marketing. They inform an empirical study that draws upon qualitative expert interviews with national and regional destination management organisations regarding their experience of the Christchurch earthquakes. The findings of this research highlight the critical importance of knowledge management and effective inter-agency collaboration and communication in the immediate disaster response, as well as during the development and implementation of (de)marketing strategies, in order to expedite medium to long-term tourism recovery.

**Keywords:** Christchurch, tourism, knowledge management, recovery marketing, disaster, earthquakes, crisis communication.

## **1.0 Introduction**

New Zealand is a geologically active country located on the Pacific-Australian tectonic plate interface. It has a history of deadly earthquakes, most notably the 1931 Napier earthquake (magnitude 7.8) which cost 258 lives. While the active geology of New Zealand is fundamental to its nature-based tourism product (e.g., geothermal, alpine and scenic), the country is inherently vulnerable to natural disasters, with the potential for earthquake and tsunami events being prominent in the public consciousness since the recent Christchurch earthquake, and Japan (2011) and Samoan (2009) tsunami disasters. The New Zealand city of Christchurch experienced a sequence of damaging earthquakes in 2010-2011, with a magnitude 6.3 on 22 February 2011 resulting in 185 deaths and causing major damage and destruction of critical infrastructure. The consequences of this event for the tourism industry were immediate and sustained, not only for the city of Christchurch but also the wider tourism economy of the South Island.

The Christchurch earthquakes (also known as the Canterbury earthquake sequence) are distinct from many natural disasters, due to both the extensive destruction of a modern city, and the prolonged nature of the aftershock sequence. This has presented a significant challenge to a range of tourism/destination management agencies at both the national and regional levels. Key aims of the research were to 1) investigate tourism agencies responses

to the earthquakes, in terms of communication and knowledge management, and; 2) examine the recovery (de)marketing approaches adopted by tourism marketing organisations in the aftermath of the earthquakes, with specific note of the purpose and timing of marketing efforts. This paper contributes theoretical and empirical insights into tourism disaster recovery within the context of a destructive and prolonged natural disaster. It is situated within the literature on tourism disaster planning (Faulkner 2001; Faulkner & Vikulov 2001; Scott, Laws & Prideaux 2008), knowledge management (Paraskevas, Altinay, McLean & Cooper 2013; Cooper 2006; Blackman, Kennedy & Ritchie 2011; Koraeus & Stern 2013) and recovery marketing (Walters & Mair, 2012). The research has been carried out over a period of 18 months, in order to understand the unique elements of a natural disaster unlike most in that it has unfolded over a period of years, rather than hours or days. This paper specifically addresses Phase 5 (Long term recovery) of Faulkner's (2001) six-phase tourism disaster planning/management model. Using empirical material from a programme of expert stakeholder interviews, it critically explores the outcomes and responses of the tourism sector, drawing conclusions that provide insights into the theory and practice of tourism disaster response, knowledge management and recovery marketing.

## **2.0 The Canterbury earthquake sequence and tourism**

Christchurch is the second largest city in New Zealand (pop. 340,000), and prior to the earthquakes it contributed 16% of the total national tourism activity (Ministry of Economic Development 2012). Christchurch was known as the 'Garden City' because of its green space, with a tourism product based on heritage and scenic values, and significant events, conventions and cruise industries. The Australian inbound visitor market comprised 43% of the arrivals to Canterbury prior to the earthquakes (CCT 2012). In the year to March 2010, Christchurch received 820,000 international visitors, however between 2006-2010 the central city was in a period of decline; international arrivals fell by 80,000, which was considered only partially a consequence of the Global Financial Crisis and more about a stagnating tourism product (Simmons & Sleeman 2012).

A major strategic advantage for the city is its position as the aviation gateway to Canterbury and the rest of the South Island, with 85% of international visitor arrivals and departures to and from the South Island travelling through Christchurch International Airport (CIAL 2012). Tourism in the wider province of Canterbury focuses on natural heritage and scenic values, including skiing (Southern Alps), thermal hot springs (Hanmer Springs), whale-watching (Kaikoura), and alpine environments (Mt Cook and Arthur's Pass national parks), including the Trans-Alpine railway. In 2009, international tourists stayed for a total of 6.6 million guest nights in Canterbury, in addition to similar numbers of domestic visitor nights (Tourism Strategy Group 2012).

The Canterbury earthquake sequence began at 4.30am on 4 September 2010 with the shallow rupture of the Greendale Fault (M 7.1), 30 km west of Christchurch. Damage in the city was considered significant at the time, with many heritage building facades collapsing and large quantities of liquefied silt erupting from the ground surface as a consequence of shaking (liquefaction). The fact that there were no casualties was attributed to New Zealand's rigorous building codes, and that the earthquake took place in the early hours of the morning while people were at home asleep. Five months later, at 12.51pm on 22 February 2011, a shallow aftershock (M 6.3) struck southeast of the central city at a depth of 5 km, resulting in unprecedented damage and destruction to the city (Stevenson et al. 2011). The aftershock claimed 185 lives, with two major building collapses accounting

for 133 deaths. The fatalities included foreign nationals from 20 countries. It also destroyed many heritage buildings, notably Christchurch Cathedral, an iconic building of significance to the people of the city, and as a tourist attraction. Less than 24 hours later the government declared a state of National Emergency, highlighting the need for national and international resources to effectively manage the disaster. The earthquake also resulted in rapid response by tourism stakeholders at national and regional level, an event that was unprecedented in New Zealand for a natural disaster.

In the months following the 22 February 2011 earthquake Christchurch experienced several damaging aftershocks and thousands of smaller seismic events. During this time 220 historic buildings were demolished, effectively changing the face of the city of Christchurch (Canterbury Earthquake Recovery Authority (CERA) 2012). The February earthquake destroyed two-thirds of existing hotel stock and many backpacker hostels in Christchurch, leading to a decrease of 1 million visitor guest nights (two-thirds were international visitors) (CCT 2012). Eighteen months after the earthquake the city had 1100 hotel rooms, compared to 3750 before (The Press 2012), with direct losses in visitor expenditure of \$235 million in Christchurch city (CCT 2012). The Christchurch Central Business District (CBD) remained cordoned off from public access for more than 18 months, although the size of the cordon gradually reduced. The city's modern convention centre was destroyed and with it the conventions market. After many months of assessment AMI Stadium was declared beyond repair, and all Rugby World Cup games (September/October 2011) scheduled to take place in Christchurch were relocated to other cities.

The Christchurch Earthquake Recovery Authority (CERA) and Christchurch City Council developed a blueprint for redevelopment of the CBD. In a submission to CERA on 12 September 2011, the regional tourism organisation Christchurch Canterbury Tourism (CCT) urged CERA to expedite the rebuilding of the CBD. It claimed the tourism sector would remain in a state of 'limbo' because of the critical shortage of accommodation facilities, and the lack of a convention centre. A master plan to rebuild the city was finally completed almost 18 months after the February earthquake following a lengthy period of community and stakeholder engagement, discussion and planning. The rebuild has been posited as a unique opportunity to revitalise the CBD and outer suburbs by creating a future city, to correct past urban design failings and to construct a dynamic and attractive place for residents and visitors.

### **3.0 Natural disasters, knowledge management and recovery (de)marketing**

Natural disasters lead to major disruption of tourism systems, and can result in prolonged and cascading impacts on destinations (Laws & Prideaux 2005; Sharpley 2005; Faulkner 2001; Ritchie 2009; Glaesser 2003; Pforr & Hosie 2009). The impacts of natural disasters on tourism have been described in the academic literature addressing crisis management and response, resilience and recovery. While academic attention has focussed on disaster planning and management (Scott et al., 2008; Ritchie et al., 2011), greater empirical attention needs to be paid to the recovery of tourism destinations affected by natural disasters. Recent recovery-focussed natural disaster studies have been carried out on tsunami (Carlsen 2006), floods (Faulkner & Vikulov 2001), wild fires (Armstrong & Ritchie 2008; Cioccio & Michael 2007; Hystad & Keller 2008), and earthquakes (Ke et al. 2010; Huang & Min 2002; Huang, Tseng & Petrick 2008). In order to continue to address

this gap, a call has been made for existing and emerging disaster case studies to specifically accommodate tourism recovery perspectives (Carlsen & Liburd, 2008).

There is much to learn from the experience of tourism destinations in the post-disaster environment. Faulkner's (2001) tourism disaster management framework outlines the sequential processes of preparing for an imminent crisis event (pre-event and prodromal phases 1-2), the emergency and response phases (acute phases 3-4), and, most importantly for this discussion, the long-term recovery and resolution phases (phases 5-6). Subsequently, Scott, Laws & Prideaux (2008) developed three sub-phases to elaborate on Faulkner's phase 5 (recovery):

- 5a: Recovery of damaged infrastructure
- 5b: Marketing responses
- 5c: Adaptations to the new system.

These three sub-phases can take place simultaneously, and are generally managed by different authorities. Scott et al. (2008) also note that the long-term (recovery) sub-phases may be aligned to an evolutionary new tourism system, such that the notion of 'return to normality' may be unhelpful, undesirable or impossible due to the existence of 'new realities' (Scott et al., 2008: 8). These are important points of note when considering the Canterbury earthquake sequence. While many natural disasters, including tsunamis, flood, wild fires and extreme weather events (e.g., cyclone and tornado), have prodromal, emergency and intermediate phases that may pass quickly (Faulkner 2001), the Christchurch earthquake experience has been quite different in terms of the absence of the prodromal phase (phase 2), a highly destructive emergency phase that continued over many months in the form of damaging aftershocks (phase 3), and a longitudinal (temporal) sequence of subsequent phases (phases 4, 5a, 5b and 5c) that have been prolonged and at times confused. During this time some aftershocks have been of sufficient magnitude and intensity to cause a return to phase 3.

### **3.1 Knowledge management**

Natural disasters result in negative business outcomes that can be exacerbated by lack of preparatory planning or inaction by key public agencies (Faulkner, 2001). Lee, Seville, Vargo & Roger (2010) argue that organisational culture plays a significant role in determining whether a planning/management agency or commercial business succeeds or fails during times of crisis. Crisis events are often without precedent and require rapid decision-making and effective communication. Indeed an organisations' awareness, management approach and adaptability to the crisis situation can have profound implications on business continuity and survival (Lee et al. 2010; McManus et al. 2008; Seville et al. 2008). Communication between recovery stakeholders is of vital importance, and can significantly enhance or impede the timeframe for a destination to recover. Strategies developed during the recovery must be rapidly deployed, presenting major challenges in making them 'fit' with the needs and motivations of other tourism stakeholders, as well as with other agencies involved with the response and recovery (Henderson 2003).

In recent years, the importance of crisis knowledge management in the tourism disaster literature has become most apparent (Blackman et al. 2011; Paraskevas et al. 2013). Crisis knowledge management in tourism can be used to improve destination recovery and

resilience to future events, and in communicating to all relevant stakeholders during a crisis. This is a critical challenge given the fragmented nature of tourism (Mistilis & Sheldon, 2006). Blackman et al. (2011) highlight that destination marketing organisations (DMOs) now play a previously unrecognised role in crisis management, which is quite aside from their traditional (i.e., primarily marketing) endeavours. This is particularly so in terms of acting as a critical information conduit to all relevant tourism stakeholders before, during and after a disaster. Situated in the field of knowledge management, Paraskevas et al. (2013) propose a framework for the governance of crisis knowledge in tourism. Four organisational factors, including leadership, communication systems, organisational structure and crisis culture form the foundation of the framework. Then, they identify ‘emergent crisis knowledge flow’ in response to crisis events, where reactive responses are needed during a time of uncertainty to address the specific needs of each disaster event. In contrast, ‘institutionalised crisis knowledge flow’ refers to organisational experience of past events that has contributed to the development of documented and stored repositories of crisis knowledge.

Paraskevas et al. (2013) also draw attention to types of crisis management, distinguishing between tacit and explicit knowledge. The former refers to individual and context specific knowledge that is derived from personal experience as well as ideas, thoughts, values and emotions. Tacit knowledge may be further distinguished as technical (i.e., expertise, knowledge and skills) and cognitive (perceptions, beliefs and values). Explicit knowledge is encoded or otherwise held in documents, objects or artefacts and here, again, a distinction is made between object (business plans, databases, reports) and rule-based (rules and procedures) knowledge repositories. Paraskevas et al. (2013:132) highlight the importance that organisations “maximise the benefits of tacit and explicit knowledge if they are to manage both types in a systemic manner” so as to be effective when required to respond with urgency (Cooper, 2006; Koraeus & Stern, 2008).

### **3.2     *Recovery (de)marketing:***

Knowledge management systems are a “...powerful resource to help governments, organisations and communities prevent, mitigate, plan for and/or recover from disasters and crises (Mistilis & Sheldon 2005:2). Within this context, this paper focuses on the Canterbury earthquake sequence and how to rebuild the tourism sector at a destination that has experienced a major natural disaster (Scott et al. 2008). Recovery marketing is a critical step in the process towards re-establishing tourism activities in the post-disaster environment, particularly in tourism-reliant communities (Walters & Mair 2012). Recovery marketing decisions are determined in part by specific circumstances with one-off, on-going or recurring crises posing very different challenges (Beirman, 2003), and it is here that knowledge management and inter-organisation/stakeholder collaboration is critical. The timing of recovery marketing efforts should be a collective one, across local, regional and national tourism stakeholders. Damaging earthquakes and their aftershock sequences pose very different challenges compared to one-off events, such as a hurricane or tornado, because aftershocks may continue to present a safety risk and can cause aggregated damage (e.g., of previously compromised structures), anxiety and fear for local residents and visitors for a prolonged period, making it difficult and potentially unsafe to resume marketing the destination.

These matters raise various important questions about recovery marketing, such as the appropriateness, timing and effectiveness of different recovery phase marketing strategies.

Walters & Mair (2012) document and critique a number of (de)marketing strategies for post-disaster (phase 5) recovery. One important question relates to timing and ethics. The 1999 Chi-Chi (Taiwan) earthquake caused an immediate reduction in tourist visitation (Huan 2007; Huang & Min 2002; Huang et al. 2008). The Taiwanese government invested heavily in rebuilding tourism infrastructure and gave priority to a marketing strategy that pursued a swift 'return to normality' (Huang & Min 2002). Similarly, following the Boxing Day tsunami, tourism was an economic imperative for authorities to call for visitors to return to struggling tourism-reliant communities in Thailand, causing some debate around the ethics of tourists returning to disaster zones where local residents may be coping with post-disaster trauma/grief and rebuild (Beirman, 2003).

Timing and strategic approaches to recovery marketing, which will vary with circumstances, are clearly of critical importance. DMOs may initiate recovery through market communications that 'addresses concerns, change false perceptions and reinforce positive perceptions' (Huang et al. 2008: 206). In some cases a complete cessation of marketing activity, i.e. (de)marketing, should be considered if the destination has been subjected to extensive damage and therefore lacks appropriate tourism infrastructure, or if visitors are at significant risk of harm. In others situations marketing as 'damage control' is necessary, in which 'alternative' images may be deployed to counter the sensational imagery that may be used (and recycled) over time by the mass media, and reassure visitors (Beirman 2003). Communication planning requires the monitoring and management of media reports to reduce the sensationalising of news reports, and reduce exaggeration (or to accurately represent progress to restore infrastructure and services), in order to counter (mis)perceptions of the destination (Armstrong & Ritchie, 2008; Walters & Mair 2012). Government advisory services also bear significant influence over the recovery of discrete markets in cases where travel advice may vary significantly between governments (Scott et al. 2008; Beirman 2003). Again, timing is critical to recovery marketing efforts; if it is initiated too soon tourists may be disappointed or potentially put at risk, too late and tourism businesses may fail due to the prolonged absence of tourists.

Various recovery marketing strategies are reviewed by Walters and Mair (2012). These include messages of solidarity (i.e. 'by visiting you are helping us recover') that were commonly employed after the Boxing Day tsunami (Carlsen & Hughes 2008), 'business as usual', community readiness ('we are ready to welcome you') and celebrity endorsements (Walters & Mair 2012). Once the recovery is underway, messages drawing on the curiosity of potential visitors, and the rejuvenation or renewal of the destination can be employed (Walters & Mair 2012), perhaps accompanied by price reductions, discounts, and guest/visitor testimonials. The manner in which recovery marketing initiatives are developed and delivered requires a level of inter-agency collaboration, knowledge management and stakeholder communication that is uncommon in highly fragmented industries (Mistilis & Sheldon, 2006). Furthermore, Scott et al. (2008: 12) comment that "...no ideal template exists or will ever be devised to deal with crises because of their varied nature", noting that 'restoring normality' may be an option that is unavailable (or undesirable) due to the extent of system change brought about by a catastrophic natural disaster.

#### **4.0 Empirical methods**

The aims of this research were to investigate 1) the response of tourism destination managers across regional and national levels of governance to the Christchurch

earthquakes in terms of knowledge management and crisis communication, and 2) the development of recovery (de)marketing initiatives, including roles and responsibilities, collaboration and knowledge management. In order to achieve these aims, the research employed a qualitative approach using empirical data collected via in-depth expert interviews with key tourism stakeholders. Six interview informants were selected based on their senior roles and responsibilities in organisations tasked with the immediate response to the earthquakes and the recovery of Christchurch as a tourism destination (Table 1). These participants were identified through word-of-mouth or by reviewing each organization's website, and contacted directly to request their participation. Interviews were conducted between March 2011 and July 2013.

#### **INSERT Table 1:**

##### Summary of expert interview participants and organisations

Two interview participants were from the national and regional destination marketing organisations (Tourism New Zealand and Christchurch Canterbury Tourism), three from the Tourism Strategy Group (Ministry of Economic Development), and one from the Tourism Industry Association of New Zealand. Each senior manager or analyst had carried out specific tourism recovery and response roles throughout the Canterbury earthquake sequence. Semi-structured interviews, which lasted between 20-60 minutes, were conducted to address the research objectives, while seeking to accommodate and encourage the opportunity to cover other relevant topics as directed by the interviewee. One-to-one open-ended interviews offered the flexibility to identify and explore issues in detail (Jennings 2001).

Questions were designed to investigate three main areas of enquiry; knowledge management, recovery marketing and adaptations to the new tourism system (Table 2). Firstly, knowledge management principles were used to investigate the tourism crisis response in the short to medium and long terms after the earthquakes. The first three interviews specifically addressed this research theme, and took place with participants from the Tourism Strategy Group (TS3 & TS4) and TIA (TS6) in March and June 2011 in the immediate aftermath of the February and September events. Interview questions sought details of the short and medium term response to the events in Christchurch, including communication channels and responsibilities, and the effectiveness of the collaborative inter-agency approach that developed. It also investigated the pre-existing level of policy and planning around crisis management in their organization.

Table 2 outlines the interview research themes and key areas of enquiry, together with the theoretical constructs that informed the analysis of the data; firstly, the Paraskevas et al. (2013) crisis knowledge management framework, and secondly the Scott et al. (2008) elaboration of phase 5 of the Faulkner (2001) tourism destination crisis management model addressing long term recovery and recovery marketing (Table 2).

The second theme, recovery marketing, was framed using the Scott et al. (2008) addition to the Faulkner (2001) tourism disaster management framework (Table 2). The framework addressed each of the three sub-phases (5A-5B) of the recovery phase of a destination affected by disaster, including the importance of infrastructural reinstatement and marketing responses. The latter was further considered with reference to the Walters & Mair (2012) analysis of marketing approaches used after the Victorian bushfires of 2009. Marketing and Communication Managers from both Tourism New Zealand (TS1) and

Christchurch Canterbury Tourism (TS2) were interviewed in June and July 2013 to understand how the long term recovery was continuing to unfold more than two years after the earthquakes. These interviews explored details about the marketing approaches that were developed and implemented by their organizations following the earthquakes, with specific note of the timing of the campaigns.

The final part of the interview programme addressed the adaptations and lessons learnt from the earthquakes as Christchurch evolved towards a post-disaster tourism system (Phase 5C of the Scott et al. (2008) framework). The outcomes of the Canterbury earthquakes required tourism DMOs to manage a heavily damaged tourism product that was undergoing a gradual (yet accelerating) evolution and renewal. A critical feature of knowledge management is the subsequent flow of emergent crisis knowledge into future organisational preparedness through embedding ‘lessons learned’ (Paraskevas et al. 2013). An important governance development that stemmed from the lessons of the Christchurch earthquakes was the Visitor Sector Emergency Advisory Group (VSEAG), an inter-agency committee that was developed in 2013 to address visitor safety during crises events in New Zealand. The core function and intent of the group emerged as a direct consequence of the Christchurch earthquakes to address the vulnerability of the tourism sector to significant shocks, including natural disasters. The VSEAG acknowledge the critical importance of crisis communication and collaboration during the response and recovery phases of a disaster. A Senior Policy Analyst (TS5) at the Ministry of Business, Innovation and Employment (formerly the Ministry of Economic Development), was interviewed in June 2013 primarily to discuss the VSEAG initiative.

## **INSERT Table 2:**

Research themes, key areas of enquiry and informing conceptual frameworks.

All interviews were recorded with permission, partially transcribed in accordance with the objectives of the research, and then subject to a blinded manual interpretation process to identify key themes emerging from the data. Discussion of key findings followed and summary tables were produced to bring the research objectives, theoretical contexts and empirical interpretations together. We used triangulation to ensure dependability (interpreter triangulation), credibility (theoretical triangulation) and transferability (rich context description) (Decrop 2004). In interpreting and presenting our findings we sought to achieve ‘referential adequacy’ (Decrop 2004) to promote the credibility of our qualitative findings.

## **5.0 Knowledge Management during and after crises**

The September 4<sup>th</sup> 2010 earthquake took place 30 km west of Christchurch city in the early hours of the morning, and caused extensive damage to buildings and infrastructure. The airport was closed for several hours, but reopened quickly and the majority of tourism businesses continued to operate as usual. While the September earthquake was much less destructive than the subsequent February 2011 aftershock, it was significant enough to generate an unprecedented response from tourism leaders. The earthquake was followed by many thousands of aftershocks in the months after September.



Emergent crisis knowledge is generated during times of real (or simulated) uncertainty (Paraskevas et al. 2013). Three themes were identified during the interview programme. These were:

1. Developing emergent crisis knowledge as a consequence of the September 2010 earthquake;
2. Applying emergent crisis knowledge to the February 2011 earthquake;
3. Embedding emergent crisis knowledge into institutionalised knowledge flow to improve future disaster preparedness.

### **5.1 Theme 1 - Developing emergent knowledge: the September 4<sup>th</sup> 2010 earthquake**

After the September 4<sup>th</sup> 2010 earthquake, the response from tourism leaders involved a rapid collaboration across several key stakeholders, including the Tourism Strategy Group (TSG, formerly the Ministry of Economic Development, currently the Ministry of Business, Innovation and Employment), Tourism New Zealand (TNZ), Tourism Industry Association of New Zealand (TIANZ), the Ministry of Foreign Affairs and Trade, the Ministry of Education and Immigration New Zealand. Christchurch Canterbury Tourism (CCT) was an important part of this collaborative response, particularly in terms of feeding updates and information from Christchurch, but were not always physically present at meetings. It became known as the Visitor Sector Response Group (VSR Group), and was based in the capital city of Wellington, which enabled a centralised response with the main tourism bodies being located in the city.

The scale of the earthquake in September was significant in terms of the response required, and TS1 and TS2, who had recently joined their organisations prior to the earthquakes, described the response effort as *'totally unprecedented'* [TS1]. In contrast TS6, who had a longer period of employment in their organisation, pointed out that there were earlier occasions when a collaborative tourism response was required. TS6 stated *'We have dealt with crises like the swine flu, or H1N1 outbreak of 2009... we worked closely with Tourism New Zealand and the Ministry of Tourism at that time, and other relevant government agencies to get relevant and accurate information out to the industry about how to cope with any outbreaks of disease in New Zealand'*. All the informants confirmed there were no formal agreements between the main tourism organisations at the time of the September earthquake, with members of the team relying on any tacit knowledge they had acquired over their job history.

Lack of procedural (explicit) knowledge was not considered to have had negative consequences for the Christchurch response effort. TS6 reported that *'There was nothing on paper. But we all swung together for the good of the industry and certainly with the latest earthquake it all pretty much went like clockwork'*. Christchurch Canterbury Tourism had no formal planning in place, however TS2 indicated that *'The way our organisation coped with the first earthquake was so positive.'* Government policy around tourism crisis response was also limited in extent in terms of procedural knowledge. *'We have not had strong policies and procedures in place for emergencies...They are put together 'on the fly' based on relationships that are there, the specific situation, the idea that almost no matter what you are going to do it's going to require you to get together with the right people, as quickly as you can, and decide what you need to do... so its very ad hoc in that way.'* [TS3]. While this approach is not ideal, it does allow for what

Paraskevas et al. (2013) describe as flexibility in the crisis response. In contrast, crisis responses with a reliance on and strict adherence to existing procedural knowledge 'may become problematic' because of an inability to be adaptive and quick thinking (Paraskevas et al. 2013:140).

The primary focus of the VSR group was on consistent, trustworthy and accurate communication of the situation as it unfolded in Christchurch, using the TNZ website as the main outlet for updates. In a time of uncertainty for the industry, including visitors, families and travel agents, the goal was to '*act as the single source of truth*' by providing clear, accurate and trusted messages to counter media speculation and misinformation [TS1]. Initial efforts were directed towards visitors in the country or those with imminent arrival in New Zealand. However, Becken (2012) identified that TNZ was the only government website providing earthquake updates direct to consumers in the first days after the earthquakes. As a consequence, the TNZ website became a '*de facto source for information from outside New Zealand, including for a wider range of New Zealand representatives offshore, not just tourism*' (Becken (2012: 30). For other government agencies, the process of communicating was slowed down by existing crisis communication protocols, which caused delays in releasing information.

The frequent VSR group communications and updates provided trusted information to travel agents so they could assist their clients in changing itineraries. At the same time TIANZ focussed on communicating relevant information to tourism operators throughout New Zealand, to enable them to advise current guests about the situation in Christchurch. TS6 stated '*It was really about reassurance to operators around the country that they could still send visitors towards Christchurch with confidence because pretty much it was up and running within a few days after the earthquake*'.

CCT learned that their main role '*was not to help with visitors on the ground, that's the job of Civil Defence. Our role was to get the tourism messages out there and know what the tourism infrastructure was like...So it really taught us what our role was, so that when February happened we didn't go into panic mode*' [TS2]. Another key lesson from the September earthquake for CCT was ensuring they backed up critical data, including industry membership, trade and media details. This was particularly fortunate, since the damage to their premises in the Christchurch CBD in February 2011 meant they were unable to access their building, and the new back up system enabled rapid access to critical communications data on staff laptops.

The September earthquake response generated emergent crisis knowledge for those in tourism crisis management roles. The reliance on tacit knowledge for organisations involved in the VSRG was not seen as a weakness of their response; rather, they collectively made rapid, informed decisions, and were flexible in their approach to the crisis. According to TS4, '*Broadly we think we did as good a job as we could have done. I think everyone was reasonably happy with how things went*'. One weakness was acknowledged by TS3, who believed that the informal nature of the collective tourism response meant they were not known within existing national emergency response communication systems (e.g. the National Crisis Response Centre). As a consequence, time was spent informing the appropriate agencies of their role in managing the tourism response, and establishing communication channels to enable the flow of crisis updates and information. In all, however, the collaborative response to the September event would later be viewed as a critical 'practice run' for the earthquake in February. The VSR group was

never officially disbanded following the September earthquake, however the frequency of meetings and discussions had reduced in the months after the crisis.

## **5.2 Theme 2 - Applying emergent crisis knowledge to the February 22<sup>nd</sup> 2011 event**

The February 22<sup>nd</sup> 2011 earthquake caused unprecedented damage and destruction to Christchurch city, destroying many buildings and roads, and interrupting all key lifeline infrastructure including electricity, sewage, water and communications. It was the largest and deadliest urban earthquake since the destructive 1931 Napier quake, resulting in 185 deaths. Aviation capacity in the vital Australian sector was reduced by one third, which effectively returned inbound capacity to 2004 levels [TS2]. Within hours of reports coming in about another significant earthquake in Christchurch, the same VSR group rapidly reassembled in Wellington to manage the crisis. TS2 commented *‘Albeit the February situation was terrible, we were in a good situation from September to know where we sat, we knew what the communication channels were and how to use them’*. The recent acquisition of tacit crisis knowledge from the September event allowed, from TNZ’s perspective, the process to become an unofficial template for responding to the crisis unfolding in Christchurch as a consequence of the February earthquake, including other significant aftershocks that followed. Immediate tasks for TNZ included altering or removing references to Christchurch in online advertising, alongside communication to the travel trade and the provision of crisis communication updates on their website. These included information about the status of Christchurch airport, damage to specific hotels or other tourist infrastructure. TIANZ continued to update the wider tourism operator community throughout New Zealand about the unfolding crisis situation in Christchurch, through their daily e-newsletters, and informing the VSR group about market responses to the disaster across the wider industry.

CCT prioritised communication with tourism operators in their region after the February earthquake. Previously CCT had a tiered membership structure with a range of benefits across different payment structures, which meant that their fortnightly newsletter only reached some members. After the earthquakes began, CCT waived the payment in order to communicate with as many operators as possible, a decision that generated a lot of positive feedback from the industry. Updates were sent daily or weekly after damaging aftershocks, and then fortnightly. In addition, updates were being sent to the Regional Tourism Organisation (RTO) and i-Site (visitor centre) network throughout New Zealand *‘To tell them what the visitor experience was like’* [TS2], including damage to tourism infrastructure, the availability of activities and attractions, and issues with accommodation.

In addition, CCT worked closely with a range of key stakeholders. During the response phase of the February earthquake CCT was part of a local communications group that included the Canterbury Earthquake Recovery Authority (government body to lead the response and recovery), Christchurch City Council and other local agencies. The Tourism Export Council (inbound tour operators) was also an important partner for CCT because of their ability to communicate directly with inbound tour operators about the response and recovery of tourism activities in Christchurch and Canterbury.

Paraskevas et al. (2013) acknowledge the importance of emergent crisis knowledge being created during an event, or acquired from external sources, which then feeds into 'institutionalised flow' of knowledge to embed important lessons learned. TIANZ, TNZ and the Ministry of Economic Development collaborated in this space by seeking external, third party tourism disaster recovery knowledge from officials in post-Hurricane Katrina New Orleans to inform the Canterbury recovery, with an invited speaker presenting a seminar at a tourism response meeting one month after the February 22<sup>nd</sup> earthquake. TIANZ and TNZ also hosted roadshows and workshops with Canterbury operators to discuss and plan the recovery of tourism in Canterbury.

As the recovery phase began, communicating about the rapidly evolving situation in Christchurch to foreign networks became a key focus for TNZ. Using existing media and trade channels, TNZ's aim was to distribute positive messages about the city to show that progress was being made towards its renewal as a destination. This work also included lobbying of the aviation industry (specifically Jetstar's trans-Tasman routes) to increase flight capacity back to Christchurch. TNZ and CCT continue to work closely together on joint marketing campaign activity in Australia, including promoting the Canterbury ski industry. TNZ also continues to assist in lobbying international travel agents to get Christchurch back into travel brochure promotional materials.

### **5.3 Theme 3 - Embedding emergent crisis knowledge into institutional knowledge flow**

The national tourism response to the Christchurch earthquakes was collective and collaborative, utilising organisational strengths and networks across local, regional and international stakeholders. The Christchurch earthquakes presented very unexpected and challenging events for New Zealand, and the key stakeholders involved in the response acknowledge their lack of formal preparedness for such a crisis. The rapid acquisition of tacit (emergent) crisis knowledge during the September response allowed for a fast, flexible response to subsequent aftershocks. The crisis knowledge flow and lessons learned in terms of the collective response to the September event greatly helped the response to the February event five months later, providing a real example in support of the Paraskevas et al. (2013) framework regarding the flow of emergent crisis knowledge.

Lessons for individual organisations are an important part of the knowledge management process. TS1 acknowledged '*There are a whole lot of lessons to be learnt from this that will surely help in a lot of other situations*'. Both CCT and TNZ outlined the key lessons from the earthquakes. For CCT, it was important to understand their role in the event, by establishing how the organisation fitted into the chain of command and what the information needs were immediately after the disaster. TS2 believed they could have done '*a whole lot of stuff that had very little impact... it was good to know that we had a place, and it was a valuable place... We got such good positive feedback from the industry about the comms [sic] we were putting out, we knew it was so valuable*'. Another important lesson was having a clear understanding of the problems the organisation was facing. It was vital to engage fully with the industry to establish what the key issues were with markets, operators and other organisations. Rapid, effective decision making was essential throughout the crisis response and recovery, which required each organisation to be as well informed as possible.

Similar key lessons were identified by TNZ, including the need for rapid, effective and trustworthy information and communication. TS1 believed *'As an organisation we moved really fast and were able to get messages out to the people that mattered really quickly'*, including potential visitors, travel agencies and international tourism networks. The role of the media was also important, and TS1 highlighted the need to play a more active role in managing the media response in future. While this is clearly a major challenge, particularly in the immediate response phase of a disaster, future efforts could be channelled into lobbying the media to reduce the use of 're-runs' of disaster imagery over a prolonged period. TS1 described the media in Australia as being *'pretty brutal...They kept using the same horrific images, even long after it didn't look like that anymore'*. TNZ believe part of their future disaster management role is to provide positives images to counter those perceptions, and by, for example, inviting media to tour the disaster zone (as well as areas peripheral to the damage zone) to show how the situation had improved.

TNZ considered that a centralised approach was important in terms of having the VSR group *'contained in one space'* [TS1], making it possible to meet daily in the first instance to strategize and organise the response. Issues around dealing with an on-going crisis were highlighted, with continuing aftershocks presenting a hugely challenging situation in terms of market recovery. The timing of when to *'get right back up to full-noise'* [TS1] in promoting the region was a dilemma which continued for more than 18 months. TNZ took a cautious approach in light of the aftershocks coupled with the lack of tourist infrastructure, because of concerns that visitors to the city *'would've had a poor experience'* [TS1].

Paraskevas et al. (2013) underline the importance of embedding emergent crisis knowledge after a disaster. TS1 acknowledges this need, but questions how the process is undertaken: *'How does an organisation capture that (emergent crisis) knowledge and embed it in the organisation for future so that the knowledge lives beyond the people?'* Eighteen months after the February earthquake, TNZ had developed a crisis response plan *'so if anything happens in future TNZ will be much better prepared to manage it'* [TS1, details of the plan were not made available]. CCT have identified the need to spend time formalising their plans, although their efforts were not as far advanced at the time; TS2 *'We have done a little bit of that – a year ago we did a bit of an overview of the process...But we should probably think about doing more'*. While policy and procedural development is clearly an important part of developing organisational crisis learning, the challenge is in developing on-going learning into the future, well after the disaster response has been completed. Of great importance is the need to access and capture tacit crisis knowledge from key individuals in the event that they subsequently leave the organisation. This could be partially achieved by these individuals disseminating their knowledge widely across other tourism organisations. For instance, the experiences of CCT should be passed on throughout the network of 29 Regional Tourism Organisations in New Zealand, at workshops or by sharing policy documents.

Within six months of the February earthquake an internal review of the VSR group performance was underway. In addition, a research report was commissioned by the Ministry of Economic Development to independently evaluate the response of the visitor sector to the earthquakes (Becken 2012). One of the key findings of this process was confirmation that a specific policy for tourism communication and visitor safety during crises was required. As a consequence, the Visitor Sector Emergency Action Group

(VSEAG) plan was developed by the Ministry of Business, Innovation and Employment (formerly Economic Development), in collaboration with all the stakeholders involved in the Tourism Crisis Response team. TS4 described the need *‘to do the planning that would establish it [the VSEAG] and formalise it ... we also need to think about what functions the group had performed [during the Christchurch earthquake response] and may perform in the future and whether or not that is duplicated in existing structures’*. Three key areas of the policy include the welfare needs of visitors during a crisis, alongside the mobilisation of the business sector to provide emergency accommodation and transport resources, and communication with key inbound tourism markets to minimise economic damage. Importantly, the policy aligns the tourism response more closely with civil defence activities in terms of communication during crisis. It also adds a Regional Tourism Organisation of New Zealand (RTONZ) representative to the committee, acknowledging its role *‘in encouraging more resilience in the visitor sector, because some of the RTOs are much more prepared than others’* [TS5].

The scope of the VSEAG is broad in terms of the size of crisis, with four alert levels related to events that are local, regional or national in extent. Alerts generated by future tourism crises will be managed from Wellington, with the ability to relocate to Auckland in the event that Wellington is affected. TS4 highlighted the risk of building a response base solely from Wellington with its high seismic risk, such that *‘if you have an event like Christchurch, where everything’s been knocked out, what kind of planning would you do for an event in Wellington?’*.

## **6.0 Marketing responses in times of great uncertainty**

Scott et al. (2008) contributed to the crisis management literature by building on the Faulkner model (2001) in describing the long-term recovery period of a crisis (Phase 5). Three sub-phases detail the recovery of damaged infrastructure (5A), marketing responses (5B) and adaptations to the new system (5C) after a disaster. All three phases temporally co-exist, and involve a great deal of evolution in the tourism system. For example, marketing responses must take into account the redevelopment of tourism infrastructure and the changing nature of the tourism product over the long term. The principles of knowledge management and crisis communication are again relevant in this discussion because key tourism agencies need to work closely together across all levels to establish solid networks (preferably before a disaster) that will enable a more efficient response and recovery.

Timeframes for the recovery of damaged infrastructure (Phase 5A) caused significant uncertainty for tourism destination managers in the aftermath of the Christchurch earthquakes. The CBD cordon remained in place for more than two years (although its size gradually reduced), and large parts of the city required major road and sub-surface infrastructural repairs. While critical lifelines (electricity, water, communications) were reinstated relatively quickly (Stevenson et al. 2011), on-going issues with transport systems and lack of accommodation continued to make tourism recovery impossible. TS1 reports *‘At that time of uncertainty about the extent of what had happened, and how long it would last, it would have obviously been reckless to send any visitors into that situation’*. TNZ and CCT needed to constantly re-evaluate the situation in the city in order to make informed decisions about the timing of recovery marketing initiatives, which initially involved the cessation of any marketing efforts due to safety concerns. Whilst the contribution of damaged infrastructure in slowing tourism recovery is clear, this research

was not specifically focussed on sub-phase 5A. The following two sections consider sub-phases 5B and 5C.

#### **6.1 Theme 4 - Post-disaster marketing responses (Sub-phase 5B)**

Both CCT and TNZ were involved in campaign activity promoting Christchurch and New Zealand respectively at the time of the September 2010 earthquake. CCT was developing a series of campaign ‘creatives’ highlighting seasonal attractions in Christchurch and Canterbury to be used in 2011. These were effectively ‘scrapped’ because they did not reflect the reality of post-earthquake Christchurch after September. A planned spring campaign was ‘re-jigged’ [TS2] by adding more factual information about the situation in Christchurch after the September event. By February, CCT was promoting the ski season but all of these efforts were immediately discontinued: ‘...after February we just said we are out completely’ [TS2]. No further marketing efforts were developed until 6 months later. Tourism New Zealand was involved in significant marketing campaign at the time of the September quake, and had to respond swiftly to the situation in Christchurch to mitigate significant losses for the New Zealand industry as a whole.

Firstly, TNZ removed images of Christchurch from all international marketing material. At the same time, it was important to remove existing advertising from news websites, alongside the purchase of key word searches associated with the Christchurch earthquake in order to deflect web browsers from negative imagery and to promote positive searches for New Zealand. In addition, all Internet traffic to the nz.com website (visitor marketing information) was directed to the corporate website so that the earthquake messaging could be separated from tourism promotion of the rest of New Zealand. Alternative travel itineraries for potential inbound visitors were quickly developed that excluded Christchurch, allowing visitors to continue with their travel plans to New Zealand. Thus, in the days following the September event TNZ did ‘A lot of work in reorganising how to sell New Zealand ... we quickly developed itineraries that did not involve Christchurch’ [TS1].

After the February earthquake it became clear that promoting the city and region would be inappropriate due to the level of damage to the city, and the significant risk to visitor safety as a consequence of earthquake damage and on-going aftershocks. As a consequence, TNZ and CCT agreed that a period of ‘de-marketing’ was necessary, which continued until September 2011. However, while active marketing efforts stopped, a great deal of communication continued across local and international networks to inform key stakeholders about the situation in Christchurch. By September 2011, there was a growing awareness by tourism managers at TNZ and CCT and tourism operators in the region that Canterbury and the wider South Island tourism industry were suffering losses as a consequence of the earthquakes, and while Christchurch was still not fit to be promoted in its own right, its importance as the primary aviation gateway needed to be utilised. As a consequence TNZ and CCT (together with the other South Island RTOs) collaborated on the ‘South Island Road Trips’ campaign.

The aim of the South Island Road Trips campaign was to attract the key Australian visitor market back to the South Island, without promoting Christchurch itself at a time when it was still unfit to host visitors. The campaign was a significant success, attracting 160,000 Australian visitors, and generating 43,000 travel agent referrals, which effectively increased Australian visitor arrivals by 18% within four months (Tourism New Zealand 2013). This marketing approach built on the ‘business as usual’ message by adding the tagline ‘in the rest of the South Island’, thus suggesting that while Christchurch was still

unfit for visitors, the rest of the South Island was operating as normal. CCT felt ‘... *marketing as part of an holistic South Island experience was the more appropriate way to start that process [of reintroducing Christchurch into travel itineraries]*’ [TS2]. The ‘gateway’ method is a useful addition to the recovery marketing approaches described by Walters & Mair (2012), applying to tourism destinations that act as transport hubs for surrounding regions. In this way, hub destinations continue to receive transit visitors, and as the recovery develops it offers the opportunity to gradually reintroduce the city back into travel itineraries relatively seamlessly when the time is appropriate.

The second major CCT marketing initiative, called ‘Christchurch Reimagined’, began in September 2012, eighteen months after the February earthquake. It was ‘*the first time we had talked about Christchurch in isolation from the rest of the South Island*’ [TS2]. The campaign was launched in an effort to address the continuing slow recovery of the important Australian inbound market; ‘*Other markets seem to have bounced back relatively well, but Australia is still our number one problem*’ [TS2] because of the primary importance of this market to the region. The message drew on the process of rejuvenation in the destination, and ‘curiosity enhancement’ for potential visitors (Walters & Mair 2012). The campaign took a light-hearted approach using the Mayor of Christchurch (Bob Parker) in a series of three 3-4 minute YouTube videos trying to convince Australian mayors to let him borrow ‘big things’ from Australia and install them in Christchurch to make Australians feel ‘at home’ when they visit. In addition to the use of social media, campaign images were being shown on billboards and buses in Melbourne and Sydney, alongside discounted activities, attractions and flights from Australia to Christchurch.

Scott et al. (2008: 8) identify that sub phase 5B evolves into sub phase 5C over time and with some overlap, ‘when the new realities become apparent’. The Christchurch disaster recovery, however, did not present itself as a smooth transition from one subphase to the other; rather with each damaging aftershock the situation would move back and forth across all three sub-phases. As a consequence, CCT had to focus on the *current* situation in the city, rather than promoting a tourism product that might develop in the coming years. TS1 suggests ‘*As Christchurch comes back online as a viable tourism offering there is a sliding scale of activity which will intensify over time*’ Partially in response to this, a recovery marketing approach focussing on the gradual, on-going renewal and revitalisation of the city was adopted. Social media and the Internet were targeted, with webpages dedicated to promoting activities and attractions in the city, such as ‘Pop Up City Christchurch,’ highlighting innovative and interesting events and attractions, with Twitter and Facebook links. Tourist testimonials were also employed to endorse the destination, which Walters & Mair (2012) and Carlsen & Hughes (2008) suggest are viewed as highly credible by prospective tourists. These marketing strategies have generated positive outcomes, including Christchurch ranking in the Lonely Planet top 10 must-see cities of 2013, with claims that the city ‘is bouncing back with new energy and inventiveness’ (Atkinson et al. 2012).

Scott et al. (2008) suggest that marketing responses should focus not simply on advertising campaigns, but on changing (mis)perceptions of the destination over time. They believe this cannot be achieved via website messaging alone, but needs a focussed communication strategy including promotion, advertising and public relations (Scott et al. 2008). It also requires monitoring of the effectiveness of these efforts. TNZ and CCT used a collaborative approach to communicate and lobby across the full range of international



networks available to them; TS2 describes *'Always having a presence in comms [sic] and public relations is really important'*. For example, CCT invited journalists to visit the city, a practice they believe will continue for the next ten years *'to try and slowly remediate the image of the city'* [TS2]. Monitoring the effectiveness of marketing efforts takes place in two main ways; First, through analysis of arrivals data collected by the Tourism Strategy Group, and second, by measuring perceptual change using the CCT Visitor Insights Programme. The Visitor Insights Programme involves a quarterly report measuring visitor perceptions of satisfaction and awareness of Christchurch (and other destinations in New Zealand). Five key questions specifically about Christchurch provide an indication of perceptual change over time, which has shown some positive improvement. For example, one of the perception questions investigates whether visitors feel comfortable travelling to Christchurch, and TS2 reports *'we have seen the most improvement from the Australian market, moreso than the international markets, so it is feeling like we are getting there'*. CCT has plans to increase the depth and range of perceptual and satisfaction studies currently being conducted to better understand long-term market response and recovery (CCT 2012).

## **6.2 Theme 5 - The post-disaster destination: Adaptation, renewal and revitalisation (sub-phase 5C)**

The evolution of the tourism destination image is an important aspect of long-term recovery (Bierman 2003), which Scott et al. (2008) identify as adaptations to the new system (phase 5C). Christchurch experienced a natural disaster that has redefined it as a destination, taking it from a heritage, 'garden' city, on a path towards a sustainable, innovative city of the future. TS1 believes *'It is time now to be creating a new reputation and a new Christchurch, and that is an amazing opportunity, to rebuild a city and build it in a way that sets itself up for success in tourism, and as a great city to live in.'* However, there are many significant challenges in adapting to the new tourism system for DMOs. For example, travel flows have been redefined, illustrated by a 44% increase in the number of Australian inbound tourists choosing to arrive at Queenstown International Airport between year end June 2010 compared to 2013 (MBIE 2013). Over the same period, Christchurch airport experienced a decline of similar proportions, which CCT believe *'is a mixture of issues – a combination of supply and demand'* [TS2]. TS2 considers the issues to be threefold: First, the supply of aviation seats into Christchurch from Australia is a third less than before the earthquakes, CCT 2012), coupled with the significant reduction in accommodation supply, and the negative visitor perceptions. *'So it is a combination of all those things with the Australian market that makes it very difficult to get back on the upward curve'* [TS2].

As a consequence the notion of post-disaster recovery to a previous state of 'normal' is unhelpful and undesirable in this context. Following Faulkner (2001) we envisage the emergence of a renewed and revitalised tourism system. The emergent tourism system in Christchurch is one with significant opportunity for the city to renew itself, both in terms of infrastructural improvements, tourism service provision and the destination product. For example, the proposed new central city plan includes a greater range of hotels, a convention centre, sports precinct, and health and welfare precinct. Several major hotel chains reopened in central Christchurch in 2013, and on-going developments will see an increase in the number of rooms available from 4532 in December 2012 to 6196 by December 2015 (a 36% increase; The Press 2013).

While these developments are positive, it is the timing of larger infrastructural projects that continues to constrain tourism recovery. CCT developed a Visitor Sector Recovery Plan in June 2012, which highlighted four key fast-track strategies crucial to the recovery of Christchurch over the period 2012-2017. These included creating new inner city tourism infrastructure, expediting the rebuild of accommodation, reinstating a convention centre by 2016 and developing air service capacity to Australia and Asia. Without a concerted effort in these areas, CCT estimate it would take 10-15 years for the Canterbury tourism industry to recover to pre-2010 levels, while the fast track strategies could halve this timeframe (CCT 2012).

The collaboration that developed between TNZ and CCT is continuing into the long term, and acknowledges the need to adapt to the new tourism environment. TS1 describes TNZ's role in helping CCT '*deliver more to their rebuild*', by continuing to engage in joint marketing activity and supporting CCT in their efforts with international travel and trade recovery.

TIA also continues to offer significant support to CCT, with industry workshops being held to inform recovery planning, and collaborative submissions to the draft Central City Plan. Scott et al. (2008) describe the dynamic and evolutionary nature of the post-disaster tourism environment, where new functional relationships are established. To this end, it should be highlighted that other broader industry networks have developed as a consequence of the earthquakes, particularly between CCT and stakeholders such as the Tourism Export Council (inbound tour operators), Hospitality Association and Christchurch City Council.

## **7.0 Conclusion**

The earthquakes in Christchurch precipitated great change in the New Zealand tourism industry, not simply in redefining the Christchurch tourism product, but also in challenging existing and future approaches to crisis and destination management, governance, and recovery marketing. Drawing upon the theoretical frameworks developed by Paraskevas et al. (2013) and Scott et al. (2008), this paper investigates knowledge management and (de)marketing relating to the Christchurch earthquakes. The September 2010 earthquake set in motion a centralised tourism crisis response, which led to the rapid acquisition of emergent crisis knowledge that was critical to the 22 February 2011 aftershock response five months later. The collaborative tourism crisis response was mirrored in collective marketing approaches that were developed between regional and national tourism marketing organisations in the medium to long term post-earthquakes. Three phases of tourism recovery presented in Scott et al. (2008)'s recovery framework have all been highly relevant in the Christchurch experience. Innovative marketing approaches have been required, drawing on the gateway status of Christchurch as a transit point for visitors in the first instance, and then aspects of renewal and revitalisation of the city. This paper highlights the critical importance of recovery marketing initiatives that aim to mitigate indirect tourism losses beyond the immediate disaster zone, illustrated by the 'South Island Road Trips' campaign.

Effective inter-agency collaboration and communication were vital to the tourism response and recovery, and effort should continue to focus on the maintenance and development of

these relationships, both within the tourism sector and beyond (e.g., Civil Defence). The Visitor Sector Emergency Advisory Group builds a more collective and resilient approach to visitor management during future crises in New Zealand. Embedding crisis experiences in this way creates procedural (institutionalised) knowledge that lives on beyond the crisis event, and improves future crisis management capacity. Future research efforts could map and evaluate the dissemination of crisis knowledge across the tourism industry as a consequence of the Canterbury earthquake sequence, by analysing the processes of embedding emergent knowledge flows into procedural and behavioural repositories.

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