Protecting your assets:

An evaluation of museum emergency planning practices in New Zealand museums

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Abstract

Museums around the world are often affected by major catastrophes, and yet planning for these disasters is an often neglected aspect of museum practice. New Zealand is not immune from these events, as can be seen in the recent series of serious earthquakes in Christchurch in 2010 and 2011. This dissertation considers how prepared the New Zealand museum sector is to handle unexpected events that negatively affect its buildings, staff, operations and treasured collections. The central research question was: What is the overall state of emergency planning in the New Zealand museum sector? There was a significant gap in the literature, especially in the local context, as there has been only one other comparable study conducted in Britain, and nothing locally. This dissertation makes a valuable contribution to the field of museum studies by drawing on theory from relevant areas such as crises management literature and by conducting original empirical research on a topic which has received little attention hitherto.

The research employed a number of methods, including a review of background secondary sources, a survey and interviews. After contextualising the study with a number of local examples, Ian online survey was then developed an which enabled precise understanding of the nature of current museum practices and policies around emergency planning. Following this I conducted several interviews with museum professionals from a variety of institutional backgrounds which explored their thoughts and feelings behind the existing practices within the industry.

The findings of the research were significant and somewhat alarming: almost 40% of the museum and galleries in New Zealand do not have any emergency plan at all, and only 11% have what they considered 'complete' plans. The research revealed a clear picture of the current width and depth of planning, as well as practices around updating the plans and training related to them. Within the industry there is awareness that planning for emergencies is important, but museum staff typically lack the knowledge and guidance needed to conduct effective emergency planning. As a result of the analysis, several practical suggestions are presented aimed at improving emergency planning practices in New Zealand museums. However this study has implications for museum studies and for current museum practice everywhere, as many of the recommendations for resolving the current obstacles and problems are applicable anywhere in the world, suggesting that New Zealand museums could become leaders in this important area.

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Fourthly, to Dr Lee Davidson and to Annie Mercer for all the assistance and support you've given me during these past two years.

Finally, to my grandparents, I miss you.

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Introduction

On 22 February 2011, Christchurch, New Zealand suffered a 6.3 magnitude earthquake, which killed at least 182 people and damaged many of the historic buildings that had survived the magnitude 7.1 September 2010 earthquake and its aftershocks. This event, occurring on a previously undiscovered fault line, amply demonstrates the need for emergency planning even where such threats are not obvious.

In the 6 months previous to the complete of this paper, major catastrophes damaged and destroyed museums around the world. These included floods in Brisbane, Australia; earthquakes and tsunami in Japan; and war in Cairo, Egypt. These, along with Canterbury's destructive earthquakes, highlight the importance of emergency preparedness for everyone.

I came to this topic via a very circuitous route. An interest in caring for medal collections re-introduced me to the 2007 theft of medals from the National Army Museum (NAM) in Waiouru. In delving deeper and trying to determine how that incident may have affected collection practices (housing, storage and display), I started looking at how museums handle unexpected events. This had me reading crisis management theories and practices.

I found these theories fascinating but quickly observed that the literature focused largely on what <u>should</u> be done, but did not address <u>actual</u> practice. This gap in the literature inspired my first dissertation research question: *What is the overall state of emergency planning in the New Zealand museum sector?* To answer it I developed a survey to determine the museum sector's emergency preparedness. That survey, presented and analysed below, is the first evaluative survey of current museum practice in New Zealand (NZ) concerning emergency planning, and one of the first in the world. More reading and informal discussions prompted my second question, an extension of the first: *How can emergency planning practices be improved to make New Zealand an international industry leader in emergency planning?* To investigate this question I conducted interviews to gather data on industry opinions, ideas and practices.

This dissertation, therefore, aims to provide an overview of current emergency planning based on original research in NZ museums, and to offer some practical recommendations and suggestions for developing it further. The objectives included identifying and reviewing

practices, gaps, concerns, and thoughts around emergency planning; advocating development to raise professional levels to international standard leaders; and advising and providing ways for that development to occur.

Before proceeding to review the literature and laying out the methodology for this study, in the following section I provide some background to the topic through three local examples of how museums responded to unexpected events.

Background

The February 2011 earthquake happened as I was completing this dissertation. It was too recent to draw upon, since museum and gallery staff were still busy adapting to a changing environment. However, the September earthquake happened during my primary research phase, so the Canterbury Museum's responses formed a second background study. That background study showed that staff reacted in a safe, orderly manner, guided by their crisis management plan.

Before presenting that background study, however, I examine the event that triggered my interest in this topic. The high media-profile theft of medals from the National Army Museum in 2007 provides an example of crisis management which was also guided by an emergency plan that helped them respond appropriately and make the fullest use of the available services and abilities. Finally, though no interviews were able to be conducted with staff, the tragic effects of the earthquake on the Kaiapoi Museum are described as an example of how bad things can get after such a catastrophe.

#1: Burglary at the National Army Museum[1]
On 2 December 2007, the alarms at NAM in Waiouru were triggered by an illegal entrance at approximately 1:10am.[2] Two career criminals, Ronald Van Wakeren and James Joseph Kapa, were enacting a plot they had been developing for over two years.[3] After stealing the medals, they intended to inform the police that, while they were not involved, they knew who had stolen

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[1] Website of the National Army Museum: http://www.armymuseum.co.nz/
[2] Interview with Col. (Ret.) Raymond Seymour
[3] "Stolen art, poetry used as bargaining tools," Accessed January 2011.

the medals and would negotiate their return in exchange for reduced sentences for previous convictions.

On the morning of the burglary, the offenders forced open an exterior door and made their way to the Valour Alcove where they smashed three wall-mounted display cabinets. From the right-most cabinet they took all six medal groups; from the middle cabinet they took six of eight groups displayed.[4] They left the cabinet on the far left untouched because they were running out of time. Their final 96-medal haul included nine Victoria Cross[5] groups, which included the Cross and Bar awarded to Captain Charles Upham,[6] two George Cross[7] groups and an Albert Medal[8] group.

Security contractors arrived on-site just 30−60 seconds after the thieves fled the building. Museum staff rostered to respond to museum emergencies arrived within about three minutes. Less than five minutes after the crime occurred, there were four different kinds of security personnel on site: museum staff, security contractors, on-duty military police and other assigned military staff. They swept the building to determine the nature and extent of the incident and then alerted the police. Once the police arrived, control was handed over to them. By three in the afternoon, a precise list of the stolen items was produced.

The media, alerted through monitoring police radio bands, arrived that morning. It was decided that a press conference would be held at 6pm. Meanwhile, museum director Col. (Ret.)

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[4] The medals within the cabinet were displayed in medal groups; each group consisting of all the medals a particular soldier had been awarded. The medals will have been attached, side-by-side, to a rigid board to become one whole, integrated, group.

[5] According to the British Army website: "The Victoria Cross is the highest military decoration awarded for 'valour in the face of the enemy' to members of the armed forces of Commonwealth countries, and former British Empire territories." It can also be awarded to civilians in the same circumstances. Instituted by Queen Victoria to cover all actions since the outbreak of the Crimean War in 1854, the Victoria Cross has been awarded 1356 times and 3 bars have been awarded.

[6] Captain Charles Upham is the only person to be awarded the Victoria Cross twice for active combat roles; the other two double winners were both doctors. Interview with Col. (Ret.) Ray Seymour

[7] The British Army Website explains: "The highest gallantry award for civilians, the George Cross is also awarded to military personnel for those acts for which military honours would not normally granted, such as acts of gallantry not in the presence of the enemy." To date, 157 GCs have been awarded directly, including four to women, with 47 of those awarded since 1947.

[8] The website "World War 2 Awards" explains that The Albert Medal for Lifesaving was awarded to recognise the saving of life on sea and land. The medal was first instituted by a Royal Warrant on 7 March 1866 and discontinued in 1971. It was named in memory of Prince Albert and originally was awarded to recognise saving life at sea. In 1877 this was extended to cover saving life on land and from this point there are two medals with different inscriptions to depict which they were awarded for. The Albert Medal in gold was abolished in 1949, being replaced by the George Cross, and the second class of Albert Medal (in bronze) was only awarded posthumously. In 1971, the Albert Medal was discontinued and all living recipients were invited to exchange the award for the George Cross.

Raymond Seymour used the time to notify the affected families, using museum records and police help to locate contact families who had moved since donating medals. The museum worked with, and used, the media to keep the crime in the national spotlight and enlist public support for recovery efforts. Seymour explains why he made himself the media point of contact:

> The buck stops with me. I am the media point of contact. One of the things I have found, if you don't take it upon yourself to be the point of contact for the media, and you allow other people to take that task, then you lose control over what they are thinking and what they might say…Whereas if I, being the Director and therefore run the show, I take total responsibility. And if I say something wrong then I'm the one that has to stand up and be counted. Of course it also helps to make sure you have continuity in the story.[9]

The police recovered the medals in February 2008, after 75 days. They were returned to the museum largely undamaged 10 months after the theft. Both thieves were convicted.[10]

While the NAM emergency plan is fairly generic, it does lay out who should respond to incidents and how. It also sets out procedures for various types of emergencies. For example, it says to call the police for a theft, but not for a burst water pipe. The museum hired outside consultants to review its security systems as a result of the 'smash and grab', even though it was not a crime of opportunity. This led to the Defence Department spending over one million dollars to upgrade an already excellent system. The review has, however, added additional layers to the security systems; it has also led to a few changes to the museum's emergency plan.

 # 2: Canterbury Museum after the Darfield Earthquake[11]
At 4:35am on Saturday 4 September 2010, a 7.1 magnitude earthquake rocked Canterbury. The epicentre was 10km deep and 40km west of Christchurch City, along a previously unknown fault line.[12] The earthquake and immediate aftershocks caused the greatest damage to New Zealand since the 1931 Hawke's Bay earthquake, though fortunately killed no one.[13]

Despite the immediate power outage, Kelvin Knolly, the building and security manager at Canterbury Museum, quickly realised that the earthquake had been very large. He and his wife

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[9] Interview with Col. (Ret.) Raymond Seymour
[10] Van Wakeren was sentenced in October 2009 to 11 years in prison, and Kapa to six years in August 2010.
[11] Website of the Canterbury museum: http://www.canterburymuseum.com/
[12] "Sep 4 2010 – Darfield earthquake damages Canterbury." Accessed January 2011.
[13] "M 7.1, Darfield (Canterbury), September 4 2010." Accessed January 2011.

dressed quickly and ran for their vehicle while his mobile phone constantly sounded with alarms from the museum security system. They reached the museum by 4:55am.

Planning discussions had taught Knolly that the police would not respond to the museum's alarms, as their first responsibility is to the public. The museum was on its own. Another security team member, Trish Heaton, arrived shortly after the Knollys. The three examined the outside of the building as best they could in the blackout.

Some chimney bricks from adjacent Christ's College had fallen across the museum's pathways, at first causing fears that they had fallen from the museum. But after fuller examination showed the building's exterior to be intact, they decided to go inside. Because the museum has 20,000 litres of flammable fluid in its basement wet store, the first priority was to determine how safe further exploration would be. Fortunately, the battery-powered emergency lighting worked, enabling them to locate the torches stored near the exits:

> We went down to the basement just to check that the wet collection store was still intact because given the fact the power was off, and if the wet collection had been damaged, we would have thrown the mains to make sure the power didn't come on, this would diffuse the potential for an explosion and/or fire. Once we checked the basement … I then checked the sprinkler unit, just to make sure that we had mains supply to a sprinkler system … The next thing we did was we went up to the children's discovery centre just to make sure all the tarantulas were still in their cases before we started fumbling around in the darkness. And they were, so it was all good.

Knolly and Heaton then checked the store for damage. They found only minimal damage to the collection stores and a mess of plaster powder from the walls.

At this point, Knolly contacted Derene Flood, who was acting director while director Anthony Wright was overseas. Knolly updated her on the status of the building and what he and Heaton were doing. They decided "to secure the building, make sure it was safe, make sure nobody got inside that wasn't allowed to come inside, and just wait for the power to come on." Shortly after Flood arrived they contacted collection services manager Terri Elder. Later in the morning she started examining the collection stores for damage to objects.

They decided to remain shut through the weekend "because we didn't know what was happening" in terms of the city infrastructure, repairs and general status. As Knolly explains:

> We knew that we wouldn't be open for that initial weekend, so we rang the managers and advised them that we would be closed until further notice because we knew full well that staff also had to deal with their own personal circumstances… The staff's immediate responsibility, we felt, was to their family.

After the power came back on around 10am, they explored the building and grounds more thoroughly. On Sunday Karin Stahill, the museum's media communicator, arrived to liaise with the media. After a few days of replacing objects that had fallen over, Elder was satisfied that the collections were secure. The insurance representative inspected on Monday morning, and Knolly then arranged a building assessment with structural engineers Holmes Consultancy. These reports cleared the museum to re-open.

Initially the museum was to re-open on Wednesday and staff were notified that those who could come to work, should do so. However, at 7:45am on Wednesday a significant aftershock caused a further power outage, so they decided to stay closed until Monday. With authorities asking people not to come into the city centre, visitors would have been light anyway.

The emergency plan assigned particular roles to staff and required Holmes Consultancy to make an on-site assessment. Holmes gave the all-clear provided that there were no aftershocks above 6.0 in magnitude. Networking with the relevant agencies, as set out in the plan, gave the museum a broader understanding of wider events.

Looking back, Knolly believes that nothing could have been done better, especially by the first response team, which made its decisions collaboratively. Overall, he was pleased with the response of both the museum and the city. He summarises the aftermath of the event:

> Because it was quite traumatic for a lot of people, we've had something like 3000+ aftershocks here, and some after the bigger ones were quite onerous ... We had to be mindful of the staff. [Also] of the visiting public as well, because it's very, very unnerving for a lot of people. But I think it went very, very well. It was certainly an experience and something, dare I say it, that I'm quite pleased I've experienced.

#3: Kaiapoi Museum after the Darfield Earthquake

Though the exclusively volunteer-run museum of Kaiapoi falls outside the scope of this project, it is an important example of how bad things can get, so I will briefly review it here as a contrast to the relatively positive examples already provided.

Less than a week after the Darfield earthquake struck, it became clear that the small museum in Kaiapoi, roughly 17km north of Christchurch, was being assessed for demolition. [14] Neither the president nor any other museum committee members were formally notified of this, learning instead through the tenant of a neighbouring building. Attempts at intervention by the committee and the Historic Places Trust failed to save the registered Category 2 Kaiapoi Historic Court House building that housed the museum.

On the 9th, a building inspector let some members of museum staff into the newer part of the building. They started removing filing cabinets, office records and photographs from the walls. However, since the police had not been informed of this by the inspector, they evicted the staff- who were told that they could remove the rest of the material and artefacts later under supervision. On the 10th, some museum staff were let back inside under Civil Defence supervision until 9:30pm. They got most of the collection moved out and stacked into two large containers on the street. The demolition team brought out still more items as they went through the building the next day. Although there were some losses, most items have been safely packed and stored until final decisions can be made about the future of the museum and its collection.

The demolition took three full days and the demolition contractor reported that the building was still very strong and that he had to either pull or push every bit of it down. Ivan Taylor, who has over 40 years' experience as a heritage building advisor and knew the building very well as a patron of the Kaiapoi Historical Society, believes that it could have been saved and restored, a view he understands the HPT conservation engineer shared. Taylor wrote to the Waimakariri District Council on behalf of the Society, seeking answers, but has received none.

The committee thinks that the damage to the building, while significant, was probably repairable and given that there was no immediate danger to people from a building collapse, more time should have been allowed to determine the future of the building and the collection. At one point the building was signed off as being empty for demolition by the engineer with the collection still inside untouched. He also commented that "it was only an old brick building full of trinkets." Taylor comments that the engineer probably did not even go inside the building, and certainly did not appreciate the building's contents or heritage value.

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[14] "What happened to Kaiapoi Museum?" Accessed February 2011.

Literature Review:

Though museums have existed for centuries, the academic study of them has been developing only since the 1970s. As a result, there is still much to write and many topics to consider. My dissertation examines how New Zealand museums plan for the unexpected. It will focus on their development and implementation of emergency plans, the contents thereof and museum practices supporting those plans. The paucity of material in museum studies made it necessary to review crisis management planning literature in fields as diverse as tourism, public relations, mathematics, libraries and archives, leadership and especially business. In this review, the theories are examined and the most useful elements are drawn out to construct an analytical framework for this study.

Definitions

Since many terms used in crisis management are uncommon in the museum sector, I provide brief definitions of the four terms crucial to this dissertation here:

    Risk Management is the process of analysing and assessing all potential risks (even unlikely ones), then developing plans, procedures and policies for minimising the likelihood of them occurring, and minimising their effects if they do. Risks and responses addressed range from obvious physical ones, such as sprinklers for fire, to less obvious risks, such as funding crises, reputational issues, fraud control, etc. In short, a risk is anything that may detrimentally affect an institution.[15]

    Emergency/Crisis plan is the written, comprehensive plan for addressing identified risks. It must be thorough, institutionally specific and readily available. New Zealand museums seem to prefer the term 'emergency plan' to the internationally-accepted 'crisis management plan', so the local term will primarily be used in this paper, though we should note that there are slight differences between the two, with a crisis management plan generally considered more comprehensive.[16]

    Disaster plan is similar to the above plan, but within museums tends to focus exclusively on the most likely natural disasters and as such is typically replaced by more comprehensive

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[15] Graham Matthews, Yvonne Smith and Gemma Knowles, *Disaster Management in Archives, Libraries and Museum,* (Hampshire & Burlington: Ashgate, 2009), 9.
[16] Matthews, Smith and Knowles, 2009, 7.

emergency or crisis plans as the institution improves. However, within libraries and archives this is the preferred term and is synonymous with emergency plan.[17]

Business Continuity Plan is the plan an institution develops for restoring its normal business activities after an incident. As the emergency/crisis management plan is part of this process, the business continuity plan is the widest-ranging document of all. It is not possible to have a good, effective business continuity plan without a good emergency/crisis plan.[18]

Crisis Management Theory

Although the general assumption is that dealing with the unexpected means dealing with some stage of a major catastrophe, Weik and Sutcliffe define 'crisis' as "when something that we expected to happen fails to happen or something that we did not expect to happen does happen."[19] According to this definition, much of what the literature had to say was relevant to the burglary as well as larger crises like the 2010 earthquake described above. Fink, an early writer in this field, demanded that "every business, large or small, public or private, should have a crisis management plan. Every division of every company, industrial or service business, should also have a crisis management plan. There are no exceptions, merely differences of degree."[20] It is a given in the literature that plans must be created and hard copies available to staff.

It is important to note two things: firstly, of the four phases (1. Risk assessment, 2. Designing strategies, 3. Writing the plan, 4. Review/updating and training) all authors stress that the training phase is of utmost importance.[21] It is repeatedly emphasised that without regular

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[17] Matthews, Smith and Knowles, 2009, 7.

[18] Matthews, Smith and Knowles, 2009, 9.

[19] Karl E. Weik and Kathleen Sutcliffe, *Managing the Unexpected: Assuring High Performance in an Age of Complexity* (San Francisco: John Wiley & Sons, 2001), 2.

[20] Steven Fink, Crisis Management: Planning for the Inevitable, (New York: AMACOM American Management Association, 1986), 54.

[21] Fink (1986); Weik and Sutcliffe (2001); Michael Regester and Judy Larkin, *Risk Issues and Crisis Management: A Casebook of Best Practice* (London & Sterling, Virginia: Kogan Page Limitied , 2005); Ian I. Mitroff, *Crisis Leadership: Planning for the Unthinkable* (Hoboken: John Wiley & Sons, 2004); Brent W. Ritchie, *Crisis and Disaster Management for Tourism* (Bristol, Buffalo and Toronto: Channel View Publications, 2009); Simon A. Booth, *Crisis Management Strategy: Competition and Change in Modern Enterprises* (London & New York: Routledge, 1993); Dirk Glaesser, *Management in the Tourism Industry*, (Oxford & Burlington: Elsevier Butterworth-Heineman, 2003); Christof Pforr and Peter Hosie, *Crisis Management in the Tourism Industry: Beating the Odds?* (Surrey and Burlington: Ashgate Publishing Limited, 2009); David Byrne, *Complexity Theory and the Social Sciences: An Introduction,* (London & New York: Routledge, 1998); Dawn R. Gilpin and Priscilla J. Murphy, *Crisis Management in a Complex World* , (New York: Oxford University Press, 2008); Judith Doig, *Disaster Recovery for Archives, Libraries and Records Management Systems in Australia and New Zealand* (Wagga Wagga:

training, staff will not know what to do, and without frequent evaluation the plan quickly becomes irrelevant and therefore useless. Hunter explains that this phase incorporates and demands "regular reviews of the disaster plan to keep it current, training in the plan's execution, periodic drills to test the plan's effectiveness, and evaluation of the plan's performance after a disastrous occurrence."[22] Nevertheless, for all its importance, this phase is the one that most institutions fail to incorporate. Planning and training go hand-in-hand.[23] There is good reason for developing training, in that "people can manage unexpected events poorly, in which case the events spiral, get worse, and disrupt ongoing activity; or they can manage them well, in which case the events shrink and ongoing activity continues."[24]

Secondly, in identifying potential crisis events, authors agree that it is best to think in general terms, not in event specifics. Authors regularly state that although specifics are impossible to know beforehand – indeed it is impossible to have the exact same crisis twice – the generalities can be known and planned for.[25]

Crises that affect other institutions should be viewed as learning opportunities. After all, "just because a crisis is not yours does not mean that you cannot find opportunity in it."[26] Every event can help a sector to evaluate planning and procedures for effectiveness, practicality and flexibility. Using every opportunity to learn and improve from others' experiences makes sense in an industry where objects and artwork are typically irreplaceable. To this end, several books provide 'what to do after' manuals.[27]

Most crisis management literature tends to view the crisis process as linear, where each action has an expected and clear effect. Generally this does not factor in any subtle external aspects that may have affected the situation, or the fact that after a crisis it is impossible to return

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Centre for Information Studies, 1997); Camila Alire, ed., *Library Disaster Planning and Recovery Handbook*, (London & New York: Neal-Schuman Publishers, Inc, 2000); and Julie Todaro, *Emergency Preparedness for Libraries,* (Lanham, Toronto & Plymouth: The Scarecrow Press, 2009).

[22] John E. Hunter, "Museum Disaster Preparedness Planning," in *Care of Collections*, ed. Simon Knell, (London & New York: Routledge, 1994), 246.

[23] Regester and Larkin, 2005, 198.

[24] Weik and Sutcliffe, 2001, 2-3.

[25] Glaesser (2003); Booth (1993); Weik and Sutcliffe (2001); Pforr and Hosie (2009); Byrne (1998); Gilpin and Murphy (2008); Fink (1986); Regester and Larkin (2005); Mitroff (2004); and Ritchie (2009); Judith Doig, (1997).

[26] Fink, 1986, 90.

[27] Judith Doig, (1997); Camila Alire, ed., (2000); John Ashman, *Disaster Planning for Library and Information Services* (London: The Association for Information Management, 1995); Judith Fortson, *Disaster Planning and Recovery: A How-To-Do-It Manual for Librarians and Archivists* (New York & London: Neal-Schuman Publishers, Inc., 1992).

to the pre-crisis 'normal'. However, complexity theory takes this into account, and I now turn to this body of literature to explore its relevance to my study.

Complexity Theory

Complexity Theory posits that it is impossible to account for all the factors of a situation. Byrne succinctly explains the usefulness of this theory as "the trouble is that much, and probably most, of the world does not work in this way. Most systems do not work in a simple linear fashion"[28] as 'traditional' crisis management theory postulates. Complexity theory openly admits it tries to incorporate or account for too many variables.[29] It is often viewed as complementary to, not a replacement of, traditional linear theory, as it helps strengthen and expand those plans. Gilpin and Murphy explain that complexity theory is holistic, taking into account such things as past history, environment, and identity. They write that " the organization itself appears as a process and series of interactions."[30]

Weik and Sutcliffe tell us that "good management of the unexpected is *mindful* management of the unexpected,"[31] meaning that there is "continuous updating and deepening of increasingly plausible interpretations of what the context is, what problems define it, and what remedies it contains."[32] The leader during the crisis needs to pay attention not just to the obvious direct cause, but to all of the factors and influences involved as well as their repercussions. Successful crisis managers, complexity theory states, know "that the world they face is complex, unstable, unknowable, and unpredictable, [so] they position themselves to see as much as possible."[33] As Gilpin and Murphy point out, the fact that identical crises cannot happen twice is exactly why a crisis plan must be adaptable and have a tolerance for uncertainty.[34] Incorporating complexity theory in emergency plans will strengthen the plans' ability to handle unexpected events.

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[28] Byrne, 1998, 19.
[29] Byrne, 1998, 63.
[30] Gilpin and Murphy, 2008, 149.
[31] Weik and Sutcliffe, 2001, 3.
[32] Weik and Sutcliffe, 2001, 3.
[33] Weik and Sutcliffe, 2001, 11.
[34] Gilpin and Murphy, 2008, 153.

All the literature strongly advocates developing a strategy to handle the media and other communication.[35] The first day is the most critical, as at this time the media will be running with whatever information it can glean from any source. If the organisation can provide that information, it is more likely to positively influence what the media puts out. By being prepared to work with the media immediately, institutions give themselves the chance to have some control over the message and a greater opportunity to correct misinformation.[36] Authors warn that not communicating can make the organisation look either overconfident or out of control.[37]

Ritchie points out that crisis communication includes more than just the media, but that the media will be the biggest source of information for others affected by the incident, and thus "organizations need to work with the media to ensure that a consistent and accurate message is transmitted to the various public and stakeholders."[38] It is important to remember that, since exact circumstances cannot be anticipated, crisis communication plans should still include a great deal of flexibility.

Museum Theory

There are many good introductory museum studies readers, but as the field is still relatively new, many lack depth in areas such as emergency planning.[39] Most museums view emergency planning solely in terms of collections, not the institution as a whole. Museum studies literature

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[35] Pforr and Hosie (2009); Glaesser (2003); Booth (1993); Weik and Sutcliffe (2001); Gilpin and Murphy (2008); Mitroff (2004); Ritchie (2009); Fink (1986); Regester and Larkin (2005); Judith Doig, (1997); Camila Alire, ed., (2000); W. Timothy Coombs, *Ongoing crisis communication: planning, managing, and responding* (Los Angeles : SAGE Publications, 2007); Jay G.Blumler and Michael Gurevitch. *The Crisis of Public Communication* (New York: Routledge, 1995); Gary Mersham, Petra Theunissen, Joseph Peart, *Public Relations and Communication Management: an Aotearoa/New Zealand perspective* (North Shore, N.Z. : Pearson, 2009); Dan Pyle Millar, Robert L. Heath. eds., *Responding to Crisis: a Rhetorical Approach to Crisis Communication* (Mahwah, N.J.: Lawrence Erlbaum, 2003).

[36] Fink, 1986, 109.

[37] Fink, 1986, 109.

[38] Ritchie, 2009, 175.

[39] Sharon MacDonald and Gordon Fyfe, eds., *Theorizing Museum, (*Oxford: Blackwell Publishers, 1996). Janet Marstine, ed., *New Museum Theory and Practice: An Introduction, (*Oxford: Blackwell Publishing, 2006). Daniel J. Sherman and Irit Rogoff, eds., *Museum Culture: Histories, Discourses, Spectacles,* (Minneapolis: University of Minnesota Press, 1994). Hugh H., Genoways, ed., *Museum Philosophy for the Twenty-first Century,* (Lanham, New York and Toronto: Altimira Press, 2006). P. Gathercole and D. Lowenthal, eds., *The Politics of the Past*, (London: Unwin Hyman, 1990). Bettina Messias Carbonell, ed., *Museum Studies: An Anthology of Contexts*, (Oxford: Blackwell Publishing, 2004). Gerard Corsane, ed., *Heritage, Museums and Galleries: An Introductory Reader,* (London & New York: Routledge, 2005). Timothy Ambrose and Crispin Paine, *Museum Basics,* (London & New York: ICOM and Routledge, 1993). Simon Knell, ed., *Care of Collections*, (London & New York: Routledge, 1994). Simon J. Knell, Suzanne MacLeod and Sheila Watson, eds., *Museum Revolutions: How museums change and are change.* (London & New York: Routledge, 2007). Conal McCarthy, *Museums and Maori: Heritage professionals, indigenous collections, current practice,* (Wellington: Te Papa Press, 2011).

contains many books, chapters and essays on collections management policies and practices.[40] Numerous sources on collections security practices can be found within these. It has long been obvious to collectors and collection managers that objects need to be kept safe. From the locked doors and velvet-lined drawers of the curiosity cabinets it is a straight line to today's locked doors and padded boxes of collections storerooms.

Collections management books such as those by Simmons, Fahy, or Buck and Gilmore are very practical but they are narrowly focused on the collection and what to do with it. This leads to a significant blind spot in terms of larger emergency planning issues. Museum sources that address a wider view of museum management or administration, such as those by Genoways and Ireland or Lord and Lord, often incorporate sections on facilities management or security. These sections are often titled or subtitled 'crisis management' or 'disaster planning', but this merely covers suggestions for preventing or addressing such issues as pest control, insect infestation or humidity problems: crises in terms of the collected objects, but not on the wider institutional scale.

By relegating emergency planning to such areas as 'security' these sources demonstrate a museum mindset that these policies are *not* central to operations, but are more along the lines of housekeeping concerns; for example in Genoways and Ireland, 'Emergency Preparedness' falls under 'Facility Operations', literally between 'Housekeeping' and 'Health and Safety'.[41] Similarly, Lord and Lord place it in their 'security' section as part of security guard duties.[42] This view is limiting, and lowers the quality of professionalism within the industry. There are many more risks that can affect the museum industry, and in many more ways, than those solely associated with the collections. I was left to wonder if, in practice, museums limit themselves as the literature suggests, or if the wider view recommended by crisis management theory is actualised. This dissertation is an attempt to explore this further and thereby remedy the lack of material by presenting original research on the topic.

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[40] John E. Simmons, *Things Great and Small: Collections Management Policies,* (Washington D.C.: American Association of Museums, 2006). Anne Fahy, ed., *Collections Management*, (London & New York: Routledge, 2003). Rebecca A. Buck and Jean Allman Gilmore, *Collections Conundrums: Solving Collections Management Mysteries,* (Washington D.C.: American Association of Museums, 2007). Hugh H. Genoways and Lynne M. Ireland, *Museum Administration: an Introduction*, (Lanham, New York and Toronto: Altimira Press, 2003). Gail Dexter Lord and Barry Lord, eds., *The Manual of Museum Management*, Second Edition, (Lanham, New York, and Toronto: Altimira Press, 2009); Rebecca A. Buck and Jean Allman Gilmore, *The New Museum Registration Methods,* (Washington D.C.: American Association of Museums, 2007).
[41] Genoways and Ireland, (2003), 202-205.
[42] Lord and Lord, (2009), 202-206.

There are very few texts directly relating crisis management theory to the museum field. I found two chapters that directly focused crisis management onto museum studies. The first was Hunter's 'Museum Disaster Preparedness Planning' in Knell's *Care of Collections* anthology, the other was a chapter entitled 'Emergency planning and operation' in Liston's *Museum Security and Protection.* Both were written in the mid-1990s, and are short 'how-to' manuals for developing emergency plans. Hunter anticipated complexity theory when he pointedly explained the need for built-in elasticity, in that "the plan should be adaptable to situations it is not specifically designed to cover."[43]

Dorge and Jones' book followed these in 1999.[44] It is an excellent study that expands upon the above chapters and applies all of crisis management theory to the museum industry. It covers fields like effective staff training, crisis communications methods, and areas that the shorter sources miss. Dorge and Jones suggest that if a museum has a good emergency plan, its insurance rates are likely to go down.[45] This book also includes several case studies that are laid out in terms of the events that prompted the development of the institution's crisis management plan, how these are evaluated and updated, and what the institutions have learned, both through training scenarios and real-life use of the plans. In most cases, the authors find that museums who have the best emergency plans are those who have already suffered a major crisis without one. This book is an excellent guide to "the process of planning, assessment, and review of the emergency plan a part of regular routine."[46]

As explained above, learning from others' hard-learned lessons is common and sensible. The International Council of Museums (ICOM) recognised this and held an International Symposium on Cultural Heritage Disaster Preparedness and Response in 2003.[47] Brinkman explained the purpose of this conference was to provide useful material because "most museums have no, or only very limited, plans for emergency situations."[48] The message of many of the papers presented was that any plan was better than none, since its mere existence influences the

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[43] Hunter,1994, 250.
[44] Valerie Dorge and Sharon Jones, comps., *Building an Emergency Plan: A Guide for Museums and Other Cultural Institutions,* (Los Angeles: Getty Publishing, 1999).
[45] Dorge and Jones, 1999, 13.
[46] Dorge and Jones, 1999, 13.
[47] Cristina Menegazzi, ed., *Cultural Heritage Disaster Preparedness and Response*, (Paris: International Council of Museums, 2004).
[48] Manus Brinkman, "Introduction," in *Cultural Heritage Disaster Preparedness and Response,* edited by Cristina Menegazzi, (Paris: International Council of Musems, 2003), 12.

museum's administrative mindset. This accords with the international literature, where all authors agree with Hayes and Patton that while it is not possible to prepare for every crisis, a general plan is more helpful than no plan.[49]

In New Zealand, the literature in museum studies is even more limited than internationally. There are many areas that have not been researched in any depth and that need more attention, not least emergency planning, and in particular research which integrates theory with current practice.[50] There is some 'grey' literature however that is relevant to the field that this dissertation explores despite the fact it is material that is unpublished and not at all academic. The New Zealand support and liaison organisation National Services Te Paerangi (NS) produces a variety of resources for museums. Its New Zealand Museums Standard Scheme tries to ensure that all museums meet certain standards by producing checklists and short guides for museums to consult. Both programmes address emergency planning, though in different ways. The Museums Standard Scheme has a checklist of nine goals, but does not outline how to achieve them. This list is found in the downloadable module entitled *Care of Collections and Taonga*.[51]

NS also provides two short manuals: *Emergency Procedures* and *Disaster Preparedness*.[52] The first guides a museum in developing a flipchart for emergency procedures, providing sample charts to include in each page, to demonstrate layout and prioritisation of content. Each example page lists some potential actions, but it does not explain how to develop systems appropriate for each museum. The second guide does an excellent job of asking the questions that any museum would need to answer in developing its emergency plan, though they are very limited in scope. It also provides a few other tips and explains why planning is important and how to evaluate each situation thoroughly. Tony Clarke's 1995 conference paper on emergency planning in NZ museums and its direction is the only paper found that explicitly

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[49] Hayes and Patton, 2001, 55.
[50] Bronwyn Labrum and Conal McCarthy, "Museum Studies and Museums: Bringing Together Theory and Practice," *Te Ara Journal of Museums Aotearoa: Special Issue: Museum Studies in New Zealand* 30, no. 2 (2005): 4-11.
[51] New Zealand Museums Standards Scheme, "Module 2: Care of Collections and Taonga," *New Zealand Museum Standards Scheme* (undated).
[52] Te Papa National Services, "Emergency Procedures," *He Rauemi Resource Guides* (2001), and Te Papa National Services, "Disaster Preparedness," *He Rauemi Resource Guides* (2001),

relates to my research, but given its six page length it does not contain the depth this research project provides.[53]

For this dissertation I also went beyond published and unpublished sources to look at related policies and legislation and in addition conducted an informal survey of overseas museums to see what was happening globally.[54] Almost all the responding institutions had crisis management plans, and those who did not have them knew they needed them and were investigating their development.[55] Every museum who had a plan updated it regularly and had conducted some staff training.

Legislation dictates minimum standards for all businesses (for-profit and non-profit) in both New Zealand and Australia. The joint standard *AS/NZS ISO 31000:2009 Risk management – Principles and guidelines* was approved in NZ on 16 October 2009, thereby superseding a 2004 version of the document that originated in 1995.[56] Published on 20 November 2009, it establishes a number of principles that need to be satisfied before risk management will be effective. This Standard recommends that organisations should have a framework that integrates the process for managing risk into the organisation's overall governance, strategy and planning, management, reporting processes, policies, values and culture.[57]

It goes on to state that "the adoption of consistent processes within a comprehensive framework helps ensure that risk is managed effectively, efficiently and coherently across an organisation."[58] While this Act does not set minimum requirements for emergency planning or business continuity planning, by setting minimum standards for risk management, it will give complying organisations a solid foundation for continuing the process.

In this literature review I have critically surveyed the theory for crisis management and a range of other areas in order to address the gap in museum studies on this topic. In applying this

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[53] Tony Clarke, "Emergency Preparedness in New Zealand: What has been achieved, where to from here?" In *Redefining Disasters: A Decade of Counter-Disaster Planning*, edited by Alan Howell, Heather Mansell, and Marion Roubos-Bennett, (Sydney: State Library of New South Wales, 1995), 21-26.

[54] Museums were contacted in Singapore, Britain, Scotland, Ireland, Australia and America. Different kinds of museums were contacted as well, such as: children's museums, science and technology museums, art galleries, natural history museums, history museums, and maritime museums.

[55] One of these museums has expressed interest in the results of this dissertation to help them develop their first emergency plan.

[56] Standards Australia/Standards New Zealand, *AS/NZS ISO 31000:2009; Australia/New Zealand Standard: Risk management – Principles and guidelines*, (Sydney and Wellington: Standards Australia and Standards New Zealand: 2009).

[57] Standards Australia/Standards New Zealand, 2009, 6.

[58] Standards Australia/Standards New Zealand, 2009, 6

theory to museums, I hope to contribute to the literature by providing original NZ research and, in doing so, expand and enrich museum studies.

The most significant conclusions from the crisis management literature can be quickly summarised: typically only institutions who have already experienced disasters have good emergency plans; not enough museums are taking advantage of the lessons that others have learned the hard way; the best plans are comprehensive, extremely flexible, and revised frequently; regular training is vital; preparing to handle the media during a crisis is just as important as preparing for the crisis itself; and emergency plans have a tendency to focus on collections, thus missing the wider picture. These themes will be explored in this research with a study of crisis management planning in NZ museums. I now consider the research design for this dissertation in the following section.

Methodology

The methodologies chosen were those of survey and interview. The survey was designed to give consistent sector-wide quantitative data. It provides the statistical answers demanded in trying to understand the current state of emergency planning in NZ museums. The interview was designed as a follow-up to the survey, and was informed by the survey results. Using the issues identified by the survey, as well as the information gleaned from the background studies, these interviews provided qualitative information about museum practitioners' thoughts and feelings around emergency planning.

Given size, time and financial restrictions, these two methods were deemed to most effectively gather the information required.[59] Other methods such as observational studies or lengthy embedding in an institution were impractical for this dissertation. Focus groups could provide useful information for future researchers. Finally, it should be noted that with so few institutions possessing detailed emergency plans, the detailed examination and comparison of such a small sample might have breached security protocols.

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[59] After completing the survey and starting the interviews I read Matthews, Smith and Knowles' book which did a similar study in the UK but covered the three domains of libraries, archives and museums. Their considerably more lavish time and financial allowances enabled them to have a much larger pool of respondents, though I felt validated by the fact that they also chose the survey and interview methods.

Survey Methodology:

The survey was developed using Dorge and Jones' framework and suggestions, as well as Hunter's, to ensure that it covered all the recommended areas.[60] As such it used their terminology, not that of the industry in New Zealand. Thus the questions on the survey addressed all areas identified by the literature as of importance. By asking generally inclusive/exclusive questions, a survey was developed which would provide an overview of the state of emergency planning in the sector without risking breaching security protocols. The survey consisted primarily of closed-ended questions for the same reasons, although there were open-ended questions in certain areas where the options given might not have been inclusive enough. Open-ended questions were also used where there were simply too many potential answers, in which case respondents were asked to provide their own descriptions rather than choosing from a provided list. As this was the first survey of its type, it tried to be comprehensive without being too daunting to respondents.

I prepared the list of museums and galleries who qualified for the survey by using the Museums Aotearoa (MA) definitions of museum size in order to remain consistent with previous research.[61] This determines museum and gallery size by the number of full-time equivalent, paid staff. Micro museums have none. Small museums have one to five staff members; medium museums have six to 20; and the large ones have over 20. The survey was limited to staffed institutions, as these would be more likely to employ professionals who would be more likely to understand the importance of having an emergency plan through their professional experiences. This excluded all volunteer-run museums, history societies, historic houses and similar institutions. I also excluded Historic Places Trust sites as these do not fit the survey criteria for museums.[62] It is worth noting that the overwhelming majority of museums in NZ are micro-museums, and a greater understanding could have been obtained by including them, but that there were time considerations that meant the scope needed to be limited.

This left 105 potential museums and galleries. I cold-called all of them to ask if they had a formal emergency plan. This vetting question told me what percentage of museums had

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[60] Dorge and Jones (1999), and Hunter (1994).

[61] New Zealand Tourism Research Institute. *New Zealand Museum Sector Survey.* Auckland: Auckland University of Technology, 2007.

[62] Historic Places Trust is responsible for historic/heritage places such as landscapes, trees, houses, breweries, etc. They do run house museums, but coming under the umbrella of management by HPT and not individualised management, they were not included in this research.

emergency plans and reduced the survey field by enabling me to eliminate those who did not, since participation by museums who did not have plans would have skewed the results. The second vetting question was to ask the survivors of this first cut if they were willing to take the survey. If they agreed, I emailed them the consent form and the link to the survey on the SurveyMonkey website. They were guaranteed anonymity, as I decided that naming participating institutions would not add anything to the statistical information sought.

As I was unable to contact five museums and galleries, this left me with an initial pool of 100. Thirty-seven reported that they had no written emergency plan and so were precluded from survey; these 37 were medium-sized (24%) and small-sized (76%) museums and galleries. They were spread across New Zealand, and there was no consistent unifying quality other than that they had no emergency plan. During the vetting process many of these museums reported that they knew they should have one, they intended to develop one, or had it on their 'to-do' list but had not done it. In many cases small museums with just one or two staff members said that though they wanted to prepare a plan, simply running the museum took up all their time.

Of the qualifying 63 museums, nine refused to take the survey (for a variety of reasons). A further 14 received the survey invitation but later failed to participate for unknown reasons. That left 40 museums. All the results presented in this dissertation, therefore, reflect their answers. They fall into the MA large (22%), medium (36.6%) and small (41.5%) categories.[63] They are spread out over the country, urban and rural, some have collections and some do not, and are supported by district councils or independent. They are art centres, history centres, and science centres. They stand alone, or are part of library/gallery/museum complexes. Some are well-funded and some struggle for funding. These 40 respondents therefore represent a wide cross-section of New Zealand's museums.

I explained that the survey was designed to be answered by referring to their museum's emergency plan. It is not known how many actually did use their plan to help them answer the questions. Every question in the survey had an 'Unknown' option, and the only question that required an answer was the demographic question asking the size of the institution. Each of the other questions was skipped by at least one respondent, giving a variable number of replies to each question. All answers to any questions that may provide identifying details have been

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[63] Note: SurveyMonkey rounds to the nearest .1% and I have chosen not to alter their numbers. If numbers do not add up to 100% it is because the 'unknown' response is not reported here.

removed from the final results, the otherwise complete results of the survey can be found in Appendix 1.

While the survey aimed at comprehensiveness, there were limitations imposed by the need to keep it to a realistic length, by the absence of comparable work to offer guidance and by the amount and depth of data returned by the respondents.

Interview Methodology:

Cold-calling museums and galleries for the survey also identified the key personnel at each institution in charge of the emergency plan. After vetting, they were asked if they would agree to participate in interviews if their institution was selected. Twenty-two of the 100 contacted institutions agreed. The status of each emergency plan – 'complete', 'under review' or 'lacking' – was also recorded.

After completing the survey and initial analysis, I developed criteria for interviewees. These included museums of the three sizes: small, medium and large; those without emergency plans, those with complete emergency plans and those currently reviewing or updating them. From the 22, six museums were chosen to represent these criteria and to provide some geographical spread. The six institutions and staff interviewed were:

Categories	Large Institution	Medium Institution	Small Institution
Complete Plans	Te Papa, Security Manager – Andrew Hunter	Dunedin Public Art Gallery, Administration Services Manager – Grant McDonald	North Otago Museum , Director – Rowan Carroll
Upgrading/ Reviewing Plans		Te Manawa, Director of Exhibitions and Programmes – Peter Sarjeant	
Lacking Plans		NZ Film Archive, Public Programmes – Steve Russell	Kaikohe Heritage & Mechanical Trust, Manager – Ian Day

Table 1 Details of the selected interviewees and their institutions

I emailed interviewees to arrange a suitable date and time and then I emailed them a copy of the interview schedule at least a week prior to the interview. There were two sets of questions: one for institutions with complete plans or updating them, and one for those lacking plans. While largely the same, there were a few differences between the sets. Institutions with plans were asked more questions about updating/reviewing and crises where the plan was put to the test. Museums lacking plans were asked more questions about what might prompt them to develop plans, how they would do so, and how their institution had fared through crises with no plans to guide them. The primary themes identified from the survey and the areas that the literature noted as of particular importance were used to develop the interview schedule. In addition to those, questions about the case studies were added to gather information on local context.

All interviews were recorded. For Wellington-based institutions, I conducted the interviews in person. For the others I telephoned via Skype, recording both sides of the conversation with my computer speakers. All recordings were transcribed and submitted to interviewees for review; edits and deletions were made after this review, and the resulting transcripts were used for the analysis.

It would have been preferable to conduct more interviews – at least nine – but this was impossible because too few institutions were reviewing/updating their plans. Time constraints precluded interviewing more than six museum workers. Although the research drew from a national pool, the small size of that sample means that this work is indicative, not prescriptive.

The research design was developed with the aim of clarifying the industry view of emergency planning by referring to and discussing the background cases of Waiouru and Christchurch. The interviews illuminate why emergency planning is in the state that it is and suggested ways of improving it. In analysing and discussing the interviews and survey data, topics are explored thematically to consolidate information and aid clarity, as can be seen in chapters one and two.

There are three chapters in this dissertation. The first focuses on the major findings from the survey, is arranged thematically and concludes with a review of the most significant issues. The second chapter analyses the six interviews and reviews the key findings. The third chapter discusses the major issues from the previous chapters, makes low-cost and/or relatively simple suggestions for overcoming weaknesses and shortcomings identified in the research and explores the feasibility of implementing them. Finally, the conclusion will briefly review the most

significant findings and the most pressing suggestions. It is hoped that practitioners will use this information to initiate or further develop emergency planning.

Chapter 1: Current state of affairs: Questionnaire survey findings

As explained in the Introduction, my first research question is: *What is the overall state of emergency planning in the NZ museum sector?* This necessitates an evaluative approach, and this chapter provides the basis for that, by presenting the results of a sector-wide survey based on plan contents, development, and extensions. Matthews, Smith and Knowles did a similar evaluation within the library field, which included some museums and archives, but, as my literature review showed, evaluation of emergency planning has not yet been done across the museum sector.[64] This research aims to fill that gap, so that international professionals can have an accurate understanding of what is happening within the museum sector of one nation.

The outcomes of the survey, which was designed to provide an understanding of the strengths and weaknesses of the state of emergency planning in New Zealand museums, as well as its coverage in various areas, are examined here. I do not present every question and answer from the survey, but will analyse the majority of the results. For the full survey see Appendix 1. Results are arranged thematically where possible, and links are drawn between related results.

Survey Results:

#1 Emergency Plan Coverage:
In trying to get an overview of the status of emergency planning in New Zealand, the survey asked how complete each institution's plan was. Only 41% (equal to 16 institutions) reported

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[64] Matthews, Smith and Knowles (2009).

that they thought their plan was complete, while a further 30.8% felt their plan was nearing completion. That meant 28.2% of respondents reported that their plan was still in its early stages. One third of respondents developed their plan between 2005 and 2008, with 19.4% developing one in 2009 or 2010. This means that for most institutions, a plan is relatively recent. Positively, 88.6% of museum directors/managers supported the emergency plan and only 2.9% did not support it.

#2 Contents:

Interestingly, only 51.4% of respondents reported that their plan included a list of employees who were first aid trained. Directors or managers were responsible for ten of the plans, while another four reported that a security/emergency manager was in charge, and seven reported that the person responsible for their collections management also managed the emergency plan. 72.7% of these respondents reported that the person who was in charge of the plan was also in charge if an actual emergency happened.

Over 77% of respondents reported that their plan explained how to contact external experts like electricians and plumbers if needed, and 85.2% had current contact information for such experts listed in their plan. 65.7% of the plans detailed who should make the decision to call for such support. 70.6% of the plans listed the members of the institution's emergency response team, but only 51.4% explained the roles of the team during an emergency.

It was interesting to note that the potential emergency most widely covered was fire, with 94.1% of plans addressing this. Second was preparation for earthquakes, detailed in 91.2% of the plans, and rounding out the top three most widely-covered crises was flood/water damage, with 88.2% of respondents having a plan in place for this. Other emergencies covered were preparation for chemical accidents, in 50% of the plans, and explosions/bombs, in 61.8%. Both injuries (to visitors or staff) and power failures were handled in 70.6% of the respondents' plans. It must be noted that while all these emergencies have the potential to be included in an emergency plan, they may be omitted due to the plan's creators considering them irrelevant to their institution. For example: the least covered potential crises were landslips at only 11.8% and

volcanic eruption at 26.5%, which may be due to institutions not being geographically vulnerable to these issues.[65]

Unfortunately, only 41.2% of the plans covered vandalism, and 55.9% addressed burglary/theft. These are worth remembering because both of these crises can happen anywhere at any time. The most commonly overlooked area for planning was database failure, with only 29.4% reporting that they had addressed it.

This segment of the survey also contained an open-ended question for areas that may be covered by the emergency plan, but were not on my list. Eleven respondents chose to use this to provide more answers. Within that group, three reported that they also covered tornado/cyclone/high wind, while two plans covered death/suicide/homicide, phone/mail threat or suspicious object, terrorist/violent incident, and biological infestation. Areas that were given one mention apiece were: near miss, assault/threat/serious verbal abuse, active shooters, armed hold up, pandemic, loss of water/electricity or gas, tsunami, electrical storm, damaged collection objects and "cancellation of major exhibitions beyond our control".

In terms of caring for humans in event of emergency, evacuation was well covered, with 82.4% of plans addressing when it should be done, and 71.4% stating who makes this decision, but only 50% of the plans explained how to contact staff and volunteers' families in the event of a crisis.

Oddly, only 42.9% of the plans explained when to relocate the collection, if needed, during a crisis and 37.1% provided guidance on how to perform damage assessments. Only 20% of the respondents' plans explained that essential records had been copied and stored off-site, and only 17.1% detailed what those records were. While 54.3% of the respondents had plans that explained which supplies might be needed in each type of emergency, 77.1% of the plans stated where those supplies could be found.

#3 Communications:

32.4% of the respondents said their plan explained how to set up a communications post during times of emergency, with 64.7% reporting that there were instructions for communicating with emergency response personnel like police. As for interacting with the media during and after a

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[65] Geographic risks were not specifically asked about and so there is no way to know at present if they aren't addressed through lack of relevance, or for some other reason.

crisis, the spread was reasonably even with 47.1% reporting that their plan prepared for this, and 44.1% that did not. The statistics that stated whether there was an assigned person for interacting with the media were exactly the opposite, in that 44.1% were detailed and 47.1% had no details. Fifty per cent of the plans noted who was responsible for press releases. These results accord with the literature, which suggests that most museums are not adequately prepared to work effectively with various media during or after a crisis.

#4 Training:

Looking at training for staff and volunteers around the emergency plan, 48.5% reported that they did not do any training to it, while 45.5% reported that the institution provided at least some training. Of those who reported training, 37.5% did so at random times while 12.5% were unsure when they held training. However, 50.5% had training at least once a year, with this split into once a year at 31.3% of the total, every six months with 12.5%, and every three months, at 6.3%. The survey asked specifically how often the plans were tested using emergency drills, to which the majority, at 26.5%, answered 'randomly', with 41.2% reported doing so at least once a year if not every three or six months. However, 20.6% of respondents stated that they never used drills in their testing or training. In 65.2% of those who conducted drills, all of the staff participated, but only 45.5% included volunteers in their drills. Debriefs were widely conducted after drills, with 78.3% of those who conducted drills also doing debriefs afterwards. Again these results directly correspond to the literature, which implies that training, while vital, is frequently ignored, ineffective or not inclusive enough.

Respondents were asked in an open-ended question what kind of training was given by their institution. A variety of responses were elicited, from very simple training to more complex and costly training. Some of the methods provided included: basic explanations/reading and signing the plan; full training on induction; mock emergency drills fire/accident/injury; courses in fire extinguisher use or first aid; Civil Defence drills; a variety of workshops, some with a specific collections focus; alarm and evacuation testing; and even use of tabletop Coordinated Incident Management Systems (CIMS) drills.

#5 Development /Revision:

The most noteworthy result of this section of the survey is that most institutions did not use any of the available guides to develop or revise their plans. Over 36% did not use either of the available guides from the National Services He Rauemi resources when developing their plans, while 30.6% used either one or both of the guides available. 44.1% did not use the New Zealand Standards Scheme information in developing their plans, with only 17.6% using this information in their planning.

However, 70.6% of the respondents did update or review their emergency plans, 41.2% did this on a random basis, with 23.5% not knowing when they did their reviews. For those who reviewed their plans regularly, 20.6% did so annually, and 8.8% did so biannually. Another 5.9% replied that they reviewed their plan every three months. As with the training results, these results support the literature findings that this essential activity is typically undertaken insufficiently.

The most commonly updated information in the emergency plans was contact information, with 88.9% of respondents including emergency contact information. Contact information for external experts like plumbers accounted for 81.5%, and staff and volunteer home contact information was updated in 77.8% of the institutions' plans. Tied at 74.1% of responding institutions updating these were: persons responsible for various decisions; and procedures for the emergencies included in the plan. Only 40.7% of respondents say they addressed communications in their updates.

Here again respondents were given an open-ended question so that they could discuss areas that were not in the survey but were updated in their plans. It elicited few responses, they were: plan has natural disasters and emergencies, but not instructions regarding the collection; emergency equipment and radios are checked and tested on a quarterly basis; weekly check on fire exits; monthly check on fire extinguishers, emergency lights and first aid kits. Many respondents took this opportunity to note that they would be using the survey during their next update to make sure they addressed more of the issues involved.

#6 Insurance:
The literature suggested that institutions with more thorough crisis plans may be able to negotiate reduced premiums, also, given the monetary nature of most damage due to crises, it is good to keep the insurance companies up to date so that they can respond appropriately and quickly,

minimising compromises to the safety and security of the staff, buildings and collections. To that end, the survey inquired whether the plan explained how and when to contact the insurance company or agents, and only 36.4% of institutions had plans that did so. 55.9% of the respondents reported that their collection valuations had been completed, and 84.2% of those that were complete were also up to date.

Conclusion – Key results of the survey:

This survey and its analysis has helped meet the research aim of finding the strengths and weaknesses of emergency planning in the New Zealand museum sector. It was possible to do this in the form of this dissertation research because of the relatively small size of the sector here, though the findings correspond with international literature and previous research.

It was found that in NZ, other than addressing fire, flood and earthquake, and having director and board support for the plan, everything else is significantly lacking. Especially serious is the lack of sector-wide coverage, with only 11 museums reporting that they had 'complete' plans, and almost 40 museums not having any plans at all. Put simply, this means that approximately 89% of the museums in NZ do not have sufficient emergency plans.

It was also noteworthy how recently most institutions had developed their emergency plans, and how few of them used outside sources to do so. Of the institutions who do have plans, they tend to be lacking in terms of preparation for burglary/theft and vandalism, protection for important records, media communication, and staff/volunteer training. Perhaps unsurprisingly, museums in this country are best prepared for fire, earthquake and flood. One finding that squared with the literature is that very little training is done, that revision/updating is far too infrequent.

This survey provides a solid overview of the current state of emergency planning in the New Zealand museum sector; through it a thorough understanding of the depth and scope (or lack thereof) of those plans has been developed. This is the first time an evaluation of this type

has been conducted within the museum sector in NZ, and one of very few worldwide, so, in a modest way, it addresses the gap identified in the literature review.

The findings of the New Zealand survey accord with what the international literature asserts. The weaknesses identified internationally were also found here, and the planning that has so far been done also agrees with what the literature suggests is a common starting point for emergency planning across the globe. Identifying these strengths and weaknesses gives the sector a clear target for improving standards of emergency planning and thus overall standards of professionalism. Implications of these results, and suggestions for addressing them, are discussed in Chapter Three, but first the qualitative information developed through the interviews is explored in Chapter Two.

Chapter 2: Current state of affairs: Interviews

This chapter will background and contextualise emergency planning in New Zealand museums. Analysis of interviews will explore issues around emergency planning, support and resources, and highlight the thoughts of sector personnel on the response to crisis. The chapter will also help fill the literature gap and meet the research aim of understanding why museum emergency planning is in the current state that it is in New Zealand. This is the first time internationally that such information, specific only to a museum sector, has been gathered.

In this chapter I will analyse the themes emerging from the interviews I conducted during my research. The interviews give greater depth to the research in the form of sector workers' thoughts about emergency planning and how it is addressed. This section focuses on the qualitative information surrounding the topic and presents the opinions and thoughts of the interviewees. Not only will some of the key themes identified via the survey be expanded upon through these interviews, but other less quantitative, concrete areas will also be investigated. These opinions and views provide insight as to the level of professionalism and professional understanding within the sector, and they also provide a reference point for existing practice.

Interview summaries will explore the key points from each interview: both responses to set questions and other subjects that came up during discussion. They are presented in order from largest to smallest. After the summaries, the conclusion will review key results and themes.

Interview Summaries:

Museum of New Zealand Te Papa Tongarewa:

Andrew Hunter joined Te Papa after 14 years at Parliament doing operational coordination and management with risk and threat assessment. He had been security manager at Te Papa for six months when I interviewed him. He oversees the security team and security and emergency management.

Hunter admits that the definition of a crisis or an emergency depends greatly on a person's role and experience. He defines crises as internally-created incidents within the organisation (and therefore preventable or minimise-able through training and preparation) and emergencies/disasters as wider-ranging events, which are external to the museum.

Hunter sees his role as trying to integrate the front- and back-of-house teams to standardise definitions of emergency/crisis, first through a better emergency plan, and second through integrated training. Alongside this, he trains staff to ensure that more than any one person can carry out a specific role. He explains his goal as:

> So people understand what a crisis is and how it affects other sides of the business, because people are quite silo-ed and only wanting to deal with issues that happen within their area... it's something that needs to be taken care of collectively, as a group and not just done by 1 or 2 individuals that know a lot because the problem there I've found is that you only get a couple of individuals that have that knowledge and they go on leave or get hit by a bus in Manners Mall and they're not available.

Hunter feels that the NAM could have had a better outcome if there had been clearer guidelines and expectations for staff. He feels that there weren't good auditing steps in place for knowing what medals were on display and thus it took quite a long time to identify what had been stolen, though "everything afterwards was pretty good." As for Canterbury Museum's earthquake response, he feels that Kelvin Knolly and his emergency team responded quite well, but that support from the rest of the staff was lacking.

However, he does not feel that the industry has learned much from these events. He asks: "If the same thing was to happen tomorrow, would they be any better off or more prepared as

what they were at the time? And that's where I come to the no." He feels no real long-term changes have been made, either procedural or practical. Hunter feels that the museum industry overall does not have enough emergency plans. He says: "I do get the impression that there is a lot of 'someone else will do it' mentality, and a lot of the onus really needs to come back on the owners of those particular collections or groups to do a lot more work around that."

Hunter suggests education and awareness as the first steps for improving emergency planning: presenting more case studies from overseas, or compiling low-cost but effective preventative/protective steps. There is a significant increase in intent and attention immediately after an event, but "eventually that sort of awareness falls away and people fall back into being complacent. Either they won't do it or they'll come up with some sort of compromise."

Even at Te Papa, Hunter admits that they do not regularly review or update their emergency plan. They are most likely to closely examine it immediately after an incident, whether it happened there or at another institution: "it's very much reactionary." He has already instituted new cross-institutional methods of staff training called Coordinated Incident Management Systems (CIMS). It includes tabletop and mock real-time exercises and is used both for training and for actual incidents. As he says:

> The advantage of CIMS is that because the police and fire service and the like already use that, if it was a major emergency in here they could easily come in and recognize that structure and either take off and take over and not have to be updated, they can see exactly where the information is up to, and where the incident is at.

While not a fan of role-playing training exercises, he concedes that these can give practical experience, that it is one thing to say after the fire is out turn off the sprinklers, but another altogether to know where to turn them off and exactly how long it will take to stop the water. "These sorts of things, unless you actually do it, then you don't really know. And it gives people more confidence."

During his time at Te Papa there has already been an incident where a small fire started in a function venue. The smoke set off the sprinklers in Te Marae, the water from the sprinklers then leaked into the Wahi Tapu room. Several areas suffered fire and water damage. The emergency plan provided for notifying a large portion of the staff, over 20 of whom responded, which meant:

There was a lot of really, really capable people here that wanted to help, but there wasn't really any direction… So that was a really good example to me of how incidents shouldn't be run, because you had a lot of people going and doing their own thing, and the point of this is to have some structure.

As a result, he modified the notification lists to go only to those relevant to the event, not the entire staff and he also purchased more radios for better on-site communication.

Hunter considers support is insufficient for developing museum emergency plans in NZ. The sources he has found are outdated books that focus primarily on fire. He wants to bring his experience with Parliament's emergency plans to bear:

We often looked at it through a number of ways, through protection at depth, where you look at the assets in the building, then you look out to see what is currently in place... Where do you evacuate to, right down to first aid kit, water supply, food, and the like as well. And also looking at crime prevention through environmental design, so how the place is set up, fences and barriers and windows and things as well.

Despite resource limitations, he sees Te Papa as having a responsibility to help smaller institutions. A major driver for this is that although Te Papa will not loan objects to institutions it deems unsafe, it also has a commitment to loan objects as often as possible. If this means he goes on-site to advise or assist, then so be it. He also confesses that a major stopping point for many small institutions is money. Without enough financial support, work like this simply cannot be done.

Hunter suggests that NS devote more workshops to emergency planning, and include security managers like himself, Civil Defence, or other experts. Additionally, he thinks that there needs to be a national minimum industry standard, a project that NS could potentially drive. He would prefer it to be legislated, but recognises that this is unlikely.

Finally, given that museums trade on their reputations, Hunter explains why he feels that, while vital, emergency planning lacks emphasis:

People kind of take a 'wait and see' sort of look at it… And I don't know if it's the NZ 'she'll be right' attitude or the fact that we don't want to spend money on it… [But] it doesn't need to be expensive for a lot of these people to put some steps into place. Even if it's just about awareness and training.

Dunedin Public Art Gallery:

Grant McDonald has worked in planning, documentation and policy preparation with Dunedin local government since 1973. As the gallery's administration services manager, he looks after front-of-house and administration staff and is part of the gallery's management team.

For McDonald, crisis management is trying to make plans to overcome or mitigate the consequences of any issue that may arise. He defines crisis as the unknown happening, whereas emergency/disaster deals with known risks. He finds it difficult to think in terms of a truly unknown event happening as "we're probably so entrenched in thinking of always having a plan B or a plan C for almost everything that happens that it's difficult to imagine that we could end up with a crisis." He finds that identifying and overcoming single point dependencies, in all practices, helps minimise the likelihood of an emergency turning into a crisis.

McDonald did not want to comment on the NAM theft as he felt he did not know enough. However, for the earthquake he knows that there is a regional emergency recovery team, one of whose members is based at the Christchurch Art Gallery. This team meets regularly to develop plans and processes for handling events. He feels that, for Canterbury, the "fairly large, good network of well-connected people with extremely good experiences and expertise" were able to join in recovery efforts very early and, indeed, would likely have put safeguards in place before the event happened. These safeguards and recovery efforts would have significantly mitigated damage to buildings and objects.

He does not see, however, a need for institutions to pass on information gained through resolving incidents, saying he does not "particularly see any value in having reports from affected museums being spread around the sector informing them about the event and the consequences and the remedial action that those institutions are putting in place." Instead he feels that "they can just be left to get on with their own devices and the necessary communication will take place." Along those lines, McDonald does not feel that it was possible to learn anything from the theft as "it's a pretty random event and could happen almost anywhere at any time," and points out that with such incidents there are limits, both practical and financial, to developing or implementing preventative measures.

McDonald also believes that there were no major lessons to be learned from the earthquake as, for museums and galleries, "part of the reason that they exist is to protect the

works that they have in their possession and so they, as a matter of course, take as much care as they possibly can to ensure that they are not damaged accidentally by a number of different factors." Though he is not directly aware of any, he articulates that there might be specific lessons that could be learned and shared, such as how shelving or strapping might act/react in an earthquake. However, he does feel that if this is true then "the communication systems that we have in the sector are going to make sure that that information does get through."

In terms of overall emergency preparedness, he feels that due to NS's work in raising awareness through their workshops and training, the standards are increasing. NS also plays a role in networking so that resources and expertise can be shared quickly and efficiently. He agrees that a large part of emergency planning is done in reaction to major incidents, after which plans are examined in terms of "Now if that happened here, what sort of consequences would we not be able to handle?" As such, he thinks that the sector is generally aware of such events and their consequences, and has addressed them. Consequently, McDonald feels that:

> The programmes that are all set up and our normal mind-set sort of leads us along the lines of being pretty well-prepared and I'm just not too sure that there's anything new that could be done within the sector to improve the thinking that goes in behind these plans. Continued training programmes are available to all, essential to maintaining the level of capability required.

The gallery reviews its plan annually. Updates are done only if there is a pressing need, if a staff member learns something new at a workshop, or in the wake of a major event.

McDonald finds that the single, considered, constant reference point of NS for the whole sector helps maintain a consistent level of professionalism. With NS's guidance the industry is able to say 'these are the sorts of standards that the NZ sector has adopted' in various areas, including emergency planning. He also feels that NZ benefits from being small, making it easier for staff from across the country to get to the same training programmes, so that the standards are indeed national.

In McDonald's experience, emergency planning within the sector is at acceptably high levels because quite simply:

> The sector itself, the reason for its existence is the protection of the collection items, and so there has always been a 'what if such and such were to happen.' That's

always been part of the approach about almost anything that we do. It's not just that we've got some pretty paintings out the back, it's that we've got some pretty paintings out the back and we apply these standards to the care and attention of them and we put them only in these conditions so that they will last for future generations, and we protect them from this hazard and that hazard and the next hazard… The sector … is always just always constantly conscious about what the next event might be, or what we might need to do to protect them.

NZ Film Archive:

Steve Russell has been with the NZ Film Archive since 1996, during which time he has been primarily involved with public programmes. Prior to that, he was the assistant director of the International Film Festival. In his current role he oversees the infrastructure and operations of the Film Archive, managing the building and services as well as staff support services. He also liaises with the board of trustees and the Film Archive convocation. His third major responsibility is the relationships with the institution's major funders and all the financial work that goes with this, as well as cross-agency relations with places such as the Ministry of Culture and Heritage, Historic Places Trust and Te Papa.

To Russell "crisis management is more where there is a significant event that endangers the archives, its staff and collections as a whole, but that we would be one victim of a much larger disaster, most likely in Wellington… It's really about a plan for what we do after that event in terms of recovery or otherwise." He does not view crisis planning as different from emergency or disaster planning.

Russell would not have considered the theft at the NAM as something that would have fallen under an emergency plan, as it was a small and localised event, though he feels that the incident got caught up in a media circus where the museum was unable to have complete control. As for the earthquake, his interactions with institutions who the Film Archive supports in Canterbury led him to believe that they handled the incident well and with no major issues. For example:

> I know this institution made contact with the RadioNZ sound archive in Christchurch to offer whatever assistance we could if they needed it from us... What I understand is that other than a couple tapes falling off the shelf, they'd been relatively unaffected by it and were coping quite well. So while they were

thankful for our offers of assistance, they didn't feel like they needed any more from us.

He feels that, as yet, the industry has not learned much from these events, especially the earthquake. He expects the Ministry for Culture and Heritage to report on practices that protected objects well or those that failed and why, and expects that the industry will absorb those lessons.

While Russell believes that the NZ Film Archive does need an emergency plan, the uniquely copy-able nature of its collection means that it has not been thought of as an urgent item; while it does hold irreplaceable original film-stock (especially 1920s nitrate film), copies can be made so that the information in them is not necessarily lost in a disaster. He explains why this has possibly encouraged delaying developing a formal emergency plan:

> One of the differences that an audio/visual archive, like ourselves, from some of our museum colleagues is that we are not dealing with discrete single objects; that film and video is infinitely duplicate-able, in many cases without a loss of quality. You can clone film, certainly you can clone digital copies, whether on digital video tape or strictly digital files. So we have the ability to create sub-masters of the master (the original object) and then put that in a separate location and mitigate against the risk. And that's one of the ways we've been able to deal with crisis management without having gone down that route, specifically.

Essentially, their emergency plan consists of copying as much of their collection as possible, and then housing those copies in different locations. Additionally, they are not the only institution to hold most of the items, copies of most are spread across other archives, such as TVNZ Archive, Archives NZ, TV3 and Mediaworks. Television stations especially archive their own works. So "for us, if the masters get lost it's not the end of the world" as the collection can largely be replaced by duplicates.

This is not to say that Russell feels emergency planning is unimportant, quite the contrary. He thinks in terms of human life and skill loss rather than collections loss when he thinks of the usefulness of emergency preparation:

> Obviously there are issues too about- let's be harsh and frank about it- if we lost skilled staff in a major earthquake to long-term injury or death, where does that leave, if the collection survives, where does that leave the maintenance of the collection and rebuilding up all those skill sets that staff have developed? It's about succession planning.

Fortunately the NZ Film Archive has not yet experienced a crisis or emergency. Its greatest worry is financial: an over-reliance on very few funding streams.

Russell believes that the sector is not as well-prepared as it should be. That is not entirely its fault; he uses his facility, built in the 1970s as the headquarters for Winstones Building Products, as an example:

> It was a kind of showcase of the latest in pre-stress concrete technology. So all of the floors are built, are constructed with four walls and then reinforced concrete bracing beams, and every floor has them. When we bought it we were under earthquake code, we're no longer under earthquake code.

In terms of emergency planning, he feels that there is no real reason the sector couldn't be better prepared, except that "we need to be dragged kicking and screaming to the trough." Russell believes that visible leadership, especially through NS and the Ministry of Culture and Heritage, would help. He wishes that they would issue at the very least "comprehensive step-by-step guidelines to crisis management and disaster planning", not just the current generalised brochures. He knows that there is no reason that an institution can't dig out the resources on its own, but recognises that good intentions are easily buried under the minutiae of day-to-day operations.

Russell thinks that, though some resources are obtainable, it would be beneficial for NS or MA to remind people of what is available. "I would love to get an email that said, 'Are you aware that we have this guideline for – ' You know, big red letters and send it two or three times." Workshops take place regularly, but he would like to see them also held at conferences to make it easier for larger groups of museum professionals to attend.

Another suggestion was to have "a person or team of people that actually visited institutions, to say 'We're going to be in your town for this week. Book us a day and we'll come talk to relevant staff about this.' And actually come to the door." "One-on-one is good." Whether that person came with a prepared framework and helped the museum tailor it to its specific needs, or just gave a presentation and answered questions, Russell feels the important thing would be that someone experienced in museum emergency planning would be on hand to help

out or provide training. The Film Archives uses a private company for staff training even though it is not tailored specifically to museum needs.

Russell is also concerned about NZ's role in professionally supporting the international community. The Film Archive is a member of the South East Asia – Pacific Audio Visual Archive Association (SEAPAVAA) with Australia, South East Asia and the Pacific Islands. As part of that, his institution acts as a mentor and trainer for smaller, less well-resourced institutions. He sees it as part of the "responsibility of national NZ institutions and museums and heritage to our Pacific neighbours to help them prepare for emergencies and to assist with recovery efforts." Raising New Zealand's industry standards and knowledge would have flow-on effects in the developing countries with which it has relationships.

Te Manawa:

Director of Exhibitions and Programmes Peter Sarjeant has worked in banking, building, and teaching, among other professions. He is part of a team that covers art, science, social history, education, exhibition design, development, and installation. With that team, he also works with curatorial content of exhibitions and looks after collections, security, and building maintenance, and is assisting the re-development of Te Manawa.

Sarjeant says that crisis management planning is:

> … trying to have the ambulance waiting at the top of the cliff, so we know what we're going to do when we get to the bottom of the cliff. It's being prepared that at some point people are going to fall off the edge, or something is going to fall off the edge. And knowing what to do when that happens.

But, for Sarjeant, this is different from both emergency planning, which is "more about keeping people and objects safe in the case of fire and earthquake, that sort of thing," and disaster planning, which "is more about getting, once the human aspect is under control and the emergency has stopped happening, you now have a disaster that has happened. Disaster planning is how to handle things after that's happened."

In his opinion, the NAM did rather well, and he appreciated how open they were about the event. He was also impressed with how well Canterbury Museum fared during the

earthquake. He gives credit to its collection storage methods and emergency plan, both of which he believes worked very well.

Sarjeant considers that there are lessons to be learnt from each event. "It's not until you get into a position like that, that you can actually learn those things. You've got to take the opportunities to learn from others' mistakes." One of the most valuable lessons came from the theft:

> I think we have a little too much faith in general public appreciating the goods and products we have at the same level that we do, and treating them with the same level of reverence. We don't expect people to pick up things and walk off with them, or break in and steal things, we expect people to recognize that it's a national treasure. But the reality is that some people don't do that.

He has recently changed his mind about crisis preparation in the sector. A few years ago he was sceptical of the state it was in, but recent visits to museums and galleries around the country have convinced him that it is better than he thought, though he still worries about smaller museums "because you can't do the stuff without money and people."

Te Manawa reviews and updates its plan thoroughly every five years, although it also does so in between times if:

> we find things that happen or we have an incident that opens up an option that we need to look at and try to close. Or just basic things like when you have staff members change, all your contact points have got to change on the plan, so it's at that same time that you give it a quick read-over and say 'Does it still make sense? Is it all up to date?'

His current review of Te Manawa's plan has convinced him that large portions of it are badly-worded, too vague or too theoretical, and so they are simplifying and clarifying it. They are adding specific lessons learnt from incidents, such as that a small lip on a shelf helps prevent objects in cupboards from rolling out when opened after an earthquake. Fortunately Te Manawa has not had any major crises to test their plan. The few incidents that have occurred were things like small leaks from the sprinkler system, which were identified and dealt with before they could cause an emergency.

In terms of support for developing plans, Sarjeant feels that while the resources are available from MA and NS, they are not being used to their full potential, partly because "museums throughout NZ don't actually know what those organisations do, and don't actually know how to access the information that they want." Furthermore, the daily demands of running a museum means that most professionals "just don't know that they [MA and NS] can do that sort of thing, and we don't have time to go out and find out if maybe they can." He finds that he gets "so tied up in doing the job here, that then you try organizing someone to come through and help out, it all gets too hard. But when it does happen it's fantastic."

Sarjeant's first suggestion is to bring a knowledgeable person into the institution for a few days and work with them to write a good, clear, concise plan. This would force the institution to allocate time to completing it as "there's always something that's more important than a wordy document that's about something that we hope never happens." He also suggests building a designated website for resources such as a list of – and contact information for – conservators.

North Otago Museum:

Rowan Carroll spent years working her way around the world in the hospitality industry. After returning to Dunedin and managing a restaurant, she wanted a change of career. Volunteer work as a public programmes assistant at the Otago Museum led to a paid position as the community programme coordinator. She then got an education degree and did LEOTC before going on to earn her Masters in Museum Studies. She became the director of the Port Chalmers Museums, and then worked for Whanganui Regional Museum before her current position as director at North Otago Museum (NOM).

As the director she is part of a very small team, so is responsible for museum management, including but not limited to: policy and procedure, strategic planning, HR management, financial and day-to-day management, exhibitions, education and public programmes, media and marketing promotions, community liaison, professional outreach to the even smaller museums in the region, and ensuring that collection management is compliant to best practice.

For Carroll, crisis management is about being prepared; about understanding your risks and mitigating them. She sees little difference between crisis and emergency planning, as both come down to "having plans in place to ensure that the worst things do not eventuate."

In regards to the NAM theft, Carroll states that when "someone wants to steal something they will find a way to do it. So no matter what you put in place prior to that, if they really want it they will get it." Thus she does not think there was much more the NAM could have done to prevent the incident, although she does wonder if it could have controlled the media better. Her own museum was given quite a shake-up during the Darfield Earthquake, and some of her first thoughts were for the institutions closer to the epicentre. She believes that for the most part they handled it extremely well and were prepared despite Christchurch not having a history of major earthquakes. She was particularly impressed with the Christchurch Art Gallery "becoming the Civil Defence post, you couldn't ask for a better outcome than that." She was saddened by the loss of the Kaiapoi Museum and its collection, and wonders if having an emergency plan for evacuating the collection might have enabled them to rescue more of it despite the loss of the building. The one thing she thinks that Canterbury could perhaps have done better was "with all of the media blitz, there was very little about what was going on at Canterbury Museum, so perhaps it would have been assuring or reassuring to know that they had weathered it."

The biggest lesson that Carroll feels was learnt from these events was an increased awareness. She thinks that a natural outcome of these events is that emergency planning improves, because "it's not until there is a big event that everyone flurries around going 'Oh my god! We need to get our disaster management plan in place.' It puts it into the forefront of people's minds." Because during periods without major crises this attention gets diverted, it is beneficial to have it refocused once in a while. This was true after both the earthquake and the theft. Another awareness that hopefully increased after the theft was vigilance about security no matter where your institution is located, as "people who are career criminals and who steal to order will case you out, and they could come from anywhere in NZ or the world to do that."

In terms of overall preparation, Carroll says "I think it's in quite good heart, really, it wouldn't concern me overly that people aren't ready." She mentions a group of South Island specialists who are part of a response team that activates whenever there is an emergency of any sort, be it the Canterbury earthquake or floods in Alexandra. NS also comes in with support. She also hopes that museums keep their plan up to date because "if you've got your disaster

preparedness plan updated annually, then you'll have a current contact list of people who you can call on for manpower to support you in any eventuality."

One of the methods she uses to ensure the preparedness and usefulness of her plan is to work with Civil Defence. Carroll manages information as part of the Oamaru Civil Defence team. She is aware of many natural and man-made disaster scenarios. This means she can be certain her museum is prepared in terms of having:

> … knowledge about what is in the collection that is absolutely essential to save, and having the capacity to actually get people mobilized so that you can actually get those things into some vehicle and up to high ground… We're talking about the backups of your collections management system as well as the physical objects and so on and so forth.

Carroll has found that this makes her plans more precise and accurate, and therefore more practical in times of true emergency. She feels that "people need to know and prepare and get that risk assessment sorted before they actually write their plan", and recommends that NS develop a role for working with Civil Defence in order to deepen that knowledge while making it available for museum staff.

Carroll updates her plan annually and would not necessarily look it over directly after an incident had affected other institutions, although she would make note of those incidents and the lessons that come from them to cross-reference in her plan in the scheduled updating. As she says, "what happens in a year will increase my awareness of looking at my plan and ensuring that it's going to work in those events." However, at a minimum, she will update "contact details and where I can source things like bread-crates and where the closest local freezer is," so that if anything were to occur at NOM it could be dealt with quickly. It is important to her that these details at least are checked every year as people move, and businesses open and close, outdating information. As she updates her plans, she checks her emergency supplies:

> Basically that involves me eating the chocolate and the muesli bars that are stored in them and putting in new ones. But you know there's the gummies and the mops and the cloths and the bags and all that kind of stuff, batteries – you got to make sure that they're still working and your first aid kits are still all up to date and all that kind of stuff. So that goes hand-in-hand with updating the actual document, is having the physical resources available and up to date. Nothing's worse than old chocolate, you know, even if you are surrounded by rubble.

Before she arrived at NOM, the emergency plan was tested with a roof leak that flooded part of the museum. The alarm sounded about 4am, and within roughly an hour a large team had assembled to resolve the incident and care for the affected collection items. So she knows that the plan works well.

Considering that emergency planning has not been focused upon by the industry for a while, and given the severity and length of the Darfield earthquake and its aftershocks, she hopes that NS and MA will turn up the pressure on that aspect of industry preparation again. She also sees a role for the museum support organisations to coordinate some scenario work with Civil Defence.

Carroll says emergency planning "is important, and if I moved to a museum and they hadn't done it I'd be horrified. And it would become priority to actually get it done. It's a really important part of what we do." However, one thing that needs to be remembered is that "it's all very well to have these plans, we know what we should do, but we're not always resourced to actually achieve it." She points out that every museum struggles for resources, and that a lack of money may prevent small museums from meeting professional standards even if they have the expertise, assistance, written resources, and the willingness to do so.

Kaikohe and District Historical and Mechanical Trust:
Ian Day's first career was as a wood carver of Maori meeting houses. This eventually led him to opening an art gallery in Greytown, which he ran for six years. After that he earned his Masters in Museum Studies, which enabled him to become the director of the Waikato Coalfields Museum and then move into his current position of manager of Heritage Kaikohe. Since he is the only paid staff member (and has been employed there for less than a year) and the first professional the museum has employed, his responsibilities cover, quite simply, everything.

To Day, crisis management planning includes disaster planning, so 'crisis' covers a much wider spread of criteria, from staffing to management, funding to politics, and much more. On the other hand, he feels that disaster planning focuses more specifically on "the physical, what happens if your building burns down or if you get flooded, those sorts of things."

Looking at the NAM theft, Day thinks that the museum handled the media superbly, but wonders if it was possible to make them harder to access and steal. Day was impressed by the

Canterbury Museum's foresight in bracing its building and storerooms for earthquake even though the region wasn't a known earthquake zone. He agrees with the guiding principle that "it was about being preventative rather than the ambulance at the bottom of the cliff." He was sorry to hear of the loss of Kaiapoi Museum and its collection and would like to know what was behind the decision to raze the building along with its collection: was it a lack of networking, funding or a political decision? While Day does not think there were many specific lessons to be learned from these incidents, he feels that they cemented a lot of knowledge and that "if they did learn anything it was not to be complacent."

Day is not worried about the overall state of emergency preparedness in professionally-staffed museums, especially those with larger staff numbers. However "there are piles and piles of very tiny museums run by elderly volunteers who just don't know what to do" and these are the ones that are places likely to suffer fates similar to Kaiapoi if any crisis happens.

Day worries about the loss of professional knowledge and training in the sector as more staff are hired for other skills and thus do not have the knowledge necessary for running a museum and handling the collection. Alongside that, he is concerned about politics interfering with the running of museums. As he explains:

> There has been a bit of a dumbing down. And it goes back to a political level, just to illustrate, you don't see very many museum directors anymore. Those positions are suddenly being called museum managers. And usually what's happening with is that the directors are losing some of their autonomy and being made to be more answerable to trust boards, local councils, all that sort of thing. And as soon as that happens you get politics coming into it in a way that I don't think is a healthy thing. If you filter that down through the museums to the level that you're asking about, which is crisis management and disaster planning, a lot of the staff members in museums now are not being hired now for their collections management or curatorial skills, they are being hired because they are perhaps media savvy, all sorts of things like that. And so what happens is that core museum knowledge is just becoming a bit thinner on the ground.

Day suggests that museums get back to basics and revisit some of the older practices, such as where museums focus. "It's about the importance of the object, museum objects are treated in a much more cavalier fashion than they once were." He thinks this general loss of focus on the importance of a museum and its collection also affects their capacity to create comprehensive emergency plans.

In his short tenure at Kaikohe, Day has not had an emergency, though a significant portion of his collection is in crisis: one-of-a-kind agricultural equipment rusting in a field and silverfish infestations in early 1800s textiles are two examples. Trying to arrest this damage has been his focus since he started work.

Kaikohe does not yet have an emergency plan, but after spending his first year learning and understanding the museum, Day expects to write one by March 2011. To do that, he will take plans he developed for other museums and tweak them to fit the situation at Kaikohe. He likely will not use any of the resources provided by MA or NS, as he has not got the time to find them, and the other plans he has are quite specific. These plans are a framework he can edit instead of writing an entirely new document. Day considers the guides provided by NS and MA not user-friendly enough. Professionals may understand them, but he thinks specifically of the small volunteer-run museums:

> I do think of those tiny museums. It's got to be put into language that these people can understand, and the reasons why it's needed has got to be put in a way that they will take it on board. I mean I am fighting with this one here in the north at the moment. I am advising a small museum that's just got a brand new premises and the premises are right on a known flood plain. And they can't comprehend what I'm talking about when I say they have to actually work out a way to isolate the building.

Conclusion – Key results of the interviews:

The responses analysed in this chapter met the research aim of understanding how industry professionals view emergency planning and how they view the resources provided by national support agencies. This analysis contributes an initial understanding of why emergency planning in New Zealand is in the current state that it is, and provides suggestions from practitioners to guide the NS and MA in developing support resources. Given that the practices in NZ correlate with what the literature suggests are international practices for those beginning the journey to meticulous emergency planning, these findings, though from a small sector, support knowledge of worldwide practices.

The majority of interviewees support the development for a role of a knowledgeable person from one of the national support organisations, most likely within NS, who would visit and work with institutions to develop or update their emergency plans. They accept that most do not have the time to find and interpret or adapt the available information. Working with Civil Defence to strengthen risk assessment and preparation could be valuable, as could being able to draw on their experience and expertise for planning and managing crises.

While most respondents feel that there are excellent emergency support networks in NZ, they worry about the smaller institutions, especially volunteer-run ones, and would like to see more NS and MA support pro-actively targeted at these.

We have discovered that those who are responsible for their institutions' emergency plans come from varied backgrounds, and typically do not have security training, unless they work in larger museums able to afford to employ a dedicated staff member. Due to this factor, there is no agreement about what constitutes a crisis and how, or even if, a crisis is different to an emergency or disaster. Several interviewees referred to planning for any eventuality, which, in practical terminology, refers to the Complexity Theory explained in the Introduction.

Respondent opinions on the handling of the crises specifically cited varied. There was almost unanimous approval of the Canterbury Museum and most of the Canterbury region's handling of the Darfield Earthquake, but surprise about the Kaiapoi Museum's fate. While practitioners seemed to approve of the NAM's handling of the theft, they disagreed as to whether its management handled the media successfully during the incident. Opinions were expressed that the media could have been used more effectively in both instances, if for nothing more than general reassurance. This is supported by the literature review finding that while media should be addressed in plans, it often is not.

Though there was not agreement on whether specific lessons were learnt from these background studies, there was agreement that such events bringing emergency planning and security to the forefront of industry attention is a good thing, as it helps improve standards of practice. Indeed, this past year there have been floods, earthquakes, tsunamis, wars, storms, and other events that have damaged and destroyed museums around the world. So there are plenty of worst-case scenarios out there to make it clear that meticulous emergency planning is not only something that *should* be done, it is something that *must* be done and there is no reason good enough to *not* do so.

The key results and their implications from this chapter, along with discussion and exploration of suggestions for improvement, will be explored in the final chapter.

Chapter 3: Discussion: Toward improved emergency planning

The previous chapters explored the actual practices of emergency planning in the NZ museum sector, and the professional thinking behind them. This chapter extends those results to address my second research question: *How can emergency planning practices be improved to make New Zealand an international industry leader in emergency planning?* It will briefly reiterate the issues identified earlier and suggest solutions drawn from the research, existing literature and sector knowledge.

To recap, a key point of this dissertation has been to stress how vital emergency plans are: they speed up responses to incidents, thereby minimising their impact; provide standard operation procedures for high-pressure situations; bestow built-in resilience and succession planning in the absence of key personnel; provide a sound basis for decision-making during the crisis, thus preventing potentially negative knee-jerk responses; and put information in-hand when communications may be down or unreliable. In short, it is irresponsible for a heritage institution not to have a complete, up-to-date, wide-ranging, in-depth emergency plan, and the lack of a good emergency plan is detrimental to the professional level of the institution and its

staff. As seen in both the literature and the interviews, there are many reasons that an institution may not have developed a strong emergency plan.

This chapter will explore the implications of the research for current museum practice and suggest solutions for institutions, in terms of practicality, feasibility and responsibility. It does not attempt to list every possible solution, nor does it decree final answers. Instead, it will address and eliminate the reasons commonly given to delay developing or improving emergency plans. It will also indicate the most feasible methods for development and improvement. The main themes arising from the research – mindset, coverage, training and support – are explored below. While the recommendations are focused on the New Zealand museum sector, many of them are adaptable for implementation anywhere in the world.

Mindset:

The first issue to arise is the industry's mindset. Mindset covers the understanding of concepts as well as the attitudes in the industry around emergency planning practices. There are two primary areas of concern: the first is definitional; the second is denial.

Definitions:

In NZ museums, there is no consensus on the definition of crisis, emergency, or disaster. Practitioners do not agree on what differentiates crisis from emergency from disaster, or even whether there are any differences. Since the absence of consistent, accepted definitions will hamper preparation for events, it may be helpful to understand the internationally accepted definitions and to align local thinking with them.[66] This will in turn raise the levels of professionalism to match international standards.

Compounding this definitional fluidity is the 'it won't happen here' mindset, possibly a significant factor in reducing time or resource allocation to plan development. It is quite likely subconscious since the raison d'être of the sector is to preserve artworks and heritage, and all institutions have policies and practices to do just that, even if they are informal, ad hoc

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[66] These have been summarised in the introduction

hodgepodges which have developed over time. This haphazardness can obscure the need for a formal emergency plan. It may also be the result of psychological denial; denying that the worst can happen by not preparing for it.[67] This can be seen in Hunter's observation that the heritage industry tends to act as though 'someone else will do it.'

As stated above, the first of these mindset concerns can be addressed by adopting the internationally standardised and accepted definitions, and disseminating them through training and workshops. Repetition of the message would help its spread, acceptance and use. Logically, NS and MA should work together to publicise the standardised definitions on their websites and in training and informational materials, a relatively simple and economical measure (though a small amount of time would be involved in developing dissemination techniques).

Denial:

The second mindset could be more difficult to address as it is a subconscious psychological barrier. Few deliberately intend to ignore emergency planning; rather, other museum needs push it down the priority list. Indeed, it may not even be a true psychological barrier, but a mere oversight by institutions that have not experienced emergencies. Without the obvious need for such a plan, why put in all that time and effort when it could be 'better' spent on more obviously pressing tasks? However, in any given year there are more than enough examples of disasters affecting the industry worldwide to make this mindset irresponsible and dangerous.

The only non-mandatory way to combat this particular mindset is by repeating the importance of emergency plans. This can be done by MA, NS, the Ministry for Culture and Heritage, the larger museums and others. The message could be as simple as 'How well protected are you? Let us help develop or update your Emergency Plan." This type of message would also serve to remind that these organisations are resources that can be used in many ways. The message could be inserted into emails as a signature, tag or sidebar; websites could have advert boxes on their main pages; it could be printed in brochures, pamphlets, or agendas; flyers could be given to new members and staff at workshops and at conferences, advertisements could be placed in sector publications, etc.

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[67] Defined by The American Heritage medical Dictionary as: "An unconscious defense mechanism characterized by refusal to acknowledge painful realities, thoughts, or feelings."

Although 'backdoor' pseudo-mandatory measures – such as institutions refusing to loan objects, not allowing institutions lacking plans to achieve accreditations or quality marks, are not practical means of ensuring widespread conformity as they cannot guarantee compliance, quality or width of coverage, they may have value in specific circumstances, by encouraging the view that emergency preparedness is a factor in raising or claiming higher levels of professionalism.

Making a start is often the most difficult step, so although it may sound like more work, the best approach is to build emergency planning into operations from the beginning. Just as it is easier to plan ways of backing up a new computer system when it is being designed and installed than after it is up and running, identifying broader risks and developing systems for handling them in the design stage makes the organisation more resilient and simplifies the process of emergency planning.

If none of these subtler methods work, the more drastic step can be taken of mandating that institutional members of national organisations have an emergency plan. Setting such a requirement would prescribe a minimum standard for any institution wanting to be considered professionally run. That said, national support organisations should not withhold support for developing those plans. On the contrary, they should encourage and assist non-members to at least meet minimum standards.

Coverage:

The coverage issue possesses the facets of width and depth. Width of coverage across the sector addresses the percentage of institutions that have plans against the percentage that do not. Depth of coverage looks at how extensive the existent plans are; what is covered well and what is lacking within the plans themselves.

Width of Sector Coverage:
While all the large institutions are covered, many small ones are not; in fact 40% of museums and galleries lack emergency plans. Managers mostly cite lack of time, staff, resources or expertise as the main reasons for this. But, as this dissertation has pointed out, written resources are readily available, making expertise, while preferential, not essential. With a guide, staff can use these sources to develop a basic emergency plan. Time is the primary resource needed,

especially if an institution wants to go into detail. Once completed, however, maintenance is minimal and the reward invaluable since a plan can save objects, collections, buildings, and even lives. Institutions that can prove they are ready to save lives and objects through careful planning, which will save money and improve its reputation within the sector.

Depth of Plan Coverage:

Of the 100 institutions contacted, only 16 had what they considered complete emergency plans. The rest admitted that their plans still need work or were being worked on. We have seen that they are especially deficient in planning for vandalism, burglary/theft, technology failure and media management. Many institutions do not seem to realise that natural disasters, such as fire, flood or earthquake, are not the only potential threats. Humans are the biggest and most common threat to museums, whether by accident or design. As Sarjeant pointed out, "We don't expect people to pick up things and walk off with them, or break in and steal things, we expect people to recognize that it's a national treasure. But the reality is that some people don't do that." This stresses the importance of re-aligning the sector mindset to understand that the human factor is as important to prepare for as earthquakes, floods and fires, because human-induced events occur far more often, even if the damage may often be less dramatic. And it is not just the visitors Sarjeant worries about who will cause problems. How many institutions are prepared for aberrant behaviour by staff members, either physically or through cyber sabotage?

Given the high sector reliance on technology and how often technology suppliers emphasise backing up information, it is unfortunate that only 29.4% of responding institutions said that they had plans for database failures. Initial setup of back-ups may be costly, but maintaining the system should be relatively inexpensive, as it requires only regular back-up to an off-site server, a service that most support companies provide cheaply. Data back-ups can usually be scheduled automatically, or set up for museum or tech support to do simply. The location and access instructions for this information should be included in the emergency plan – something that surprisingly few museums have done.

As technology improves, it becomes more linked and intertwined. Thus, most phone and internet services are already joined, along with support for much IT infrastructure. This combined infrastructure must be considered in planning: when the internet goes down, the phones might go too, so how does the institution call for help? What are priorities for bringing

back on line first? Again, though it is often omitted from emergency plans, this is a critical area as all institutions become more and more reliant on such systems to run their operations.

Preparing to deal with the media is as important as preparing for a fire. The media can be tricky, fickle and uncontrollable, but they can also be an ally. An excellent example was NAM using the media to encourage public support for the recovery of its stolen medals. Had the museum not involved the media, prepared information for it, or assigned a designated spokesman presenting a clear message, it could have been savaged by the press. Indeed, there have been several recent examples of museums not working well with media, to their detriment. Media directly form and inform public opinion, making it crucial for museums to forge a relationship that will positively influence public opinion. While many events can be planned for and media releases written and edited in preparation, it is in the midst of a crisis or directly afterwards that the relationship can turn sour. It is not necessary to release every detail to the media, but it is beneficial, at the very least, to have basic information about the museum itself: its goal, role in the community, major items in the collection, history, etc. This more general information, easily prepared beforehand, can flesh out reports on the incident without giving many details of the incident itself until the institution is ready to do so. Generalised media releases for each kind of crisis can be developed alongside the emergency plan. Leaving them general means that specifics for any incident can be inserted almost in a 'fill-in-the-blank' method. Along with this, a prepared FAQ list that can be issued or posted on the institution's website will help alleviate the immediate need for information. This is not the end of the process; it is merely a start. In an emergency, the media will appreciate the prepared information, and the institution will appear to be co-operative and forthcoming, encouraging the media to respond positively and will buy the museum time for it to prepare appropriate information.

Other areas such as injury, explosion, power failure and chemical accident, are covered moderately well within the industry, possibly because they are more obvious and dramatic potential emergencies, though there is room for improvement with those as well.

The focus on fire, flood and earthquake is logical in that those are obvious threats, and ones that have already affected New Zealand institutions. These precedents and the perception they could easily happen again, forces institutions to include them in even sketchy plans. The less covered areas do not have such obvious precedents to encourage planning. But this does not

mean that they cannot happen. Like the more obvious potential crises, they should be covered so that potential damage can be minimised.

Training:

The third theme is training. There are three different areas to address: NS workshops, working with Civil Defence and other emergency services, and staff training.

National Services:

NS does run occasional workshops on disaster management, but these are more about practical responses to disasters than developing emergency plans. The disaster preparedness workshops are not designed to help prepare effective in-depth plans, but to guide what should be considered by institutions trying to implement them. While this is a step in the right direction, it must go further. As we saw from the interviews, there is a demand for more explicit, personal help. Institutions would like someone from NS to offer a conference or regional workshop with a template and help walk them through it. Another option, one that museums seem to support despite it making more work for them initially, is for a 'homework' list to be sent out before such workshops so that the attendees can come prepared with information specific to their institutions, and thus leave with completed (or at least well-advanced) tailor-made plans. An extension of this idea is for the 'homework' list to be sent out ahead of an on-site visit from NS staff, who would then sit down with museum staff and help them use their own information to make the template institutionally specific. While this last option may be the best, it would require significant time commitment from NS.

Staff Training:

Staff training is a vital part of planning. After all, what good is a plan if no one knows how to use it? All staff and volunteers should receive regular training, more than once a year. Quarterly practice would be ideal as this is often enough to keep emergency procedures and responses fresh in the minds of the participants, but not so often that they become complacent about them. It may not be realistic for all staff to participate in training this often, however training does not necessarily need to include all staff in every session. A randomised or selected yearly training

rotation that moves through the whole institution in 'teams', and also includes at least one annual all-staff training, could be an answer. Few museums reported having regular training; although those that did mostly included all staff. Unfortunately, almost half of respondents excluded volunteers from training. Volunteers should be included in training for many reasons. During emergencies, extra pairs of hands are often urgently needed, even if they do no more than spread tarpaulins. And, depending on the number of volunteers in an institution, they are likely to be on the scene, or even be the discoverers of any incident. Trained volunteers can respond to the situation appropriately and contribute valuably towards its alleviation.

Training should be more than theoretical tabletop 'what-if' exercises, though these have a role to play. Tabletop training allows staff to train for more challenging situations, which may be too complex, unsafe or impractical to do with drills. By pushing participants continually to solve ever-more complex 'what if' factors in theoretical situations, this kind of training addresses what complexity theory advises, in order to develop confidence in creative but effective responses to situations with various layers of factors and influences that are impossible to predict.

Drills are the best training, as these develop confidence in a reasonably realistic way. They develop familiarity, efficiency and fluidity, teaching participants what they have to do, who should do it, how and when. Drills also help to enrich the plans in terms of specifics. Staff and volunteers who have participated in the drills will know where to go, which collection items should be protected first, how to handle or remove them, etc. Drills can cover any event, enabling trainees to react quickly and confidently.

Civil Defence and Emergency Services:
Civil Defence (CD) excels at both tabletop training and drills and can be drawn on for training opportunities. As Carroll pointed out, CD can help explain how a building and property will react to various crises and natural disasters, better preparing institutions to respond. It can also develop co-operative mock-emergencies, strengthening training and drills. It is CD's duty as an organisation to provide these training opportunities. A significant benefit to working with CD is that when something does happen, both museum and CD workers will be used to working with each other and thus can respond more cohesively. Working with emergency services and CD also has the benefit of alerting those organisations to the unique demands and qualities of our sector during a crisis. Thus they may be able to develop plans and training in ways that museums

may not think of, because they are up-to-date on the latest crisis response techniques, equipment, practices and theories. This relationship can easily be mutually beneficial as most museums have meeting rooms, foyers or other large spaces that could potentially be used during large-scale crises as either incident control points or assembly points by CD.

Hunter is instituting CIMS training at Te Papa, as it is a crisis response structure that emergency services understand. This is an excellent suggestion, but developing a familiarity with CIMS may not be possible everywhere, especially where there are few staff. However, it is possible for institutions that conduct regular drills to arrange to have them with emergency services in the same way suggested for Civil Defence. While these may be less common, they are equally worthwhile and have many of the same benefits to both organisations. A major benefit for smaller museums to develop relationships with local emergency services is quite simply the value of these relationships. Responding fire-fighters are potentially less likely to smash their way through the building (regardless of what objects they may damage) if they have been working with the staff and institution, and have developed a respect and understanding for the building and its contents. Obviously their first priority will be responding to the crisis, but they may take more care whilst doing so and thus fewer objects will be unintentionally damaged.

Support:

Fourthly, this chapter addresses various forms of support. Support is a wide-ranging term that here is used to cover various networks, insurance, written and online guides, and National Services.

Networks:
There are many support networks in NZ at national, regional and local levels. Indeed, some of our institutions enjoy international support networks. Many interviewees seem to be pleased with the support offered by their various networks in times of emergency. One of the key results this research noted was that larger institutions feel responsible for helping smaller ones in terms of professional development. Emergency planning is part of that role, though it is a struggle to provide good advice when larger institutions are not completely certain they have sound,

comprehensive plans. Thus emergency planning is important for development of better mentoring relationships.

One example of networking support that I came across was where the knowledgeable security manager at one institution was invited to another to examine its policies and procedures with fresh eyes, and was therefore able to identify several weak areas that had been overlooked. Along those lines, the larger museums are starting to exchange staff for short periods of time in order to cross-train them, benefitting both insitutions.

Insurance:

Saving on insurance is another reason to develop better disaster plans, since the literature suggested that insurers give lower premiums to institutions with comprehensive emergency plans. As part of the research, I contacted several NZ museum insurance companies and brokers and discovered that the situation here accords with the literature's findings, that this is a way of reducing insurance premiums. The brokers agreed that institutions who have safety plans and procedures in place (that means both physical features such as sprinklers and detailed plans for minimising damage and loss), can negotiate for lower premiums. The better the plan, the better the negotiated premium can become.

Part of this is also having valuations up to date so that insurance companies know what the institution has and how much it is worth. This saves time and energy for insurers and institutions, and speeds up the claims process. Current, detailed valuations (including descriptions and images) may, reduce the claim processing time from months to days or weeks. It will also duplicate records, a considerable benefit if the museum's ones are lost or damaged.

Written Guides:

NS has developed two written manuals for NZMSS on disaster planning, but these are mere checklists of things to do; there is no information on how to accomplish them. There is slightly more development in the NS *He Rauemi resource* guides, though these are short brochures that do not provide much depth or breadth. In short, New Zealand lacks written guides to help institutions to create comprehensive, in-depth emergency plans. This is not a local phenomenon, as a similar situation prevails elsewhere. The best of the few books, *Building an Emergency Plan: A Guide for Museums and Other Cultural Institutions* by Dorge and Jones, was published

in 1999 and has not been updated. The NS manuals are not explicitly helpful enough for museums with staff inexperienced in this field and the international books, while better, are difficult to locate. This is a serious problem. According to the survey, very few museums use the sources available through NZ to develop their plans. Interviewees explained, repeatedly, how difficult it was not only to locate resources, but to interpret them well enough to actually use them.

Online Guides:

Fortunately there are free and easy potential solutions these problems. The online *Risk Awareness Profile Tool* is designed to help the heritage industry understand its potential risks and raise awareness of those that may have been overlooked.[68] It is a series of questions that asks whether or not various risks have been considered, and ways of addressing those risks identified and developed. The site breaks risk assessment down into four sections: assets, systems, finance, and audience. "When you have completed an assessment you will be able to see your results as a colour coded risk awareness profile. The profile uses the 'traffic light' colours of red, amber and green to classify your risk awareness." It is designed for those institutions in the UK, but can offer guidance to institutions in other countries. While it is an excellent tool for risk assessment before developing disaster plans, and to check breadth of coverage for existing plans, it does not help with actual plan development.

The online website *Dplan: The Online Disaster-Planning Tool for Cultural and Civic Institutions* is a disaster plan (based in the US, it uses their terminology, but as shown in the introduction this is synonymous with emergency plan) template.[69] An institution can join for free, using a generic institutional email and then select one of two paths. *Dplan Lite* gathers the most essential information in thematically organised boxes. Completing this gives an institution a basic disaster plan. Downloadable information-seeking forms enable an institution to switch to *Dplan In Depth*, which will automatically transfer the information already entered into *Dplan Lite*, and then staff can add the new data that they fill into the forms. After a few such guided sessions, users end up with a detailed, printable emergency plan. Dplan stores the entered information forever, though it is only accessible by the registered user. This also makes it easy to

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[68] "Risk Awareness Profiling Tool," Accessed February 2011.
[69] "dPlan: The Online Disaster-Planning Tool for Cultural and Civic Institutions." Accessed January 2011.

update regularly. The instructions provided on the website are clear and concise, and the format is easy to extrapolate if there are areas that the institution wants to include that the website does not include, such as planning for the media.

National Services:

Interviews repeatedly showed that there is a role for NS to strengthen and develop knowledge in, provide access to, and stress the importance of this area. One of the simplest, most cost-effective solutions offered was by Sarjeant, who suggested a website, an extension of Hunter's idea of a centralised list. While he was thinking of one that included lists of people institutions can contact for various needs, this idea can be expanded significantly. It should be straightforward for NS, the Ministry for Culture and Heritage or even MA to host a site that anyone can join. One of the main pages would be a directory of links to areas divided along themes. The front page for each theme would have links to other pages developed within that theme. For example, a main theme on the front page could be 'Conservation,' on the main page of the Conservation theme there could be links to: 'Conservators,' 'Conservation Techniques,' 'Conservation Supplies,' 'Guides on Conservation,' etc. Clicking on 'Conservation Techniques' would take the searcher to a page that would list links for books and other written sources, websites, suggestions for cost-effective temporary solutions, questions or problems posted by users for other users to give advice on, etc.

Taking this a step further, though MA, the Ministry for Culture and Heritage or NS could host and primarily run this website, it could principally depend on user-generated content, similar to how web 2.0 runs. The cost to this would be principally site development and maintenance, but this cost is far outweighed by the potential benefit to the sector. Monitoring for appropriateness – both language/content, and placement of new information in correct categories – would have to be done regularly as well. However, given the potential for practical, useful information that is easy to find and update, this expense is justifiable, especially as it could be footed by national support organisations. Alternatively, the hosting organisation could charge a minimal joining fee or yearly fee for contributing members.

Conclusion:

New Zealand is a small country with a small museum and gallery sector. That means that its institutions are already quite good at, and used to, working together. As has been shown in previous research, there is fragmentation, but overall there is quick uptake of new practices and ideas.[70] If a smooth, clear process for developing and implementing emergency plans can be found, the levels of professionalism across the sector, and especially in smaller museums, could rise significantly. The desire is there, but not necessarily the knowledge and ability. This is not an issue localised to NZ, as it affects the industry worldwide.

Given that good emergency plans enable faster responses, provide procedures during crisis, address the absence of key personnel, prevent knee-jerk responses, and put useful information where it is needed, they can save institutions from disaster. The benefits gained from having plans far outweigh the cost of developing them.

Many of the deficiencies found in this study accord with the international literature. This chapter examined the more significant ones and suggested ways of overcoming them. While these suggestions were not exhaustive, most were practical and many were also inexpensive. Implementing even a few would raise the level of professionalism within the industry and bring the standard for safe-keeping the industries assets can be brought to a level on a par with, or even above, the international standards.

The concluding section of the dissertation will review the key suggestions explored in this chapter as well as the key findings from the research. It will also present the limitations faced in this project and suggestions for further research.

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[70] McCarthy, 2011.

Conclusion

This final section of this dissertation addresses the contribution this research makes to museum practice and theory and will briefly use the key findings to answer the primary research questions that drove this project: *What is the overall state of emergency planning in the NZ museum sector?* and *How can emergency planning practices be improved to make New Zealand an international industry leader in emergency planning?* The suggestions developed in the discussion chapter will be re-stated and summarised. Suggestions for further research will also be discussed.

The first question was answered via the survey and interviews, while the answers for the second started in the interviews but were expanded in the discussion chapter. In answering the primary research question *What is the overall state of emergency planning in the NZ museum sector?* the survey found that other than addressing fire, flood and earthquake and having

director and board support for the plan, almost everything else is lacking. The most worrying result is that 89% of the museums did not have what are considered 'good' emergency plans. It has also been noted how badly supported emergency plans are through staff training and familiarity. Another unpleasant surprise was how few institutions used the available resources for developing plans. The lack of agreement on definitions and thresholds for emergencies or disaster will greatly hamper the development of consistent standards and plans.

Nevertheless, there is significant support for the creation of a position for someone to visit and work with institutions to develop or update their emergency plans. While most respondents feel that there are excellent emergency support networks in New Zealand, they worry about the smaller institutions, especially volunteer-run ones. As demonstrated, working with Civil Defence would also offer short-term gains and media management should be prioritised.

Finally, it has been established that institutions can save money on insurance premiums through better emergency planning and can ensure faster responses by keeping valuations accurate and up to date.

Several answers were presented in response to the secondary research question, *How can emergency planning practices be improved to make New Zealand an international industry leader in emergency planning?* None of the proposed suggestions are quick, but most are feasible if enough time is allocated.

The website [www.dplan.org] offers a free and flexible format for institutions who want to develop a plan or revise and existing documents. Another suggestion would be a user-driven, easily-accessible resource website hosted by a major support organisation.

We learned of several training methods, including tabletop situational training (excellent for modelling extreme scenarios) and actual drills (better for gaining first-hand, on-the-spot experience). All training should include relevant staff and be provided regularly, even if on rotation. Ideally it should also include volunteers, who can provide useful support in an emergency. It may be possible for museums to work with the emergency services to gain access to off-the-shelf services and to familiarise external emergency services with the special requirements of museums and galleries.

What contribution has this study made to museum studies and museum practice? By drawing on crises management and complexity theory, this dissertation expands museum studies

by incorporating relevant theory into a framework for original research into an under-examined area. In doing so this dissertation represents the first evaluative study of emergency planning in New Zealand museums and one of the first of its type in the world. On a more practical level, it offers guidance to the sector to assess and raise its professional levels.

While not a comprehensive list, the suggestions for improvement gained through interviews and the literature review provide good starting points to improve practice and raise professionalism in an area in which New Zealand has the ability to become a global leader.

This dissertation also helps to fill a gap in evaluative studies in the international literature by demonstrating how theory is (or is not) applied, and by identifying the need for further documentation. There is certainly room for further work and it is my hope that it and the improvements suggested will quickly outdate this study.

In the following paragraphs I explain what I would do differently if I were to do the study again and notes areas for future research. One area that I would change is that my survey did not address the financial impact of prolonged closure after a crisis, or financial crisis caused by the loss of a major sponsor, bomb threats and terrorism. Although not currently major concerns for New Zealand museums, they remain potential threats.

I would also have included a final survey question that allowed respondents to make general comments or thoughts, as many chose to do this within the open-ended questions during the survey instead. I have also since identified a few topics that I would include in the survey if I were to do it again, for example identifying the percentage of council-supported museums that have plans as compared the percentage of independent museums that do.

For the interview I would have asked further questions about engaging with media during and after a crisis, as well as investigating the decisions behind what was chosen to be included in the plan, and what was left out.

In terms of further research that might be conducted in following up this dissertation, I feel that during the course of my research I have found several areas that would provide useful information. The three I think would be the most useful concern decision-making around inclusion and exclusion of areas in emergency plans; investigating the best method of delivery for information from NS; and the effect of various standards organisations upon emergency planning. It would also be helpful to do a similar study of the micro-museums to fully flesh out the information gained from the survey.

First, further research is needed in order to understand why some key components (lists of first-aid-trained staff, priority checklists for object relocation etc) have not been included in plans. Are they considered irrelevant or have institutions simply overlooked them? Second, if, as was shown, few industry practitioners use the NS brochures and pamphlets for emergency planning, is there is a style or size that they prefer? If so, why? And through what medium – print or electronic?

Third, organisations who provide standards, such as the International Council of Museums, the International Standards Organization and Qualmark all have standards for emergency planning in museums, so why aren't more museums trying to meet these standards, or using them to develop their plans? Doing so would significantly improve the levels of professionalism and protection within the sector.

The first two areas would provide practical information that the industry could then act upon to strengthen its emergency planning practices. The third would strengthen and support the underlying call of this paper for museums to improve those practices.

In conclusion, through examining available literature on emergency planning and relating it to museums and through the survey and interviews conducted here in NZ, this dissertation has shown that there is work to be done for the sector to develop consistent, quality emergency plans. It has revealed the current actual state of emergency planning across the country, as well as the professional beliefs and opinions behind that. Practical solutions for improving emergency planning, such as [www.dplan.org] and a dedicated travelling NS expert staff member, have been suggested and explored. As a small country with a close-knit museum sector already used to working together, I believe there is an opportunity for New Zealand to become a world leader in setting standards for museum emergency planning.

Appendix 1: Survey result statistics

1. What institution do you represent?

	Response Count
	40
answered question	40
skipped question	1

2. What institution do you represent?

		Response Percent	Response Count
Small: 1 to 5 full-time, paid staff members		41.5%	17
Medium: 6 to 20 full-time, paid staff members		36.6%	15
Large: 21 or more full-time, paid staff members		22.0%	9
		answered question	41
		skipped question	0

3. What region is your institution in?

	Response Count
	40
answered question	40
skipped question	1

4. Which insurance company does your institution use?

	Response Count
	40
answered question	40
skipped question	1
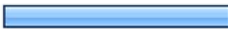
5. How complete is your crisis management plan?

		Response Percent	Response Count
Complete		41.0%	16
Nearing completion		30.8%	12
Still in early stages		28.2%	11
	answered question		39
	skipped question		2

6. When was the crisis management plan developed?

		Response Percent	Response Count
2009 or 2010		19.4%	7
2005-2008		33.3%	12
2000-2004		25.0%	9
1995-1999		8.3%	3
Before 1995		2.8%	1
Unknown		11.1%	4
	answered question		36
	skipped question		5

7. Were National Services Te Paerangi He Rauemi Resource guides used to either develop or update the crisis management plan?

		Response Percent	Response Count
Yes "Emergency Preparedness" was used		5.6%	2
Yes "Disaster Management Planning" was used		8.3%	3
Yes to both		16.7%	6
Yes to others		5.6%	2
No		36.1%	13
Unknown		27.8%	10
	answered question		36
	skipped question		5

8. Was the New Zealand Standards Scheme used to develop the crisis management plan?

		Response Percent	Response Count
Yes		17.6%	6
No		44.1%	15
Unknown		38.2%	13
	answered question		34
	skipped question		7

9. Does the director / governing body support the crisis management plan?

	Response Percent	Response Count
Yes	88.6%	31
No	2.9%	1
Unknown	8.6%	3
answered question		35
skipped question		6

10. Does the crisis management plan have a table of contents?

	Response Percent	Response Count
Yes	74.3%	26
No	22.9%	8
Unknown	2.9%	1
answered question		35
skipped question		6

11. Does the crisis management plan list which staff members have first aide training or certifications?

	Response Percent	Response Count
Yes	51.4%	18
No	40.0%	14
Unknown	8.6%	3
answered question		35
skipped question		6

12. Has your crisis management crisis management plan ever been tested in a real situation?

		Response Percent	Response Count
Yes		31.4%	11
No		68.6%	24
Unknown		0.0%	0
	answered question		35
	skipped question		6

13. Does the crisis management plan explicitly state the title of who is in charge of the crisis management plan?

		Response Percent	Response Count
Yes		65.7%	23
No		31.4%	11
Unknown		2.9%	1
	answered question		35
	skipped question		6

14. If Yes, what is their job title?

	Response Count
	22
answered question	22
skipped question	19

15. Is the same person in charge in case of an actual emergency?

		Response Percent	Response Count
Yes		**72.7%**	16
No		13.6%	3
Unknown		13.6%	3
		answered question	22
		skipped question	19

16. If No, what is the job title of the person who is responsible in times of actual emergency?

	Response Count
	3
answered question	3
skipped question	38

17. Does the crisis management plan explain how to contact external experts (plumbers, electricians, etc) for support or assistance?

		Response Percent	Response Count
Yes		77.1%	27
No		17.1%	6
Unknown		5.7%	2
		answered question	35
		skipped question	6

18. Does the crisis management plan list their current contact information?

		Response Percent	Response Count
Yes		85.2%	23
No		11.1%	3
Unknown		3.7%	1
		answered question	27
		skipped question	14

19. Does it detail who makes the decision to contact them?

		Response Percent	Response Count
Yes		65.7%	23
No		25.7%	9
Unknown		8.6%	3
		answered question	35
		skipped question	6

20. Does the crisis management plan list the members of the museum emergency response team?

		Response Percent	Response Count
Yes		70.6%	24
no		23.5%	8
Unknown		5.9%	2
		answered question	34
		skipped question	7

21. Does the crisis management plan explain the roles of the museum response team during an emergency?

		Response Percent	Response Count
Yes		**51.4%**	**18**
no		40.0%	14
Unknown		8.6%	3
	answered question		35
	skipped question		6
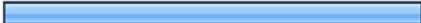
22. Does the crisis management plan cover (choose all applicable):

		Response Percent	Response Count
Injuries?		70.6%	24
Power failure?		70.6%	24
Explosions / bombs?		61.8%	21
Earthquakes?		91.2%	31
Floods / water damage?		88.2%	30
Fire?		**94.1%**	**32**
Chemical Accidents?		50.0%	17
Landslip?		11.8%	4
Volcanic eruption?		26.5%	9
Vandalism		41.2%	14
Burglary / theft?		55.9%	19
Database failure?		29.4%	10
	answered question		34
	skipped question		7
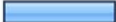
23. Does the crisis management plan cover anything else? If so, please explain below. If not, please leave box blank

	Response Count
	11
answered question	11
skipped question	30

24. Does the crisis management plan explain when to evacuate staff and visitors?

	Response Percent	Response Count
Yes	82.4%	28
No	8.8%	3
Unknown	8.8%	3
answered question		34
skipped question		7

25. Does it detail who makes the decision to evacuate?

	Response Percent	Response Count
Yes	71.4%	20
No	21.4%	6
Unknown	7.1%	2
answered question		28
skipped question		13
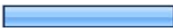
26. Does the crisis management plan explain how to contact staff and volunteers' families?

		Response Percent	Response Count
Yes		50.0%	17
No		41.2%	14
Unknown		8.8%	3
	answered question		34
	skipped question		7

27. Does the crisis management plan explain when to relocate or evacuate the collection?

		Response Percent	Response Count
Yes		42.9%	15
No		45.7%	16
Unknown		8.6%	3
Not Applicable- No Collection		2.9%	1
	answered question		35
	skipped question		6

28. Does it detail who makes the decision to evacuate or relocate the collection?

		Response Percent	Response Count
Yes		60.0%	9
no		33.3%	5
Unknown		6.7%	1
	answered question		15
	skipped question		26

29. Does the crisis management plan explain how to protect the building?

	Response Percent	Response Count
Yes	40.0%	14
No	**48.6%**	**17**
Unknown	11.4%	4
answered question		35
skipped question		6

30. Does the crisis management plan detail where emergency supplies are located?

	Response Percent	Response Count
Yes	77.1%	27
No	14.3%	5
Unknown	8.6%	3
answered question		35
skipped question		6

31. Does the crisis management plan explain which supplies might be needed for each emergency type?

	Response Percent	Response Count
Yes	54.3%	19
No	40.0%	14
Unknown	5.7%	2
answered question		35
skipped question		6

32. Does the crisis management plan provide guidance on how to perform damage assessments?

		Response Percent	Response Count
Yes		37.1%	13
No		51.4%	18
Unknown		11.4%	4
	answered question		35
	skipped question		6

33. Does the crisis management plan list or explain what essential records have been copied and stored off-site?

		Response Percent	Response Count
Yes		20.0%	7
No		65.7%	23
Unknown		14.3%	5
	answered question		35
	skipped question		6

34. Does it explain where copied records held off-site are held and how to access them?

		Response Percent	Response Count
Yes		17.1%	6
No		65.7%	23
Unknown		17.1%	6
	answered question		35
	skipped question		6

35. Does the crisis management plan explain how to set up a communications post?

		Response Percent	Response Count
Yes		32.4%	11
No		61.8%	21
Unknown		5.9%	2
	answered question		34
	skipped question		7

36. Does it explain how staff and emergency response personnel (police, etc) will be communicated with?

		Response Percent	Response Count
Yes		64.7%	22
No		26.5%	9
Unknown		8.8%	3
	answered question		34
	skipped question		7

37. Does the crisis management plan include preparations for dealing with the media after an event?

		Response Percent	Response Count
Yes		47.1%	16
No		44.1%	15
Unknown		8.8%	3
	answered question		34
	skipped question		7

38. Does the crisis management plan detail the person responsible for interacting with the media?

		Response Percent	Response Count
Yes		44.1%	15
No		47.1%	16
Unknown		8.8%	3
	answered question		34
	skipped question		7

39. Does the crisis management plan explain who is responsible for press releases?

		Response Percent	Response Count
Yes		50.0%	17
No		41.2%	14
Unknown		8.8%	3
	answered question		34
	skipped question		7

40. Is the crisis management plan issued or printed out and located in a variety of places to be easily accessible by all staff and volunteers?

		Response Percent	Response Count
Yes		61.8%	21
No		32.4%	11
Unknown		5.9%	2
	answered question		34
	skipped question		7

41. Is there any training to the crisis management plan?

		Response Percent	Response Count
Yes		45.5%	15
No		48.5%	16
Unknown		6.1%	2
	answered question		33
	skipped question		8

42. How often is crisis management training conducted?

	Response Percent	Response Count
Every month	0.0%	0
Every 3 months	6.3%	1
Every 6 months	12.5%	2
Every year	31.3%	5
Every 2 years	0.0%	0
Randomly	**37.5%**	**6**
Unknown	12.5%	2
	answered question	16
	skipped question	25

43. Please explain what kind of training is given:

	Response Count
	15
answered question	15
skipped question	26

44. How often is the crisis management plan tested with an emergency drill?

		Response Percent	Response Count
Every month		0.0%	0
Every 3 months		8.8%	3
Every 6 months		20.6%	7
Every year		11.8%	4
Every 2 years		0.0%	0
Randomly		**26.5%**	**9**
Never		20.6%	7
Unknown		11.8%	4
		answered question	34
		skipped question	7

45. How much of the staff participates in emergency drills?

		Response Percent	Response Count
All of the staff		65.2%	15
More than half of the staff		17.4%	4
Half of the staff		8.7%	2
Less than half of the staff		4.3%	1
Only a few of the staff		4.3%	1
		answered question	23
		skipped question	18

48. Does your institution update or review the crisis management crisis management plan?

		Response Percent	Response Count
Yes		70.6%	24
No		8.8%	3
Unknown		20.6%	7
	answered question		34
	skipped question		7

49. How often is the crisis management plan updated or reviewed?

		Response Percent	Response Count
Every month		0.0%	0
Every 3 months		5.9%	2
Every 6 months		0.0%	0
Every year		20.6%	7
Every 2 years		8.8%	3
Randomly		41.2%	14
Unknown		23.5%	8
	answered question		34
	skipped question		7
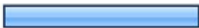
50. What is included in the update (choose all applicable):

		Response Percent	Response Count
Emergency contact information		88.9%	24
Outside expert (plumber, carpenter, etc) contact information		81.5%	22
Staff and volunteer home contact information		77.8%	21
Communications		40.7%	11
Procedures for the emergencies included in the crisis management plan		74.1%	20
Persons responsible for various decisions		74.1%	20
		answered question	27
		skipped question	14

51. Please explain any other topics included in your process of reviewing and updating the crisis management plan:

	Response Count
	10
answered question	10
skipped question	31

52. Does the crisis management plan explain how and when to contact the insurance company or agent(s)?

		Response Percent	Response Count
Yes		36.4%	12
No		54.5%	18
Unknown		9.1%	3
	answered question		33
	skipped question		8

53. Does the crisis management plan specify who makes the decision to call the insurance company/agent?

		Response Percent	Response Count
Yes		38.2%	13
No		55.9%	19
Unknown		5.9%	2
	answered question		34
	skipped question		7

54. Has a valuation of your collection been completed?

		Response Percent	Response Count
Yes		55.9%	19
No		26.5%	9
Unknown		11.8%	4
Not Applicable- No Collection		5.9%	2
	answered question		34
	skipped question		7

55. Is the collection valuation up to date?

		Response Percent	Response Count
Yes		84.2%	16
No		10.5%	2
Unknown		5.3%	1
	answered question		19
	skipped question		22

56. Rounding up to the nearest $5,000, approximately how much is your insurance premium per year?

	Response Count
	32
answered question	32
skipped question	9

1. If Yes, what is their job title?

	Response Text	
1	Duty Officer	Oct 17, 2010 11:20 PM
2	Various, depending on type of crisis	Oct 18, 2010 3:32 AM
3	Conservator	Oct 19, 2010 1:53 AM
4	Museum Manager	Oct 19, 2010 9:06 PM
5	Culture and Heritage Manager	Oct 26, 2010 2:29 AM
6	Protective Services Manager	Oct 27, 2010 8:00 PM
7	Collection Manager	Oct 28, 2010 10:39 PM
8	Director	Oct 31, 2010 8:34 PM
9	Manager Heritage Collections	Oct 31, 2010 11:42 PM
10	Collections and Programmes Manager	Nov 1, 2010 10:05 PM
11	Registrar	Nov 1, 2010 10:58 PM
12	Emergency Manager	Nov 2, 2010 3:14 AM
13	VIsitor Services Manager	Nov 4, 2010 12:13 AM
14	Museum Curator	Nov 4, 2010 5:05 AM
15	General Manager	Nov 8, 2010 12:14 AM
16	The Director	Nov 8, 2010 7:28 PM
17	Gallery Director	Nov 8, 2010 9:40 PM
18	Director or Safety and Security Manager	Nov 10, 2010 12:29 AM
19	Director	Nov 11, 2010 7:54 PM
20	Director	Nov 11, 2010 8:07 PM
21	Manager, Corporate Services	Nov 11, 2010 10:12 PM
22	Manager	Nov 12, 2010 2:44 AM

1. If No, what is the job title of the person who is responsible in times of actual

	Response Text	
1	Duty Officer	Oct 17, 2010 11:20 PM
2	depends on the emergency and where it is ie contracted site, museum, public	Oct 28, 2010 10:39 PM
3	Commercial Manager	Nov 8, 2010 12:15 AM

2. Does the crisis management plan cover anything else? If so, please explain

	Response Text	
1	Electrical Storm	Oct 17, 2010 11:22 PM
2	In regards to the other aspects in question 21, these are covered through the _____ City emergency policies and practices, we also have a tsunami emergency plan.	Oct 26, 2010 2:33 AM
3	Damaged Collection Objects Bomb Threats	Oct 27, 2010 8:08 PM
4	Pests, tornadoes and cyclones	Oct 31, 2010 11:50 PM
5	HIgh Wind / Cyclone	Nov 1, 2010 10:19 PM

2. Does the crisis management plan cover anything else? If so, please explain

	Response Text	
6	Near miss ; Assault/Threat/Serious verbal abuse Passenger or staff death/suicide	Nov 2, 2010 6:24 AM
7	Active shooters (employees who use their authorised access to shoot other employees), Death (the plan covers both accidental death, suicide and homocide)	Nov 7, 2010 6:54 PM
8	tornado, terrorist/violent incident	Nov 8, 2010 12:16 AM
9	Armed hold up,Pandemic Flu,Terrorist Activities,Loss of water, Elect or gas, cancellation of major exhibitions due to circumstances beyond our control	Nov 8, 2010 7:35 PM
10	Biological infestation Phone / Mail Threat / Suspicious Object Evacuation Procedure	Nov 9, 2010 2:29 AM
11	Insect & Rodent Infestation	Nov 11, 2010 8:36 PM

2. Please explain what kind of training is given:

	Response Text	
1	Alarm and Evacuation testing Refreshers on Emergency Procedure Checklist	Oct 17, 2010 11:28 PM
2	We take part in Civil Defence exercises	Oct 18, 2010 2:30 AM
3	Full training on induction. Three-monthly updates.	Oct 18, 2010 3:39 AM
4	Practical workshop	Oct 19, 2010 1:55 AM
5	revise procedures, workshops in collection emergency preparedness.	Oct 26, 2010 2:48 AM
6	almost none to date - dealing with situations Plan due December and there will be a training session	Oct 28, 2010 10:42 PM
7	We have an actual evacuation for a fire situation that is randomly conducted without staff knowledge. Fire brigade are involved in the process.	Oct 31, 2010 8:42 PM
8	First Aid courses, Fire extinguisher course, packing and handling, Disaster magaement	Nov 1, 2010 10:39 PM
9	Mock emergency situations / fire / accident / injury	Nov 2, 2010 6:32 AM
10	mainly staff induction and annual reviews if the Director reminds staff about it	Nov 4, 2010 12:24 AM
11	Training on CIMS (Coordinated Incident Management Systems) is delivered on an annual basis to operational staff whiich consists of a series of table top exercises.	Nov 7, 2010 6:57 PM
12	basic explanations of procedures to staff and volunteers	Nov 8, 2010 9:09 PM
13	Staff and volunteer round table discussion	Nov 8, 2010 9:40 PM
14	In house training	Nov 10, 2010 12:33 AM
15	As part of contract staff are required to have read it and understood its implications	Nov 10, 2010 9:07 PM

4. Please explain any other topics included in your process of reviewing and

	Response Text	
1	Being a Local Authority generally all policies and procedures are reviewed and where required updating or improving the plan is required.	Oct 26, 2010 2:50 AM
2	The Crisis Management Plan has yet to be finalised	Oct 27, 2010 8:12 PM

4. Please explain any other topics included in your process of reviewing and

	Response Text	
3	We are in process of reviewing crisis management plan as it covers emergencies/natural diasters and evacuation but does not include instructions regarding museum collection. A lot of the no answers in this survey are because they are taken care of by another group within the complex we operate in.	Oct 28, 2010 10:39 PM
4	We practise evac regulary (as required by law) by not crisis Rather depends on what you call a crisis plan, evac plan, and disaster planning	Oct 28, 2010 10:44 PM
5	All of the above will be included in the update. We have not had a disaster plan before	Nov 2, 2010 3:21 AM
6	After reading this will be looking at a number of mentioned updates from above!	Nov 2, 2010 6:36 AM
7	Our Cris Managemnet plan requires an update since our new Directorship in 2007. We are aware it is overdue. All the above will be revised.	Nov 3, 2010 3:08 AM
8	Emergency equipment and emergency RT's are checked and tested on a quarterly basis also.	Nov 7, 2010 7:00 PM
9	weekly check on fire exits monthly check on fire extinguishers, emergency lights and first aid kits. maintain a hazzard & accident register.	Nov 8, 2010 9:17 PM
10	The information highlighted in this survey will form part of a review.	Nov 10, 2010 9:08 PM

For museums with current plans- either complete or in process of being updated:

1. What is your background?

2. What are your job title and responsibilities?

3. Can you tell me what crisis management planning means to you?

4. *How did you come to be in charge of the emergency plan at your institution? optional*

5. Do you think there is a difference between crisis management planning and emergency or disaster planning?

    a. If yes, how so?

6. Did you hear about the 2007 burglary and medals theft at the National Army Museum?

    a. How well do you think the museum handled it? Why?

7. How well do you think the Canterbury museums and galleries responded to the earthquake this past September?

    a. Do you think they could have done better? How?

8. Do you think that the NZ museum industry learned anything as a result of either of those two events?

9. How well prepared do you think the NZ museum industry is overall in terms of emergency preparedness?

    a. What do you think the general response is to crises like these?

10. How do you think overall industry preparedness could be improved?

11. Was your plan updated or reviewed as a result of these or any other crises?

    i. If so, how and why?

12. When or why does your institution decide to update its plan?

    a. What is the process for updating it?

13. Has your plan ever been put to the test?

    a. What happened?

    b. How did the plan work?

    c. Were there changes made to the plan after the event?

        i. Why?

14. Do you know what prompted the museum to initially draw up an emergency plan?

15. Do you feel like there is enough support or guidance for developing emergency plans in NZ?

16. Why do you feel this way?

17. Would you like to see more support or guidance? In what ways?

For institutions with no current plans:

1. What is your background?

2. What are your job title and responsibilities?

3. Can you tell me what crisis management planning means to you?

4. Do you think there is a difference between crisis management planning and emergency or disaster planning?

    a. If yes, how so?

5. Did you hear about the 2007 burglary and medals theft at the National Army Museum?

    a. How well do you think the museum handled it? Why?

6. How well do you think the Canterbury museums and galleries responded to the earthquake this past September?

    a. Do you think they could have done better? How?

7. Do you think that the NZ museum industry learned anything as a result of either of those two events?

8. How well prepared do you think the NZ museum industry is overall in terms of emergency preparedness?

    a. What do you think the general response is to crises like these?

9. How do you think overall industry preparedness could be improved?

10. Can you tell me a bit about the state your museum is in- in terms of an emergency plan?

    a. Do you know what prompted, or might prompt, the museum to draw up an emergency plan?

    b. How important do you feel it is to have a plan?

        i. How is the process going? Any surprise bumps?

11. Has your institution ever had to deal with an emergency?

    a. What happened?

    b. Do you feel having an emergency plan have been helpful? How?

12. Do you feel like there is enough support or guidance for developing emergency plans in NZ?

13. Why do you feel this way?

14. Would you like to see more support or guidance? In what ways?

Appendix 3: Background study interview schedule

Background study questions for the National Army Museum:

1. Can you tell me about the 2007 burglary and theft? What happened?

2. How were the stolen items displayed relative to the door?

3. Who responded first?

4. How did they find out about it?

5. When did the police get there? How did they find out about it?

6. Who told the media? Who made that decision?

7. Did the museum control the media access, or did the media control what got out?

8. Did you have an emergency plan that helped guide the decisions made during this incident?

9. How were decisions made?

10. Did things go as expected, or were there surprises in the process? Good or bad?

11. What was the resolution of the incident?

12. How long did it take?

13. Who was involved in making it all happen?

14. Are you happy with the result? Why or why not?

15. Are there things that you wish had been done differently?

16. Would an emergency plan, or changes in the emergency plan, have helped?

17. Would a media plan have helped?

18. Was there thought of making a formal emergency plan after this incident?

19. Did the National Army Museum tell the industry about lessons that were learnt as a result of this earthquake? Things like storage methods that worked well for protecting collections, or things that failed in unexpected ways?

20. Anything else?

Background study questions for the Canterbury Museum:

1. Can you tell me about the September Earthquake? What happened?

2. Who responded first?

3. How did they find out about it?

4. Who else responded? How did they find out about it?

5. Who told the media? Who made that decision?

6. Did the museum control the media access, or did the media control what got out?

7. Did you have an emergency plan that helped guide the decisions made during this incident?

8. How were decisions made?

9. Did things go as expected, or were there surprises in the process? Good or bad?

10. What was the resolution of the incident?

11. How long did it take?

12. Who was involved in making it all happen?

13. Are you happy with the result? Why or why not?

14. Are there things that you wish had been done differently?

15. Would an emergency plan, or changes in the emergency plan, have helped?

16. Would a media plan have helped?

17. Has the plan been updated or reviewed since the earthquake?

18. Did Canterbury Museum tell the industry about lessons that were learnt as a result of this earthquake? Things like storage methods that worked well for protecting collections, or things that failed in unexpected ways?

19. Anything else?

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