Evaluative Case Study: Gap Filler a creative urban regeneration initiative

A public health perspective

Canterbury
District Health Board
Te Poari Hauora o Waitaha

Front page: The Pallet Pavilion, Gap Filler, file photo http://gapfiller.org.nz/project/pallet-pavilion/

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Abstract

Following the devastating Canterbury earthquakes of 2010/11, Gap Filler (a registered charity) emerged and responded with a large number of innovative urban regeneration initiatives. Gap Filler has been prolific in the delivery of a broad range of artistic, creative, educational, enabling and inspiring interventions that have gained considerable profile and following among locals and visitors alike. The projects have ranged from small short-term installations or activities costing one or two hundred dollars, to major medium-term architectural-build projects costing more than $250,000. Gap Filler has established expertise; engaged the public in a multitude of interactive installations and volunteerism; influenced thinking; contributed to improved wellbeing for some; gained local, national and international media coverage and profile; and earned a reputation for quality, creativity and novelty. While inferences can be drawn about the projects' effects and their overall positive contribution to the psychosocial recovery of Christchurch residents, the size, nature, scope and longevity of these effects cannot be easily or precisely estimated. These issues are discussed within this report, along with a review of related concepts, sections on the attributes of successful initiatives, resilience and wellbeing, future directions, and considerations for funders and other stakeholders.

Glossary

Note: The purpose of this glossary is to explain certain technical terms as they are used in this document and to promote the use of consistent terminology wherever possible. However, it is acknowledged that some of these terms may have different meanings within and between different fields of study.

Adaptive urbanism: adaptive urbanism is an emerging term referring to the growing practice of residents, artists, community groups, and more getting actively involved in conceiving, designing, implementing, activating and maintaining flexible city spaces.

Adaptive resilience: involves adapting to a situation that is outside your experience, and outside existing plans, models, or programmed responses to change (e.g. in the case of a disaster response).

Additionality: an impact arising from an organisation's activity is additional if it would not have occurred without that activity.

Attribution: the degree to which the outcome in question was caused by the contribution of the organisation or intervention.

City-building: a process whereby most residents are consumers of permanent developments created for them.

City-making: to remake and re-create the given social, cultural and spatial landscape (cityscape), investing it with cultural meaning and humanising it as well as challenging current political and economic trends. The concept of city-making thus refers to a comprehensive construction and articulation of urban life (http://www.citymaking.eu/en/). City-making involves a shift from the realm of bureaucratic control-from-above and a return to face-to-face communication among small units (Frug, 1999).

Community development: communities working together to identify their own needs and to create shared solutions.

Context: aspects of the environment that may influence intervention/project implementation or outcomes.

Displacement and substitution effects: the degree to which an increase in an activity or outcome is related to or offset by reductions in the activity or outcome elsewhere.

Effect size: in statistics, effect size is the magnitude of the difference between groups. Effect size can refer to the raw difference between group means, or absolute effect size, as well as standardised measures of effect, which are calculated to transform the effect to an easily understood scale.

Existence value: the value placed by people on the continued existence of a product or service for the benefit of present or future generations.

Exposure: extent to which participants actively engage with, interact with, are receptive to, and/or use a space/facility/resource/service (can include 'initial use' and 'continued use').

Multiplier: a measure of the degree to which effects 'ripple' out into the wider community or economy.

Reach (participation rate): the absolute number, or proportion of the intended priority audience that participates in the intervention or project (often measured by attendance or other documentation e.g. website hits).

Resilience/community resilience: a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance.

Satisfaction: participant (primary and secondary audiences) satisfaction with program/project and with interactions with staff and/or other participants.

Transitional: in the context of disaster recovery, a late post-disaster response phase — a phase between response and recovery phases.

Transitional community-initiated open spaces (CIOS): temporarily used vacant urban sites.

Urbanism: the (study of the) characteristic ways of interaction of inhabitants of towns and cities (urban areas) with the built environment.

Use value: the estimate of the value of people's use of a service, even if that service is usually free at the point of use.

# Introduction and context: The Canterbury Earthquake Sequence

In the early hours of Saturday morning, 4 September 2010, a strong, shallow earthquake struck Christchurch marking the start of the Canterbury Earthquake Sequence. Between September 2010 and December 2011, Christchurch was hit by four major earthquakes and thousands of aftershocks. The 22 February 2011 aftershock caused 185 deaths and many serious injuries, along with significant damage to buildings and infrastructure. As a result of the Canterbury earthquakes, the residents of greater Christchurch continue to feel the effects of personal losses and ongoing disruption to day-to-day life. The effects include grief, financial losses, loss of infrastructure, compromised housing and living conditions, disruption to educational settings and other community facilities, including recreational spaces. These losses have exerted an overall negative influence on residents' health and wellbeing. To date, much of the response to the Canterbury Earthquake Sequence has depended on a coordinated effort and sustained input and support from local and central government. However, part of the response to these events and the associated secondary stressors has come from within the affected communities themselves.

Summary of four significant earthquake events, Canterbury, 4 September 2010 – 13 June 2011

Darfield 4 September 2010

The 2010 Canterbury earthquake (also known as the Darfield earthquake, epicentre 40 kilometres west of Christchurch, depth of 10 km) struck with a moment magnitude of 7.1 at 4:35 am local time on 4 September. It had a maximum perceived intensity of 'X' (Extreme) on the Mercalli intensity scale with peak ground acceleration (PGA) of 1.26 g, and duration of 40 seconds. While the 4 September earthquake caused widespread damage and several power outages, the damage was still relatively minor compared with what was to follow (damage claims of $3.5 billion NZD vs ≈ $27 billion). Most modern buildings performed as they were designed to do, preserving life rather than keeping the interior in good order. However, some heritage buildings and buildings of
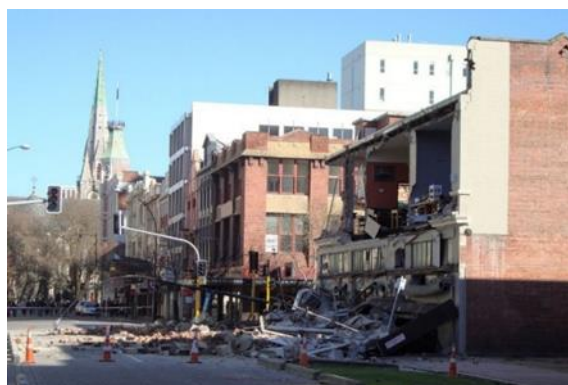
Figure 1: Building damage in Worcester Street, corner Manchester Street, with Christchurch Cathedral in the background. Photo: Schwede66, Creative Commons 3.0.

unreinforced masonry construction suffered damage and/or partial collapse. Some buildings in the Christchurch Arts Centre suffered moderate damage including the Great Hall, the Clock tower, and the Observatory. Of note, the Christchurch Cathedral remained intact (Figure 1). A feature of the quake was the damage caused by soil liquefaction. This was particularly the case in the riverside areas of Avonside, Dallington, Burwood, Avondale, and Kaiapoi, and in river delta areas near Bexley, Brooklands, Spencerville, Pines Beach, and Kairaki, with other areas being affected to a substantially lesser degree or not at all.

Boxing Day 26 December 2010

On Boxing Day 2010, a cluster of more than 32 shallow aftershocks, many centred directly under the city, occurred throughout the day beginning with a 4.2 jolt at 2:07am. The largest of these, the 'Boxing Day aftershock' with a magnitude of 4.9, at a depth of 12 km below Opawa, was felt very strongly and caused further damage to at least 20 buildings, the closure of the central city, and loss of power to more than 40,000 homes for some time.

Christchurch 22 February 2011

A magnitude 6.3 shock (Max. intensity MM IX – Violent, peak ground acceleration 1.88g (city); 2.2g (epicentre) known as the Christchurch earthquake occurred nearly six months after the Darfield earthquake, on 22 February 2011 (23:51 21 February UTC) (Figure 2). The earthquake was centred 2 kilometres west of the port town of Lyttelton, and 10 kilometres south-east of the centre of Christchurch, at a depth of 5 kilometres. Because this aftershock was centred very close to Christchurch, it was much more destructive and resulted in the deaths of 185 people (of the 185 deaths, 133 people died in two major building collapses; 115 people

Figure 2: Dust clouds caused by the 22 February earthquake. Photo: Gillian

died in the Canterbury Television building and 18 people in the Pyne Gould Corporation building). In addition to these deaths, hundreds of people suffered injuries leading to the Government declaring a state of National Emergency for the first time in New Zealand's history. Christchurch City and the surrounding areas suffered considerable damage to buildings, infrastructure and community facilities. This aftershock/earthquake is generally considered to be the 'index' event for Christchurch City residents, who had previously been relatively unaffected by the Darfield earthquake. Christchurch's central city and the eastern and hill suburbs were badly affected, with damage to buildings and infrastructure already weakened by the magnitude 7.1 Canterbury earthquake of 4 September 2010 and its aftershocks. Many buildings collapsed or were significantly damaged in the quake, among them the city's iconic Christchurch Cathedral.

13 June 2011

The 13 June 2011 Christchurch earthquake was a shallow magnitude 6.3 ML earthquake (peak acceleration 0.78g (city); 2.13g (epicentre) that occurred at 14:20 NZST (02:20 UTC). It was centred at a depth of 6 km, about 10 km from Christchurch. The June quake was preceded by a magnitude 5.9 ML tremor that struck the region at a slightly deeper 8.9 km. The earthquake produced severe shaking that registered VIII – Destructive on the Mercalli scale in and around the city of Christchurch, destroying some buildings and causing additional damage to many structures affected by previous earthquakes (Figure 3). The earthquake downed phone lines and triggered widespread outages, which left around 54,000

Figure 3: A car stands in water on Ferry Road after two magnitude 6.0 and 5.5 earthquakes struck on 13 June 2011 in Christchurch. Photo: Martin Hunter.

households without power. Rebuilding costs in Christchurch increased by NZ$6 billion owing to the additional damage from the quake. Forty-six people suffered injuries, and one elderly man died after being knocked unconscious.

An introduction to Gap Filler

Eighty-three days after the first earthquake event in Canterbury, and the associated land damage, infrastructure damage, and subsequent demolitions, Gap Filler founders, volunteers, and supporters staged their first temporary project on an empty site on Colombo Street, Christchurch. This project ran from Thursday 25 November 2010 until Sunday 5 December 2010 and involved Gap Filler transforming the empty site into a space which hosted a temporary garden café, pétanque, live music, poetry readings, outdoor cinema and more.

Gap Filler is a creative urban regeneration initiative that continues to facilitate a wide range of temporary projects, events, installations and amenities in Christchurch City. It continues to operate and evolve in the changing context of the Canterbury earthquake sequence recovery. Gap Filler (a registered charity) was initially conceived to deliver '5-6 projects total, each of which might occupy a vacant site for a few weeks' (Ryan Reynolds)[1]. However, the major February 2011 Christchurch aftershock, combined with the enthusiasm of Christchurch residents, led Gap Filler to expand to more than 70 projects over six years.[2,3] Over time, Gap Filler has developed considerable expertise and capacity for community development and psychosocial interventions.

As the context continues to shift from recovery towards a future Christchurch, and life returns to the Christchurch CBD, the original earthquake response phase of Gap Filler has passed. However, Gap Filler is seeking to document the 'Gap Filler story' and provide accessible information that could inform other community development initiatives and/or wellbeing interventions, and provide information relevant to potential funders. Generally, evaluations aim to identify the factors that contribute to either the success or failure of particular types of services, their organisation and delivery, and/or the characteristics of particular interventions, projects or programmes. The results of programme/project evaluation studies can provide others with information to improve the effectiveness and efficiency of psychosocial and mental wellbeing responses. These types of responses or interventions can contribute powerfully to reducing the impacts of disasters and to improving community wellbeing. To that end, Gap Filler requested that Community and Public Health (a division of the Canterbury District Health Board) carry out this evaluative case study to describe Gap Filler's development and activities for the period September 2010-March 2017.

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[1] https://my.christchurchcitylibraries.com/blogs/post/five-years-of-filling-gaps/.

[2] Ibid.

[3] http://gapfiller.org.nz/about/.

Review of relevant concepts

Introduction, scope, and purpose of this literature review

Overall, this report aims to describe and highlight the role that Gap Filler (along with its partner organisations) has played in providing psychosocial interventions and support to the residents of Christchurch. Firstly, this literature review section seeks to show how participatory interventions 'work', that is, the plausible pathways and mechanisms of action, 'what they do' and 'how they do it'. To this end, this literature review section covers the following topics at an *introductory* level.

- An overview of psychosocial recovery following disasters.
- The linkages between psychosocial interventions and health.
- Resilience.
- Wellbeing (including the 5-ways to wellbeing framework).

This review is based on a non-exhaustive iterative search of relevant databases. The reference lists of relevant review articles were also scanned for pertinent articles, and ad hoc database searches identified further articles of relevance. This rapid review of selected literature is not a Systematic Review and therefore the review does not necessarily contain all possibly relevant articles and information.

Post-disaster psychosocial recovery, an introduction

The context of the Canterbury Earthquake Sequence presented above (p.7) provides some general details of the physical and economic impacts of the main earthquake events. Previous research suggests that the reactions of communities and individuals to disaster events tends to progress through a number of broad psychosocial phases with a certain degree of predictability (Figure 4).[4] With respect to people's health and wellbeing, the psychosocial responses are described below with reference to the phases of recovery as described by the Emergency Management Australia recovery framework (Emergency Management Australia, 1996).[5] Figure 4 broadly depicts fluctuating levels of psychosocial wellbeing (either individual level or community level) over the time-course of a disaster recovery sequence. Levels of subjective wellbeing are generally considered to be judged by people's own aspirations, based on a blend of objective reality and their subjective reactions to it (Diener, Lucas, Schimmack, & Helliwell, 2009).

Figure 4: Phases of psychosocial recovery, Christchurch, approximate time-scale
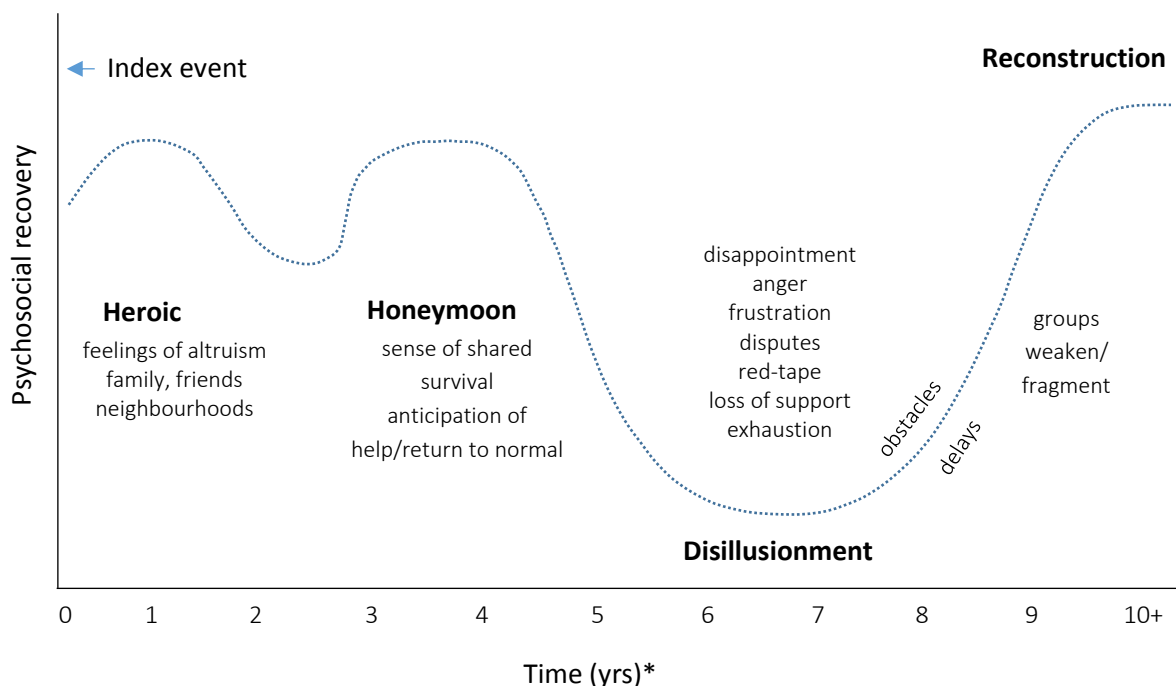
Adapted from: Emergency Management Australia recovery manual (1996).
*Timescale approximate only.
Responses to emergencies, major incidents and disasters typically pass through a series of phases. Frequently, these phases overlap depending on the nature and extent of events, the degree of disruption, and how people who are directly and indirectly involved react. Note that the goal of recovery is seldom that of return to the circumstances preceding the disastrous events or circumstances (Williams et al., 2014).

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[4] Note that most disaster recovery models relate to one 'index' event, but in the case of the Canterbury earthquakes, several significant earthquakes occurred over an extended period of time, at multiple primary sites (epicentres).

[5] Other models adopt broader phases including (1) preparation before events, (2) coping with the onslaught of an emergency or disaster and the immediate aftermath, (3) recovery after matters settle, and (4) review and learning (Williams, Bisson, & Kemp, 2014).

However, despite the general predictability and trends in disaster recovery, the psychosocial phases do not necessarily occur for all people at the same time or in a sequential manner. The various reactions will likely be felt at different times by different groups and individuals within the community. The length of time of each of these 'phases' will also vary and overlap from person to person or group (and probably geographically). Further, secondary stressors often follow the disruption of primary disaster events. Depending on the circumstances, some of the secondary stressors that emerge may be as impactful as the primary event: as people endeavour to reconstruct their lives, attachments, families, homes, employment, communities and recreation. As a consequence, some people may require assistance and support over extended periods of time (Lock et al., 2012). Improving psychosocial health post-disaster became a prominent focus for Central Government and regional organisations such as the Canterbury District Health Board (CDHB), the Canterbury Earthquake Recovery Authority (CERA)[6], the Christchurch City Council, Environment Canterbury, and a multitude of social service providers. Disasters and major incidents affect whole communities and populations directly or indirectly and public health approaches, including psychosocial care, are required to reach everyone who is affected (Williams et al., 2014). The generalised descriptions below are provided as a basic summary of the greater Christchurch psychosocial response, using the Emergency Management Australia (1996) framework.

The Heroic Phase

In the time immediately following each of the major Canterbury earthquake events, the city's residents responded in ways generally consistent with the 'Heroic Phase' (Emergency Management Australia, 1996). Their reactions occurred 'at impact' and in the early stages immediately following the event. A sense of altruism was experienced as those involved at the main disaster sites became involved in a range of activities aimed at saving lives and material possessions (in particular, at several building collapses and partial-collapses within the CBD on 22 February 2011). The immediate response phase was captured extensively by the media via live reporting and subsequently in many published documents (including government-led and police-led enquiries).[7]

The Honeymoon Phase

Following the immediate emergency phase (Heroic Phase), Christchurch residents' psychosocial recovery entered a period characterised by strong bonds being formed by those members of the community who had experienced the danger and disruption of the earthquake events together. For example, many schools and community centres served as semi-formal 'depots' for the distribution of drinking water, communally sourced food and other essential items, and for the exchange of emotional and material support.[8] This sense of shared survival, together with the anticipation of help engendered through the promises and offers of assistance made through political, media and broader community interest in the event, are often referred to as a 'honeymoon' phase (Emergency Management Australia, 1996). During the honeymoon phase, some positive outcomes were reported, such as pride in ability to cope, renewed appreciation of life, heightened sense of community, spending more time with family, and increased resilience (CERA Wellbeing Survey 2012). However, from September 2012 to April 2014 many of these initial positive outcomes of the earthquakes were slowly dissipating with time (in particular community connectedness) (CERA, 2015).

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[6] CERA was a government department created on 29 March 2011 to lead and coordinate the Government's response and recovery efforts following the earthquakes of 2010 and 2011. CERA was disestablished on 18 April 2016.

[7] https://interactives.stuff.co.nz/2017/06/ctv115/index.html

[8] http://www.stuff.co.nz/national/christchurch-earthquake/4707127/Christchurch-quake-essential-information

Disillusionment

As the recovery process advanced, much of the initial euphoria at surviving and the anticipation of assistance diminished. This lead to a sense of disillusionment, with feelings of anger, frustration and disappointment evident. High proportions of Christchurch residents reported experiencing a strong negative impact on their everyday lives as a result of the earthquakes. In 2012, more than half believed that their quality of life had deteriorated since the earthquakes (CERA, 2012). While rebuild plans began to be developed and debated, the city was confronted by large desolate areas of vacant land and low amenity, and many businesses were forced to re-establish in the suburbs, disconnecting from their communities, and creating a polycentric pattern of employment clusters (as compared to a monocentric city with a Central Business District) (Christchurch City Council, 2014a).

Diminished material and perceived support from broader New Zealand, together with a realisation of the enormity of scale of work required (i.e. rebuilding the CBD, homes and infrastructure) probably added to the sense of disillusionment. Ninety-seven percent of respondents to the (2012) CERA Wellbeing Survey reported having experienced stress at least some time in the past year and nearly a quarter indicated they had been living with this type of stress for most or all of the time over the past year. At the time, the three most prevalent negative impacts experienced as a result of the earthquakes were identified as: loss of recreational, cultural and leisure time activities; distress and anxiety associated with on-going aftershocks; and dealing with EQC or insurance issues. EQC and insurance-related issues have been extensively and vigorously discussed in the mainstream media and have been the subject of litigation and ongoing disputes.[9] In September 2012, 37 percent of respondents to the CERA Wellbeing Survey (CERA, 2012) said that dealing with EQC/insurance issues was having a strong negative impact on their wellbeing. This fell to 10 percent in 2016 (CDHB, 2016)[10] yet 30 percent of respondents reported that living in a damaged environment was still having some negative impact on their everyday lives.

There has also been a reported lack of confidence in the decisions being made by the agencies involved in the recovery (2012-2016 Wellbeing Survey reports). Five years on from the 4 September 2010 earthquake, the CERA Wellbeing Survey (CERA, 2015) reported there had been a drop in the optimism that had been evident over the previous 12-18 months (particularly among those living in the most damaged areas of Christchurch City vs greater Christchurch as a whole). This was reflected in a drop in overall confidence that residents had in the agencies making the earthquake recovery decisions and a drop in satisfaction with the opportunities the public had to influence those decisions. The analysis suggested there was frustration that the regeneration of Christchurch City was not happening as quickly as may have originally been expected or hoped.

The Reconstruction Phase

In many cases internationally, the 'reconstruction' phase sees a realisation that the ultimate responsibility for recovery lies with individuals and within the affected community (i.e. 'recovery' beyond the physical rebuild). During this period, the range of community restoration, physical reconstruction and community programs reaffirm the belief of those affected by disasters in themselves and in their community (Emergency Management Australia, 1996). Consistent with general predictions, in recent years (2014-current), greater Christchurch residents report seeing noticeable signs of progress in terms of access to new

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[9] For example, see http://www.srca.co.nz/

[10] The CDHB has managed the survey since inheriting the monitoring of psychosocial recovery from CERA on 1st March 2016.

and repaired facilities, and rebuilt and repaired private dwellings (CDHB, 2016). However, this sense of reaffirmed belief will not necessarily be felt by all residents, depending on their individual experiences and progress within their local area (including for example, their own homes).

Undoubtedly, the rebuild has generated substantial economic growth, and increased training and employment opportunities (Canterbury District Health Board, 2016). However, much is still to be done to regenerate greater Christchurch and recovery is different for different population groups. As of mid-2017, only two of 13 anchor projects had been completed (Bus Interchange and the Canterbury Earthquake National Memorial)[11] and considerable work is still required to return the City's roads and other horizontal infrastructure to pre-quake levels of service (Christchurch City Council, 2014b). Despite the ongoing challenges that many people face, there have been noteworthy increases in reported indicators relating to access to facilities and subjective wellbeing (CDHB, 2016).

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[11] https://www.otakaroltd.co.nz/anchor-projects/

Community capacity and resilience

Community capacity is a concept used to capture how communities mobilise resources to solve problems by building community assets (Norton, McLeroy, Burdine, Felix, & Dorsey, 2002). Goodman et al. (1998, p.259) define community capacity as 'the characteristics of communities that affect their ability to identify, mobilise, and address social and public health problems.' Some of the key community characteristics relevant to building capacity include an emphasis on civic capacity (such as leadership development and collaborative decision making) and social capital within communities in terms of social networks, mutual trust and shared expectations. Recently, attention has shifted from community capacity to resilience – or the ability of a community to 'bounce back' following a disaster (Baker, 2009; Martin, 2015; Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008).

An early 'ecological' definition by Holling (1973, p.14) proposed that resilience is the 'capacity of a system to absorb disturbance, undergo change, and still retain essentially the same function, structure, identity, and feedbacks.' The current focus on resilience signals a move towards developing a long-term perspective on how communities can organise capacities in the face of potential and ongoing challenges. For example, Norris et al. (2008, p.130) defined community resilience as 'a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance'. If a system has resiliency it is more likely to be sustainable over a long period (Longstaff, 2005). Norris and colleagues' (2008) definition shifts the emphasis from retaining essentially the 'same function' to an emphasis on 'positive trajectories' and adaptation. Disaster relief may present opportunities for social change.

Resilience is often an emergent property of the system and therefore is difficult to predict and manage. Phenomena are said to be emergent when they arise from the collective actions of many uncoordinated agents (Johnson, 2001). These concepts of resilience, and particularly emergence are relevant when seeking an understanding of how resources are deployed effectively following an earthquake, and when developing a long-term perspective on how communities can organise capacities in the face of ongoing disasters (Norris et al., 2008). Norris et al. (2008) go on to highlight important characteristics of disaster-relief resources including: their robustness (effective under a wide range of circumstances), their redundancy (i.e. they are substitutable), and that they can be deployed quickly (rapid). It is important to note that the resources for resilience available to the rich and poor often differ markedly because financial resources can minimise loss and provide options on where to live (Wisner, 2004). Further, while some people push for social transformation, others desire the status quo before the natural hazard or disaster (Longstaff, 2005). Resilience involves an ongoing and complex process of adaptation occurring across time (Martin, 2015).

Four sets of adaptive capacities
Norris et al. (2008) theorise that community resiliency involves four sets of adaptive capacities – economic, communication, social, and community competency. Norris and colleagues' (2008) four adaptive capacities are shown in Table 1 and this general framework of interlocking capacities may provide a basis or guide for capacity-building initiatives and/or evaluations.

Table 1: Four adaptive capacities for community resilience

Adaptive capacities	
Economic	Include the level of economic development, diversity of resources and equity of their distribution.
Communication	Communication capacities span the existence of a responsible media, skills and infrastructure, trust and narratives.
Social	Social capacities include formal and informal social ties, social support and place attachment.
Community competency	Community competency involves problem solving, creativity and flexibility, community action, collective efficacy and political partnerships.

Norris et al. (2008) conclude that community adaptation is manifest in population wellness, defined as high and non-disparate levels of mental and behavioural health, functioning, and quality of life. In addition, to build collective resilience, 'communities must reduce risk and resource inequities, engage local people in mitigation, create organizational linkages, boost and protect social supports, and plan for not having a plan, which requires flexibility, decision-making skills, and trusted sources of information that function in the face of unknowns' (p.127).

Wellbeing, and post-disaster responses

A common understanding of the concept of wellbeing comprises two main elements: feeling good and functioning well (Box 1). Promoting wellbeing is often a focus for multiple stakeholders involved in recovery activities and health promotion (Diener et al., 2009). Wellbeing can also provide a common metric that can help policy makers and funders compare the potential effects of different policies and interventions (across time and across different groups) (Diener et al., 2009). Increasingly, wellbeing is an outcome that is meaningful to the public and to health organisations and other stakeholders.[12]

People's wellbeing is also shaped by a range of objective influences, including a range of social, economic, environmental and geographical background variables. One notable feature of the Canterbury earthquake-recovery sequence was the marked differentiation in the distribution (geographically and socioeconomically) of these factors across greater Christchurch following the earthquake events (e.g. the quality of housing/damage to housing, household income/impact on household income, unemployment/employment levels, neighbourhood infrastructure/damage). As noted above, the psychosocial phases do not necessarily occur for all people at the same time or in a sequential manner, and marked geographical (suburb-to-suburb) differences in residents' wellbeing have persisted over time (CDHB, 2016; CERA, 2012). A whole range of factors determine an individual's level of personal wellbeing (Huppert, 2008).

Numerous studies have demonstrated associations between wellbeing and health-, job-, family- and economically-related benefits. Higher levels of wellbeing are associated with decreased risk of disease, illness, and injury; better immune functioning; speedier recovery; and increased longevity (Tov & Diener, 2008). Results from cross-sectional, longitudinal and experimental studies have generally found that wellbeing is associated with:

- self-perceived health
- longevity
- healthy behaviours
- mental and physical illness
- social connectedness
- productivity, and
- factors in the physical and social environment.

Summarised from: (Cooke, Melchert, & Connor, 2016; Tov & Diener, 2008)

> ### Box 1: What is wellbeing?
>
> Wellbeing comprises two main elements: feeling good and functioning well. Feelings of happiness, contentment, enjoyment, curiosity and engagement are characteristic of someone who has a positive experience of their life. Experiencing positive relationships, having some control over one's life and having a sense of purpose are all important attributes of wellbeing (Aked et al., 2008; Andrews & Withey, 1976).

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[12] Note: this section relates to people's psychosocial reactions to emergencies that are common, and not necessarily pathological. Reactions that are symptomatic of mental disorders (and the care that might be appropriate) are beyond the scope of this review.

Primary and secondary stressors and individual differences in responses

As noted above, secondary stressors (for example resolving insurance issues, repairing homes, roadworks, loss of community facilities) may follow as a consequence of primary events. Generally, individuals, families, and wider groups within greater Christchurch have been exposed to varying degrees of both primary and secondary stressors (e.g. 'red-zone' residents vs 'green zone' residents). Researchers of past disaster events have observed that people react idiosyncratically to a given 'dose' of stressors. Williams et al. (2014) have described the ways in which people respond to emergencies and disasters as falling into four main groups.

1. People who are not upset at all (resistant people).
2. People who are proportionately distressed, but able to function satisfactorily.
3. People who are disproportionately distressed and dysfunctional (at some level).
4. People who become mentally disordered in the short, medium or longer term.

Williams et al. also note that the goal of disaster recovery is seldom that of return to the circumstances preceding the disastrous events or circumstances (Williams et al., 2014) and people differ both in their experiences and expectations post-disaster.

Why evaluate community interventions and creative urbanism initiatives?

Evaluation of community projects and interventions is desirable to better understand the consequences of interventions, assess whether they achieve the objectives set, and identify whether all population groups benefit equally (WHO, 2017). Broadly, evaluation can be described as the systematic determination of the merit, value and importance of a programme, generally for the purposes of learning, development and accountability (often of interest to funders and potential funders) (McKegg, 2006).

Often, funders benefit most from quantitative data and it is helpful to consider what quantitative data could be obtained with reasonable effort (e.g. simple counts of participants or usage). The use of routinely collected statistical data on a local level should be maximised (although its usefulness might be limited) and project planners/implementers might consider the use of 'citizen science'[13] to augment data collection (this may also increase the active uptake of the interventions). Local project designers should consider teaming up with academic institutions or Public Health Units when planning an intervention to discuss data collection, potential funding opportunities, and methods for robust evaluation. The evaluation of outcomes should match the scale of the project and be realistic regarding expected outcomes, changes, and data availability. In theory, weighing the costs and benefits of any set of activities should take into account the full range of possible outcomes – including social, cultural or environmental outcomes. However, because placing a financial value on such costs and benefits is difficult, these types of evaluative judgments are often excluded from impact assessments (Arts Council England, 2012). This is partially explained by the lack of actual or true reference values against which comparative judgements can be made — or a 'gold standard' (particularly in a post-disaster context).

Practical and feasible evaluations may help funders and Councils and other organisations to choose between different types of urban interventions, based on the evidence and the outcomes sought. Evaluations should also consider and provide guidance on potential adverse effects or unintended

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[13] The collection and analysis of data relating to an intervention or project by members of the general public, typically as part of a collaborative project with professional scientists or evaluators.

consequences, for example property damage, health and safety issues, crime and fear of crime, and anti-social behaviour.

Evaluating the effects of community interventions on wellbeing and other social, and creative outcomes: Challenges and limitations

The difficulties associated with evaluating community initiatives and participatory projects are well-documented. These difficulties include the need for activities and outcomes to be translated into observable measures, and there are often multiple factors (mediators[14] and moderators[15] of the intervention effects) that need to be taken into account. Further, there may be multiple desired outcomes and multiple levels of influence (e.g. individual level, community level). Finally, measures of community attributes such as social capital, shared values, and strong networks are more elusive, as are institutional change indicators (e.g. a change in a statutory institution's methods or responsiveness to community need), system reforms, and overall programme reach and programme adoption (Flay et al., 2005; Kreuter, Lezin, & Young, 2016).

The quality of evaluation often depends on funding requirements which may focus on a narrow range of outcomes or require an evaluation report within a short time frame. This may limit the overall value of evaluation work and potentially underestimate the intervention benefits. Typically, in the post-disaster context, many organisations become focused on their core activities with potentially less attention being paid to documentation, data collection and reflection than might be the case under normal circumstances. In addition, the type of information gathered by response-oriented organisations is generally only indirectly measuring their organisation's impacts on community wellbeing. Given the wide range of urban intervention types, and acknowledging the different functions the community projects provide to different population groups, evaluation should consider equity effects and impacts for specific groups – especially the disadvantaged or underserved (i.e. the unfair and unequal distribution of benefits and risks between different population groups) (WHO, 2017). There is a limited but growing evidence base investigating the impacts of urban community initiatives, yet more research on such interventions and how to reach 'hard to engage' target groups is needed.

As previously discussed, wellbeing need not imply perfect function and it is subjective and relative, rather than absolute. The reference point for judging wellbeing is a person's own aspirations, based on a blend of objective reality and their subjective reactions to it (Diener, Horwitz, & Emmons, 1985). These elements of subjectivity and relativity bring about measurement challenges. While the benefits from arts and other creative participatory community programmes resonate intuitively with the evidence base (i.e. appear to relate to positive health effects), directly measuring and quantifying the benefits and 'reach' of any one initiative or intervention is difficult.[16]

With respect to overall context, there may also be sets of activities that occur over time in inter-related clusters of activity at different levels of observation. For example, designers may plan and set out a project, volunteers may construct or implement a project, artists may exhibit or perform within a project, and the general public may interact with the project. At each of these stages or levels, the individual participants or

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[14] A mediator variable is one that explains the relationship between the two other variables.

[15] A moderator variable affects the direction and/or strength of a relationship (a third variable that affects the correlation between two other variables).

[16] It is generally accepted that concepts such as wellbeing cannot be measured in any direct and simple manner.

groups may derive a range of benefits, and later activities may be shaped by the outcomes of earlier activities. Therefore, traditional single-point or fixed-interval longitudinal assessments of outcomes will not effectively capture the sum of all benefits (economic, social, health, creative, and other impacts) for all stages or levels of engagement (even when good outcome measures are available).

Clearly, the measurement burden in real-world evaluations is likely to be heavy (Flay et al., 2005). Therefore, within the voluntary and community sector, where this focus is often on social, health, and environmental change, there is a need to find a 'good enough' level of evaluation that suits an organisation's activities and resources (typically, not-for-profit organisations do not have surplus funds to apply to project evaluations). Ideally, a level of evaluation robustness must be decided upon, one that is achievable and able to report at least some evidence of the practical value or practical importance of an initiative (Flay et al., 2005). Also, an evaluation should be able to clearly identify to whom intervention findings can be generalised, and provide some evidence of the ability to 'go-to-scale' (i.e. be replicated or expanded or skills and knowledge be transferred to other similar projects).

As a consequence of the measurement challenges outlined above, confidently asserting causality is, in most cases, difficult (i.e. actually demonstrating that a particular project or intervention directly improved the wellbeing or other social or health outcomes of individuals or groups) (Lyubomirsky, Sheldon, & Schkade, 2005). More recent studies have begun to look at the effectiveness of specific behavioural interventions for enhancing wellbeing in clinical trials[17] (Weiss, Westerhof, & Bohlmeijer, 2016), but there is very little literature, if any, on effect sizes (the amount or scale of impact)[18] for community based projects. Therefore, it is difficult to specify and compare the impact of different actions on the promotion of wellbeing (particularly at the community level). More broadly, while system changes may occur (for example, changes to planning or consultation methods or developing organisational capabilities), they may go undetected because it is difficult to evaluate and demonstrate a cause-and-effect relationship (Kreuter et al., 2016). Further, strong transformational changes may occur for some people and while such individual-level change certainly occurs, these types of outcomes are inherently difficult to capture and evaluate, and compared to community-level change, they may be less important to public health. While involvement in creative expression and urban community projects has the potential of engaging individuals in personal and community level change through reflection, empowerment, and the facilitation of connectedness (Gray, Oré de Boehm, Farnsworth, & Wolf, 2010), funders and other stakeholders may be expecting too much from the practically limited approaches to evaluating such initiatives (Kreuter et al., 2016).

When disaster strikes: The role of creative urban initiatives

When a natural disaster occurs the wellbeing of individuals and the community as a whole can be severely disrupted. As people begin what can be a long recovery process from a natural disaster it is important that there are support mechanisms in place to help them manage their wellbeing. These can come from many places and the arts and cultural aspects can be one such place. Participating in meaningful group activity and volunteering can reduce isolation, build networks and increase activities outside the home, all of which

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[17] Showing small but statistically significant effect sizes at follow-up.

[18] Effect size is the magnitude of the difference between groups. Effect size can refer to the raw difference between group means, or absolute effect size, as well as standardised measures of effect, which are calculated to transform the effect to an easily understood scale.

can increase wellbeing and protect against physical or mental decline (Bungay & Vella-Burrows, 2013; Cohen et al., 2006; Greaves & Farbus, 2006; Harris & Thoresen, 2005).

A 2013 report to the Health Research Council and Canterbury Medical Research Foundation called *Building Community Resilience: Learning from the Canterbury earthquakes* (Thornley, Ball, Signal, Lawson Te-Aho, & Rawson, 2013) identified that community events in the Christchurch post-earthquake setting, such as concerts and festivals and contributing to community responses, were all beneficial for wellbeing and counteracted feelings of helplessness in a post-disaster setting (Thornley et al., 2013). The study also concluded that engagement and participation in post-disaster artistic and creative initiatives

(Box 2) contributed to positive social and health impacts, ultimately facilitating the process of community resilience among the communities studied. Thornley et al. (2013) concluded that while pre-conditions influence post-disaster community resilience to a large degree, post-disaster community initiatives are also important for community wellbeing and recovery. In particular, the research found that strong pre-existing community connectedness (relationships, interactions, and networks within and across a community) and infrastructure (e.g. local organisations, marae, community halls, parks, playgrounds, and libraries) were critical to a community's ability to adapt after the disaster. With regard to post-disaster activities, Thornley et al. (2013) highlighted the following post-disaster strategies.

• Community participation in disaster response and recovery (encourage community-led action).
• Community engagement in official decision-making (understand community complexity and diversity).
• External support from organisations and authorities outside the community (e.g. develop and strengthen partnerships between communities and government).

While individual initiatives were not clearly evaluated against community resilience and wellbeing criteria within the *Community Resilience report*, it was consistently reported across the six included case studies that organised community events involving community members (concerts, anniversaries, and festivals) gave purpose for those involved and also contributed in some way towards wellbeing and community resilience. Conversely, residents reported that community connectedness was hindered in communities where most venues were closed because of earthquake damage (Thornley et al., 2013).

How to increase individual and community wellbeing

Wellbeing researchers generally support the view that positive emotions, central components of wellbeing, can and should be fostered (Bradburn, 1969; Herrman, Saxena, & Moodie, 2005). Many wellbeing interventions seek to influence what the World Health Organization calls the 'social determinants of health', defined as the 'conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life'.[19] Many wellbeing interventions (particularly placemaking projects, Box 3) aim to influence a range of outcomes such as:

- boosting social connections and social capital by bringing together diverse groups of people both in the process and the space that it creates
- providing opportunities for civic engagement, skill building, and leadership development
- enhancing local economic development by creating a place that attracts people to the neighbourhood, creating opportunities for home-grown entrepreneurship and skills development
- improving safety and reducing violence by creating a space that is well managed and frequented by diverse groups of people
- promoting environmental protection by offering non-motor vehicle accessibility, and
- adding greenery to an area, and/or cleaning up toxic land or waterways for use.

From: Project for Public Spaces (2016, p.5).

Box 3: What is Placemaking?

Placemaking refers to a collaborative process by which residents can shape their public realm in order to maximise shared value. 'Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of every community. Strengthening the connection between people and the places they share, more than just promoting better urban design, Placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution. With community-based participation at its centre, an effective Placemaking process capitalises on a local community's assets, inspiration, and potential, and it results in the creation of quality public spaces that contribute to people's health, happiness, and wellbeing' (Project for Public Spaces, 2016, p.4). But 'placemaking is not just about the *outcome* of an improved place, it is grounded in the process itself—observing, listening to, and asking questions of the people who live, work, and play in a particular area in order to understand their specific needs and aspirations for the place' (Project for Public Spaces, 2016, p.4).

Some health institutions (particularly health insurers in the US) are now directly funding public space improvements, recognising the benefits to community health outcomes, providing a public good, and boosting awareness about the health entity's services (Project for Public Spaces, 2016).[20]

Five ways to wellbeing

Developing a research-based approach to increasing community wellbeing has been the subject of extensive work by the UK Government's Foresight Programme over a number of years[21] (Huppert, 2008; Lyubomirsky et al., 2005). The Foresight Programme has used evidence from across a wide range of disciplines to analyse and develop policy options to address key issues that will impact on UK society over the next 10–20 years (Jenkins, Meltzer, Jones, Brugha, & Bebbington, 2008). The 2008 Mental Capital and Wellbeing Project analysed the most important drivers of mental capital and wellbeing to develop a long-term vision for maximising mental capital and wellbeing in the UK for the benefits of society and the individual (Aked et al., 2008). The 2008 psychological wellbeing report (Huppert, 2008) identified and

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[19] http://www.who.int/social_determinants/sdh_definition/en/

[20] https://www.pps.org/about/

[21] i.e. general levels of wellbeing but also relevant to disaster recovery.

summarised evidence regarding five key actions around the themes of social relationships, physical activity, awareness, learning, and giving (Huppert, 2008; Jenkins et al., 2008).

The resulting 'Five ways to wellbeing' (Give, Connect, Take notice, Keep learning and Be active) were developed as a generic set of actions with wide-ranging appeal to promote wellbeing in daily life. Figure 5 shows how the Five Ways may influence wellbeing and mental capital by interacting at the level of functioning. They may not be sufficient to denote good functioning in its entirety but, according to the evidence base to date, they play an essential role in satisfying needs for positive relationships, autonomy, competency and security (Aked et al., 2008). Norris, Friedman, and Watson (2002) suggest that for psychosocial interventions to be effective, they must emphasise empowerment and support and build on strengths, capabilities and self-sufficiency. Therefore, including the development of the social and individual competencies that help people to identify and represent their needs during the response and recovery phases of disaster is important.

The Five ways to wellbeing framework has been adopted by many organisations and used in a range of settings and wellbeing initiatives across government, research, health, social services, and business sectors in the UK and elsewhere (Mental Capital and Wellbeing Project, 2010). New Zealand adopters of the Five Ways to Wellbeing framework include the New Zealand Mental Health Foundation[22] and the Canterbury District Health Board.[23]

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[22] https://www.mentalhealth.org.nz/home/ways-to-wellbeing/

[23] https://allright.org.nz/about-us/   Note: All Right? is a combined New Zealand Mental Health Foundation and the Canterbury District Health Board project.

Figure 5: The five ways to wellbeing

Connect

With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

Be active

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and that suits your level of mobility and fitness.

Take notice

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

Keep learning

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

Give

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

Good feelings day-to-day and overall happiness, satisfaction

Wellbeing

Good functioning

Mental capital

Resilience, self-esteem, cognitive capacity, emotional intelligence

The evidence indicates that each action theme (connect, be active, take notice, keep learning, give) positively enhances personal wellbeing. The model suggests that following the advice of these interventions enhances personal wellbeing by making a person feel good and by bolstering his/her mental capital. The actions mainly influence wellbeing and mental capital by interacting at the level of 'functioning'.

Adapted from: Aked, J., Marks, N., Cordon, C., & Thompson, S. (2008). *Five Ways to Wellbeing: A report presented to the Foresight Project on communicating the evidence base for improving people's well-being*. London: New Economics Foundation, p.13.

Case study methods

Aim

This evaluative case study aims to: provide accessible information, gain insight, and assess the feasibility and practicality of a Gap Filler's approach, for the purpose of informing other community development initiatives and/or wellbeing interventions, and to provide information relevant to potential funders. The case study also provides a structured record of the Gap Filler story but does not judge the significance or merit of individual projects, or the organisation overall.

Objectives

(1) To introduce relevant concepts.

(2) To detail the Gap Filler story[*] — Gap Filler's values, creative stimulus/capacity/talent, underlying principles, motivation(s), niche, and other characteristics.[†]

(3) To describe Gap Filler's interpretation of organisational and project-level success including a description of identified success factors (also consider less successful projects).

(4) To describe Gap Filler's interpretation and experience of 'Business as Usual' — as applied to the immediate post-earthquake, current, and (probable) future time points.

5) To describe Gap Filler's 'fit' with health (i.e. the contribution that Gap Filler currently makes to health e.g. wellbeing, other).[‡★]

Scope

This evaluative case study report does **not** cover the entire range of Gap Filler initiatives, including all individual projects. In brief, the included scope is limited to:
1. describing the context
2. describing the establishment of the Gap Filler initiative (as an organisation) and its development over time
3. describing the techniques involved in Gap Filler's style of intervention, and
4. assessing the degree to which the interventions potentially (theoretically) map to positive health (or other) outcomes.

Data sources

The case study drew primarily on semi-structured interviews with Gap Filler board members and staff members/volunteers. In addition, document reviews of the Gap Filler website, other internal documents, and other publications provided additional information. The process was guided by a set-list of topic questions and the relevant data sources. The main topics guided more specific interview questions that were tailored to each interviewee.

Notes

*The structure for the case study report uses a time-course approach — describing the story, characteristics, projects and other aspects across five described phases.

†In part, describes/categorises Gap Filler as an entity e.g. a participatory arts organisation? a community development organisation? a disaster-recovery organisation? a creative urban regeneration initiative? a placemaking initiative?

‡Maps the project characteristics/success factors against the Five Ways to Wellbeing (Connect; Be active; Take notice; Keep learning; Give) (Aked, Marks, Cordon, & Thompson, 2008), as per the Arts Council England 2012 evaluation (Arts Council England, 2012).

★ Based on the impact Gap Filler might have on identified stakeholders (both positive and negative). Illustrated via a simple 'impact map' to show the probable impacts for stakeholders. Estimating the size and value of these plausible impacts (either quantitatively or qualitatively) is beyond the scope of this case study, but the impact map may form a basis for understanding Gap Filler's potential reach and influence (potentially of interest to funders). Note that the impact map includes only a small number of example projects, and in all aspects is non-exhaustive.

Data collection

As briefly outlined above, this report is based primarily on semi-structured interviews with past and present Gap Filler board members and staff members/volunteers. All interviews were completed by two analysts. In total, nine interviews were conducted between 13 April 2017 and 1 May 2017, totalling 8hrs 20min of interview time.

List of interviewees' organisations and roles

1) Gap Filler, Co-founder, Media, Comms and Relationships.
2) Gap Filler, Co-founder, Co-director (Strategy), (also Co-founder, Life in Vacant Spaces).[24]
3) Gap Filler, Co-Director (Operations).
4) Gap Filler, Co-founder and architect.
5) Gap Filler, Board Chairperson.
6) Gap Filler, Education and Community.
7) Gap Filler, Wellbeing Activist.
8) Life in Vacant Spaces (LiVS), Director.
9) CCC representative, Urban Design, Regeneration and Heritage (written submission).

Information from the interviews was supplemented by a document review, including the Gap Filler website and grant applications and Christchurch City Council documents. A review of peer reviewed and grey literature also provided information about the context in which Gap Filler has operated over time, and to a limited degree, similar organisations in other cities.

Analysis

The interviews were audio-recorded and subsequently transcribed before analysis. Immediately following each interview, the evaluators discussed the interview content and main themes and completed written notes. These notes guided the *content analysis* of the data. The transcripts also provided a source of illustrative quotes, along with those drawn from other documents, reports, web pages and blogs. This case

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[24] http://www.canterbury.ac.nz/spark/researcher.aspx?researcherid=2098126

study report describes and illustrates the evolution of Gap Filler across time,[25] presents an account of 'the meaning of success' (project-level and organisational-level), and presents a basic impact map showing example interventions (Gap Filler initiatives) mapped to known and/or potential stakeholders.

Limitations of the analysis

This report is based on information collected from past and present Gap Filler personnel, board members and/or volunteers; partner organisation representatives; Gap Filler and partner organisation web-site content; and other published reports only. No attempt has been made to directly assess possible outcomes and impacts for end-users, either qualitatively or quantitatively. All discussions about outcomes and impacts are 'as reported' by Gap Filler representatives or their partner organisations and/or by other secondary sources.

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[25] Defining these phases according to the following criteria: EQ event timeline; participants (staff/volunteers) legal description/status of the organisation; projects/outputs (distinctive or unique characteristics of projects and locations/type as well as success/failure); identified milestones; funding (sources, amounts, and stability/reliability); other outcomes/factors.

Describing Gap Filler — a creative urban regeneration initiative

Who is Gap Filler?

Gap Filler was co-founded by Coralie Winn, Andrew Just and Ryan Reynolds. The organisation is supported by the Gap Filler Trust and is a registered charity. It has a board and 7.2 FTE employees spread across the Gap Filler roles (as of 2017, Box 4). The organisation has also engaged a range of volunteers across many of the projects that they have administered. This group of artists, scholars, activists, and other professionals has had a pioneering role in defining transitional space in Christchurch's CBD, through its focus on imaginative social and cultural initiatives (Wesener, 2015).

Box 4: Gap Filler people

Gap Filler staff roles at the end of 2017
- Operations Director
- Strategic (Consultancy) Director
- Administrator
- Book-keeper
- Volunteer Coordinator
- Promotions and Relationship Manager
- Education and LEOTC Coordinator
- Activator
- Site checker
- Project Developer
- Technical Support
- Project Developer (East Frame)

What is Gap Filler?

Gap Filler, a creative urban regeneration initiative, was initially formed in response to the 4 September 2010 Darfield earthquake and has continued to operate and evolve in the changing context of the Canterbury earthquakes sequence and recovery. Gap Filler identifies itself as

> 'A creative urban regeneration initiative that facilitates a wide range of temporary projects, events, installations and amenities in the city' and 'aims to innovate, lead, and nurture people and ideas; contributing to conversations about city-making and urbanism in the 21st century' (www.gapfiller.org.nz/about/).

Initially, Gap Filler 'filled the gaps' left on vacant sites (predominantly within the CBD) as a result of building damage and subsequent demolitions, as an interim measure. In collaboration with other community groups, Gap Filler pioneered the utilisation of these transitional spaces through the emphasis given to short-term, experimental, and temporary features of each intervention (Bowring & Swaffield, 2013).

In May 2011 Coralie Winn (Gap Filler co-founder) presented at the first TEDxEQCHCH[26] event which focused on the future of post-quake Christchurch.[27] In this talk, Winn described Gap Filler's approach as a way of 'redesigning a new city, the long way around'. The initial goal of Gap Filler was to use temporary projects to connect people and their city, a city that had been broken as a result of the earthquakes. Winn explained that rather than Gap Filler being solely about temporary projects, Gap Filler had the potential to assist Christchurch to take risks, learn new things and influence the future of the city of Christchurch. As Gap Filler grew and developed their strategic thinking their approach became more focused towards *transitional* projects and these projects were seen as a means of informing the permanency of the city. Rather than individual Gap Filler projects being singular stop gap measures, Gap Filler began to see their various projects as a way to inform what the city rebuild could and should be. As Gap Filler has evolved, this idea of influence has been termed 'city-building'. Part of the Gap Filler philosophy that developed through

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[26] https://www.ted.com/tedx/events/3215

[27] http://www.tedxchristchurch.com/coralie-winn/

the post-disaster period is that cities are never really finished, and are always evolving and in transition (Bennett, Dann, Johnson, & Reynolds, 2014).

> *'Gap Filler provides a way for something to happen now. You get life in a city by not trying to plan for everything, by allowing things to happen organically where possible. Life comes when you give people the chance to contribute something and I think that it proves that people need spaces to come and do that kind of thing. To just come and dance' (Coralie Winn, Gap Filler Co-Founder, in The Human Scale (Dalsgaard, 2012)).*

In recognition of the value created by these initiatives, for the social life of the city, and in reconnecting residents and visitors with the city centre, the Christchurch City Council and a wide variety of local stakeholders offered support funding and sponsorship to Gap Filler initiatives. The Christchurch City Council remains Gap Filler's principal funder.

Ways of working

Gap Filler is a values-based and outcome focused organisation which strives for social impact (Reynolds, 2014a). Gap Filler runs an annual internal strategy day which focus on the values, purpose, vision, outputs and outcomes of the organisation. Gap Filler values and philosophy, such as nurturing people and ideas, quality projects, impacting civic life, and engagement in the city, are central to Gap Filler's work. Gap Filler perceives their work as a form of social entrepreneurship with their bottom line being benefit to the public (Reynolds, 2014a). Through Gap Filler's projects and its relationship with other organisations such as Life in Vacant Spaces, the Festival of Transitional Architecture (FESTA), and the broader community there have been various forms of transitional projects launched: temporary cinemas, street festivals, urban sculptures, temporary venues for music and theatre, street furniture, street art, markets, bike workshops, urban farming, sports and commercial spaces (Gap Filler has been recognised nationally and internationally for their work, see Box 5). Transitional projects allowed the community, developers and government to see city-building in a new way which might not have been possible prior to a natural disaster. Transitional city projects have allowed for the conversation about urban development and city-building to be broader than it has traditionally been (Bennett & Moore, 2015). It allows specific ideas and discussion in regard to urban development and city-building (Davidson, Johnson, Gonzalo, Dikmen, & Sliwinski, 2007; Lawther, 2009; Wesener, 2015).

Box 5: Awards, 2011-2016

> Gap Filler has won a number of awards for its work. It won the Civic Trust Award in 2011; the Mayor's Earthquake Service Award in 2011; the Sustainable Habitat Challenge (SHAC) Award in 2012; Sustainable Business Network Social Innovation Awards in 2012; the BEST Design Awards, Silver (Exhibitions and Temporary Installations category) for the Pallet Pavilion in 2013; Coralie Winn, the director of Gap Filler, was awarded the Queen's Service Medal for Service to the Arts in the New Year's Honour list, 2015; and finally the City to City Barcelona FAD Award, 2016, for Eyes on the City as one of the top three global Learning Initiatives in the City.

There has been some limited work in the area of measuring outcomes against the values, purpose and vision, and Gap Filler has also used a range of alternative reporting methods on outcomes such as info-graphics and cartoon strips.[28] However, to date, there has been little or no evaluation of the *impact* of specific Gap Filler projects, as is often the case with post-disaster arts/creative practices, but there is anecdotal evidence that there has been a positive impact on community wellbeing (Lesniak & Life in Vacant

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[28] http://gapfiller.org.nz/wp-content/uploads/CSC-Cartoon.pdf

Spaces, 2015, p.9). These positive impacts include physical and mental health benefits, contributions to post-disaster resilience and urban identity, strengthening neighbourhoods' resilience and wellbeing, and the provision of appropriate venues that cater to various artistic and creative institutions, events and programmes (Lesniak & Life in Vacant Spaces, 2015; Lesniak & Reynolds, 2016).

Key values

Gap Filler's approach to participation in the city is people-centred and values based. All of Gap Filler's activities are underpinned by seven core values,[29] specifically: community engagement, experimentation, leadership, creativity, resourcefulness, collaboration, and honouring the Treaty of Waitangi/Te Tiriti (Figure 6). Rather than a top-down approach, Gap Filler strives to work *with* local community groups (see also Box 6 & Box 7), artists, architects, landowners, librarians, designers, students, engineers, dancers – anyone with an idea and initiative. Gap Filler activates city spaces for temporary, creative, people-centred purposes. Gap Filler aims to open up opportunities for experimentation, trying new ideas, pushing social boundaries, adopting participatory processes to get everyday people involved in creating their city. Gap Filler's values are applied to all potential proposals, whether in education (in schools), partnering on large-scale permanent developments, or working with the City Council to create enabling regulatory frameworks. All potential projects are critiqued against the seven stated values.

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[29] https://gapfiller.org.nz/about/

Figure 6: Gap Filler's seven values

Community engagement	Gap Filler believes in encouraging and promoting community spirit, growth and awareness by assisting people to experience and participate in artistic projects. The belief is that vacant land and buildings present opportunities; through developing and investing in gap sites, communities will recognise the value of social/cultural activities and communal endeavour in building social capital and resilience, stimulating economic development and creating connectedness. Gap Filler defines that 'Community spirit' is necessarily related to the idea of 'the public good': communities are strongest when working for public benefit, social capital and a flourishing environment.
Experimentation	Gap Filler value trying out new things and taking calculated risks to lead by example with high productivity and turnover of projects. Gap Filler focuses on the opportunities presented by each site, neighbour, business, community and individual involved.
Leadership	Gap Filler undertake leadership through expressing their values through what they define as *fearless* implementation – by *doing*. The organisation wants to celebrate playfulness, hope, critique and positivity to ensure they are living out the organisation's values in, and contributing to, a flourishing city.
Creativity	Creativity is central to all Gap Filler projects with great respect for the spirit of innovation, exploring new ways of engaging, creating and realising ideas, honouring and promoting the arts and artistic practice and process.
Resourcefulness	Gap Filler understand and value resourcefulness as meaning both adaptability and a commitment to re-use, re-purpose and recycle wherever possible.
Collaboration	Gap Filler seek out partners to implement ideas together, as well as co-operating to realise others' ideas. Gap Filler feel that collaboration unlocks creative potential.
Treaty of Waitangi/Te Tiriti	Gap Filler strives to honour the Treaty of Waitangi/Te Tiriti in their projects, approach and relationships. They believe in honouring the stories and histories of Ōtautahi and its tangata whenua.

Source: http://gapfiller.org.nz/about/

Gap Filler has evolved over time

Gap Filler is an organisation that has embraced experimentation, innovation and uniqueness (notably via a 'no repeats' policy) as its 'business-as-usual' model and Gap Filler has continued to evolve since its inception. Gap Filler's activities have been shaped over time by the changing physical, economic and political context during Christchurch's recovery and post-recovery phases. Differences in Gap Filler's approach and outputs are evident over time, and these differences have been analysed and described here as broadly falling into five phases [30] (discussed below, see Figures 7-11 and Figure 12).

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[30] Note that the phases are not absolute and considerable overlap is apparent. Also, the labels for these phases are provided as a guide only, they are not labels assigned by Gap Filler per se (although considerable commonality was evident between Gap Filler and other stakeholders' descriptions of the phases, the number of phases, and the key words used to label the phases).

Figure 7: Colombo

The Pre-Gap phase covered the 83-day period immediately following the 4 September 2010 Earthquake (Darfield) until the start of the first Gap Filler project Colombo (Figure 7). This period included all project development activities up to and including the implementation of the first project. The first project ran from Thursday 25 November 2010 until Sunday 5 December 2010 (10 days) and involved Gap Filler transforming an empty site on Colombo Street into a space which hosted a temporary garden café, pétanque, live music, poetry readings, outdoor cinema and other activities. [Pre-gap phase: 4 Sept 2010 - 25 Nov 2010, post-EQ and pre-first project #01, 83 Days].

Figure 8: Think Differently Book Exchange. 'An artistic, instinctive, creative response'

The Founding phase was characterised by prolific innovation and experimentation and multiple activations of sites with a range of passive and active initiatives. This phase included the Think Differently Book Exchange (Figure 8), the Painted Piano Project, Cycle Powered Cinema, and Dance-O-Mat, all highly visible and engaging signature founding projects. [The Founding phase: 25 Nov 2010, first project Gap Filler #01 – 1 Dec 2012 Pallet Pavilion, Gap Filler #22, 735 Days].

Figure 9: Pallet Pavilion. 'The glory summer of 2012/2013'

The Big & Bold phase was dominated by the Pallet Pavilion project (Figure 9), which was a half-million-dollar project and hosted more than 250 events. The Pallet Pavilion December 2012 – May 2014 was Gap Filler's first temporary architecture build project, and largest project to date. [The Big & Bold phase: 1 Dec 2012 Pallet Pavilion, first temp architecture build - 26 Nov 2015, Pallet Pavilion Gap Filler #22 – 5th Birthday, 1091 Days].

Figure 10: The Commons Shelter Challenge/The Dock

At Gap Filler's 5th Birthday celebrations (November 2015),[31] Gap Filler announced their intention to continue to facilitate creative community projects in Christchurch. At this time, more than half of Gap Filler's key funders had started returning to business-as-usual and some commentators and funders expressed the view that such creative community work 'belonged solely in the domain of disaster recovery, or that such projects are a luxury and not needed once a few buildings go up' (Reynolds, 2015). Gap Filler faced increased scepticism generally, and some commentators questioned its continued relevance and its worthiness for public funding. However, Gap Filler disagreed with these views and committed to continue developing and implementing creative community projects as a core focus (such as the Commons Shelter Challenge, Figure 10).[32] Gap Filler affirmed that fostering social and cultural wellbeing was still regarded as core business — fundamentally, about civic rights (Reynolds, 2015). However, Gap Filler undertook a shift in strategic thinking and approach, aiming to became more focused on projects as a means of informing the permanency of the city. This required going beyond the immediate functionality of projects and considering longer-term outcomes more deliberately moving towards a focus on 'city making'. Ryan Reynolds explained that 'a city is not just buildings, but also the process and the participation.' [The Transitional phase: 26 Nov 2015, 5th Birthday – 7 May 2016, Export Dance-O-Mat to Tauranga, 164 Days.]

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[31] https://gapfiller.org.nz/news/2015/looking-backwards-thinking-forwards/

[32] Gap Filler discontinued this project and did not build the winning entry, The Dock.

Figure 11: Super Street Arcade

The Professional/City-making phase is characterised by diversification. Several features of the phase evidence a shift towards a more 'marketable' and self-sustaining model. Firstly, the emergence of corporate partnerships and sponsorship. For example, the export of Dance-O-Mats to Tauranga and Auckland (sale of Dance-O-Mat manual/franchising); the installation of Super Street Arcade (Figure 11) using a public space and a corporate owned building exterior; the Learning Experiences Outside the Classroom (LEOTC)[33] programme; consultations services provided to businesses and Councils; corporate volunteer days; and providing support to start-ups/ entrepreneurs to pilot their business or social enterprise. [The Professional/City Building phase, 7 May 2016 – current. Milestone: Gap Filler #72, the implementation of Super Street Arcade in a public space. December 2016 – Current, 400+ Days].

Note: selected quotes are from Gap Filler co-founders and key personnel.
Images: gapfiller.org.nz

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[33] LEOTC supports students with learning experiences that complement and enhance student learning (part MOE funded).

Figure 12: Selected Gap Filler projects 2010-2017

Figure 12 shows a small number of selected Gap Filler projects, and for the purpose of illustration, the time-line is divided into five approximate phases within Gap Filler's development (some overlap is apparent). The projects vary considerable in their resource intensity (scale, materials, passive/active sites, maintenance requirements etc) and this is not specifically shown on the figure. For example, both the Think Differently Book Exchange and the Dance-O-Mat are long-running projects, but the Dance-O-Mat is a considerably more intensive intervention (also with greater interaction and reach) than the low-cost and passive Book Exchange. Note that the Transitional phase was characterised by a number of predominantly short-term events or projects that were not necessarily site-specific, or were largely passive, or under development, or educational, or consultative in nature.
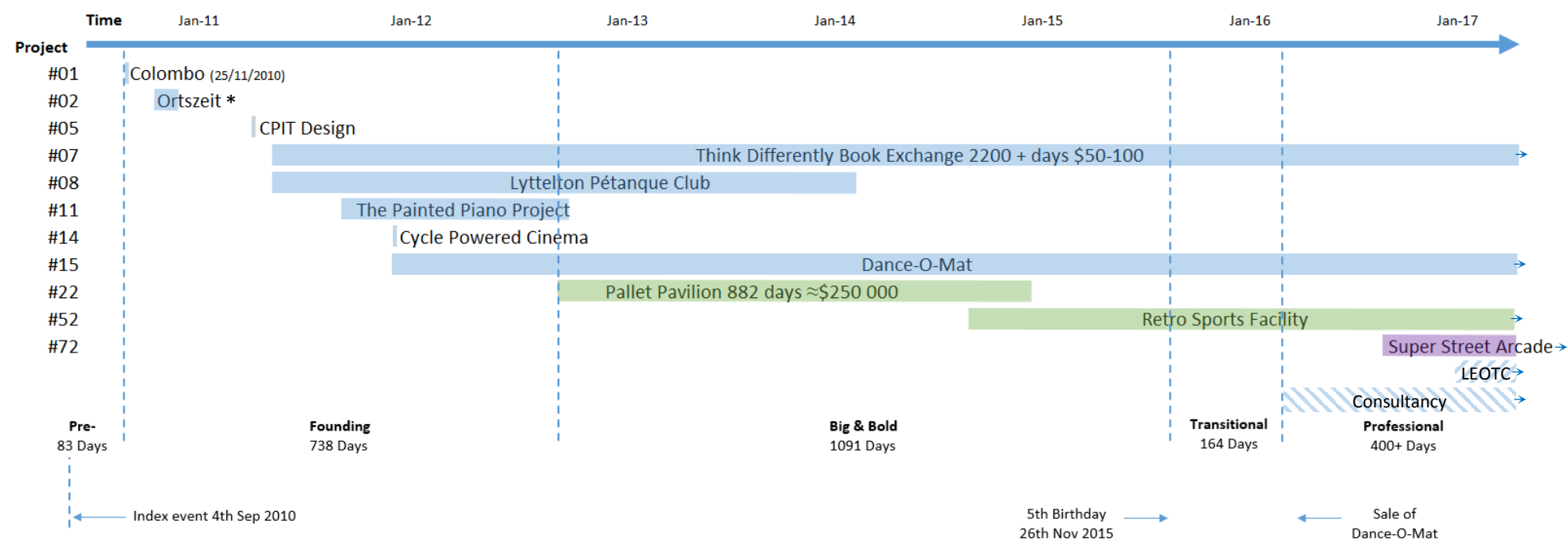
*Ortszeit = an exhibition of photographs by Stefan Koppelkamms, displayed outdoors at 63 Worcester Blvd, documenting architectural change in East Germany, post the Berlin wall.

LEOTC = Learning Experiences Outside the Classroom (non-infrastructure projects). Consultancy = e.g. workshops, developing strategic frameworks, or programmes or organisational structures, or other presentations.

Gap Filler now

Gap Filler's current work is characterised by diversification and a focused shift towards a more marketable and self-sustaining model. Firstly, the emergence of corporate partnerships and sponsorship. The installation of the *Super Street Arcade* using a public space and a corporate owned building exterior and the *Fletcher Living project* (see below) are two exemplars of this approach. Gap Filler emphasises that one of its aims is to be able to 'innovate, lead and nurture people and ideas contributing to conversations about city-making and urbanism in the 21st century'.[34] This focus on city-making and urbanism has led Gap Filler to broaden its activities and interests.

The long time-scale, the meeting of significant milestones in the City, the changing discourse around Christchurch's psychosocial and infrastructure recovery, and multiple stakeholder interests all intertwine to become the Christchurch story — a non-linear process of recovery and ongoing change. This continually changing environment has required Gap Filler to be constantly evolving to anticipate community need. Gap Filler now lists four main areas to describe how the organisation operates and the type of work undertaken – consultancy, education, project portfolio, and sharing Gap Filler values. These four domains demonstrate how Gap Filler has expanded from being a project-based organisation to other areas which support city-building.

From: http://gapfiller.org.nz/what-we-do/

The philosophy of 'city-building' has emerged from the earlier prototype of 'transitional'. The terminology 'transitional city' was used in the 2011 Christchurch City Council Central City Plan (Christchurch City Council, 2011). The term transitional (rather than temporary) suggested that individual projects contributed to the larger purpose of rebuilding the city rather than being momentary placeholders[35] or singular standalone temporary responses to the disaster (i.e. aimed to influence process rather than just provide respite) (Bennett & Moore, 2015).[36] This shift through the various paradigms of the disaster recovery sequence has created some tensions for Gap Filler with regard to their 'brand'. Ryan Reynolds, one of the co-founders of Gap Filler, has discussed being somewhat 'saddled' with the Gap Filler name and that

> 'it implies that we're just biding time and distracting people until the "real" rebuilding
> can happen rather than (as we wish) engaging people, involving them in the city's
> renewal and transforming how they desire their urban environment to be shaped'
> (Reynolds, 2014c, p.172).

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[34] http://gapfiller.org.nz/about/

[35] Examples such as the Restart Mall and the Transitional Cathedral demonstrate this concept.

[36] http://volumeproject.org/the-transitional-city/

Coralie Winn (Winn, C., Co-founder, Gap Filler, April 2017) also identified the need to keep Gap Filler's profile and brand current but that this takes time, money and energy. The issue of brand awareness, and the current 'fit' of the Gap Filler brand is reported to be a work-in-progress. Gap Filler acknowledges the critical role that branding, communications, media and marketing potentially play in their future development.

Nevertheless, temporary site-specific projects are still prominent and visible activities of Gap Filler (and key branding/marketing elements) but these projects are seen as being only one part of the transition that is occurring in Christchurch. It is the principles of experimentation, adaptability and participation that are identified by Gap Filler as their current main focus. To this end, Gap Filler has expanded as an organisation and two areas of current focus are *Consultancy* and *Education* (both described below). For example, the Learning Experiences Outside the Classroom (LEOTC)[37] programme for schools (Gap Filler #76, including Super Street Arcade/game development, Diverscity, and Open City) is an example of a non-site-specific programme.

Consultancy

As the consultancy aspect of Gap Filler has grown, Gap Filler consultants have worked with organisations both in New Zealand and overseas. Recent clients of the consultancy have included Fletcher Living; Auckland Council Urban Design Team; Adelaide City Council Placemaking Team; City of Fremantle; Port Macquarie Hastings Council (NSW, Australia); Shell Harbour Council (NSW, Australia); Siddhartha Arts Foundation (Nepal); and Copenhagen University (Denmark) (Gap Filler, 2016a).[38] Consultancy services offered include:

- advising local and national governments on how to establish placemaking programmes and community activities
- helping to generate civic projects and deliver great outcomes
- working with and advising groups on civic projects
- working with developers and architects to add value to their developments and to their communities
- designing processes and strategies for co-creation
- giving talks, keynotes and lectures
- running and facilitating workshops
- initiating and directly implementing projects, and
- helping to develop or improve corporate social responsibility and workplace wellbeing programmes.

Box 7: Gap Filler relationships

There are numerous organisations and community groups that Gap Filler has developed working relationships with. Locally, Life in Vacant Spaces,[a] Te Pūtahi – Christchurch centre for architecture and city-making[b] and Greening the Rubble[c] are three core organisations that Gap Filler has collaborated with. As noted above, Life in Vacant Spaces manages privately owned land and property and finds short and medium-term uses for vacant sites and buildings in Christchurch. Te Pūtahi produces the *Festival of Transitional Architecture* (FESTA), a biennial weekend festival of creative urban design within the Christchurch central city. Greening the Rubble is a charitable trust that creates and maintains temporary public parks on cleared sites in Christchurch. These organisations, along with Gap Filler, all share a common focus on transitional projects and city-building.

Gap Filler has also had a positive relationship with local media and many of their projects have received media attention over the last six plus years. This has increased their visibility as an organisation and drawn attention to individual projects.

Another example of relationship-building was *The Adaptive Urbanism Congress* in Christchurch. Initiated and organised by Gap Filler in 2014 and funded by the Christchurch City Council, it was an interdisciplinary congress on adaptive urbanism and city planning. Adaptive urbanism is having residents, artists and community groups being active participants involved in creating and maintaining flexible city spaces.[d] Within this capacity, Gap Filler was able to share their experiences and also collaborate with others in regard to city-building for Christchurch.

[a]http://livs.org.nz/
[b]http://teputahi.org.nz/
[c]http://greeningtherubble.org.nz/
[d]https://gapfiller.org.nz/news/2015/congress-on-adaptive-urbanism-report/

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[37] Gap Filler is a LEOTC provider and runs programmes that are funded in part by the Ministry of Education.

[38] http://gapfiller.org.nz/what-we-do/consultancy/

The most complex project to come out of Gap Filler's consulting work is the collaboration on the Fletcher Living East Frame programme.[39] As part of the tender for the large residential development, Ōtākaro (the crown) have required Fletcher Living (a trading unit of Fletcher Residential Limited) to run a community placemaking programme and spend $1M over the 6-8 years of the development timeframe on this programme. Gap Filler were engaged to develop the programme for Fletcher Living, and more recently engaged to oversee implementation (dubbed "CitySide" projects) (see www.jn-creative.co.nz/portfolio/gap-filler-east-frame-proposal/ for an overview of the strategy document, Figure 13). The first iteration of the Fletcher Living and Gap Filler collaboration opened in late 2017, activation of a public space on the corner of Lichfield and Manchester Streets in the East Frame. Gap Filler is contracted to activate Fletcher Living sites during the East Frame build over a two-and-a-half-year period.
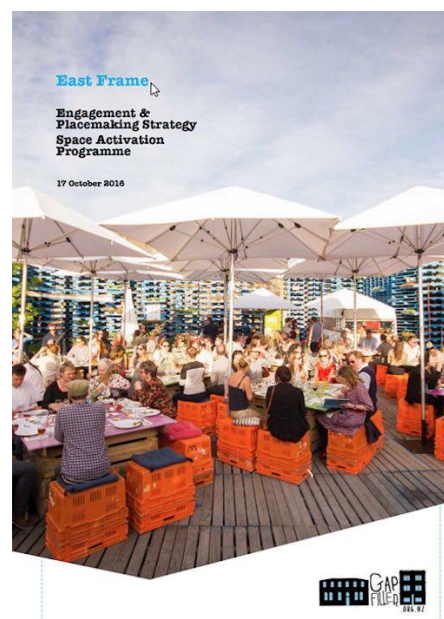
Figure 13: East Frame strategy document, 2016.

Education programme

In the immediate post-disaster context of Christchurch City, Gap Filler sought out opportunities to engage with young people, by offering a range of ad hoc educational experiences (primarily but not exclusively through schools). These initial opportunities included supporting young people performing at an event or running an event, extending or contributing to a developing or existing project, creating their own project or event, or via workshops (e.g. leadership workshops, project management) and other activities such as teacher-level workshops. In addition, Gap Filler started to facilitate 'walk-around-town' trips with schools[40] with the specific aim of drilling down deeper into the post-earthquake response and noting actions/projects that people had taken themselves — for the greater good (not just Council-led initiatives) (Airey, S., Education and Community, Gap Filler, May 2017). Gap Filler's walk-around-town trips were interactive and included observations of people working and interacting in the city, evidence of population movement, and changes in land use. The Christchurch City Council was at that time providing kids-to-town funding to help with the reconnections of kids to the city.

Gap Filler's LEOTC programmes

Based on these earlier experiences, Gap Filler realised their approach within the educational domain needed to be more specific and structured, as the resource-intensive generalist approach was not sustainable. After examining the national curriculum, key competences, and values, Gap Filler designed two Learning Experiences Outside the Classroom (LEOTC) programmes:[41] *Connect and Participate* and *Create and Contribute* (summarised in Table 2). Learning Experiences Outside the Classroom (LEOTC) programmes are delivered across New Zealand by community-based organisations, to provide students with added learning experiences in alignment with the national curriculum. LEOTC programme providers tender for

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[39] https://www.otakaroltd.co.nz/anchor-projects/the-east-frame/

[40] At this time, there were also other schools coming in to look at the city.

[41] Learning Experiences Outside the Classroom (LEOTC) supports community-based organisations to provide students with learning experiences that complement and enhance student learning, in alignment with the national curriculum. It is a limited and contestable funding pool.

limited and contestable funding from the Ministry of Education. Other providers in Canterbury include *Rutherford's Den*, the *International Antarctic Centre*, and the *South Canterbury Museum.*[42] Gap Filler now provides these hands-on, interactive LEOTC experiences, in partnership with schools, to ensure that programmes meet the learning needs of students. Gap Filler's LEOTC programmes have been funded for three years from the social sciences learning area funding pool (from Nov 2016).

Table 2: Gap Filler LEOTC Programme summaries

Connect and Participate

Students meet with community organisation Gap Filler, consider what makes a city, visit and explore the selected project(s) through music, dance, sport and play and consider the organisation's role / responsibility in making the city through interactive activities.

Key concepts: Community, identity, sustainability, creativity, contribution to society, rights and responsibility, taking action, collaboration, leadership, experimentation.

Possible activities include: Discovering projects and the community that creates and maintains them via a guided tour of Gap Filler projects including discussion and hands-on interaction. For example: a tour of Dance-O-Mat (creativity, arts, health) where we will discuss the project's inception, the needs it fills (including participation), and the Ping Pong project (cultural diversity, collaboration) followed by a discussion of the project's development and next steps for Diverscity, and lastly, a visit to Super Street Arcade (identity, play, leadership) where students enjoy the video game and consider the place of play in the city and the impacts of positive action.

Key competencies (curriculum Links)

1. Thinking – Students will use creative, critical and metacognitive processes to make sense of their experience and how communities can contribute to our city.
2. Managing self – We aim to empower students by presenting them with engaging, interactive activities and provide a role model with a 'can-do' attitude.
3. Connecting and participating – Students are involved in planning and creating a community project or volunteering with a community organisation that contributes to the city, their school or local community.

Create and Contribute

After completing our Connect and Participate programme, students can experience a deeper connection with the city by contributing to an existing Gap Filler project or creating their own new project with positive community outcomes in mind.

Key concepts: as above

Possible activities include: as above

Key competencies: as above

Adapted from: Gap Filler, 2017, http://gapfiller.org.nz/what-we-do/education/

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[42] http://eotc.tki.org.nz/LEOTC-home

Challenges for Gap Filler's LEOTC programmes and future direction

Marketing

Conveying the philosophy of Gap Filler projects and endeavouring to encourage students to develop a 'love and connection to the city' is an ongoing focus for Gap Filler. In part, this is seen to be a marketing challenge. In an increasingly competitive environment (i.e. an increasing number of LEOTC providers), effectively defining and communicating Gap Filler's programmes is seen as a priority (Airey, S., Education and Community, Gap Filler, May 2017). Current marketing methods include the Gap Filler website, word of mouth, flyers to schools, e-flyers, and via existing networks with schools/subject teachers.

Evaluation

In part, such marketing efforts depend on Gap Filler being able to demonstrate benefit, and evaluating and improving programmes is seen as a necessary area for continuing development. Existing data collection methods include student-led surveying, before-and-after self-reports by students, Google Forms, and real-time data entry on mobile devices. Gap Filler acknowledges that continuing to experiment with different evaluation methods, and improving the strength of the evaluations within the LEOTC programmes are essential in an increasingly competitive environment.

Meeting obligations – The Treaty of Waitangi

Gap Filler acknowledge that their work in the education domain falls short of fully embracing the principle of *partnership* with Māori and may not be 'equity neutral'. Although Gap Filler strives to meet these principles, it generally does not fully achieve them in a practical way.

> '… don't think education has fulfilled the "partnership" approach with Māori …. haven't got a Māori community involved ………. but the programme is fully open to participation ….. and provides opportunities for people to connect' (Airey, S., Education and Community, Gap Filler, May 2017)

As indicated above, Gap Filler projects are designed and intended to be open to everyone. However, Gap Filler acknowledges that in reality, not everyone has equal opportunity (e.g. transport, free time) and generally, the degree of cultural tailoring involved in most projects has been minimal.

> ' it's really hard because I think that the way that we work and the things that we talk about …. health and wellbeing …. I think that ultimately that is about everyone' (Airey, S., Education and Community, Gap Filler, May 2017)

Future aspirations

Fundamentally, Gap Filler focuses its education programmes on teaching students both 'civic rights' (demonstrating that anyone can take action in their city) and 'civic responsibility' (that actions people take can and should be for the greater good).[43] To best meet these aims, Gap Filler is continuing to evolve its education programme, with possible future developments including a 'classroom' and other physical resources in the city, supported by local sponsorship (two or three local businesses). Gap Filler's vision is essentially 'helping with civics, helping students to develop an idea and make it happen' (Airey, S., Education and Community, Gap Filler, May 2017).

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[43] http://gapfiller.org.nz/what-we-do/education/

Wellbeing

Although the promotion of 'wellbeing' was implicit and incidental to Gap Filler's start-up initiatives (the language of the time included 'resilience' and 'community spirit'), Gap Filler has progressively strengthened the wellbeing theme throughout all of its more recent initiatives. The Pallet Pavilion was Gap Filler's first architectural build project, and during this project, Gap Filler observed, perhaps for the first time at scale, that the *process* was also the *project*. In other words, the work preceding the opening of the physical structure was, in effect, a wellbeing intervention, even before the project had been 'used' for its intended 'community spirit' purpose. During the various design and build stages of the Pallet Pavilion project,[44] many volunteers were engaged at specialist/consultant level (engineers, designers, project managers) and as a general 'workforce' during construction. Gap Filler observed that the process of the design/build appeared to be exerting a positive wellbeing effect on those who participated, and some participants reported the effect extending to other non-involved peers (Airey, H., Wellbeing Activist, Gap Filler, May 2017). From this point, Gap Filler realised the importance of 'weaving' wellbeing into every initiative, and that wellbeing already aligned with Gap Filler's long stated values: community engagement, experimentation, leadership, creativity, resourcefulness, collaboration, and honouring the Treaty of Waitangi/Te Tiriti. To illustrate Gap Filler's alignment with wellbeing concepts, Table 3 maps Gap Filler's core values to the Foresight Project's 'Five ways to wellbeing': the most up-to-date understanding of the five actions considered important to the day-to-day wellbeing of individuals, families, communities and organisations (Aked et al., 2008). In particular, Reynolds noted (Reynolds, R., Co-founder, Gap Filler, April 2017) that the value Gap Filler placed on experimentation was a factor that linked wellbeing and adaptive resilience in a way that enabled people to respond to a disaster situation that was outside their experience. Gap Filler employed a Wellbeing Activist[45] in 2017 and wellbeing as a concept (or aim or objective) is included in all project plans (Airey, H., Wellbeing Activist, Gap Filler, May 2017).

Table 3: Gap Filler's seven core values mapped to the Foresight Project's 'Five ways to wellbeing'

Gap Filler's core values	The Five-ways to wellbeing				
	Connect	Give	Take notice	Keep learning	Be active*
Community engagement	●	●	●	●	
Experimentation			●	●	◔
leadership	●	●		●	
Creativity			●	●	◔
Resourcefulness			●	●	
Collaboration	●	●	●	●	
Honouring Te Tiriti	●		●	●	

*Although promoting physical activity is not specifically listed as a Gap Filler value, many Gap Filler projects encourage or require physical activity for participation.

Source: Gap Filler Trust (2017) and Aked et al. & the New Economics Foundation (2008).

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[44] http://gapfiller.org.nz/project/pallet-pavilion/

[45] Coordinator/promoter of a range of wellbeing activities, and drafts/reviews wellbeing content in all Gap Filler project plans.

Gap Filler employs a Wellbeing Activist (coordinator/promoter) with the goal of promoting community engagement and participation, as a tool to increase wellbeing and positive social change. The consultancy service identifies developing workplace wellbeing programmes as one of the services that it offers. Although not always explicit, Gap Filler has demonstrated that promoting wellbeing is an underlying element of many Gap Filler activities and projects, and 'the primary thrust was healing and recovery' (Reynolds, 2014b).

> 'Creative community projects will still be our core focus. Fostering social and cultural wellbeing, and contributing to a thriving city where the people of the city feel meaningfully involved in its creation – not just once in a Share An Idea campaign[46], but in an ongoing and constantly changing way.' (Reynolds, R., Co-founder, Gap Filler, 5th Anniversary speech).

Measuring wellbeing — challenges and opportunities

Gap Filler acknowledge the inherent difficulties involved in measuring changes in wellbeing and other project outcomes, particularly any favourable long term social impacts. While Gap Filler have received many anecdotes and accolades, the temporary and experimental nature of their work means that long-term outcomes are difficult to assess. Further, all Gap Filler projects[47] are free and open to anyone and do not require registration or sign-up, therefore no individual-level or demographic data is collected.[48] More recent projects such as the Super Street Arcade and the Open City project do offer the potential to collect some user-level data electronically, however, these data will be limited to point-in-time analysis. Assessing long-term effects objectively requires before-and-after type studies of identified users, and Gap Filler is not currently funded for such work. However, Gap Filler is continuing to explore different ways of collecting user feedback and self-reported outcomes, although the attribution of wellbeing and other long-term social outcomes to Gap Filler projects remains theoretical. Gap Filler acknowledges that demonstrating impact is important to the organisation's long-term viability, and increasingly, funders require evidence to support funding applications.

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[46] The Christchurch City Council initiated 'Share an idea community public engagement campaign' was a conversation with the community to gather ideas on how they wanted their Central City redeveloped following the February 2011 earthquake. Ideas were shared at a two-day Community Expo, online, by leaving a message, filling out a questionnaire, posting a letter and there were more than 100 meetings involving 1000 people. The result was the collation of 106,000 ideas from the community, which were considered/reflected in the draft Central City Plan.

[47] With the exception, for example, of projects such as the LEOTC programmes that are specific to school children.

[48] Projects such as Dance-O-Mat, Pallet Pavilion, and Super Street Arcade provide estimates of volunteer and participant numbers, but little or no follow-up data (i.e. no measures of change in long-term outcomes such as participants' wellbeing).

Project-level and organisational success factors: What works and why?

One of the fundamental questions that can be asked about any community project (or organisation) is "Was it successful?" Measuring success first requires the desired outcomes to be specified, along with the perspective (i.e. what stakeholder or group's perspectives are being considered?) (Box **8**). In the case of local-level psychosocial recovery interventions, outcomes such as creating urban resilience, building networks and social capital, community empowerment, and wellbeing may be considered relevant outcomes. However, the evaluation of interventions against such outcomes is inherently difficult because (1) these types of outcomes are difficult to measure at the population level and (2) because the accurate assessment of impacts requires a counterfactual or control (i.e. an idea of what those outcomes would have been in the absence of the intervention)[49] (Baker, 2000). Nevertheless, this report does aim to provide some insight into Gap Filler's contributions to the post-quake recovery of Christchurch, as reported by key Gap Filler personnel and other stakeholders. This information is intended to inform other community initiatives and/or wellbeing interventions, and provide information relevant to potential funders.

Box 8: An illustration of perspective

> Different projects can bring a range of tensions and contradictions with regard to what one might call success or failure. Two interviewees used the Pallet Pavilion as an example. One the one hand, raising $80,000 in crowd funding was a validation for the project and a significant sign of success in terms of public 'buy-in' (from the public's perspective, the Pallet Pavilion had merit and offered real value for money).
>
> *'Hundreds and hundreds of people volunteered and felt a sense of ownership and then like donated money and bought the Pallet Pavilion for another year. Like that was amazing'* (Winn, C., Co-founder, Gap Filler, April 2017)
>
> On the other hand, from Gap Filler's perspective (organisationally), the need to raise these funds in this way represented a failure that resulted from a sub-standard approach to the building consent process [by Gap Filler], and subsequently needing 24/7 security guards to mitigate fire and other risks,
>
> *'which is a big failure'* (Reynolds, R., Co-founder, Gap Filler, April 2017)

Key Gap Filler personnel were interviewed to gain insight into the characteristics of interventions/projects that have tended to be regarded as successful (i.e. viewed as successful by the interviewees). Firstly, this involved the interviewees listing and describing outcomes (i.e. the outcomes considered relevant to Gap Filler's purpose). Then, the interviewees identified the key ingredients, attributes, and characteristics that they thought most contributed to project and/or organisational success (i.e. achieving the outcomes that they had identified previously). Interviewees also commented on how these ingredients, attributes, and characteristics fit with or are derived from Gap Filler's values.

All the interviewees mentioned the importance that Gap Filler's values play in designing and implementing projects, and that the values ultimately shape the kinds of outcomes that are desired.

> 'making that meaningful, so it's not just words on a page somewhere but that these are things that we live and embody and challenge ourselves when we're not doing it well, and that's not just in our projects but in our organisation structure and our job descriptions and our processes and all of that, and try to live it' (Reynolds, R., Co-founder, Gap Filler, April 2017).

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[49] In this case, any idea of the counterfactual, Christchurch's post-earthquake recovery in the absence of Gap Filler, is not known.

One theme that tended to frame the interviewees' responses was the historical emphasis placed on experimentation and novelty (and that experimentation and the 'no repeats' policy has always been held as more important than necessarily repeating particular project elements). However, across the interviewees' perceptions of various exemplar projects, a number of common characteristics were identified. It is important to note that Gap Filler projects often include consultation, planning, design, preparatory work, and construction phases, and the activities and outcomes associated with these phases are specifically considered as important project activities (some interviewees commented that these phases can be as important as the eventual physical project).

Table 4 lists a range of outcomes and explanatory notes as described by the Gap Filler founders and key personnel. This list does not attempt to validate those outcomes (i.e. judge their potential feasibility for assessing impact) or describe measurement approaches. Then, Table 5 lists a number of project attributes as described on the Gap Filler website along with a number of attributes described by the Gap Filler founders and key personnel during semi-structured interviews. Table 5 begins with Gap Filler's core values, framed as outcomes (as the values can be understood as both guiding principles and outcomes).

Table 4: Outcomes identified via interviews and website content analysis

Outcomes identified by Gap Filler	Notes
Community engagement (Value 1)	• The project creates an opportunity for public engagement (includes pre-project activities). • Provides opportunities for civic engagement.
Experimentation (Value 2)	New knowledge is created via an experimental approach and risk is reduced for stakeholders. Outcomes are demonstrated. Others may apply new knowledge and/or adopt similar methods or approaches.
Demonstrating leadership (Value 3) leadership development	• The project involves/demonstrates leadership that plausibly influences the attitudes and actions of others. Changing attitudes is a key outcome that is necessary for sustainable change. • The project provides the opportunity for leadership development.
Creativity (Value 4)	The project demonstrates creative thinking and/or produces a tangible creative output, a work of functional, artistic or creative merit is produced.
Employing resourcefulness (Value 5)	The project employs resourcefulness in that it is economical on resources (environmentally friendly) and not extravagant, i.e. 'fit for purpose'.
Collaboration (Value 6)	The project involves/encourages collaboration across sectors and disciplines.
Honouring the Treaty of Waitangi/Te Tiriti (Value 7)	Projects are culturally appropriate.
To enhance social capital	• Provides input/guidance to enhance social capital. • Provides opportunities for skill-building.
Enhancing or encouraging local economic development	• Reduces risk for stakeholders. • Creates opportunities for entrepreneurship.
Popularity	Broadly, the number of people who engage with the project in some way.

Visibility/profile	The observability of the project, including location, scale, design, and any special features.
Longevity	The duration of all stages of the project; the time period for which meaningful engagement is sustained.
The project effects/activities consistent with organisational values	Observed effects of a project are consistent with the organisation's values (inconsistent or negative unintended consequences are avoided/mitigated).
The project met specific design criteria	The project's design criteria were met (and the resources used did not exceed those allocated/budgeted).
Demonstration	The project or process serves to demonstrate 'proof-of-concept' (e.g. a process, application, procedure, approach, system or technology is demonstrated, including bureaucratic processes). To smooth the path and show people the way.
Priming, testing, sets a precedent	Undertaking or initiating a bureaucratic process, the outcome of which sets a precedent (tests/smooths the path for others to follow).
Attitudes are influenced	Did the project/Gap Filler change the way people (including Govt. officials and business leaders) think about the city?
Quality	The project embodies quality (materially, or quality of ideas, information, experience, other).
Creates an income stream	The project creates an income stream (while remaining consistent with organisational values).
Changes expectations and/or behaviours	Normalised something/made something familiar… leading to some permanent impact.
Scale/size	Is the project on a scale that is plausibly impactful?
Achieves effective reach	Does the project reach a significant/meaningful number of people in the target area/population?
Provides interest or entertainment	The project performs some entertainment/leisure function.
Improves health and wellbeing	Improves individual/population health & wellbeing.

Project-level characteristics

Gap Filler has implemented over 75 projects since the organisation's first site activation on 25 November 2010. These projects have varied greatly in scale, duration, function, and overall character. Some projects have been unquestionably high-profile and widely celebrated (e.g. the Pallet Pavilion) and others less so (e.g. the Commons Shelter Challenge/the Dock). Each individual project undoubtedly brought about different types of impacts over its lifespan, a range of intended and possibly unintended consequences. A key part of assessing intended and unintended consequences is perspective. Different stakeholders may have very different perspectives and assessments of the relative merits of a project — funders, volunteers, project managers, and local Government may all be looking for different indicators of success.

That said, there is an extensive evidence base (particularly from organisational and industrial psychology, and sociology) that supports the idea that certain key attributes tend to generalise across projects or innovations that are more engaging and attractive to potential stakeholders (see Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004 as an example of a systematic review of this topic). In Table 5, several

categories of attributes are listed in the left-hand column as a starting reference (as described in the literature). Then, in the right-hand column, key attributes of Gap Filler's projects are listed under the main groupings. These key attributes were collated from Gap Filler's website content and from interviews with the Gap Filler founders and key personnel.

Table 5: Key attributes of innovations identified by Gap Filler founders and key personnel

Key attributes — General principles described in the literature	Key attributes of Gap Filler projects as described by Gap Filler founders and key personnel
Compatibility: Initiatives that are compatible with the intended adopters' values, norms, and perceived needs are more engaging.	**Projects** Are values-led. Involve elements of trust. Challenge pre-existing beliefs. Delight. Have charm. Connect with a community. Create a sense of discovery. Encourage collaboration. Are accessible, financially accessible. Incorporate fun. Are interactive. Involve presenting and resolving incongruity, use exaggeration or unexpected scale. Are quirky and interesting. Reframe standard thinking. Respond to something that is meaningful to a community in a current context. Make use of rhetorical effects. Test ideas. Use humour: including to be playful; to put twists on the familiar (including ambiguity); are fun and quirky; unusual (place, size, function). Create opportunities for participants to feel a sense of ownership. Demonstrate passion and provide opportunities for expression. Demonstrate or promote or embody optimism. Display or demonstrate quality (of concept, design, project management, workmanship).
Simplicity: Initiatives that are perceived as simple to use are more easily adopted.	Typically, Gap Filler projects are intuitive and simple in concept and in practice. Projects typically do not require any special knowledge or skills. Projects demonstrate clarity of concept.
Trialability: Initiatives where users can experiment on a limited basis are more engaging.	Almost universally, Gap Filler projects can be trialled or experienced in many ways, ranging from simple observation to full involvement as a volunteer (e.g. construction projects) or participation as a 'user' of an interactive site or activity. Gap Filler projects typically include elements of experimentation (or the project concept is experimental). Gap Filler projects typically involve doing things differently, including alternative approaches to familiar activities. Gap Filler projects may test or demonstrate a process or approach.
Observability: If the benefits of an initiative are visible to the intended audience, the **initiative** will be adopted more readily.	Gap Filler projects include 'sites' and 'non-site' projects. Site based projects (active and passive) are principally 'observable' in the first instance, i.e. the projects typically use visual cues to encourage participation — *this appears to be a signature ingredient for project success.* This includes visibility to the media (locally, nationally and internationally).
Reinvention: If potential users can adapt, refine, or otherwise modify the	All Gap Filler projects are 'open-access' and any skills and knowledge gained by participants can be applied to suit their own needs.

initiative to suit their own needs, it will be adopted more readily.	
Risk: If the initiative carries a high degree of uncertainty of outcome that the individual perceives as personally risky, it is less likely to be adopted.	Most Gap Filler projects start as small-scale temporary initiatives (with some notable exceptions, such as the Pallet Pavilion and Super Street Arcade). In this way, risks are lowered and projects and processes can be more experimental. This temporary project format appears to be well suited to architecture projects, for example, as it may permit more adventurous undertakings without the need to address many of the issues associated with permanent structures and conventional uses. The due diligence undertaken by Gap Filler reduces the risks for stakeholders and encourages participation and replication, by demonstrating ('pre-testing') appropriate processes.
Knowledge required to use It: If the knowledge required to use an initiative can be simplified and transferred from one context to another.	Gap Filler projects typically do not require any special knowledge or understanding or skills. Some skills may be transferable once gained.
Meaning: The meaning of the initiative for the intended audience has a powerful influence on engagement.	Gap Filler projects are generally designed in response to an identified community need and are shaped to convey a certain understanding of that need in an accessible way. Responds to need or addresses a poignant point.
Other	Gap Filler projects are generally collaborative: specifically crossing fields of practice and bringing in different ideas that contribute to a better outcome (as distinct from collaboration within-field/sector). Gap Filler projects generally provide an opportunity for wide engagement (public, NGO, Govt., business, and other stakeholders). Gap Filler projects often create opportunities for volunteerism and include managing volunteer involvement, e.g. safety, risk/achievement, cost/benefit, recognition. Gap Filler projects often provide experiences not otherwise available to members of the public. Gap Filler projects often provide a facility or access to infrastructure not otherwise available to members of the public. Gap Filler projects provide opportunities for civic engagement.

Key attributes of innovations adapted from: Greenhalgh et al., (2004).

Impact mapping

A well-documented difficulty lies in measuring the economic impacts of artistic and creative initiatives. The social, cultural, educational, and health impacts of arts and culture activities can be strongly argued, however, assigning value to these impacts in economic terms is complex. Increasingly, establishing cost-effectiveness for arts or cultural projects may be essential for securing funding (Arts Council England, 2012).

Establishing the cost-effectiveness of Gap Filler projects is beyond the scope of this report but the impact map shown in Figure 14 may form the basis for understanding Gap Filler's plausible reach and influence, which are potentially of interest to funders. Note that the impact map includes four example projects only, and is non-exhaustive and illustrative. The figure attempts to illustrate some of the probable linkages between Gap Filler's interventions and the stakeholders who might be influenced by the selected initiatives and by Gap Filler's activities more generally. The figure also includes some relevant details about the local post-earthquake context in Christchurch, drawn largely from the CERA Wellbeing surveys (2012-14) and other sources (see also, Emergency Management Australia, 1996).

Figure 14: A simplified impact map of example Gap Filler initiatives across a range of potential stakeholders

Example projects	Stakeholders	Context

Super Street Arcade

LEOTC

Pallet Pavilion

Consultancy

Stakeholders:
- Residents & rate payers
- Children, Young people, Adults, People with disabilities
- Māori
- Other groups
- Visitors
- Artists
- Volunteers
- Teachers
- Schools
- Developers
- Investors
- Land owners
- Business owners
- Central govt.
- CCC
- ECAN
- Statutory orgs.
- Planners
- Engineers
- Architects
- Corporates
- Other observers
- Funders
- Sponsors

Ranked by greater Christchurch residents 2012-2014*

Context:
Loss of life
Damaged environment
Damaged/lost infrastructure
Damaged/lost dwellings
Loss of recreational, cultural & leisure facilities
Transport related pressures
Dealing with EQC/insurance
Relocation (home/work)
Loss of sports facilities
Additional financial burdens
Uncertainty
Living in a damaged home
Additional work pressures
Loss of usual access to the natural environment
Loss of meeting places
Difficulty finding accommodation
Poor quality of house
Relationship problems
Lack of community engagement opportunities
Barriers for people with disabilities
Loss or relocation of services
Potential or actual loss of employment or income
Dealing with frightened, upset or unsettled children

Commonly occur post-disaster

Disillusionment
Disappointment
Anger
Frustration
Experiencing stress
Negative impact on community wellbeing
Disputes
Red-tape
Loss of support
Obstacles
Delays
Exhaustion
Loss of sense of community

The figure is a simple impact map that illustrates probable links between Gap Filler and a number of relevant stakeholders. Estimating the *size* and *value* of any impacts (either quantitatively or qualitatively) was beyond the scope of this analysis. However, the impact map may form a basis for understanding Gap Filler's potential reach and influence. Note the figure includes four example projects only and is non-exhaustive.

*These set responses were scored/ranked by CERA Wellbeing Survey participants from 2012-14, (rather than the comments being spontaneous reports). This summary shows a reasonable representation of the more commonly selected response items across this time series of surveys.

Source data for 'context': CERA Wellbeing surveys (2012-14), Emergency Management Australia (1996), and Gap Filler Trust.

Overview of selected Gap Filler projects

Faced with the socio-economic aftermath of violent change, there is often an overriding desire to clean up, repair basic infrastructure, and restore both public and private cash flows (Bowring & Swaffield, 2013). At the same time, this is precisely when imagination and vision are most needed to initiate strategic changes in such things as land use, public infrastructure, the way people live, and the overall functioning of the city. In an effort to influence such strategic changes, Gap Filler's initial use of temporary projects was an effort to connect people and their city, in effect,

'redesigning a new city, the long way around' (Winn, C., TEDxEQCHCH, 2011). [50]

In collaboration with other community groups, Gap Filler pioneered the utilisation of transitional spaces (Dionisio & Pawson, 2016b). Initial projects included: the Think Differently Book Exchange (an old refrigerator transformed into a public book exchange point), painted pianos for public use, the Dance-O-Mat (an outdoor dance floor with lights and sound system), and the Pallet Pavilion (a medium-term venue for cultural and social events). In 2013, the Gap Filler Trust inaugurated The Commons, in the centre of the city. This was a community hub for collaborative work on different projects and public events. [51]The site belongs to the Christchurch City Council, and currently lodges food trucks, several community groups, and space for other initiatives. The purpose of The Commons is 'to be a welcoming, ever-evolving community space. A space that connects people to their inner-city and to each other'.[52]

Below is an overview of some of the most well-known Gap Filler projects (compiled from the Gap Filler website and other sources). Further information on specific projects is available on The Gap Filler web page[53] and in the publication Christchurch: The Transitional City Pt IV (Bennett, Boidi, & Boles, 2012).[54]

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[50] Encouraging people to consider the different physical, emotional, economic, and political risks and benefits associated with different planning proposals. From https://www.youtube.com/watch?v=a_6b7QpsLcA.

[51] http://www.thecommons.org.nz/about/

[52] http://www.thecommons.org.nz/about/

[53] www.http://gapfiller.org.nz/what-we-do/project-portfolio/

[54] The book, Christchurch: The Transitional City Pt IV contains descriptions of 153 temporary and transitional 'earthquake-response' projects, some developed by Gap Filler, and some developed by other individuals and organisations.

Selected project profiles

See Table 6 for a full list of Gap Filler projects to April 2017 (Appendix A).

Pallet Pavilion

Project number	22
URL	https://gapfiller.org.nz/project/pallet-pavilion/
Location	Site of the former Crowne Plaza Hotel, Victoria Square.
Timeline	December 2012 – May 2014
Project description	The Pallet Pavilion was a transitional architecture project that functioned as a community space and venue for events — Gap Filler's first temporary architecture build project. The Summer Pallet Pavilion was built from over 3000 wooden blue stackable shipping pallets and was designed as a showcase for the possibilities of innovative transitional architecture in the city. The Pavilion hosted live music, outdoor cinema and a wide range of other events from Thursday to Sunday and was also available for hire by any individual or community organisation at other times. Thursday to Saturday in the summer the Pavilion was used largely as a venue for live music. The Pallet Pavilion had a capacity of 200 people, and the pavilion was open daily as a public space and hosted organised events most evenings. It was equipped with a basic sound system, a small triangular stage and a video projector and screen.
Objective(s)	To provide a community space and venue for events. To address the city's need for new small-to-medium sized venues, after the loss of clubrooms and community halls demolished as a result of the earthquakes. The Pavilion also aimed to draw people back into Christchurch city, supporting central businesses and promoting the central city as a place for experimentation.
Special design considerations	The temporary architecture project was designed around the use of a modular item and the design allowed for unskilled people to put it together in a simple and safe construction process. The construction phase included a 24 Hour 'Drillathon', where volunteers drilled 2 holes in ≈2000 pallets from 12pm Friday 2 November until 12pm Saturday 3 November. The Pavilion was also dismantled by volunteers, and composite elements of the Pavilion were returned to the suppliers (e.g. the pallets, fruit crates, some plants) or moved on to new uses.
Values/skills embodied by the project	Collaboration, constraint, community spirit.
Land owner	Christchurch City Council (leased to Crowne Plaza)
Physical resources	Built from loaned, reused and donated materials using volunteer, professional and community labour (around 2600 volunteer hours). 24hour per day security guard and maintenance required further fundraising of $80,000. Note: the security guard was required as a condition of the building consent, to mitigate fire and other risks.
Cost	Nominal $25,000 / value $250,000+
Site type or programme type	Active site with structure
Funding source(s)	Multiple
Partner, contributing or sponsor organisations	50+ businesses partnered up and offered their time.
Personnel involved (in each stage of the project)	

Professions/disciplines involved in the project	Design, landscaping, lighting design, structural engineering, and lighting engineering.
Number of people involved	More than 250 volunteers
Implementation/build time	Four months
Consents, planning permission, and other requirements	Building consent, licence to occupy agreement, public liability insurance.
Outcomes (responses) to the project	Critical acclaim and international recognition
Gap Filler commentary	'The challenges of this project were the scale of the project, the pallet pavilion site is absolutely massive and far too big for us. So the obstacles were: trying to achieve something of that size, an actual building, with a charitable trust's tiny budget and capacity; on-going security costs that we're required to meet; and all the work that needs to go into setting up a community venue to run well over summer'

Dance-O-Mat

Project number	15
URL	http://gapfiller.org.nz/project/dance-o-mat/
Project description	The Dance-O-Mat is a coin operated dance floor that anyone can use. A coin-operated ex-laundromat washing machine powers four speakers which surround a custom-made dance floor. To use the Dance-O-Mat, people bring any device with a headphone jack such as an IPod, phone or Mp3 player and plug it into the converted washing machine, insert $2 to activate the power and get dancing!
Location	The Dance-O-Mat was first located on a vacant site in 2012 and has occupied three different gaps in the city since then (original location was Cnr St Asaph and Manchester Streets, city). It currently shares the vacant site on the corner of Gloucester and Colombo Streets with Julia Morrison's artwork Tree Houses for Swamp Dwellers which was commissioned by CCC and realised as part of SCAPE 2013.
Timeline	February 2012 – Current
Objective(s)	Gap Filler created this project to respond to the lack of spaces for dance post-quake and bring people, life and energy back to the central city.
Special design considerations and features	Accessibility
Values/skills embodied by the project	Community engagement, experimentation, creativity.
Land owner	Private land owners
Physical resources required for the project	Sponsored materials: Plywood (Placemakers), paint (Resene), steel tubing (Steel and Tube), bunting (KiteShop), Electrical labour (Aotea Electrical and Matt Ballantine), electrical materials/parts (Ideal Electrical), washing machine (Phil at Maytag), power (from neighbour), loaned limiter device (SoundStore).
Cost	Total cost of project: $11,400 (approx.) ($22,000 real cost) + periodic maintenance (e.g. replacing audio equipment components and re-surfacing dance floor).
Site type or programme type	Passive (self-service) site
Funding source(s)	
Partner, contributing or sponsor organisations	
Personnel involved (in each stage of the project)	Gap Filler: Andrew Just, Pippin Wright-Stow, Richie Lorgelly (F3) + Volunteers: 6 painters, 4 installers/de-installers, 5 maintainers.
Professions/disciplines involved in the project	Design, electricians, builders, dancers, choreographers
Number of people involved in the project	15
Time to organise/construct/implement project	Six months, 100+ hours, September 2011 – May 2012
Consents, planning permission, and other requirements	N/A
Outcomes (responses) to the project	Thousands of people have used the Dance-O-Mat. Dance-O-Mat has brought smiles to many people's faces. Local choreographers and teachers also use the floor to work out in the open with their students. This project in its first

	iteration recorded 600 hours of use (based on the $2 coins collected) across 3 months. Provided a space for dancers and a space to have fun and gather in the city.
Gap Filler commentary	This has been one of our most successful projects to date because of how many different people have used it. There were complaints about the noise and originally the project ran until 11pm daily. By deciding to cut the sound at 10pm rather than the original finish time of 11pm, we were within the permissible noise levels in the central city. In Dance-O-Mat's future iterations, more care needs be taken to be nowhere near any residents.

Think Differently Book Exchange

Project number	7
URL	**https://gapfiller.org.nz/project/think-differently-book-exchange/**
Project description	The Think Differently Book Exchange is a public book exchange located inside a recycled fridge on an empty site. The fridge is full of books with a pathway of pavers leading to it, drawing people in. A bench is provided between two cabbage trees. This project is a 24 hour a day, 7 days facility.
Location	Corner Kilmore and Barbadoes Sts., Central Christchurch.
Timeline	Sunday 17 July 2011 to current
Objective(s)	Intended to attract books (via exchange) which readers/exchangers have found life-changing and challenging.
Special design considerations and features	Rather than place signs telling the viewer what this site was about, Gap Filler hoped to create a space that drew people in.
Values/skills embodied by the project	Community engagement, experimentation, creativity, resourcefulness.
Land owner	Private
Physical resources required for the project	Second-hand fridge full of books. Pavers. A wooden bench.
Cost	$50-100
Site type or programme type	Passive (self-service). Some maintenance required, by community/Gap Filler.
Number of people involved in the project	Three
Time to organise/construct/implement project	Two weeks
Consents, planning permission, and other requirements	Permission of landowner
Outcomes (responses) to the project	The exchange has proven to be a popular resource for both locals and tourists.
Gap Filler commentary	This project is a 24 hour a day, 7 days a week, public book exchange, with the 'Think Differently' moniker intended to attract books which readers/exchangers have found life-changing and challenging. The Book Exchange has shown its resilience through a number of setbacks. It was pushed over and one panel of glass broken in October 2011, and suffered two further push-overs in its first year. The fridge was adapted with a stake at its back to stabilise it, and the glass doors were replaced with perspex. Nearly all the books were stolen from the fridge twice, but the exchange continued with new books replacing the stolen ones. The local community responded to all acts of violence and theft quickly, showing how important the fridge has become, and continues to be.

Super Street Arcade

Project number	72
URL	https://gapfiller.org.nz/project/superstreetarcade/
Location	This giant game controller, with a joystick and two brightly-coloured buttons, has been installed on the pavement opposite a giant screen on the side of the new Vodafone building, between High and Madras streets.
Timeline	December 2016 – Spring 2017 (current)
Project description	Super Street Arcade is the world's first giant, outdoor arcade game system. A giant joystick and 'jump on' over-sized buttons control the unique classic-style retro games which are displayed on a big screen. Play any time, 24/7 FREE to play, 2-3 players required. It features a cyclist moving down a computerised Tuam St, complete with local landmarks like C1 Espresso, Christ Church Cathedral and local characters like the Wizard of New Zealand and a figure who may be (then) Greater Christchurch Regeneration Minister.
Objective(s)	To make a contribution to the city being more playful and social. Also, uses privately owned infrastructure (a building's exterior wall) as well as a public footpath space in the central city to signal a new direction for Gap Filler and to demonstrate one way the organisation wishes to play a part in the longer-term development of the city.
Special design considerations	The oversized game controller was designed to evoke nostalgia for 1980s video-game culture. The installation is based on Atari 1980s games with moulded black plastic and bright red and blue buttons, pixelated graphics and the eight-bit sound.
Values/skills embodied by the project	Innovation, creativity, experimentation, collaboration.
Land owner	Corporate
Physical resources	Oversized game controller, with a joystick and two brightly-coloured buttons, giant screen, and data and power systems.
Cost	Not disclosed
Site type or programme type	Interactive installation public/private site
Funding source(s)	CCC, Aotea Electrical, CDC, Red Cross (support for events)
Partner, contributing or sponsor organisations	Cerebral Fix, P3, Split'N2, Monsta Vision, Vertigo Tech, Vodafone, Men at Work, Solar Bright, SignTech, Science Alive, Aurecon, Kirk Roberts, Chapman Engineering, The Composite Group, JN Creative.
Personnel involved (in each stage of the project)	Damian Doyle, Ryan Reynolds, Correna Davies (and the whole Gap Filler team).
Professions/disciplines involved in the project	Design, electrical engineering, structural engineering, software design.
Number of people involved	50-150 (estimated)
Implementation/build time	8 months
Consents, planning permission, and other requirements	Yes
Outcomes (responses) to the project	Collaborative and participatory community engagement. Physical activity.
Gap Filler commentary	Gap Filler is interested in how we can make the city more playful and social. Gaming was highly social in the '80s with the popularity of arcades; now it has become more private, usually undertaken in homes alone, in small groups, or in

virtual space with others around the world. Super Street Arcade is in public, a great spectator game, and requires two or more people to collaborate to play, making it social and fun. It also requires the players to get active; you will break a sweat in this game! And it is our hope that strangers will lend a hand to other strangers in order to play the game. In this way, the game is collaborative and participatory. Super Street Arcade is a double-spectacle: the video game is fun to watch and the people playing become a spectacle themselves. We're trying to find ways for the fun and community-led principles that we've been exploring in our temporary projects to find a longer-term place in the city.

Summary of selected Gap Filler projects

From the beginning, Gap Filler aimed to influence strategic changes in land use, public infrastructure, the way people live, and the overall functioning of the city. Gap Filler's initial use of temporary projects was an effort to connect people and their city. Notable projects have included (chronologically) the Think Differently Book Exchange, Lyttelton Pétanque Club, Painted Pianos, Cycle Powered Cinema, the Dance-O-Mat, the Pallet Pavilion, and Super Street Arcade, as well as a range of short-term or one-off events and fairs, volunteer days, festivals and other social, cultural, and consultative interactions.

Successful projects

All the interviewees easily identified three or four of these projects as 'very successful' or as exemplars of 'the Gap Filler way'. The most commonly identified projects were the Pallet Pavilion, Dance-O-Mat, Think Differently Book Exchange, and the Super Street Arcade. Overall, the characteristics of engagement, scope, scale, longevity and profile (particularly within the mainstream media) were the elements or indicators of success that were most commonly cited by the interviewees. All the interviewees concurred that the sheer scale and impact of the Pallet Pavilion project set this project apart from all others.

Less successful projects

The general theme expressed by the interviewees was that no project was a failure, as all projects at least provided new knowledge. However, some interviewees did highlight a small number of projects as less successful. These projects included Ortszeit[55] (low engagement/depressing tone), The Commons Shelter Challenge[56] (issues with consultation and leadership) and, paradoxically, the Pallet Pavilion. As discussed above (Box **8**), some interviewees cited certain issues and errors with the Pallet Pavilion building consent process, and the subsequent need for additional funding to cover ad hoc measures to mitigate fire and other risks.

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[55] An exhibition of photographs documenting architectural change in East Germany after the fall of the Berlin wall.

[56] The Commons Shelter Challenge was a design competition to explore ways to collectively design, build and/or engage with a shelter at The Commons on the the former site of the Crowne Plaza Hotel. The winning design, The Dock, was not built and the project was ended.

The future direction of Gap Filler: What next?

To conclude the interviews with each of the Gap Filler founders and key personnel, the interviewees were asked to describe their vision for the future of Gap Filler as an organisation. The interviewees all identified the need or desire for Gap Filler to become a robust and sustainable organisation in the post-recovery era. However, the interviewees all identified an important caveat: that the characteristics and time-scales that define this post-recovery era are still not fully apparent and the relevance of these factors may depend largely on perspective. One perspective is that:

> 'Gap Filler type activities are just standard practice in a lot of great cities around the world' (Just, A., Co-founder, Gap Filler, May 2017).

However, another view is the idea of future redundancy:

> '… in some ways nothing would make me happier than to be entirely irrelevant cos [Sic] that would mean that, you know, all the public and private developments in the city are starting to think about community outcomes … I am totally open to imagining a scenario in which we're just redundant' (Reynolds, R., Co-founder, Gap Filler, April 2017).

These two statements traverse the question of relevance. On the one hand, ongoing Gap Filler type work can be seen as important to the business-as-usual activities of a city (unrelated to earthquake/recovery effects), and on the other hand, Gap Filler activities can be seen as serving a need but only for the time that the need exists during and after recovery. A third scenario appears plausible in which Gap Filler diversifies its activities more in the direction of social enterprise. Gap Filler has already started to move in this direction with the commercialisation of the Dance-O-Mat, the LEOTC programme, the Fletcher Living collaboration,[57] and consultancy more broadly. The interviewees generally acknowledged that maintaining the organisation's attractiveness to funders will require the ongoing demonstration of relevance and impact, and both are perhaps becoming increasingly difficult to convey. All the interviewees mentioned the importance that Gap Filler's values play in any discussions about the organisation's future direction. Gap Filler interviewees were aware that some people hold differing views about the Fletcher Living project for example, questioning whether the project fully aligns with Gap Filler's organisational values.

> 'So there will be people who feel that it's a waste of money and I guess the Fletcher's thing, it gives them a negative take on it … and that kind of attitude, why do we need more of this temporary stuff, we need permanent stuff now, the time is past for that, that's long ago' (Winn, C., Co-founder, Gap Filler, April 2017).

Despite the historical emphasis on physical projects, interviewees expressed the view that activating temporary projects was not, or is not now why Gap Filler exists, rather, that activating temporary projects is 'a means to an end'. That end includes changing the models of property development, creating some sort of structural change, influencing regulatory frameworks, encouraging community involvement and

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[57] The first iteration of the Fletcher Living and Gap Filler collaboration opened in late 2017, activation of a public space on the corner of Lichfield and Manchester Streets in the East Frame. Gap Filler is contracted to activate Fletcher Living sites during the East Frame build over a two-and-a-half-year period (dubbed "CitySide" projects).

participation, and generating value (e.g. social, economic). How attractive these more intangible outcomes are or will be for funders in the future is not known.

One of the co-founders simplified Gap Filler's current and future purpose or role as that of 'engagement' and in large part, inspiring people to take their own action and to not feel disenfranchised or helpless in this process. One view expressed was that:

> 'cities feel like they're made by planners, designers, architects, engineers … [but] cities
> are ultimately made by citizens … the people who use them, live in them, play in them'
> (Fox, C., Board Chairperson, Gap Filler, May 2017).

Some of the interviewees discussed engagement and importantly, reach.[58] The interviewees acknowledge that the reach of Gap Filler, as an organisation, and of Gap Filler projects is not really known. By definition, reach is a measure of the absolute number, or proportion of the *intended priority audience* that participates in an intervention or project. One the one hand, it can be argued that Gap Filler (particularly as an organisation) has achieved considerable reach, as evidenced by the extent of local, national and international media reporting and by the extent of Gap Filler consultation in other cities and countries (e.g. workshops with a range of different Councils around Australia and NZ, and presentations/workshops in England, Sweden, Denmark, Hong Kong, Taiwan, Kathmandu, and Australia). However, it can be questioned if these international audiences are the *intended priority audience.* A related question was posed by some of the interviewees, concerning local reach more specifically. The interviewees questioned the extent to which Gap Filler projects attract novel users versus recycling an existing pool of 'regular' engaged like-minded participants, who are not necessarily representative of the population groups most in need (see Addendum, p.73 for information on awareness from the June 2017 Canterbury Wellbeing Survey[59]).

> '…. are we just talking to the people who we come from …or is there great reach? [we
> mostly] come from an arts or academic background and there is a risk that that is a bit
> elite …and therefore … there may only be certain groups that we connect with ….on a
> day-to-day basis …. it's hard to estimate … how can we reach out to a broader range of
> people…. not just the regular group(s) who are already engaged?' (Gregg, J., Director,
> Life in Vacant Spaces, May 2017) [speaking both *about* Life in Vacant Spaces and *for* Gap
> Filler as partner organisations].

Finally, one of the Gap Filler co-founders provided the following overview of Gap Filler's past and possible future direction, when describing 'the Gap Filler way'.

> 'to let the values that underpin the organisation guide the way we make decisions and
> the way we do things. That's sometimes hard and doesn't necessarily happen but that's
> the aim ... to be continually asking questions around what's missing in the city and what
> our role is and what's needed and how we can draw attention to those things, and how
> we can make the city a place where people want to be and [where] people feel

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[58] The absolute number, or proportion of the intended priority audience that participates in the intervention or project.
[59] Available at https://www.cph.co.nz/wp-content/uploads/CantyWellbeingSurveyJun2017.pdf

connected, and feel like they have a stake in. It's about creating active citizens and that's changed over time I think because in the aftermath of a disaster, it's a bit different to what it is six years on. But it's still about that … that people are engaged in the city and the city is a place for interesting things to happen' (Winn, C., Co-founder, Gap Filler, April 2017).

Summary

Introduction

Following natural disasters, and the resultant dramatic socio-economic change, there is usually a concerted and fundamental drive to clean up, repair basic infrastructure, and restore both public and private cash flows (Bowring & Swaffield, 2013). However, such efforts can be hampered by disputes, bureaucratic processes, loss of support, and exhaustion: leading to frustration, anger and disillusionment (Emergency Management Australia, 1996). Some argue that this is precisely when imagination and vision are most needed to initiate strategic changes in such things as land use, public infrastructure, the way people live, and the overall functioning of the city (Corner, 1999). Gap Filler emerged as a creative urban regeneration initiative in response to precisely these dynamics in Christchurch City, post-earthquake, 2010.

This evaluative case study highlights Gap Filler's work in Christchurch, and the organisation's application of the principals of artistic, creative, novel and adaptive urbanism and city-making. This case study also considers particular characteristics of that work (project-level and organisational-level) and the possible direct and indirect contributions made to the recovery process (built environment and process/regulatory environments) and to the health and wellbeing of Christchurch residents and other stakeholders.

Limitations of the case study methodology

This case study does not have the explanatory or evaluative power to report cause-and-effect or before-and-after type relationships, and the benefits of Gap Filler's post-disaster projects and activities may not have transferred to or be indicative of the wider community of Christchurch residents. Participation in Gap Filler's initiatives may have been limited to certain geographical communities, most often within the CBD (where the projects were intentionally targeted) and the benefits may not have directly reached parts of the community (including those who live in or access the CBD).

Main points
Impact, a matter of degree and perspective

Gap Filler has been prolific in delivering projects in Christchurch City, with more than 75 projects launched since their first site activation on Thursday 25 November 2010. The projects have ranged from small short-term installations or activities costing one or two hundred dollars, to major medium-term architectural-build projects costing more than $250,000. Without question, Gap Filler has established expertise; engaged the public in a multitude of interactive installations and volunteerism; influenced thinking; contributed to improved wellbeing for some; gained local, national and international media coverage and profile; and earned a reputation for quality, creativity and novelty.

Nevertheless, success or *impact* is a matter of degree and perspective. What is not known is the exact nature and scope of the impacts, the size of the impacts (effect size), the reach of the impacts (number of people/proportion of target population) and the longevity of the effects. Questions about impact and reach will be, if not already, increasingly on the minds of funders, donors, sponsors and other stakeholders, as Christchurch moves beyond the post-earthquake recovery phase.

A major difficulty lies in (quantitatively and qualitatively) measuring and reporting the impacts of Gap Filler's artistic and creative initiatives (and similar interventions generally), and assigning value to these impacts (in economic and/or other terms) so that funders can make the necessary but invariably complex assessments of cost-effectiveness (and/or efficiency): those critical judgements that influence ongoing

funding decisions. Further, the funding criteria for 'post-post-disaster' initiatives will almost certainly continue to shift over time. Funders and other stakeholders are likely to consider many factors when prioritising funding allocations, possibly asking one or more of the questions below.

- Is Gap Filler continuing to make a difference to citizens' lives?
- How well is Gap Filler engaging the public, beyond a possibly small group of the-already-engaged (i.e. does Gap Filler have influence beyond its own sphere)?
- Can Gap Filler shape or continue to shape Christchurch's recovery and regeneration?
- To what degree are these effects long-lasting or prone to decay?

As funders periodically review their operating policies and procedures, they are likely to adjust their decision criteria as the needs of Christchurch residents are seen to change over time. Factors for consideration typically include the 'fit' of the applicant's project and funding requirements and the relative merits of competing applications received and assessed in the same funding round.

Attributes of successful initiatives

This case study has identified and categorised a number of success factors or attributes that have been associated with Gap Filler projects over the years. Often, those seeking to replicate successful interventions tend to look for an 'ingredients list' of winning components or attributes. One theme that is evident from the study of Gap Filler projects is that the 'output' (e.g. the installation or event as seen by the public) is only part of the whole project. Specifically, the projects typically involve the processes of engagement, consultation, collaboration, planning, and significant volunteerism, and these processes are as much part of the projects as any physical structures, events or displays. This observation suggests a challenge for others eager to create similar projects because the other less tangible processes are more difficult to emulate and replicate, as they require sufficient knowledge, skill, creativity, experience and leadership.

This case study has listed and described some of those intangibles so that they might be more readily identified in other interventions, and so that adjustments and inclusions can be made accordingly. A brief sample of these less tangible ingredients includes projects being: values-led, challenging pre-existing beliefs, responding to something that is meaningful, demonstrating passion, embodying optimism, being experimental, lowering risk, fostering a collaborative environment, and actively encouraging and supporting volunteer involvement.

Community resilience and wellbeing

Resilience

This case study has highlighted ways in which Gap Filler has undertaken to help Christchurch City become more resilient to the physical, social and economic challenges that followed the Canterbury earthquakes. Present-day ideas of resilience tend to emphasise positive trajectories and adaptation rather than retaining essentially the 'same function'. In this way, resilience can be viewed as a set of qualities or protective *mechanisms* that give rise to successful adaptation and to near optimal wellbeing. Gap Filler had a pioneering role in defining transitional space through its focus on imaginative social and cultural activities that endeavoured to reinvent urban community and social connectedness (Dionisio & Pawson, 2016a; Wesener, 2015). Gap Filler has promoted a long-term perspective on how communities can develop capacities in the face of ongoing disaster recovery.

Wellbeing

Wellbeing is an overarching lens that might be applied to adaptive urbanism and city-making initiatives. Adaptive urbanism is seen as the growing practice of residents, artists, and community groups getting actively involved in conceiving, designing, implementing, activating and maintaining flexible city spaces.[60] Different stakeholders will, no doubt, apply their own individualised metrics to the overall merit, worth and importance of these kinds of approaches. Some stakeholders will prioritise economic outcomes, some social cohesion, others mental wellbeing, resilience, and physical health, along with a range of other outcomes. Arguably, wellbeing can be used as a broad and comprehensive metric or end-point by which adaptive urbanism and city-making initiatives might be judged.[61]

The wellbeing perspective might be concerned with the degree to which an initiative significantly supports or improves residents' social relationships, their engagement and interest in daily activities within the city, their active contributions to the happiness and wellbeing of others, their competence and capabilities as citizens, their self-efficacy, their optimism about the future, and their sense of self-worth (Andrews & Withey, 1976; Diener et al., 2009).

Future direction

This evaluative case study aimed to gain insight into the nature, feasibility and practicality of the Gap Filler approach. In addition, it describes Gap Filler's projects and programmes in terms of their potential for improving the wellbeing of Christchurch residents as well as providing relevant information to potential funders. With respect to future direction, a dominant strategic-level theme was identified as a result of the case study process: 'redundancy versus business-as-usual'. On the one hand the end-point is 'redundancy'— the idea that Christchurch City has recovered sufficiently and is on a positive trajectory and Gap Filler's initiatives are no longer needed, and on the other hand, 'business-as-usual'— achieving sustainability whereby Gap Filler continues to add value to life in Christchurch City for an open term, unrelated to recovery or post-recovery milestones.

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[60] https://gapfiller.org.nz/news/2015/congress-on-adaptive-urbanism-report/

[61] i.e. does an intervention improve the target populations' feelings, thoughts, experience and satisfaction with life?

Conclusion

Following the devastating Canterbury earthquakes of 2010/11, Gap Filler emerged and responded with a large number of innovative urban regeneration initiatives. Gap Filler has been prolific in the delivery of a broad range of projects and initiatives in Christchurch City. These artistic, creative, educational, enabling and inspiring interventions have gained considerable profile and following by locals and visitors alike. Inferences can be drawn about the projects' potential effects and their overall positive contribution to the psychosocial recovery of Christchurch residents. However, the size, nature, scope and longevity of these effects cannot be easily or precisely estimated. This leaves funders to make value-judgements based on their own assessments of the likely impacts of Gap Filler's work and to apply their own weightings to determine value-for-money relative to the outcomes of interest.

References

Aked, J., Marks, N., Cordon, C., & Thompson, S. (2008). *Five Ways to Wellbeing: A report presented to the Foresight Project on communicating the evidence base for improving people's well-being*. London: New Economics Foundation.

Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being*. NewYork: Plenum Press.

Arts Council England. (2012). *Measuring the economic benefits of arts and culture: Practical guidance on research methodologies for arts and cultural organisations.* London: Arts Council England.

Baker, J. (2000). *Evaluating the impact of development projects on poverty*. Washington, D.C. : The International Bank for Reconstruction and Development/The World Bank.

Baker, S. M. (2009). Vulnerability and resilience in natural disasters: A marketing and public policy perspective. *Journal of Public Policy & Marketing, 28*, 114-123.

Bennett, B., Boidi, E., & Boles, I. (2012). *Christchurch: The transitional city. Pt. IV*. Christchurch: Christchurch, New Zealand: Transitional Architecture Trust.

Bennett, B., Dann, J., Johnson, E., & Reynolds, R. (Eds.). (2014). *Once in a lifetime: City-building after disaster in Christchurch.* Christchurch, New Zealand : Freerange Press.

Bowring, J., & Swaffield, S. (2013). Shifting landscapes in-between times. *Harvard Design Magazine, 36*, 94-104.

Bradburn, N. (1969). *The structure of psychological well-being*. Chicago: Aldine.

Bungay, H., & Vella-Burrows, T. (2013). The effects of participating in creative activities on the health and well-being of children and young people: A rapid review of the literature. *Perspectives in Public Health, 133*(1), 44-52.

Canterbury District Health Board. (2016). *Canterbury Wellbeing Index 2016*. Christchurch, New Zealand: Canterbury District Health Board.

CDHB. (2016). *Wellbeing Survey September 2016.* Christchurch, New Zealand: Canterbury District Health Board.

CDHB. (2017). *Wellbeing Survey June 2017.* Christchurch, New Zealand: Canterbury District Health Board.

CERA. (2012). *CERA Wellbeing Survey 2012.* Christchurch, New Zealand: AC Nielsen & Canterbury Earthquake Recovery Authority.

CERA. (2015). *CERA Wellbeing Survey 2015.* Christchurch, New Zealand: AC Nielsen & Canterbury Earthquake Recovery Authority.

Christchurch City Council. (2014a). *Public Transport Infrastructure Activity Management Plan, Long Term Plan 2015–2025*. Christchurch, New Zealand: Christchurch City Council.

Christchurch City Council. (2014b). *Roads and Footpaths Activity Management Plan, Long Term Plan 2015 – 2025*. Christchurch, New Zealand: Christchurch City Council.

Cohen, G. D., Perlstein, S., Chaplione, J., Kelly, J., Firth, K. M., & Simmens, S. (2006). The impact of professionally conducted cultural programs on the physical health, mental health, and social functioning of older adults. *Gerontologist, 46*(6), 726-734.

Cooke, P. J., Melchert, T., & Connor, K. (2016). Measuring well-being: A review of instruments. *The Counseling Psychologist, 44*(5), 730–757. doi: 10.1177/0011000016633507

Corner, J. (Ed.). (1999). *Recovering landscape: Essays in contemporary landscape architecture*. New York: Princeton Architectural Press.

Dalsgaard, A. M. (Writer). (2012). The Human Scale [Film]. In S. B. Sørensen (Producer). Denmark.

Davidson, C. H., Johnson, C., Gonzalo, L., Dikmen, N., & Sliwinski, A. (2007). Truths and myths about community participation in post-disaster housing projects. *Habitat International, 31*(1), 100-115. doi: 10.1016/j.habitatint.2006.08.003

Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. (2009). *Well-being for public policy*. New York: Oxford University Press.

Dionisio, M. R., & Pawson, E. (2016a). Building resilience through post-disaster community projects: Responses to the 2010 and 2011 Christchurch Earthquakes and 2011 Tōhoku Tsunami. *Australasian Journal of Disaster and Trauma Studies, 20, People in Disasters Special Issue*.

Emergency Management Australia. (1996). *Australian Emergency Manual: Disaster Recovery*. Dickson ACT 2602 Australia: Emergency Management Australia.

Flay, B. R., Biglan, A., Boruch, R. F., Castro, F. G., Gottfredson, D., Kellam, S., . . . Ji, P. (2005). Standards of evidence: Criteria for efficacy, effectiveness and dissemination. *Prev Sci, 6*(3), 151-175.

Frug, G. E. (1999). *City making: Building communities without building walls*. Princeton: Princeton University Press.

Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., . . . Wallerstine, N. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health, Education, and Behavior, 25*, 258-278.

Gray, N., Oré de Boehm, C., Farnsworth, A., & Wolf, D. (2010). Integration of creative expression into community based participatory research and health promotion with Native Americans. *Family & Community Health, 33*(3), 186-192. doi: 10.1097/FCH.0b013e3181e4bbc6

Greaves, C. J., & Farbus, L. (2006). Effects of creative and social activity on the health and wellbeing of socially isolated older people: Outcomes from a multi-method observational study. *Journal of the Royal Society for the Promotion of Health, 126*(3), 134-142.

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Q, 82*(4), 581-629. doi: 10.1111/j.0887-378X.2004.00325.x

Harris, A. H., & Thoresen, C. E. (2005). Volunteering is associated with delayed mortality in older people: Analysis of the longitudinal study of aging. *Journal of Health Psychology, 10*(3), 739-752.

Herrman, H. S., Saxena, S., & Moodie, R. (2005). *Promoting mental health: Concepts, emerging evidence, practice: A WHO Report in collaboration with the Victoria Health Promotion Foundation and the University of Melbourne*. Geneva: World Health Organization.

Holling, C. S. (1973). Resilience and stability of ecological systems. *Ann Rev Ecol Syst, 4*, 1-23.

Huppert, F. (2008). *Psychological well-being: Evidence regarding its causes and its consequences*. London: Foresight Mental Capital and Wellbeing Project.

Jenkins, R., Meltzer, H., Jones, P., Brugha, T., & Bebbington, P. (2008). *Mental health and ill health challenge report*. London: Foresight Mental Capital and Wellbeing Project.

Johnson, S. (2001). *Emergence: The connected lives of ants, brains, cities, and software*. New York: Scribner.

Kreuter, M., Lezin, N., & Young, L. (2016). Evaluating community-based collaborative mechanisms: Implications for practitioners. *Health Promotion Practice, 1*(1), 49 - 63. doi: 10.1177/152483990000100109

Lawther, P. M. (2009). Community involvement in post disaster re-construction – Case study of the British Red Cross Maldives recovery program. *International Journal of Strategic Property Management, 13*(2), 153-169. doi: 10.3846/1648-715X.2009.13.153-169

Lesniak, M., & Life in Vacant Spaces. (2015). *Gauging the impacts of post-disaster arts and culture initiatives in Christchurch – A literature review prepared for Manatu Taonga – Ministry of Culture and Heritage.*

Lesniak, M., & Reynolds, R. (2016). *The benefit of arts and culture to post-disaster Christchurch*. Report commissioned by Ministry of Culture and Heritage.

Longstaff, P. H. (2005). *Security, resilience, and communication in unpredictable environments such as terrorism, natural disasters, and complex technology.* Cambridge, MA.: Program on Information Resources Policy.

Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111-131.

Martin, I. M., Martin, W.E., Baker, S.M., Scammon, D.L. and Wiener, J. (2015). Disasters and social marketing. In D. W. Stewart (Ed.), *Handbook of persuasion and social marketing* (Vol. 3, pp. 77-116). Westport, CT: Praeger.

McKegg, K. (2006). Intervention logic: a tool for demonstrating and understanding results. Wellington.

Mental Capital and Wellbeing Project. (2010). *Foresight Project Mental Capital and Wellbeing One-Year Review October 2008 to November 2009*. London: Government Office for Science.

Norris, F. H., Friedman, M. J., & Watson, P. J. (2002). 60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research. *Psychiatry, 65*, 240-260.

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology, 41*, 127–150.

Norton, B. L., McLeroy, K. R., Burdine, J. N., Felix, M. R. J., & Dorsey, A. M. (2002). Community capacity: Concept, theory, and methods. In R. J. DiClemente, Crosby, R.A. and Kegler, M.C. (Eds.), *Emerging theories in health promotion practice and research* (pp. 194-227). San Francisco, CA: John Wiley & Sons.

Project for Public Spaces. (2016). *The case for healthy places: Improving health outcomes through placemaking*. New York: Project for Public Spaces.

Reynolds, R. (2014a). Gap Filler. In B. Bennett, J. Dann, E. Johnson & R. Reynolds (Eds.), *Once in a lifetime: City-building after disaster in Christchurch*. Christchurch, New Zealand: Freerange Press.

Reynolds, R. (2014b). Introduction to the International Adaptive Urban Congress Report. In S. Vallance, R. Reynolds, T. Moore, B. Sherow, S. Carlton & D. Darren Davis (Eds.). International Adaptive Urban Congress Report. The International Congress on Adaptive Urbanism 23-24 OCT. Christchurch: ICAU.

Reynolds, R. (2014c). Once in a lifetime: City-building after disaster in Christchurch. In B. Bennett, J. Dann, E. Johnson & R. Reynolds (Eds.), *Once in a lifetime: City-building after disaster in Christchurch*. Christchurch, New Zealand: Freerange Press.

Reynolds, R. (2015). Looking backwards, thinking forwards. *Speech delivered at Gap Filler's 5th birthday celebrations (November 2015)*. Christchurch.

Thornley, L., Ball, J., Signal, L., Lawson Te-Aho, K., & Rawson, E. (2013). Building community resilience: Learning from the Canterbury earthquakes. Research Report. New Zealand: Unpublished Report.

Tov, W., & Diener, E. (2008). The well-being of nations: Linking together trust, cooperation, and democracy. In B. A. Sullivan, M. Snyder & J. L. Sullivan (Eds.), *Cooperation: The psychology of effective human interaction* (pp. 323–342). Malden, MA: Blackwell Publishing.

Weiss, L. A., Westerhof, G. J., & Bohlmeijer, E. T. (2016). Can we increase psychological well-being? The effects of interventions on psychological well-being: A meta-analysis of randomized controlled trials. *PLoS ONE 11(6), 11*(6).

Wesener, A. (2015). Temporary urbanism and urban sustainability after a natural disaster: Transitional community-initiated open spaces in Christchurch, New Zealand. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 8*(4), 406-422. doi: 10.1080/17549175.2015.1061040

WHO. (2017). *Urban green space interventions and health: A review of impacts and effectiveness*. Copenhagen: WHO Regional Office for Europe.

Williams, R., Bisson, J., & Kemp, V. (2014). Principles for responding to people's psychosocial and mental health needs after disasters. *Vol. Occasional Paper OP94, The Royal College of Psychiatrists*.

Wisner, B. (2004). Assessment of capability and vulnerability. In G. Bankoff, G. Frerks & D. Hilhorst (Eds.), *Mapping vulnerability: Disasters, development & people* (pp. 183–193). London: Earthscan.

Appendix A

Full list of Gap Filler projects to April 2017

Table 6: Full list of Gap Filler projects to April 2017

Phase	Project Number	Name
	00	Pre GF, Putting ideas into action
	1	It all begins here
	2	Ortszeit
	3	Beckenham
	4	Fun Fair
	5&6	CPIT
	7	Book Exchange
	8	Lyttelton Pétanque Club
	9	AFAECS
	10	Chess
	11	Pianos
	12	CAG wall
	13	10 m2 office
	14	Cycle Powered Cinema TH
	14.2	Cycle Powered Cinema (version 2) TH
	14.3	Cycle Powered Cinema (version 3) TH
	15	Dance-O-Mat RS & TH
	15.2	Dance-O-Mat (version 2) RS & TH
	15.3	Dance-O-Mat (version 3) RS & TH
	15.4	Dance-O-Mat (version 4) RS & TH
	15.5	Dance-O-Mat - Disco campaign
	15.6	Dance-O-Mat – Re-vamp RS & SG
	16	Tati
	17	Info Gap
	18	Golf SG & BM
	18.2	The Aalt Verkerks
	19	Projections
	20	Walls
	21	Monopoly
	22	Pavilion
	22.1	Social Soup
	22.3	Café
	22.4	Retention
	22.5	PPV Team
	22.6	Spring Feast
	22.7	Summer Feast
	22.8	Fairy Commons
	22.9	Deconstruction
	23	Re-Entry SA
	24	Ash Keating "Concrete Propositions" CW
	24.1	Ash Keating No.2
	25	Sauna TH
	26	Outreach SA
	27	SVA – Soccer
	28	FALK RS
	29	Audio Trail RRish
	30	Youth Town SA
	31	UPT SA
	32	RAD/CBW (Re-cycling Cycling) RS
	33	Open Source RS
	34	Tess Sheerin's Wall RS
	35	He Tangata SA
	36	Faux Arcadia RS
	37	Youth Town 2 SA
	38	Fundraising (Claire Cowles) CC
	38.1	Birthday Fundraiser
	39	Sound Garden TH
	39.1	Sound Garden No. 2 SA, SG & RF
	40	Kakapo Journey SA
	41	Weavorama (Hannah Hutchinson/Loom) SA
	42	Arcades CW

Phase	Project Number	Name
	43	Steak in the City CW
	44	GF Consultancy RR
	44.1	Fletchers EFR RR
	44.2	Consultancy – Sales HA/RR
	45	Inconvenience Store RR
	46	Youthtown 3 (RAD) SA
	47	Volunteers/Working bees SA
	48	The Commons AP, SG, RS & RF
	48.1	The Commons – Landscape RS & SG
	48.2	Food Collective AP & RF
	48.3	Info Boards SG
	48.4	Food Truck Market AP & RF
	49	Grandstandium RS
	50	Interns CW
	51	Congress RR
	52	Retro Sports BM
	52.1	IFCWC BM
	53	Gimme Shelter SA
	54	Giraffes CC
	55	Hops CW
	56	FESTA 2014
	57	Winter Chill event RF
	58	Daikin Volunteer Day n/a
	59	Artist in residence AP
	60	Gap Cache RM & RS
	61	Wayfinding CW
	62	freiSITE RS
	62.1	Open City RB, HA, SA
	63	Tiny House HA
	64	Soup BM
	64.1	Soup Next Step CD, SG, RW
	65	Commons Shelter RF
	66	Festivals and Spectacles RF
	67	Kids in schools SA
	68	Parking Day SA
	69	Waimari School Performance SA & RF
	70	Bank/Seed Funding BM/RS
	71	Summer Play 2016 TH
	72	Giant Arcade Game / Super Street Arcade RR, SG, DD
	73	Cultural Tour / World Tour / Divercity SA, DD, RW
	74	Kids Kinetic Build / Kids Can Upcycle SA, SG, CD
	75	Guangzhou Project RR, RW
	76	LEOTC Programme SA, RW, RR

Note: Gap Filler # 65 The Commons Shelter Challenge (07/10/15), Gap Filler discontinued this project and did not build the winning entry, The Dock.

Appendix B

A selection of 15 brief project profiles

Gap Filler #01
The first Gap Filler project, 'Gap Filler #01/It All Begins Here' started on the 25 November 2010, nearly three months after the 4 September 2010 Darfield earthquake. The project created an events space on the site of a demolished restaurant and auto electrician in central Christchurch. It ran for two weeks and the space had a temporary garden café, a Pétanque court, live music, poetry readings and an outdoor cinema.

Ortszeit 63 Worcester Blvd – 20 Jan 2011 to 3 Mar 2011 — **Gap Filler #02**
Ortszeit is an exhibition of photographs documenting architectural change in East Germany after the fall of the Berlin wall. Taken by Stefan Koppelkamms, the photographs were brought to Christchurch by Gap Filler and laid out in an empty building site for the public to view.

Beckenham – Stand Your Ground dance performance — **Gap Filler #03**
22 Apr 2011: Stand Your Ground (Improvised Dance Performance) – 276 Colombo Street, Beckenham
Stand Your Ground - An Improvised Dance Performance. Stand Your Ground was a performance installation for one night only by respected New Zealand dancers/choreographers Julia Milsom (ChCh) and Kristian Larsen (Akl), in collaboration with video installations.

Fun Fair – 9 April 2011 — **Gap Filler #04**
The fourth Gap Filler project was a fun fair put together to raise money for The New Zealand Red Cross and Gap Filler. The fair featured craft and bake sales, carnival games, a bouncy castle, sausage sizzle, races and a concert organised by the Addington Action Committee.

CPIT – 23 May 2011 – 2 June 2011: CPIT Design/Build – 19 Ferry Rd & 270 St Asaph St — **Gap Filler #05-06**
Gaps #5 and #6 were the results of a Gap Filler / CPIT collaboration, which ran from Monday 23 May until Thursday 2 June 2011. Two projects led by CPIT students created interactive spaces on empty sites in the central city.

Think Differently Book Exchange — **Gap Filler #07**
The Think Differently Book Exchange is a public book exchange located in a recycled fridge. It is in central Christchurch on an empty site, operates 24/7 and has been running for over five years. The local community has looked after the book exchange when the books and fridge has been damaged. People are able to both place and take books from the exchange.

Lyttelton Pétanque Club — **Gap Filler #08**
The Lyttelton Pétanque Club (or LPC) was a temporary project on the corner of London and Canterbury Streets, in Lyttelton, Christchurch's port town. It was created in July 2011 by Lyttelton locals and Gap Filler. This temporary project sowed the seeds for the permanent project and Albion Square that now fills the space.

The Painted Piano Project 4 Dec 2011 – 2013 — **Gap Filler #11**

The Painted Piano Project was an ongoing, multi-site, art and music installation. Gorgeously off-kilter pianos were located in various sites around New Brighton, Woolston or Sydenham. The pianos were donated by the Christchurch School of Music and painted by volunteers.

Cycle-Powered Cinema — Gap Filler #14-14.3

In 2012 local engineers designed and built ten special stands so that members of the public could generate power while riding their own bicycles. This powered an outdoor cinema which showed a variety of bicycle-themed films across several nights. A series of LEDs strapped onto the cycles' handlebars indicated when the riders were riding fast enough to charge the battery that ran the projector and sound system. A sequence of lights near the screen indicated whether the team of cyclists was generating enough power at any given moment.

Dance-O-Mat February 2012 – Current — **Gap Filler #15-15.6**

The Dance-O-Mat is a coin operated dance floor that anyone can use. An ex-laundromat coin-operated washing machine powers four speakers which surround a custom-made dance floor. To use the Dance-O-Mat, people bring any device with a headphone jack (such as an IPod, phone or Mp3 player) and plug it into the converted washing machine, and insert $2 to activate the power. This project was created in response to the lack of spaces for dance post-quake and local choreographers and teachers also used the floor to work out in the open with their students.

The Pallet Pavilion — Gap Filler #22

One of the most prominent examples of a transitional open space that occurred in Christchurch is Gap Filler's Pallet Pavilion. The pavilion was built from 3000 blue–painted pallets in central Christchurch. It was designed 'like a secret garden' and hosted live music and community events. 'It aims to meet a need in the city given the loss of so many venues as a result of the earthquakes. The pavilion is a showpiece, pushing the envelope in a city that is ready to embrace new ideas […] it hopes to draw people back into the city and to Christchurch as it recovers from the quakes. It is a family friendly venue and something uniquely Christchurch'.[62]

The Pallet Pavilion was constructed between October and November 2013 with the help of more than 250 volunteers and the support of more than 50 businesses. Chosen construction materials were reusable or at least recyclable. Although initially intended for use for a limited period of five months, the organisers successfully ran a fundraising campaign to cover running and maintenance costs for another year, which extended the Pavilion's lifespan. Preceded by a week-long programme of live events the pavilion was de-constructed in April 2014 leaving the site vacant again. The deconstruction of the pavilion was not linked to upcoming permanent redevelopment plans but to operational difficulties and maintenance costs.

The Commons — Gap Filler #48

Gap Filler is based at The Commons in central Christchurch, the former site of the Crowne Plaza Hotel which was demolished in 2012. The Commons is a hub of transitional activity and home to a number of post-quake organisations such as Life in Vacant Spaces. The former Crowne Plaza Hotel site has been licensed for transitional projects and is a partnership-style agreement between the Christchurch City Council and Gap Filler. (http://www.thecommons.org.nz/about/)

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[62] https://gapfiller.org.nz/project/pallet-pavilion/

Retro Sports Facility October 2014 - Current**— Gap Filler #52**

The Retro Sports Facility activates the green space at The Commons (cnr Kilmore and Durham Streets). It features sporting equipment that's available to the public to use daily and regular retro-themed sporting events, as suggested by the public, facilitated by Gap Filler and others (e.g. dodge ball, sack races, croquet and more).

Super Street Arcade December 2016 – Spring 2017**— Gap Filler #72**

Super Street Arcade is more in the tradition of Gap Filler's initial quirky projects. Super Street Arcade is the world's first giant, outdoor arcade game system, which involves participants working together to actively move the giant joystick and jumping on oversized buttons to play the game. The screen is beamed up on a screen on the side of a multilevel building across the street from the game. The game can be played any time, 24/7 FREE to play, and 2-3 players are required. Location: Tuam and High Street intersection, Christchurch. Vodafone Building (exterior).

LEOTC Programme for Schools — Gap Filler #76

Gap Filler is a 'Learning Experiences Outside the Classroom' (LEOTC) provider and runs programmes that are funded in part by the Ministry of Education.

Addendum

The June 2017 iteration of the Canterbury Wellbeing Survey (CDHB, 2017) contained questions regarding the awareness and impression of a number of initiatives (Figure 15) including two Gap Filler projects (*Dance-O-Mat* and *Super Street Arcade*). This Survey is a representative population-based survey, so provides a useful insight into the wider community's awareness and opinion of these projects.

Respondents were also asked to rate their impressions of the community initiatives on a 5-point scale, ranging from 'very unfavourable to very favourable' (i.e. respondents' opinions of each initiative, even if they had not personally used or engaged with it themselves). The following summary is copied (abridged) from the June 2017 Canterbury Wellbeing Survey (CDHB, 2017) and only the two Gap Filler projects are presented in detail. Details for all eight projects can be found in the full survey report at: cph.co.nz/wp-content/uploads/CantyWellbeingSurveyJun2017.pdf

Awareness of community initiatives

In June 2017, respondents were asked about their awareness of eight community initiatives. Note that, while reported together here, these initiatives vary in terms of their nature and scope, for example ranging from permanent 'in place' initiatives to time-limited initiatives focused on specific communities within greater Christchurch. These differences should be taken into account when considering these results. The Margaret Mahy Family Playground was the most widely known of the eight initiatives, with nearly nine in ten residents of greater Christchurch (89%) being aware of it. No other initiative was known to more than half of those surveyed. Just under half (45%) were aware of the 'All Right?' campaign, while nearly four in ten (38%) were aware of the Dance-O-Mat.
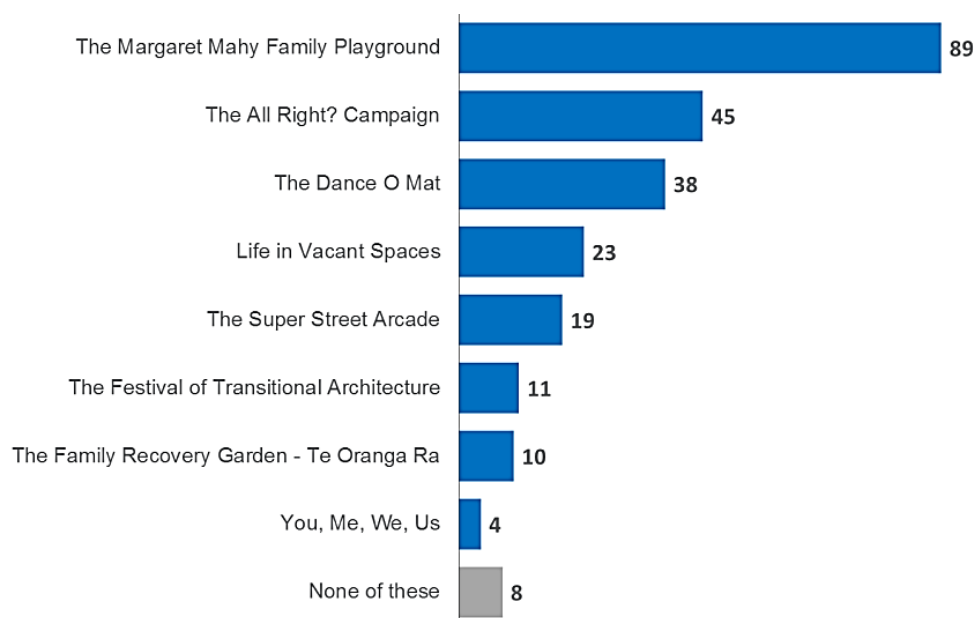
Base: All respondents excluding not answered, and initial online data (n=1493)

Figure 15: Current result – Awareness of Initiatives (%)

Please note: a question recording design issue affected early fieldwork for the online sample. Results for questions about Awareness of Initiatives exclude data for these respondents; hence the total sample base for this subsection of the report is significantly lower (n = 1493) than the total sample base of n = 2549. This issue may also have affected the comparability of results with previous timepoints, for example if those who respond online differ from those who respond in hard copy.

Eight percent of respondents were not aware of any of the eight initiatives. Those more likely to *not* be aware of any of the community initiatives (8%) are:

- Aged 75 years or over (26%)
- Those of Pacific, Asian or Indian ethnicity (24%)
- Those who rate their quality of life as poor or extremely poor (17%)
- Living with a health condition or disability (14%)
- From a household with an income of less than $30,000 (17%) or between $30,001 and $60,000 (12%).

Opinion of initiatives

Impressions of the community initiatives are generally favourable among those who are aware of them. The level of unfavourable impressions was typically around the 1% level, with slightly higher unfavourable ratings for the Festival of Transitional Architecture (at 4%).

Table 7: Current result – Opinion of each initiative among those who have seen or heard of it (% who are favourable or very favourable)

Initiative	June 2017 (%)
The Margaret Mahy Playground	92
The 'All Right?' Campaign	78
The Dance-O-Mat	75
Life in Vacant Spaces organisation	83
The Super Street Arcade	73
The Festival of Transitional Architecture	77
The Family Recovery Garden – Te Oranga Ra	77
You, Me, We, Us	75

Base: All respondents aware of each initiative, excluding don't know, initial online respondents, and not answered

The Dance-O-Mat

Nearly four in ten (38%) greater Christchurch residents are aware of the Dance-O-Mat (a coin operated dance floor in central Christchurch).

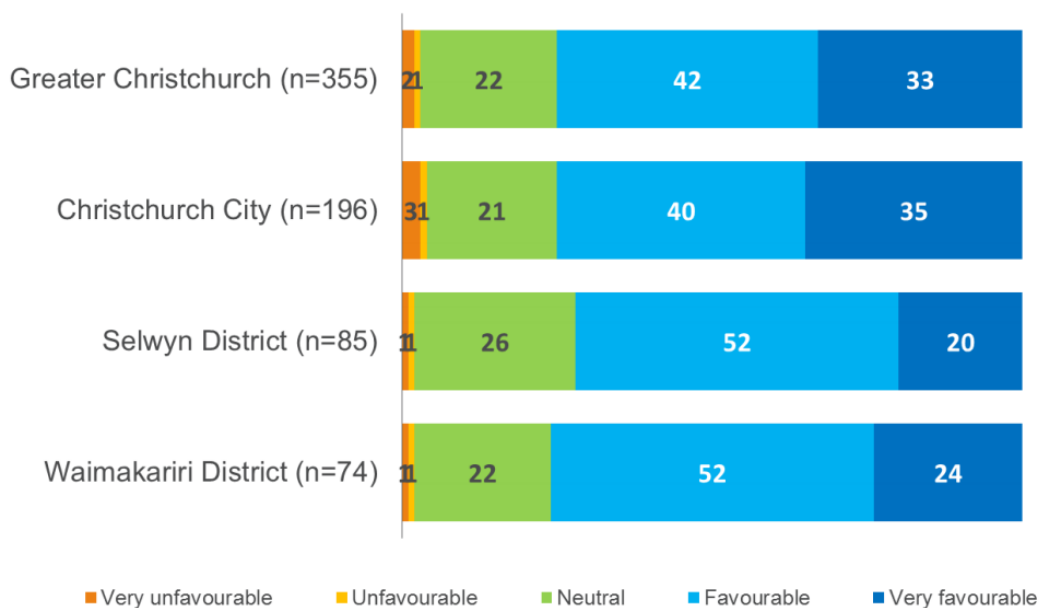Those more likely to be aware of the Dance-O-Mat (38%) are:
• From a household with an income exceeding $100,000 (52%).

Those less likely to be aware of the Dance-O-Mat (38%) are:
• From a household with an income of less than $30,000 (20%)
• Of Pacific, Asian or Indian ethnicity (23%)
• Those who rate their health as fair or poor (25%)
• Aged 65 to 74 years (26%) or 75 years or over (17%)
• Living with a health condition or disability (26%)
• Renting the dwelling they usually live in (30%).

Selwyn District (32%) and Waimakariri District (27%) residents are less likely to be aware of the Dance-O-Mat, compared with those living in Christchurch City (40%).

Three quarters (75%) of those who are aware of the Dance-O-Mat have a favourable impression (Figure 16).

Base: Those who are aware of the initiative excluding those who said don't know , excluding initial online data , excluding not answered

Figure 16: Current result – Opinion of the Dance-O-Mat (%)

The Super Street Arcade

Nearly one in five (19%) greater Christchurch residents are aware of the Super Street Arcade, a giant outdoor computer game in central Christchurch.
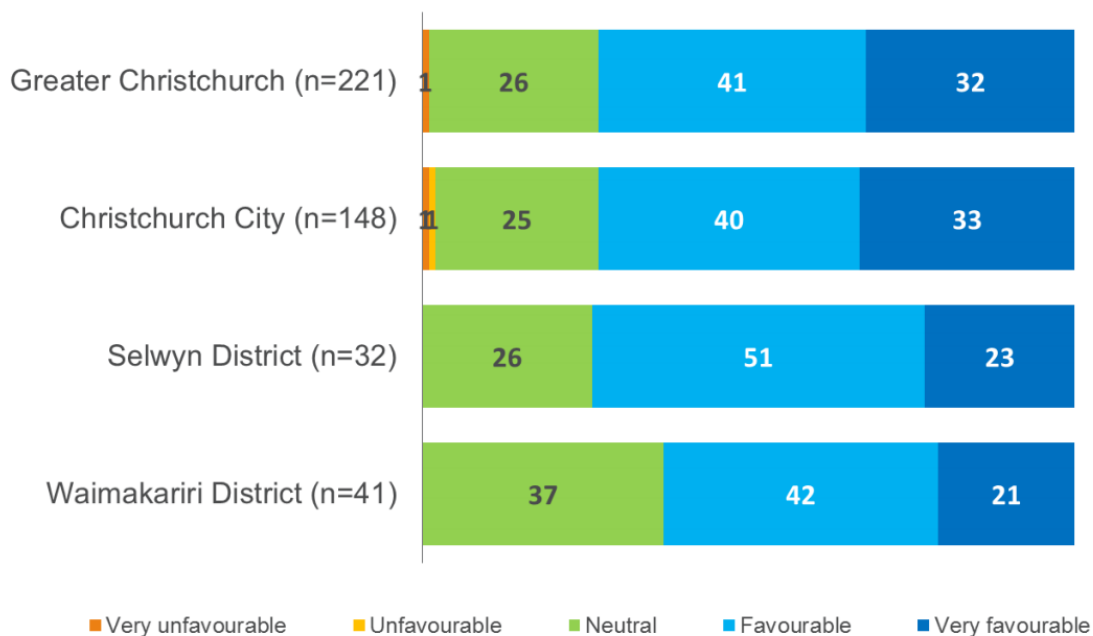
Those more likely to be aware of the Super Street Arcade (19%) are:
• Aged 18 to 24 years (32%).

Those less likely to be aware of the Super Street Arcade (19%) are:
• Aged 65 to 74 years (9%)
• From a household with an income of less than $30,000 (9%)
• Living in Selwyn District (10%)
• Living in Waimakariri District (11%).

Among those who are aware of the Super Street Arcade, nearly three quarters (73%) hold a favourable opinion (Figure 17).

	Very unfavourable	Unfavourable	Neutral	Favourable	Very favourable
Greater Christchurch (n=221)	1		26	41	32
Christchurch City (n=148)	1	1	25	40	33
Selwyn District (n=32)			26	51	23
Waimakariri District (n=41)			37	42	21

Base: Those who are aware of the initiative excluding those who said don't know , excluding initial online data , excluding not answered

Figure 17: Current result – Opinion of the Super Street Arcade (%)

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