



# REFLECTIONS ON RESIDENTIAL REBUILDING AFTER THE VICTORIAN BLACK SATURDAY BUSHFIRES.

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## Abstract

*After the catastrophic 2009 bushfires in the state of Victoria, Australia, the State Government provided information and advice, short-term and temporary accommodation as well as financial assistance to bushfire-affected communities. A tension developed between quickly rebuilding housing and re-establishing known social and economic networks versus a slower and more deliberative process that focuses on long-term community outcomes. Whilst there was a widespread assumption that quick rebuilding would be beneficial, resulting in immediate pressure to do so, it became evident that many people were not prepared to, or even did not want to rebuild. Thus it became important to provide time and support for people to consider their options away from the immediate pressures to rebuild that are often inherent in post-disaster recovery processes. This became known as “holding the space” and included the introduction of interim supports such as building temporary villages and other supports which enable people to achieve appropriate interim accommodation without having to rebuild immediately. However, even two years after the bushfires a significant proportion of people remained undecided whether they wanted to rebuild or not. The post-bushfire experience pointed to a number of lessons including the importance of appropriate timing of post-disaster activities, careful targeting of financial assistance, need for developing better and lower cost interim housing options and pre-impact planning. Given the complex nature of rebuilding following a disaster, design professionals should focus not just on the final house, but also look at housing options that blur the distinction between temporary and permanent. Their designs should be quick to build, offer a good quality of life, be affordable for most and be flexible in design for future use.*

**Keywords:** Bushfire, Rebuilding, Temporary Villages, Victoria.

## Introduction

The 2009 bushfires in the state of Victoria, Australia, also known as the Black Saturday bushfires, saw the greatest loss of life in any bushfire in Australian history. The fires devastated 109 towns across the state, destroying more than 2,300 homes and damaging around 43,000 hectares of land. More than 70 National Parks and reserves were damaged, and over 11,000 farm animals killed or injured. More than 10,100 insurance claims were made, totalling AUD\$1.09 billion (VBRR, 2011).

The rebuilding of residential housing post-disaster in Australia, as in many developed countries, is an owner-driven process. It is expected that private resources such as insurance, loans and savings will provide the primary means for funding repair and rebuilding or another long-term housing solutions (Zhang, 2010). The role of government is in the form of providing information and advice, short-term and temporary accommodation as well as some financial assistance based on eligibility criteria. For catastrophic events such as the 2009

bushfires, the range of activities of the State Government increased to reduce the burden on those remaining within devastated communities as well as assistance from the Victorian Bushfire Appeal Fund.

Catastrophic disaster events, such as the 2009 bushfires, have a wide range of impacts that persist over a long time and these events often highlight the complexity of post-disaster housing policy and programs. Sapat et al (2011) articulate this point in saying, “We find that as a policy issue, post-disaster housing continues to be a ‘wicked’ and ‘messy’ policy problem, exacerbated by unrealistic expectations of governmental agencies.” For catastrophic events in particular, it is clear that housing recovery is not a short-term activity. The issue cannot be left solely to the market and must be considered as a core part of the long-term recovery planning (Zhang, 2010).

Well-considered and deliberative decision-making is often very difficult in the post-disaster environment with the pressure to rebuild quickly (Evans-Cowley and Kitchen, 2011; Olshansky, 2006; Olshansky et al, 2008; Paul and Che,

2011; Zhang, 2010). Many are keen to rebuild quickly based on the pre-existing housing and infrastructure to restore a familiar community, whilst others advocate reconstruction that incorporates new planning and hazard minimisation. Often this tension develops between quickly rebuilding and re-establishing known social and economic networks versus a slower and more deliberative process that focuses on long-term community outcomes. This is particularly worrying when it is considered how important small things may be in the rebuilding process. Following the 2009 bushfires, the Victorian Government was keen to make available a free clean-up program that would seek to expedite the often lengthy clean-up process if the affected community is left to arrange for it themselves. It was clear though to the government that this would only succeed with a people-centred approach that was mindful of the needs of individuals and families more than only focusing on timelines.

The narrative below from a member of the bushfire-affected community in Christmas Hill, expressed at a Community Leadership Forum in 2010, highlights the importance of seemingly minor matters:

*“Our insurance company was efficient. Too efficient. The demolition crew arrived unannounced. Before the government had organised the Grocon [a private developer and construction company] clean-up and before we had a chance to search properly for surviving 'treasures'. My husband discovered the demolition activity by accident, having driven past our property for a quick look. He threw himself in front of the bulldozer to stop them and called me to bring the kids so we could have a quick sift through before they continued. To be honest there wasn't much left after the fires. There was even less after the bulldozer had been through. BUT, incredibly, my eldest son, Jess, spotted a little yellow and brown foot amidst the rock and dirt and the ash. He carefully excavated & pulled out a little china cat. It was one of those \$2 special varieties. I remember thinking when he bought it “Oh great, more rubbish!” But it had survived not only the fire, but a bulldozer and 2 bobcats and it was pristine apart from a couple of slightly charred paws. Well, we took it home and placed it on an altar of other surviving 'treasures'- a molten piece of glass, some burnt crockery and a bent fork or two. That little china cat has no monetary value. But it's true worth is immeasurable. Seeing the look of joy on our children's face when it was discovered makes it more valuable than any Ming vase or valuable piece of pottery.”*

Stories such as this clearly indicate that the process around decision-making and rebuilding is a very important part in seeking meaning and long-term wellbeing, rather than just the end outcome of a house to live in.

## Lack of strong evidence base

These challenges in the residential rebuilding process post-disaster are exacerbated by the lack of detailed studies and information on these often devastating social and physical losses (Zhang, 2010). In the aftermath of the 2009 bushfires, there was very limited information on how long the rebuilding process following a catastrophic bushfire actually takes or any detailed information on how many people would be likely to rebuild. Additionally, there was very little information on whether outcomes for individuals and families are improved if they remain within the community or move to another, less affected community.

Seeing the level of devastation, loss of infrastructure and services, and lack of immediate access to services, it can be easy to hypothesise that it might be beneficial to relocate to less affected areas. It is equally easy to surmise that the benefits of remaining within a tight-knit community where social networks can be maintained and with easy access to the house site during rebuilding. There is evidence to support both of these views (Bonnanno et al, 2010). In reality, the benefits and hindrances for individuals with either of these choices will depend on a range of factors including the services available within affected communities and timelines for personal financial resources, pre-existing issues or resources within the community prior to the disaster, disruption and likely restoration of lifelines, personal factors such as the availability and access to employment, as well as the availability of housing options within the affected community and surrounding areas.

In the absence of any clear evidence either way, it can be deduced that the role of the government is to ensure that there is clear information about the range of options so that individuals can make informed decisions about what is most likely to suit them. It is most important to realise that this decision may change over time and so it is important to continue to provide this support in the months and years following the event. Where additional government or other donated assistance is available, there may additionally be the opportunity to provide tailored local accommodation options.

Further research is thus needed into the outcomes for individuals and families affected dur-

ing the 2009 bushfires and whether this will indicate any benefit to either remaining within a community or moving to another community. Arguably it is likely to be more important whether the people felt that they had a range of options and were in control of their decision (whether to remain or move elsewhere) that is the strongest determinant to long-term mental health and wellbeing, rather than the actually choice itself.

### **Certainty about rebuilding**

The pressure to rebuild, real or perceived, are often encountered by affected people from friends, donors, the government and media. It was found in many conversations with people considering their options after losing their home that they felt they would be letting down the community and the broader society who had donated money if they did not rebuild within the community; whether they thought that this was in their own and their families' interest or not seemed of less consequence. They experienced pressure to quickly make decisions that would impact on their lives for many years to come.

There often appears a pre-conceived idea within the government and media that anyone who has lost a house to a bushfire (or other natural disaster) will naturally want to rebuild. There seems to be little thought about whether these people have ever built a house or ever had a desire to build a house. This is not limited to bushfires in Australia. A resident in Kansas, USA, who lost their house in a tornado in 2007 stated, "With stunned minds, we began trying to decide what to do next. Ray did not have the mental and emotional energy to rebuild. I clung to the thought of rebuilding for a while, but to be honest, the last thing that I'd ever wanted to do was build a house" (Paul and Che, 2011).

A common story that can be heard in many of the bushfire-affected communities was of elderly couples who had established extensive gardens over decades and had no inclination (and perhaps no longer the physical strength) to re-establish their gardens. There are other similar reports, some from bereaved people who did not wish to consider rebuilding on the site where loved ones had perished, and also from many others who never thought that they would regain the lost sense of safety and security within their community, and also a number of other people who had tentative plans to move out of the community prior to the fire and saw this as an opportunity now to act upon those plans.

In the rush to help people re-establish their lives, governmental and other agencies should be cautious that people are allowed time to consider

their options and choose what they consider best for themselves rather than feeling forced into rebuilding either through perceived pressure or the assistance that unduly focuses on rebuilding rather than other long-term housing options. In fact I would argue that the role of the government, Non-Governmental Organisations (NGOs), as well as built environment professionals is to assist people in realistically considering the range of options open to them rather than advocating any specific and defined outcome. This approach of providing time, space and support for people to consider their options is well described by a community worker as "holding the space" (River, 2013).

### **Approaches to "holding the space"**

The idea of "holding the space" is to ensure that immediate needs are catered for (such as short term or temporary accommodation, access to support and advice as well as immediate financial assistance where required) whilst providing time and information to allow an individual or household to make informed decisions about what might be in their best interest. Making informed decisions will involve having access to a range of information. Direct advice such as legal, insurance, financial and building advice can be made available through specialist advisers or pro-bono services, but it can often be difficult to mark the importance of this advice prior to individuals making decisions. Rebuilding advisors engaged after the bushfires remarked, often despairingly, that they were often asked for advice only after people found themselves in trouble after previous decisions.

Many residents were also concerned about what the community would be like in the future as they were considering whether they wished to rebuild. Although this is next to impossible to predict, some processes work to establish a shared vision and provide an opportunity for residents to understand how that vision may look. In Marysville, one of the most severely affected towns, a workshop was conducted to prepare an Urban Design Framework for the community and surrounding townships. This allowed residents to be actively involved in shaping the future direction of the township. A key element of the workshop was the involvement of urban designers who were able to illustrate what these hopes and ideas may look like and to give a better sense of the future community (see figure 1).

### **Temporary accommodation**

The Victorian Government decided to develop a



Figure 1. An illustration showing a future vision of the town of Marysville after rebuilding.

number of temporary villages to provide additional housing options within some of the most significantly affected communities. The idea of temporary villages was not part of any pre-existing planning and was developed primarily in response to the desire of the community of bushfire-affected Flowerdale town to have a village there (VBRRA, 2011).

Following further community consultations, two more temporary villages were established, one in Marysville and the other Kinglake were opened. Further units were also built in Whittlesea town. At their full capacity in April 2010, 314 people resided in the temporary villages and the final residents moved out of the villages gradually during 2011 (Flowerdale & Whittlesea) and 2012 (Marysville & Kinglake). The time pressures of getting the villages, the community and service infrastructure quickly established without any prior planning meant that there was little time to consider the most suitable or cost-effective solutions or what would be in the best interest of the community in the long term. It was also difficult to know how many people would eventually utilise the villages and it was therefore important to plan the villages to expand as required. Nonetheless, for many of the people who stayed at the villages, it was a positive experience, as captured by a resident: "It [the temporary village] was the best ever thing that happened after the bushfire. It really kept our community together."

It is important to note that temporary accommodation support cannot be successful in isolation and requires a cohort of other supports to

be effective. Extensive communal facilities and activities were put in place in the temporary villages. While people resided at the temporary villages, housing workers worked closely with them to develop housing plans and to maintain a focus on attaining more permanent accommodation. Regular meetings with residents ensured that critical issues could be addressed before they could create further stress. These included ideas from residents to install backyards and pet enclosures, television antennas, wireless internet and a games room at Marysville and Kinglake.

### *Wider support*

For those remaining on their blocks, a range of other initiatives sought to provide assistance. These included:

- A property clean-up program that cleared a total of 3,053 properties with 98% of these properties cleared within the first 18 weeks. The program was designed to meet community-wide health and safety objectives as well as providing support for those who required demolition and clean-up services. The coordinated service reduced the risk of demand for suitably qualified demolition contractors that would have driven up prices for individuals. The program's main success came from an extensive engagement program with each property forming a separate contract. This allowed the contractors to respect each owner's timing and site-specific requirements.



Figure 1. An aerial view of the Kinglake temporary village (source: Johns, P. 2010).

- A temporary toilets-and-showers program involving the provision of over 450 units delivered to properties and subsequent cleaning and disposal. This initiative supported people who chose to remain on their blocks, assisting them to maintain a higher level of hygiene than may otherwise be available. The program was initially envisaged to remain in place for 12 months, but was extended twice to meet the needs of those still rebuilding with further options for people to continue the contract beyond the end date of March 2011.
- A rebuilding advisory service was established based on the advice of the building industry to provide general building advice and to assist people in navigating the rebuilding process. Two teams of roving advisors were employed who could provide advice face-to-face, over the phone or by meeting people at their homes or blocks. The service proved popular with support provided to nearly 1,000 households through 4,300 consultations as of June 2011.
- Many other forms of support were also available such as surveying support, the provision of communal laundry facilities and many not-for-profit agencies supporting with block clean-up and maintenance.

## TRANSITION AWAY FROM THE VICTORIAN BUSHFIRE RECONSTRUCTION AND RECOVERY AUTHORITY (VBRRA)

The Victorian Bushfire Reconstruction and Recovery Authority (VBRRA) was formed after the 2009 bushfires by gathering together professionals with relevant skills from different government departments. After actively supporting the post-bushfire recovery process, VBRRA ceased operations in June 2011 after almost two and half years and a small unit, the Fire Recovery Unit, was established to carry on the support to communities still recovering from the fires. It was initially considered that after two years most of the residential rebuilding would be complete or nearing completion and that the role of the Unit would focus on referral, community capacity building, advocacy and ongoing monitoring.

Status	%
Rebuilt Onsite	43.6
Permanent Offsite	37.0
Temporary Onsite	10.4
Temporary Offsite	9.0
<b>TOTAL</b>	<b>100</b>

Table 1. Percentage of post-bushfire households by housing status (source: Fire Recovery Unit, 2012).

Intentions	%
Currently Rebuilding	38.1
Converting temporary structure into permanent dwelling	1.5
Intend to rebuild, not yet started	32.1
Undecided/Unknown	28.3
<b>Total</b>	<b>100</b>

table 2. Percentage of households in temporary accommodation by intention.

However, a telephone survey conducted in 2012 indicated that whilst 80.6% of 1,380 households who were able to be contacted were in permanent accommodation, 19.4% were still in temporary accommodation (see table 1) (Fire Recovery Unit, 2012).

Of the 19.4% in temporary accommodation, a little more than one third were currently rebuilding, another third were intending to rebuild but not yet started, 1.5% were converting a temporary structure. However, 28.3% remained undecided after over two years since the bushfire ( see table 2).

This survey was the first extensive one indicating the housing outcomes for those affected by the fires and highlighted the lengthy process encountered by many of those rebuilding. This lengthy period of time in temporary housing for some people raises the question whether the focus on the provision of housing as temporary is in the best interest of individuals. The approach to Hurricane Katrina in the USA saw the development of the 'Katrina Cottages' in a variety of styles as temporary housing that could be incrementally extended over time. This initiative sought to blur the distinction between temporary and permanent housing, providing a reasonable quality of life and appropriate for longer term habitation or incorporation as a core model into a larger house.

## CAN WE BE DOING THIS BETTER?

In reflecting on the above issues and the challenges for people rebuilding after natural disasters such as the 2009 bushfires, the following considerations should be taken into account by agencies, governmental or otherwise, that seek to assist post-disaster reconstruction in Australia and similar contexts:

- It is very important to get the timing of activities right and this could be enabled by comprehensive prior planning for post-disaster rebuilding. It makes sense to provide support for re-surveying of boundaries prior to people replacing fences but most people, concerned about stock welfare and public

liabilities, replace fencing as one of the first rebuilding activities. A number of people later finding out after some months that the previous fence line was actually on the neighbours' property just adds to stress and costs. This timing of activities includes having advisory services available early on when people are making critical decisions.

- Financial assistance whether government or appeal funds presents difficulty where the process is bureaucratic (long timelines which do not work well with tight building schedules), resulting in lack of focus on long-term housing outcomes, unless targeted specifically to individual household needs. How such targeting can be done effectively is worthy of much more research.

- Better interim housing options are required that seek to protect the capital of those rebuilding. Some evidence of people spending a significant amount of money on making a shed liveable for which they will never be able to obtain a building permit suggests the importance of advice and support for interim solutions. For example, a community in the bushfire-affected town of Strathewen organised highly mobile 'holiday cottages' that maintained some resale value and were more comfortable and accessible than a caravan.

- Options and advice on lower cost intermediate housing options that can develop into long term housing can prove valuable after a disaster. The idea of commencing with a core housing module that is sufficient for immediate needs and is economical and that can be further developed as time and money becomes available, a concept that has been applied in other countries, is worth exploring in the Australian context.

- There is a need for robust planning prior to events. Pre-impact planning for housing recovery when a disaster occurs is needed to be able to coordinate the wide range of supports, services and policies required to support people in the endeavour to rebuild or find other long-term housing options

## Conclusion

The complex nature of rebuilding following a disaster means that there will never be any easy solution to these complex housing issues. There will also remain a requirement for a suite of initiatives to cater for the range of needs and to best enable individuals to determine how to achieve a long-term housing outcome that is in their best interest. The rebuilding of housing should not be seen as a race and the outcome should focus on individuals and families choosing the right option for long-term housing rather than focusing solely on rebuild-

ing destroyed houses. The lengthy period of time that many people remain in temporary accommodation should force a rethink of marginal on-site accommodation in caravans and the provision of options that allow a reasonable standard of living for a longer period of time.

Amongst the suite of support from the government and NGOs, there exists an opportunity for design professionals and architects to not focus just on the final house (which may be unaffordable and not appropriate amongst the difficult post-disaster decisions), but to look at housing options that blur the distinction between temporary and permanent. Such designs would be quick to build, offer a good quality of life, be affordable for most (reducing the dependency of individuals on extensive government or donor support) and be flexible in future use. By considering the lived experience of disaster, the rapid need for some form of accommodation, often limited financial resources, designers can assist those who are most in need.

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