

Climate, Community and Capacity.

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Why would a fire service invest in building social capital?

Abstract

In many locations across the nation, there are clear links between volunteer brigades and the communities they serve. In fact, often the value of emergency service organisations in many locations is not response activities, but the intangibles provided by having the last remaining organised infrastructure in many communities. It is hypothesised that to have a strong brigade you also require a strong community. Therefore to have sustainable brigades and viable volunteerism it could be more important in some cases to focus on community strength in order to improve brigade strength.

Two separate issues will be used as examples to demonstrate and test this hypothesis. These issues have been challenging emergency service organisations across Australia for a number of years now – the first being the issue of declining volunteerism in the sector and the more recent issue, particularly in Victoria being the impact of drought on the availability of volunteer resources.

The steady decline in volunteer *capacity* and *capability* in rural Victoria is not measured only by numbers, but also in the demographic changes occurring in the volunteer ranks. There are several issues facing CFA, one of them being the demographic shifts brought about by farming economics:

- As the average age of the farmer gets higher, so does the average age of the rural volunteer.
- The migration of youth to the cities is also affecting the capacity of CFA to attract and retain new members with the capacity and commitment to remain.
- Small farms continue to be amalgamated into multi-national big farms, reducing the number of workers and therefore reducing the volunteer pool.

CFA is conducting research into the volunteer work/life balance, their relationship with their local communities and the impact of external environmental factors such as drought. The drought continues to impact on the volunteer capacity to support CFA, even with the peak fire season now over:

- Increased hardship on drought affected farm land is limiting the time community members have available to volunteer organisations such as CFA.
- Farmers having to work second jobs are now working away from their traditional community base and unable to support their local brigade in the way they could when on the farm.

In light of these issues, CFA is undertaking social research in order to better understand the needs and expectations of the CFA volunteer and to position CFA to partner with other governments departments involved in the delivery of community strengthening programs. This work will be best achieved *across agencies* in order to assist volunteers to remain *viable*, both in their daily lives as members of their local community and as CFA volunteers.

This paper will consolidate the findings of several CFA research projects conducted in 2006 and 2007 and provide strategic options to address, in particular, the issues in Victoria but will have application beyond Victoria.

Delivery of this paper to a wider audience will also provide useful information to other agencies who may be facing similar issues.

In the beginning...

On 6 February 1851, Black Thursday, 15 people died, 5 million hectares of Victoria burnt and the Victorian community struggled to save lives and properties. Three years later, driven by community need, the first volunteer fire brigade was formed. These brigades were built on community needs and the clear link between brigades and their community is the foundation.

On 6 December 1944 the Country Fire Authority (CFA) was formed by an Act of Victorian Parliament, driven by a desire for state level coordination of the community-built fire services scattered across Victoria. In the sixty years that have passed since, CFA has evolved into a complex multi-faceted and sophisticated statutory authority.

Today there are still fires, *and* the community still reacts and responds either as volunteer members of CFA or as members of the community, who choose to stay and defend their homes – but the capacity of the community to respond is affected by an increasingly complex range of environmental changes, social impacts and economic realities.

Developing a better understanding of how a community prepares for, reacts, responds to and recovers from a wildfire – is one of the challenges facing CFA today. In fact, we need to recognise that there is greater impact beyond the emergency and that decisions and actions taken before and after an event will greatly affect the pace at which the community returns to ‘normal’. In simple terms, we need to take a systems approach to understanding and maintaining viable brigade and to sustain volunteerism into the future.

Who does CFA define as *community*?

Traditional concepts of community in CFA have been based on the sharing of a common set of risks; therefore a community becomes geographic by definition. For example – it is often stated that the northern face of the Dandenong Ranges in Victoria is one of the three most ‘at risk’ communities in the world in relation to wildfire, due to the combined factors of aspect, topography, fuel, weather and land occupation. Frequently, a community becomes defined by its location and proximity to a risk.

Having recognised that they share a common risk, members of the affected community interact with each other to work our ways of dealing with the risk – individually and mutually. These interactions start the formation of local community networks.’

Using concepts put forward by several researchers that a community may be better understood by its networks; we have now begun to reinterpret our communities using social rather than geographic descriptors. Factors such as access to support, local knowledge networks, shared risk experience and how long someone has lived in the one location become the new definitions of community in relation to risk.

One of the most important assumptions about organisations such as CFA with a high volunteer base, is that the CFA brigades are an integral part of the communities they protect, and as such are one of the network hubs that enables communities to exist. With close to 60,000 volunteer members in communities across Victoria, CFA is well positioned to learn more about those communities by learning more about the members of our brigades and the networks to which they belong.

There is significant independent research on the significance of the link between CFA brigades and the community they serve. For example, the following extracts from interviews undertaken as part of independent research by Lewis Hughes¹:

¹ Lewis Hughes is undertaking research work on behalf of Emergency Management Australia as part of a PhD program. The purpose of the research is to address the issue of making the most of what people know and can do within a volunteering environment.

“... the thing that holds a little town together is the CFA and the local footy club if they still have one. And so, to some extent, if it has got down to that, then the **CFA becomes a social event as well as a bit of glue** [emphasis added], I suppose, within the community. And so that starts to broaden the bounds of what it [CFA] is about. It is not just about moving to response. **It is about something that helps to hold the community together** [emphasis added].”

“... especially smaller rural communities – the CFA, or the brigade, can also have a social impact ... you are doing something worthwhile for the community, but you also **strengthen the social network of your community** [emphasis added]. It goes a long way towards making people feel valued and part of what is happening.”

The research findings are showing us that there are many benefits to both the CFA and the community coming from volunteerism. The obvious ones being such tangible benefits as having trained and available firefighters to respond, and perhaps the not so obvious ones being the ‘intangible’ benefits that come from social networking and association through CFA membership.

In fact, it can be argued that the benefit of many of the brigades is in the intangible networks. The formal organised structure of a brigade encourages the development of social cohesion, community building, and social interaction.

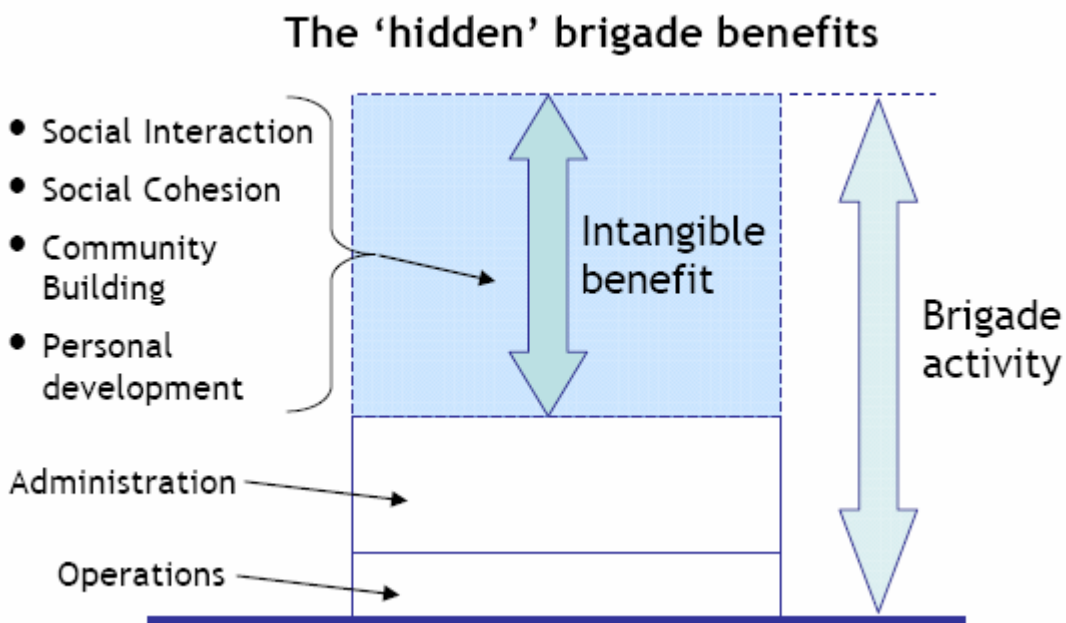


Figure 1. Representing the intangibles

Figure one represents a typical cross section of CFA volunteer fire brigade activity. The operational element of brigade activity (responding to emergencies) varies from 5% to 8% of total activity; this is based on data gathered at busy metropolitan fire brigades. This compares favourably with similar data collected for the Ambulance Services where life risk emergencies represent approximately 10% of all calls. The administrative, preparedness and maintenance activities in a brigade are usually more than the operational activity. Combined – these two activity elements do not represent the whole of brigade activity, they are merely the tangible elements.

The intangible benefits of brigade activity come from the association brigade members have with each other and their extended communities through the brigade. It must also be recognised that leaders in brigades are often leaders in other areas within their communities. These ‘intangibles’ represent the bulk of brigade activity in many brigades.

The ‘feelings’ of belonging and development of social networks through volunteer brigade membership are often as a result of change in the external environment, where in remote rural communities there have been a reduction in other community infrastructure and services, such as:

- the withdrawal of banks and post offices (now a franchise),
- no municipal infrastructure due to the amalgamations and contracting out of services,
- the amalgamation or complete loss of the local sports teams (e.g. football, tennis) due to aging and declining population²,
- the increasing size of farms to be economically viable,
- closure of schools (both public and private e.g. Hill End, Tatong, Purnim, Ouyen),
- loss of social facilities (e.g. cinemas, town socials),
- etc.

Many of the services we take for granted in major cities are now non-existent in many rural communities. The remaining services such as CFA brigades are becoming more important in these communities as they continue to serve as one of the few remaining physical locations for social interaction.

Coupled with the socio-economic impacts on rural communities, the expectations of the more urbanised communities we serve are increasing. These communities often don’t volunteer as readily as their more rural counterparts. The need to support your community is not recognised in the more urban environment, where the common expectation is that services such as fire brigade response is ‘some else’s problem’. These issues are threatening the viability of structures that have previously been central to the fabric of the community.

When combined with the other significant issues in our changing world such as our declining and aging of populations, greater understanding and research is required to ensure the ongoing sustainability of brigades and viable volunteerism.

CFA is undertaking social research to determine if brigade members reflect the demographics of their community and how ‘networked – or linked up’ our volunteer members are in their communities. This research has been developed to provide quantitative data in support of existing qualitative information. In particular the objective of this research is to establish the:

- representativeness of the CFA membership compared to the Victorian community, ie how closely does the brigade’s demographics represent the whole community demographics, and
- connectedness of the CFA membership with local communities, ie what other formal and informal relationships do members have with other community groups. How far does their influence within their community stretch beyond the brigade?

It is particularly important to understand the intangible benefits embedded in brigades because many brigades do not have high levels of response activity and their contribution to the community through ‘social cohesion’ is probably more important. The social aspect of brigade membership is important to the attraction and retention of volunteers.

² In 1911, 43% of Australian lived in rural areas, this progressively declined to 14% by 1976. Between 1976 and 1991 there was a slight increase in the number of people living in rural areas, but the 1996 census indicated that the rural population had again declined as a proportion of the total Australian population.

It is hoped that one of the outcomes of the research will be a better understanding of how to:

- successfully recruit and retain volunteer members in an increasingly competitive market for volunteer time. If there is evidence of the benefits of CFA other than ‘getting a uniform and getting to ride a fire truck’- then this can be used to enhance the volunteer recruitment program.
- Influence government to better support volunteers and volunteerism within Victoria
- Build and develop communities
- Ensure viable volunteerism and sustainable brigades
- Underpin the transition from emergency service to emergency management

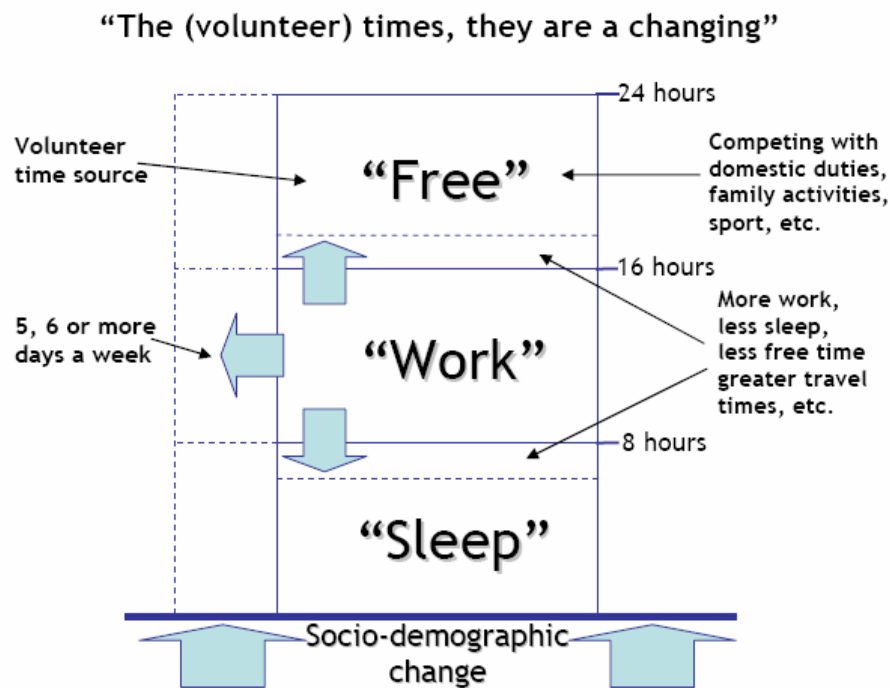


Figure 2. The changing work/life pattern

Figure two illustrates the pressures on the traditional ‘eight hours work, eight hours sleep, eight hours play’ daily pattern influenced by socio-demographic change, increased work hours (and days) and competition for leisure time. The traditional volunteer time source is leisure time, so choices made around leisure time will depend upon the value ascribed to those choices by the individual.

Therefore, to continue to recruit new CFA members we need to not only understand the intangible benefits of volunteer membership of a CFA brigade, but also to develop strategies which support and promote these benefits to the broader community.

How did the survey work?

The first step in this research program involves using a survey tool to capture quantitative data in order to make comparisons to other survey finding from other organisations. The survey conducted in June 2007 surveyed 1120 CFA volunteer members with 648 responses (57%) responding to questions about their level of involvement, representation and connectiveness in their local communities.

The survey gathered CFA brigade level demographic data to compare with Australian Bureau of Statistics (ABS) data (at Census Collector District – CCD level) in order to identify any similarities or differences between the demographic make up of CFA and their community. The second part of the survey gathered data on volunteerism, community perception and community satisfaction in order to compare with data gathered by the Victorian State Government’s ‘Department for Victorian Communities’ (DVC).

A preliminary analysis of the survey results has shown that contribution to a volunteer organisation within the community can be seen as the key factor to building and maintaining networks within the community, and that becoming or being a CFA volunteer is one of the ways of building these networks.

For example – 54% of the CFA members surveyed are also volunteers in their community in another capacity. This is interesting when it is compared with the overall figure for the state from the DVC data indicating that 39% of the general community is involved in volunteer activity³. By being a CFA volunteer *and* volunteering elsewhere, these people are creating the strong networks and links across their communities.

When other community activity through either membership or leadership involvement undertaken by CFA members was explored further, it was found that a high proportion of the activity was sporting club involvement (48%) followed by church (28%), landcare (24%) school (22%) and Victorian Farmers Federation membership (21%).

This is only one part of the network within the community that explores the relationships between CFA members and other community groups. Further study of selected communities to determine the full extent of the networks that form them would be even more revealing. This is planned as the next step of our journey.

The other interesting result was the comparison between CFA members who have attended a local community event in the last six months (77%), and the same DVC data (63%) suggests that CFA volunteer activity leads to a greater participation in the social events within the community, not just the emergency events.

Our aim is to build on the network knowledge with further research using other methodologies. This will add to our knowledge of communities and help develop programs that support the goals of CFA to build “safe, self-reliant, resilient and strong” communities by working *inside the communities* with local leaders and key members - the ‘network hubs’ as they might be called.

As well as recognising the links within the community that brigades are part of, it is also the recognition of the *intangible benefits* provided by a volunteer fire brigade in a local community that has become the focus of much of our research. The traditional role of the fire brigade in protecting the community remains at the forefront – but there are some other things worth considering:

- CFA has over 1200 buildings where members of the local community can socialise, share issues and provide support to each other. Where they exist in CFA these facilities are often used for a variety of community activities such as municipal meetings, Victorian Farmers Federation meetings, Rotary meetings, Land Care meetings, art classes, children’s playgroups, craft classes, activities to promote social interaction with the youth of the community, dance classes, etc. This infrastructure can therefore provide a focal point for community activities.
- CFA members provide services to the community outside of emergency response. You will often find them working as car park attendants at local events (admittedly this is often a fund raising exercise for the brigade) or driving Santa around town on the fire truck on Christmas Eve to deliver sweets to children.
- In many cases the station is the last piece of public infrastructure left in the community. Following the closure of schools, the rationalisation of banks, the amalgamation of councils, and the loss of post offices – all that is often left as a ‘representative structure’ of support for the community is the station.
- As the catalyst for social interaction and cohesion, these gathering can be used to share and ‘sell’ the preventative messages and be used to build community sustainability and resilience.

³ Indicators of Community Strength: a framework and evidence, Strategic Policy and Research Division, Department for Victoria Communities

CFA brigades provide more than firefighting capacity to communities – they contribute to the social capital.

How can CFA build *social capital*?

CFA has recognised the need to invest in building social capital. It has been recognised through CFA's Corporate Strategy 2007/08-2010/11. In particular Corporate Goal 2 is '*Build and Strengthen Self-Reliant, Resilient Communities*' and as an objective of Goal 2 '*CFA will establish a quality reputation for its contribution to community strengthening; whilst researching opportunities to collaborate with other government agencies and departments on community strengthening outcomes*'. To underpin Goal 2, CFA is developing a broader picture of the value of volunteer brigades in the community, in providing social networks and community infrastructure. We can build on both of these assets to build the communities social capital.

Recognising the synergies that exist between State Government agency services in communities and partnering with those agencies has already produced tangible benefits. CFA entered into an agreement with the Department of Victorian Communities (DVC) to 'partner'⁴ in the enhancement of CFA station facilities to provide better services to the community for a wider variety of uses. The sites for the 'partnering' initiative were chosen based on isolated and/or disadvantaged rural communities where CFA could not justify the infrastructure expenditure on its own. . The partnering between CFA and DVC also includes a third important component – that of the local community as an equal partner with the two agencies in the process. The agreement provides both project management and funding support from DVC and CFA to communities in need of facilities.

The aim of the 'partnering' agreement is to encourage the local community to drive the project and gain local support, and for DVC and CFA to provide the additional support required to complete the project. The focus is on community ownership of the project and the outcomes, to ensure that the community invests in the project.

One of the first sites to benefit from this project is a fire station called 'Crossroads' located in Western Victoria, 55 kilometres west of Ballarat. The fire station is the only building in the area, and services a community of around 145 residents. Community meetings held at the Crossroads fire station have identified a number of groups in the area that wish to use the proposed enhanced facility, and are providing support to the project.

These groups include:

- Pilates health training
- Local community physical and mental health and well being programs
- Local aerobics and circuit training
- Veterinary workshops and farm discussion meetings
- Family day care
- Local council community meetings
- Local farming federation branch meetings
- Department of Primary Industries (DPI) training seminars for farmers

Therefore Crossroads stops being 'just a fire station' and becomes a facility providing a venue for improved community physical and mental health, greater knowledge sharing through training and seminars and a greater community voice in local government. This the essence of network development and of growing local 'social capital'

The obvious tangible benefits are the provision of physical resources for these community groups to use in order to function, but the intangible benefits will be in the increase in community capacity and social capital through the networks and relationships built as a result of the project.

⁴ The Department for Victorian Communities (DVC) and Country Fire Authority (CFA) joint funding agreement signed by both parties in July 2007. This is a formal agreement to 'partner' for the purpose of strengthening Victorian communities and ensuring they have access to good quality facilities through the redeveloping of CFA buildings to add Multipurpose Community Facilities

Crossroads is the first of what we hope will be many more projects that work with CFA, state government and the community to determine specific local needs, and then help the community to build the resources to service those needs.

What *environmental impacts* do CFA and community members face today?

Simply – Weather and climate change – drought and flood. And associated impacts such as salinisation, land degradation, loss of habitat, local threatened species, commodity prices, collapse of trade agreements, tighter credit, farm amalgamation, more expensive fuel, less sympathetic financial institutions, servicing debt, cost of water or hay, health deterioration such as obesity, diabetes, heart disease!

These impacts are important, as the volunteers and their brigades do not operate in isolation to their community and other external factors eg economy, climate, world trade, fuel prices. Therefore, there are clear links between external factors and the health and viability of individual brigades. Hence the assumption of brigade and community strength being intimately linked.

What does drought do to CFA?

The single biggest impact on CFA volunteer member capacity in the rural sector is the impact of the drought. This event not only reduces the capacity of CFA members to respond to emergencies, but it impacts on their daily lives as members of their communities. And the various impacts of drought are not isolated – they are cumulative.

Drought has an obvious environmental impact. The lack of water creates a dryer forest which therefore provides more dry fuel for more intense longer duration fires in Victoria. This puts pressure on CFA volunteer members to respond to fires more frequently, and be at those fires for longer periods of time.

Drought has an impact on volunteer capacity and capability. During the 2006-07 campaign fire in Victoria, around 1.1 million hectares of land was burnt over 69 days. Of the 19,000 firefighters and support staff involved in combating the fire, 14,000 of them were volunteers who contributed most of the 2.5 million work hours of fire fighting it took to stop the fire.

This sort of support has occurred in the past, most recently during the 2002-03 campaign fire, but it is becoming more difficult to provide such a level of sustained volunteer support each time there is a major fire. The 2006-07 fire tested the limits of rural volunteer availability during a drought.

Many of those volunteers are farmers in rural Victoria who have been affected by drought on their properties, so the capacity of those members to leave their farms and attend fires is already reduced by the need for them to be on the farm to hand feed stock – or just in case it does rain and they can get a crop in the ground. As a result – the traditional five day tour of duty at a major fire was compromised, and many volunteers could only provide one days service. This meant a massive increase in logistical support to the campaign fire, moving a greater number of personnel to and from the fires each day.

There is the associated economic impact of drought that reduces both CFA volunteer and community capacity. Many farmers are working other jobs off the farm to get an income and cannot leave work to respond to a fire. Many others are making tough decisions about their capacity to support their brigades based on what it costs them. Research in the North West of Victoria conducted last year by CFA found several examples of drought induced economic hardship that was impacting on brigades.

One member in particular stated:

'It's getting hard to justify the petrol it costs me to turn out from the property into town for a fire call, especially when it turns out to be a nothing job or a false alarm, that just makes it worse.'

Thirdly and most importantly is the social impact of drought on rural communities. Faced with a bleak future and limited options, farming families are suffering depression and in some cases individuals are suiciding as a result. These tragic events seriously impact so many members of those communities because of the very networks we value that tie the community together. To support volunteers and their community, all CFA field staff in North West Victoria has been trained in Mental Health First Aid. This program assists in early identification of issues and the implementation of appropriate support.

In the North West of Victoria, CFA recognised the potential impact of drought on its members and have been working across rural Victoria providing awareness and support to communities affected by drought in order to reduce the impact and provide appropriate support and maintain a level of *sustainability and resilience* in the community.

CFA established a pilot project called the 'Volunteer support service awareness program'. This project successfully received funding under the Valuing Volunteer Emergency Service Workers Program and to date there have been 35 awareness sessions delivered to approximately 1500 CFA members and their families in communities across western Victoria. This program continues, with awareness sessions ongoing and a steady rate of CFA members or their immediate families contacting CFA for support.

Another CFA project aimed at building community resilience in the face of drought was the 'cultivating viable communities' event held in the town of Wycheproof. This event was organised by CFA for members of the rural communities surrounding Wycheproof, it was supported by State Government agencies, women's groups, landcare groups, local banks and farming co-ops – who were all on hand to provide advice and support. The day attracted close to 300 people, children were entertained by the Salvation Army and everyone was fed by CFA.

The event provided community members the opportunity to come together, learn more about what they could do together in the face of drought, and what support was available.

So what does this sort of event have to do with fighting fires?

Once again – this is about CFA recognising a risk to the viability of the volunteer brigade with an impact on both the CFA and broader communities' capacity, and then taking action to address the risk by bringing communities together to build resilience.

Why is this important for *Emergency Management*?

It is pertinent to ask what does an understanding of community, social capital and building social cohesion have to do with CFA? As CFA moves from an emergency service into a broader emergency management agency across the full PPRR (Prevention, Preparedness, Response and Recovery), it will need a detailed understanding of community resilience and sustainability.

This will require new capacity and capabilities to engage with and develop communities. This requirement was recognised through the recent adoption by the Council of Australian Governments (COAG) of the Report "*Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements*" (and its Recommendations), signal a national move toward the more comprehensive model of Emergency Management, although 'technical' response to emergencies remains a central requirement. As part of these recommendations, the COAG Report also endorsed an integrated 'whole of government' approach to emergency management problems (including the social and economic aspects),⁵ with this model being adopted by state governments, (that is more high-level interagency coordination is required).⁶

⁵ High Level Group (2004). *Review of Natural Disaster Relief and Mitigation Arrangements*. Commonwealth of Australia, Reform Commitment 3 - Develop, for each level of government, a natural disaster mitigation strategy to be implemented by the Commonwealth and each State and Territory commencing in year 2, and by Local Governments commencing in year 3.

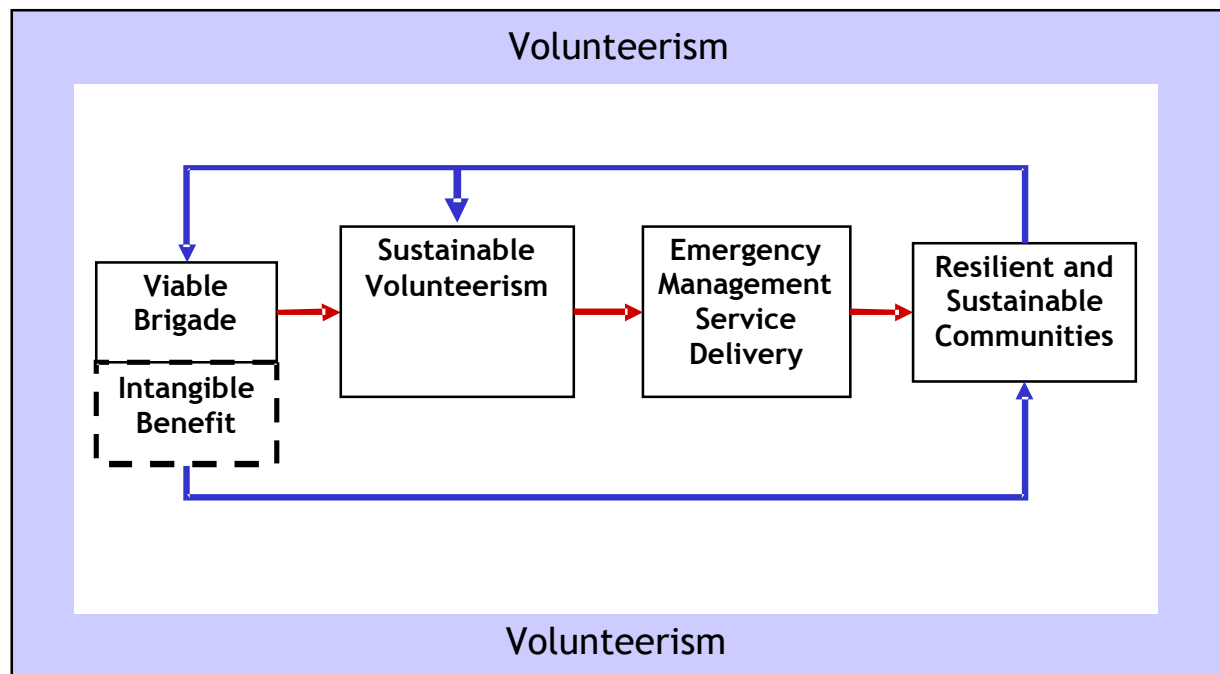
⁶ Blacher Y (2005). 'Changing the way Government works'. Presented at the Engaging Communities 2005, United Nations Conference, Brisbane, August 2005.

The well-accepted ‘triple bottom line’ approach to program design and evaluation, argues that Emergency Management needs to be recast in a socio-economic context instead of the traditional ‘technical’ mould.

More recently still, the concepts of prevention (aimed at maintaining homeostasis), resilience (the capacity to recover and resume normalcy) and sustainability (long-run prospects for unchanged conditions), have been brought into the Emergency Management debate, as maintenance of, or return to the *status quo* for the individual or community was seen to be the required end-points.

Realising these concepts (particularly resilience and sustainability), rely heavily on various community networks or the existing of sufficient ‘social capital’ in the local community. It is widely agreed that communities which score a high level of ‘social capital’ also display resilience. The “resilience of social systems is mainly a function of ‘social infrastructure’”.⁷

In summary, the following diagram demonstrates the link between the brigade and emergency management and how we can leverage the intangible benefits to build sustainability and resilience into communities. Therefore, there is a clear link between the intangible benefits delivered though having brigades and Emergency Management:



This research may lead emergency service and management organisations to work to strengthen and build communities where there are ‘problems’ within brigades rather than trying to deal with the internal brigade issues directly with the brigade, ie *outside in* rather than *inside out*. This is based on the assumption that strong community equal strong brigades.

⁷ Glavonic B C (2005). Social resilience: Building layers of resilience to transcend waves of adversity. Massey University NZ. Resilience Infrastructure Conference August 2005. <http://www.caenz.com/info/2005Conf/pres/Glavovic.pdf>

Conclusions.

Building community capacity does not just mean signing up new volunteer members and putting them on trucks – it means giving the whole community the knowledge and skills to decide for themselves how they will respond, whether it be as a member of a brigade or as an organised network of fellow community members.

Creating community resilience and sustainability does not just mean providing the community with a better appreciation of incident risk and how to respond. It also includes helping a community to ‘bounce back better’, in the aftermath of any emergency event (not just fire!).

Emergency agencies need to understand, recognise and support the intangible benefits of volunteer brigades to ensure ongoing brigade viability and to sustain volunteerism into the future.

So put the concept of building social capital into context for CFA and it means identifying the ways communities are at risk and engaging with them to help them react and respond to those risks or events and remain vibrant, strong, networked, caring communities.

This will allow the community to develop the capacity and capability to quickly return to normalcy following any emergency event.