The development of municipal emergency management planning in Victoria, Australia

By Paul Gabriel

In Australia, local government plays an essential role in emergency management, although not a provider of emergency services. The role of supporting emergency services and the community both during and after emergencies has been a traditional role. Added to this is an increasing responsibility as the focal point for the conduct of local mitigation using risk analysis, prioritisation, and treatment under the methodology of emergency risk management. This role is part of a shift in the emphasis of emergency management in Australia away from the strong focus on emergencies and the emergency services, towards an emphasis on the sustainability of the community and its life in the context of the risk of loss posed by natural and other hazards. Models of municipal emergency risk management planning are presented to assist municipalities to connect or even integrate their emergency management planning processes with other similar community safety activities such as crime and injury prevention.

Australia's Federal system of Government

The Australian states were formerly separate British colonies which came together in 1901 to form the states of the Commonwealth of Australia, together with two territories (Northern Territory and Australian Capital Territory) both of which are now self-governing. Under the Australian constitution, the commonwealth has jurisdiction over national issues such as defence, trade, immigration, and major aspects of taxation. Many of the more community-interface government services such as education, health (including public hospital and ambulance services), and public transport remain with the states. Importantly, state responsibilities also include police and fire services; the latter are generally set up as more or less autonomous statutory authorities so as to give them a degree of operational and financial independence from the government of the day.

Local Government responsibilities

In Australia there are some 770 municipalities, with populations ranging from a few thousand to over three-quarters of a million. Large areas of Australia with low population density do not have municipal government, so municipal services are provided there by state or territory agencies.

Local governments are created by state governments, whose legislation governs their formation, roles, and powers. Their traditional responsibilities of roads, rates, and rubbish have expanded considerably in recent years to encompass promotion of healthy, prosperous communities, and they carry significant roles in emergency management through responsibilities for land use zoning (within state statutory frameworks and policies) and application and enforcement of building control standards. More specific roles are discussed below.

Unlike many other countries, Australian municipalities are not responsible for provision of police services, but in rural areas many have a close involvement with fire services through support to volunteer brigades. There is, however, a trend towards greater state responsibility for rural fire service resourcing and management, as the needs of state fire services for a homogeneous force deployable over a wide area exceed the capacity of municipalities.

Emergency management responsibilities of states and the Commonwealth

Under Australia's constitutional arrangements, emergency management is a state responsibility, as are all nonmilitary aspects of safety for the community. States provide emergency response services (fire, police, ambulance, and state emergency services) using a combination of paid and volunteer staff. In addition, the states control or provide the major legislative and financial tools for prevention/mitigation and professional and financial services for recovery. All of these state-based organisations use some type of regional structure for provision of services and operational management.

Most states and territories also have emergency management legislation which creates the framework for relationships between the key organisations and provides for declaration of specific legal states, such as states of emergency/disaster, for times when there is need to use extraordinary or coercive powers in dealing with a disaster or major emergency.

The commonwealth provides explicit support to the states and territories through the provision of

- physical resource support, mainly from the defence forces, when state resources are inadequate or unavailable;
- financial support for regional planning support personnel, general enhancement of emergency management capabilities through, for example, research or specialised equipment acquisition, mitigation through grants programs, and also response and recovery expenditure when states' costs exceed thresholds linked to the size of their general revenues; and
- a range of supports to the improvement of emergency management nationally, through Emergency Management Australia (EMA), part of the Attorney General's Department; these include facilitation of national policy and practice, research, and, through its training arm the Emergency Management Australia Institute (EMAI), specialised development and training services.

Principles underpinning the current emergency management system

During the 1970s and 1980s, Australian states developed formalised emergency management structures largely in response to both a series of major emergencies such as the substantial devastation of Darwin by Cyclone Tracey in 1974, major floods in Brisbane in 1974, and the 'Ash Wednesday' bushfires in Victoria and South Australia in 1983. Further impetus was provided by the emergence of a new commonwealth focus in the formation of EMA (then Natural Disasters Organisation) by the reformist Whitlam Labor government in the early 1970s.

Significantly, the Comprehensive and Integrated model of emergency management articulated by the National Governors' Association (1979) from the U.S. was incorporated into states' legislation and management structures and, by virtue of national training programs, became deeply embedded in the thinking of emergency management practitioners and the many others who undertook basic familiarisation courses, where it resides to this day.

The most prominent element is the Prevention, Preparedness, Response, and Recovery (PPRR) model (Emergency Management Australia 1993). The Australia-wide uptake of this model has been very beneficial on the whole because of its emphasis on a broad range of

emergency management activities carried out by a variety of organisations, not only emergency services.

There are various limitations or, to be fairer, misuses of the PPRR model, as noted by Crondstedt (2002) including the tendency to see its components as separate, as always equal in importance, as sequential phases of a cycle, or as focused on activity and physical action. Another limitation is, again, not an inherent fault, but rather the assumption that the various PPRR components are managed and discharged in similar ways, and by roughly the same groups of people and organisations.

Until recently, the emergency management networks and structures at state and local levels have been centred around emergency services and their personnel, who have not necessarily been in the best position to significantly influence and promote prevention/mitigation on a comprehensive basis. Prevention may be facilitated through organisations with appropriate powers, responsibilities, and resources, in conjunction with the exposed communities generally. As noted by Hays (1999), the creation of a 'natural disaster reduction culture' is a considerable challenge for any jurisdiction.

Reconceptualising emergency management

The PPRR model may now be close to its 'use-by date' because it is emergency-centric, in that emergency events are the focal point and purpose for the activity embraced by it. (Prevention of *emergencies*, preparedness for *emergencies*, response to *emergencies*, and recovery from *emergencies*.) Emergency management objectives can no longer be limited in scope to coping better with emergencies and disasters, but must instead be seen in the broader context of the ongoing everyday life of the community. Emergency management is a key contributor to community 'triple bottom line' outcomes by its specific contributions to safety and sustainability.

The range of perceptual and conceptual shifts in Australian emergency management over recent years includes such directions as:

- away from an emergency-*centric* view of emergency management and towards a community-centric view;
- away from an emergency-service centric view of emergency management and towards one which embraces the whole of government;
- towards an increased emphasis on sustainability as a key purpose of emergency management;
- seeing emergencies as manifestations of vulnerability not simply as a function of the presence of hazards (Salter 1995);
- recognising the need to create many focal points for interdisciplinary and intersectoral partnerships

(International Strategy for Disaster Reduction 1999); and

- emphasising the benefits of effort and resources invested in prevention/mitigation/risk reduction compared with response and recovery.

Victoria's Emergency Services Commissioner, Bruce Esplin, has observed that 'Communities own their own risks, and a community-centred rather than agency-centred approach is essential in the management of [emergency-related] risks and the development of local, integrated plans and programs. What works in one community may not work in another' (Esplin 2000). A major paradigm shift is underway in which we are witnessing a shift in the role and image of the emergency services away from the role of quasi-military 'authorities' (Dynes 1994) taking charge of the community during times of crisis, into supporters and facilitators working with community in dealing with its risks as well as its emergencies (Esplin 2000).

Risk management and PPRR

It is in the context of this broader imperative that risk management offers a new way to think about and build planning frameworks for emergency management. Following the publication in 1995 and revision in 1999 of the Australian Standard on Risk Management (Standards Australia 1999), Australia's emergency management community has been quick to adopt and adapt the standards generic risk management approach to its own field, recognising its potential to provide a better way to manage prevention in particular. In the emergency management environment, risk management has been adapted to become emergency risk management (Emergency Management Australia 2000).

The risk management based framework facilitates

- a focus on risks (the interactions between hazards and communities in particular contexts) and not just on hazards;

- the development of a variety of innovative approaches to safety programs through the reduction of risk by modification either of *likelihood* of emergencies and/or of their *potential consequences*, by, for example, enhancing the resilience of exposed populations; and

- the engagement of a wider group of people and professions than just emergency services to promote safety and sustainability.

Despite the ready uptake of risk management, there has been some lack of clarity in thinking among some Australian emergency management practitioners as to how emergency risk management relates to the PPRR formulation. For example, in the *Emergency Risk Management Applications Guide* (Emergency Management Australia 2000) in which a risk management process for emergency-related community risks is set out in detail, one of the final stages in a detailed analytical process

model is '[g]enerate risk treatment options' (Emergency Management Australia 2000, p. 20). Under this section, PPRR is included as a potential way of 'thinking about' risk treatment. This reveals a misunderstanding of risk, of risk management, and of the differences between treatment of risk (a constructed idea) and dealing with an emergency (a real phenomenon). Worse, it suggests that the risk management process is an additional set of activities on top of what was already being undertaken using the PPRR process.

A more satisfactory marriage of the two approaches is based on the recognition that *treatment* or *reduction* of risk (through reduction of likelihood and/or potential consequences) is the same thing as what has been called prevention/mitigation – it aims to achieve the same goals. In the emergency context, risk reduction will rarely result in the *elimination* of a particular risk, of course, unless drastic steps are taken, such as moving a community and its assets completely out of a floodplain.

The risk that remains subsequent to risk reduction activities is known as residual risk (Standards Australia 1999, p. 3). The exposed community lives with residual risk on an ongoing basis. Generally, there remains a risk of potential future loss or damage from emergencies which it is too expensive, difficult, or disruptive to life to eliminate or avoid. Therefore, there is need for the exposed community, in conjunction with its emergency agencies, to prepare for both response and recovery.

Recent publications by EMA such as Reducing the Community Impact of Landslides (Emergency Management Australia 2001) have adopted this way of articulating the relationship between risk reduction and operational preparedness, using the linking concept of residual risk.

In a public administration activity such as emergency management, there are those who would argue that a shortcoming to an approach is not a problem, as long as there is a some actual and hopefully beneficial activity taking place. However, the major benefit of the emergency risk management approach is to pursue all the means other than response and recovery of reducing the likelihood and/or potential consequences of

Figure 1. Emergency Risk Management Linked to Operational Planning.

emergencies. This is well expressed by Crondstedt, who states that 'Un constrained [sic] thinking about possible treatments is a critical feature of deriving innovative, new and possibly better ways of treating risks. Participants in the risk management process, in particular while sourcing and selecting treatments, must therefore be able to look beyond a framework that emerged from an era well prior to the current risk management framework' (Crondstedt 2002, p. 13). The introduction of emergency risk management would yield little true benefit if the 'old treatments' of response and recovery were considered to be available options, as they could tend to be relied upon excessively.

Municipal roles in emergency management

The role of local government as a key focal point for the various networks of people, organisations, needs, resources, and issues that impact on community sustainability and safety has become increasingly important. However, this role is not always taken up willingly or competently, and, in doing so, local governments may encounter structural obstacles created by others, such as the state, for which some solutions need to be facilitated.

The emergency management roles of local government in Australia include the following:

- Identification and treatment of emergency-related risks using such resources as they have available to them, in conjunction with other government agencies and nongovernmental organisations and the private sector. This includes establishing and maintaining nonstructural risk treatment options such as community education and awareness, and warning systems.
- Support for the emergency services in response operations. Control of emergency operations is usually vested by legislation or agreement in a member of a statutory body (fire service, State Emergency Service, police) according to the type of emergency. Municipal support can take the form of resources such as the provision of heavy machinery which the response agency needs but does not own, responsibility for feeding response agency personnel, managing road closures, provision of local information to response agencies, provision of evacuation or relief centres, and general immediate support to its community.
- In recovery from emergencies, the provision not only of resources to assist residents with clean up, but also personnel to manage the recovery process and assist affected householders and communities, using community development processes, with their recovery journey into a viable future. In this they are often supported by personnel from relevant state human service departments – who may also source financial assistance from state and commonwealth assistance programs.

- Generally mediating between their communities and state agencies in emergency management matters.

To underpin these roles, Victoria's emergency management legislation requires each local government to:

- develop and maintain a municipal emergency management plan,
- make specific appointments of municipal emergency officers whose role is to ensure provision of municipal resources in emergencies, and
- appoint a planning committee which must follow planning guidelines issues by the Minister for Police and Emergency Services (*Emergency Management Act 1986*).

An additional impetus to municipal planning is a commonwealth requirement that postdisaster financial assistance to a municipality may be reduced if it has not been engaging in risk reduction activities arising out of its risk analyses. In Victoria at least, emergency management planning support and facilitation is provided free of cost to municipalities. This is carried out by paid personnel of the State Emergency Service (SES), a predominantly volunteer organisation whose other main roles include volunteer response to floods, storms, and road crashes. The benefit of this paid support is that there is a quality level below which municipalities' plans rarely fall.

Repositioning municipal emergency management

Many municipalities identify emergency management as substantially the responsibility of the 'outdoor' or physical services side of their activities, often managed part-time by engineers who also may be responsible for contract and/or works management. This is consistent with the traditional view of municipal emergency management as support to response agencies. As a broader view of emergency and risk management gains strength, the municipal locus of responsibilities needs to shift towards the community services or people-focused side of municipal activities. This would support municipal emergency management planning, to both maintain the emphasis of coping better with actual emergencies and incorporating the further dimension of managing the risks to community safety and sustainability by engaging the community in relevant social processes.

The question now becomes how to efficiently and effectively organise and plan for all the various activities which contribute to the safety and sustainability of communities. As pointed out by Britton (2001, p. 45), emergency management is now placed 'in the overall context of a community's economic and social [and, one might add, environmental] activities.'

Other influences

In addition to emergency risk management, other factors are influential in the rethinking of how municipalities engage with emergency management and how they might evolve their approach into the future.

Community safety

A range of social programs in Victoria associate under the umbrella term community safety. The Government of Victoria supports a range of community safety programs and objectives such as crime prevention, prevention of injury in the home, workplace, and in public and recreational spaces, as well as the prevention of emergencies and the minimisation of their effects. The government has sought, over the past few years, to encourage local governments to be actively involved in programs to promote and improve community safety.

The government's sponsorship of Community Safety Month (formerly Community Safety Week) is designed to encourage communities and households to be more conscious of the need for safe behaviours in a variety of life activities and situations. It is a focal period for many local safety displays and events, incorporating emergency services among others.

Mandated planning committees

As pointed out above, emergency management at the municipal level carries a legislative mandate, requiring each municipality to have a planning committee, a plan, and appointments of emergency-relevant officers. In contrast, municipal participation in crime prevention has been promoted through government grant funding programs as well as the encouragement of municipalities to appoint specific personnel to promote this activity.

These personnel tend to be drawn from the community development side of the municipal organisation. In addition, outer metropolitan and rural municipalities in Victoria are required under fire legislation to maintain municipal fire prevention committees. The role of these committees is to devise treatment strategies related to the fire risk in their municipal district and to recommend implementation to the municipality and other bodies.

All these safety-related activities promote a risk management approach which commences with an assessment and evaluation of the risks which are facing the communities of that municipality. There is a clear possibility that a conscientious municipality might undertake all the processes in isolation from each other and duplicate not only the findings regarding risk, but also the effort involved in undertaking the assessments and in devising and planning treatments.

The challenge

The challenge for municipalities in Victoria is that each of these state-initiated programs, whether statutory or funded, calls for a specific committee in every local government to promote and administer it. Each one also promotes a holistic approach to problem identification and solving without full acknowledgment that municipalities may already be engaged in very similar programs and projects under slightly different banners. And each has to report independently.

This is made more complex by the fact that many of the programs which promote safety can overlap, can be similar, and could draw upon the others' programs and their proponents to contribute to their own objectives. For example, it would be feasible for those people who
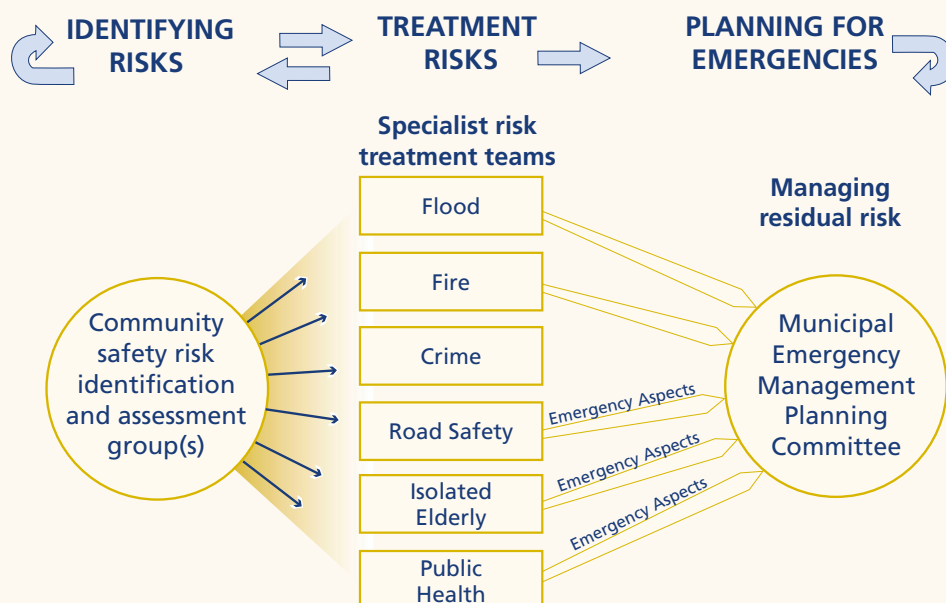

Figure 2. Integrated Community Safety and Emergency Operations Planning Model.

routinely visit elderly people in their homes to add a small component to their visit to explore and promote fire safety issues.

Model for integrating community safety planning

What is needed is an integrated, holistic process for local government community safety planning and practice which is not only efficient and effective, but also

- responsive to the legislation and/or funding conditions required by state government;
- manageable and managed by local government personnel, so it is 'owned' and not simply run out of a sense of duty; and
- capable of contributing to key objectives as an element of municipal core business.

This represents a strong argument for integrating at the municipal level the planning and execution of programs which promote community resilience and well-being.

The model represented in Figure 2 is being promoted to Victorian local governments (Office of Emergency Services Commissioner 2001) as a way in which they can operate a community safety process which assists in meeting the criteria set out above. Implementing this model requires municipalities to interpret, for their own resources, structures, and communities, the state government's expectations for managing the various aspects of community safety. It therefore promotes the principle of diversity—local structures devising local solutions for local problems (Wheatley 1997).

The model draws on the simplified representation of risk management identified in Figure 1, above, in which the key elements (in respect of organising the planning process) are:

- Identify, analyse, and prioritise risks
- Treat risks
- Acknowledge existence of residual risks
- Plan and prepare for emergency operational activities

The first activity, that of identifying, analysing, and prioritising risks, should be a holistic activity, covering as broad a range of community safety risks as the municipality wishes. This is a major activity, and should not take place too frequently – once per three- to five-year period may be appropriate. It needs a reasonable amount of knowledge and expertise to obtain and interpret data from a number of sources, including government or research institutions that gather statistics on health, emergencies or crime, and to segment it on a municipal basis. In addition, information from all departments of the municipal organisation can provide valuable insights into the community including possibly people at higher than normal risk, the local area and its

hazards, and existing hazard-relevant planning and building controls.

A common presentation basis using a Geographic Information System (GIS) would facilitate interpretation and understanding, and assist in identifying areas of heightened risk. It must be acknowledged in this context that identifying, for mapping purposes, the characteristics of communities which indicate resilience and/or vulnerability is currently at an early stage of development.

This first stage is not isolated in terms of people or information from the other stages. Risk is evaluated with reference to treatment strategies already in place. On the diagram in Figure 2, the first stage is represented as having an interactive relationship with the second stage, that of treating risks. The first stage results in a determination by the municipality in association with its partners of the high priority risks affecting the relevant area and its communities which are to be addressed by risk reduction activities.

The next stage is the allocation of risk reduction tasks to those in the best position to address them. In the diagram, this is managed through specialist risk teams differentiated by hazard type (e.g., fire, flood, or road accident). However, the separation of risk treatment teams implied by the diagram is not desirable. Rather, there should be a degree of common membership and/or an overarching structure within which each team interacts, to ensure that there is exploration of the possibilities for common action. The common action would be specifically directed to enhancement of community capacity as a means of reducing risk.

The activity on the right side of the model is planning and preparedness for emergencies, given the existence of residual risk and the expectation that emergencies will occur. This is the traditional role of municipal emergency management planning committees in Victoria; their membership made up of municipalities and emergency service representatives makes them well-suited for this purpose.

This model clearly places new demands on the administration of the municipality to manage the various elements, stages, and bodies involved. However, it is important to note that not all possible risks need to be treated in all places and all times—the process of risk prioritisation is important. In addition, there are efficiency gains to be made throughout the whole process which could provide a payoff for the extra administrative effort involved.

The emphasis is on local process. The skills are those of networking, consultation, and problem-solving, where people are provoked and empowered to identify and address their local safety issues with the support of

emergency services and other organisations with necessary knowledge and expertise.

It is acknowledged that this model is yet to be explored in-depth by municipalities on a practical basis. It has been put forward on the basis that municipal emergency management planning ought not be an isolated autonomous activity and would benefit greatly by being incorporated into a larger stream of activities.

Conclusion

As with any evolutionary process, the directions outlined in this paper may not all lead to an improved future safety for communities and more efficient and effective multiagency planning processes. Change always requires a letting go of the familiar previous practice. For busy people whose commitment to municipal emergency management is generally part-time, the effort to grapple with something they have to partially invent themselves can be difficult to justify. Nonetheless, there are those who are prepared to take up the challenge of discovery, and whose experience will be instrumental in the development and refinement of the way forward.

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