



# SOCIAL NETWORKING IN A DISASTER

Social media channels are becoming an increasingly important means of communication in disaster situations and, as Suzanne Waldman explains, have the power to significantly enhance emergency response capabilities

Imagine being part of a social media-managed disaster. If it is a disaster with advance warning, like a forest fire or a hurricane, people begin early to warn each other via their social media feeds. They keep neighbours notified of the trajectory of the destructive force, using eyes on the ground to update maps of its movement faster than official management organisers can possibly do. Survivor accounts also provide the best warning to others to get out of its path.

If it is a sudden event, like an earthquake or a tsunami, people who aren't directly in its wake may well hear about it first via social media. The channel allows friends and family to ask after each other and to officially update their status on 'check-in' forums. It helps people directly alert each other of where is safe and not safe to go, and to confirm who needs to be checked in on. In fact, because both emergencies and social media can be rife with confusion, Facebook is starting to initiate crisis hubs focusing on official warnings and updates appended with first-hand video to give order to what may otherwise seem like chaos.

## Emergency responders

But it's not just citizens who rely on social media during an emergency. Emergency management officials are learning that they can also use it to elevate their situational awareness.

Social media can provide a vehicle for a member of the public to report their perspectives on emergency to the community at large, as well as officials. It may be someone who first observes that a dike has failed, or that an evacuation route is blocked. Or maybe they are having their own particular emergency, are stranded somewhere or out of medicine, or know someone else who is.

These social media reports can save lives or reveal new strategic priorities, so long as someone at the command centre is paying attention by watching hashtags and looking for conversational hot spots. Even if the emergency management agency is too small to monitor social media flows in real time, they may be able to tap Virtual Operations Support Teams (VOSTs), teams of expert volunteers stationed around the world who assist emergency managers by keeping a 24/7 eye on the social media activity that develops during unfolding disasters.

## Social networking

This is the face of disasters today around the world. People no longer simply wait in their houses for help to arrive. In more and more places, they are using social media to organise the self-rescue of their communities, or even of other communities. They can potentially hit the ground far more quickly and broadly than municipal or regional services can, and long before the insurance companies can send in their assessors or paid remediators. While self-organising volunteers cannot do everything, they can certainly help ensure emergency response covers all bases and can fast track recovery by an order of magnitude.

During an emergency, the main priority for first responders is to safeguard the area. Only later can they turn their attention to the larger community's needs. So, if supply chains are damaged, it may well fall to others to build structures that can temporarily replace those supply chains by providing food, water, and other forms of care to community members. Doing so is the traditional focus of organisations such as Red Cross, but their support takes time to set up and in large emergencies such groups can become overtaxed.

An effective social media-organised emergency volunteer force can call out the diverse skills of its participants, matching them directly to specific needs. Who can provide medical care, child care, elder care or pet care? Who can help move a tree, provide a truck to deliver water bottles, or a boat to evacuate someone stranded on their roof? Who needs a place to stay and who can provide one?

It is this type of spontaneous organisation that emerged in the wake of the Calgary flood of 2013, a massive deluge in which 75,000 people were ultimately evacuated from their homes. In advance of the floodwaters receding, several Calgarians set up 'YYCHelps' on Twitter and Facebook, ultimately streaming some 4,000 members of the public to aid each other in tasks of relocation, housing and flood-damage cleanup.

## Building emergency volunteer networks

Lately, the question has been asked whether the potential of social media organisation in the aftermath of an emergency can be channeled more predictably and effectively by setting the stage for convergence in advance.

The Government of Canada's Defence Research and Development Canada's Centre for Security Science has been helping cities such as Calgary establish the conditions for these successes in advance of any emergency<sup>1</sup>. Other cities in Canada, including Toronto, Vancouver, and Halifax have also been setting up loose structures of members of the public and public groups that are ready to hit the ground running in the event of emergency, prepared with skills, information and networked channels of communication to the operations centre.

Though structures for pre-planning emergency volunteering social networks vary from Canadian city to city, the basic formula works like this. A disaster hits a wide area of a city, and it's going to be a few days before the city workers can get out to a given neighbourhood to start clearing the rubble. In the meantime, however, the city's emergency social services unit has an understanding of and contacts into that neighbourhood's most significant social networks, centred on school councils, religious organisations, community centres and other community-based groups. Possibly it has given basic training in emergency response and recovery tasks to a few of its key members.

Within hours of disaster hitting – so long as communication networks are in place – the unit has already contacted that social network's key members through Facebook pages and other access points. They have received an update on the neighbourhood situation and its greatest urgencies. The city's Facebook page and website has guidelines on setting up task teams and advice for staying in touch with volunteer coordinators.

The city has also found a place to drop off a container of goods in an accessible location that is stocked with buckets, bleach, personal protective equipment, emergency food, water and first aid supplies. Using these supplies, neighbourhood volunteers can begin path-clearing, cleaning up and providing essentials to neighbourhood residents, long before the city can prioritise that area. Also included in the container are a sheath of instructions for how volunteers can keep themselves safe, waiver forms to limit liability for volunteer actions, and signs for houses that indicate to city workers the types of hazards or needs they present, thereby accelerating their identification.

All the while, as emergency management teams are being kept apprised of goings-on in neighbourhoods, both directly through social networks that have been set up and indirectly through social media monitoring – they can prioritise accordingly and make the best strategic decisions. Where are the emergencies within the emergency breaking out and where are their forces most needed? Where are supplies running down or in excess? Where is additional organisational support required, for instance from the Red Cross or other experienced groups?

With a good neighbourhood-based social networking strategy in place in advance, those unforeseeable chain reactions in

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emergencies that can never have been fully prepared for in advance – no matter how elaborately detailed a 'Concept of Operations' is – can instead be adapted to and responded to rapid-fire by emergency management teams.

### Recovery ahead of schedule

The case of the 2013 Calgary Flood demonstrates how social media-organised emergency volunteering can significantly enhance emergency recovery. The combination of organised and social-media organised volunteer forces in Calgary helped the city bounce back within weeks, instead of months. In Canada, new emergency management approaches to tapping and connecting with the structures of social media spontaneity and dynamism will help ensure that there are higher numbers of such dramatic successes going forward.

- 1 Waldman, S, Verga, S and Godsoe, M, "Building a Framework for Calgary's Emergency Volunteers," Defence Research and Development Canada, Ottawa ON, 2016.
- 2 City of Toronto, "Partners in Preparedness," [Online]. Available <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=f371e52994be2510VgnVCM10000071d60f89CRD>. [Accessed 16 January 2017].

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## A SOCIALLY NETWORKED FRAMEWORK

Creating a networked framework for emergency volunteering can begin at a range of different levels:

Regional emergency managers can start the process by holding a table-top workshop with major voluntary organisations and other stakeholders. This was done in Calgary in January 2016, under the guidance of the Government of Canada's Defence Research and Development's Centre for Security Science<sup>1</sup>. At these workshops, organisations can begin to envision what elements of the emergency response or recovery process—or in emergency management jargon, what 'capabilities' – they might oversee in an emergency.

Alternatively, emergency management organisations can put a call out on their websites for community groups of all sizes and kinds to provide information for a Community Capacity Survey, where they detail what types of assistance they could potentially offer their communities in an emergency, as the City of Toronto's Office of Emergency Management Agency did<sup>2</sup>. Communities can also request a visit from emergency managers to discuss what their skills and assets are for emergency volunteering, and how they could begin to pull them together in a crisis.

Even without top-down direction from the emergency management sector, voluntary organisations and community groups can go through a process of visualising what they



could contribute to an emergency response or recovery process. To begin the networking process, these groups could consider how they would call out more voluntary and other resources from other, diverse organisations from across the community.