Logistics: More than a List

Building a Source for Connection and Resource Identification

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The opinions expressed in this work are solely those of the author and do not necessarily represent the views of any organization(s) affiliated with the author.

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Introduction

According to Canada's Incident Command System (ICS), logistics represent the provision of "resources and other services to support incident management" (ICS Canada, 2019). Sometimes referred to as the "getters", people working in a Logistics Section are faced with the challenge of finding diverse products and services to support efforts on the front lines, within the command centre, and at reception and registration centres. While a comprehensive hazard assessment can be helpful to identify typical resources, in a disaster situation, we never really know what we need until we need it – and then we need it right away.

According to Young (2014), "the logistics and resource management functions of Emergency Management (refer to as EM logistics) have been largely reactive, with little to no pre-event planning for potential demand". In other words, capacity building is absent. Where logistics planning has been made a priority, it generally appears in the form of updated contact information and vendor lists painstakingly collated annually. This results in a labour-intensive, redundant, and highly ineffective process and outcome. In the constantly changing and dynamic environment of emergency management, maintaining current information is a significant challenge for even the most advanced organizations.

Many organizations conduct emergency management planning and preparations from the corner of their desk as they lack the capacity and resources to dedicate full time attention. Directors of Emergency Management (DEMs) regularly build relationships within their sector and engage "contractors through personal relationships and other channels" (KPMG, 2021. P.130). However, major disaster situations remove the DEM from significant logistics functions, leaving other members of the local EM team to fulfil the Logistics responsibilities. Incomplete paper or digital lists with missing information add time and complexity that can result in missed opportunities to

mitigate damage to people and property – especially when the logistics functions are being undertaken by people infrequently engaged in crisis situations.

This article substantiates the need for logistics as a central consideration in building and maintaining networks for connection and collaboration, identifies the value of maintaining comprehensive resource lists as a logistics function, and highlights the significance of building and maintaining local data as part of a solid strategy in preparation for the next disaster situation.

Logistics for Connection

"While provincial/territorial and federal governments have a significant role in disaster response and recovery, it is important to remember that all disasters are local" (EDA, 2019, p.12). Without the connection to others both within a community and beyond its boundaries, a community can easily become overwhelmed when dealing with a disaster situation. It is important to have current and relevant contact information for external stakeholders – other emergency management organizations, local charities and community organizations, utilities, industry, businesses, etc. Repeatedly, after-incident reports from significant Canadian disasters have revealed a pattern of calls for improved contact management, with some reports citing past reports on the same recommendations for "better engagement of key external stakeholders at the right levels with the right information" (KPMG, 2017, p.64). The constant movement and changing dynamics among people, businesses, and organizations make it virtually impossible to gather and maintain the "right information" using traditional list generation strategies.

According to the KPMG (2017, p 63) report on the Wood Buffalo Wildfires, "there was a gap in understanding of industry infrastructure within the Region, such as pipelines, communications towers, and transit lines, which required protection and/or may have been a risk to firefighters". This situation is not unique to the Wood Buffalo region as many municipalities hold different sets of information within different departments – business contact information is held by

economic development, pipeline information may exist with the planning or engineering departments, and school contact information useful in establishing reception centres for evacuees is likely known best by the recreation department. As the range of information needed to make timely and effective decisions is vast, a high-quality and comprehensive contact data set can rapidly lessen search and response times.

A traditional perspective on emergency management contact information for connection includes the DEMs from neighbouring communities and significant agencies or networks within the sector. A thorough set of contacts for connection considers both public and private sector emergency management organizations, agencies, networks, non-governmental organizations (NGOs), businesses, and product and service vendors – in a location that can easily be accessed by logistics personnel from within the responding municipality and by other resources coming in to provide support and assistance.

As a logistics function, a database of information makes it possible for the "getters" to find what they need when they need it regardless of whether they perform their logistics duties on a daily basis, as part of an "other related duty" to their day job, or as a person new to the community arriving to help through a mutual aid arrangement.

Quality and Accessibility

Building and maintaining a manual list of contact information is both time-consuming and redundant. Much of the information generated by one community would likely contain similar content to that of a neighbouring community – or be missing comparable data. Following the Slave Lake fires in 2011, KPMG identified that "the Emergency Management Manual used to set up the Emergency Operations Centre was missing certain information, such as contact information for local contractors and other local service providers" (2012, p.55). This is indicative of the traditional

contact list approach – the inability to find critical information to include in the list and the near-impossible task of maintaining and distributing current content.

While current and relevant contact information would be a significant improvement to disaster preparation, response, and recovery, a significant advancement would be the inclusion of detailed information about products, services, equipment, facilities, and inventory. Further, having access to this information in the event of damaged communications infrastructure or displacement would be revolutionary.

Emergency Management Logistics Canada has created the EMLCanada.ca platform to transform the traditional contact list using one simple principle – *when emergency management stakeholders assume responsibility to build and maintain their own profile within a shared database, the sector will have access to current and relevant information 24/7/365*. Local communities can access the platform to create their own information and build out contact information relevant to their specific needs and location.

Logistics for Resource Identification

After-incident reports from past events consistently identify the need for timely access to resources. "Local authorities should prepare by compiling inventories of critical infrastructure within their boundaries"(KPMG, 2017, p.61) and "pre-loaded information on vendors and resource inventories that are available; inventories should include resources that are needed to stabilize a community, prepare for re-entry, and support recovery, not just resources to respond to the incident itself" (KPMG, 2017, p.63). Ironically, the efforts required to maintain this level of current logistics information would be illogical when left to each community. Collectively, however, an open database available to registered organizations, agencies, networks, and vendors capable of building and maintaining their own information would facilitate timely updates to inventory, contact information, and product descriptions.

Two significant factors affect the ability of "getters" to find what they need – training and searchability. In the provincial after-action review prepared by the Province of British Columbia following the 2017 freshet and wildfires, "it was reported that positions were often filled on an 'as available basis' – the warm body is better than a gap concept – often by personnel with no relevant experience" (Province of British Columbia 2018, p.45). In the logistics section, it is entirely conceivable that people will occupy key positions without working knowledge of the resources, equipment, supplies, or facilities being requested from the front lines or evacuee centres. In this case, searchability is critical. While traditional lists may contain good contact information, a part-time person positioned in the logistics section may not know where to start looking for (or understand the difference between) hydraulic, pneumatic, or mechanical equipment, or whether a bobcat can accomplish the same task as a front-end loader – searchability by keywords, location, and availability become critical to helping save time and energy.

Even at the provincial level,

> *"while the POC (Provincial Operations Centre) had a resource list, it was noted that this list was not comprehensive with contact details for various vendors. As a result, time was spent identifying additional resources that were needed, such as the coordination of shelter arrangement with post secondary institutions. The REOC (Regional Emergency Operations Centre) was also lacking a comprehensive, and up to date list of resource contacts based on what would be needed to support such a significant and prolonged disaster" (KPMG, 2017, p.66).*

These reports point out the inherent challenges associated with the traditional list-building approach used by emergency management organizations across the country. A paradigm shift is required to alter inputs, outputs, and outcomes. The traditional process of building contact lists requires significant inputs from the list-building organization yielding a single and static output (the list) with limited outcomes as evidenced by after-incident reports.

The EMLCanada.ca platform provides emergency management stakeholders with a dynamic and searchable database that will continually grow and change to include new organizations, agencies, networks, NGOs, and vendors – each with the ability to update information as part of their commitment to local emergency management efforts. Emergency Management Logistics Canada has strategies in place to enforce regular updates.

Tools For Logistics Standardization

Too often, logistics are viewed as a response function when there is ample evidence to support logistics being equally critical to preparation, recovery phases, as well as capacity building for future emergencies. Based on the review of the Slave Lake fires, it was determined that "no pre-established agreements with vendors existed that could be activated quickly to mobilize services and supplies that would be required by any large disaster (such as fencing, food, blankets, etc.). This was true at the local level as well as the provincial level" (KPMG, 2012, p.129). In British Columbia, the freshet and wildfire after-action report indicates "problems in identifying existing availability of contractors, equipment, and human resources as well as those responsible for maintaining materiel resource lists" (p.48).

An online database for emergency management stakeholders requires the ability of local jurisdictions to identify and pre-arrange service agreements in support of mutual aid and the provision of products and services.

As well, the literature identifies the need for tools to help manage offers of support. In Wood Buffalo, "offers of support were overwhelming, and it was a challenge to identify the best resources" (KPMG, 2017, p.64). From experience, we know that many offers of support are communicated between individuals known to one another, and typically while the responder is on the ground, in transit, or housed within a bustling coordination centre transitioning between 'it reps,

Council briefings, and media questions. If the offers of support find their way to the logistics section, it would often be on the back of a sticky note with no context.

The EMLCanada.ca platform includes "preferred contact" designations that enable organizations to pre-select and download vendors or contacts that have been vetted to align with the community's emergency management plan and procedures. As well, the platform has a feature for organizations to post a current activation and invite offers of support from other members and vendors. The offers of support can then be downloaded to a spreadsheet for easy sorting and analysis.

Logistics for Local Engagement

"If the community is not prepared, businesses and the local economy can be devastated" (EDA, 2019, p.6). Emergency management and economic development are often considered separate and distinct from one another, unless within the local context where both opportunities and risks can be felt immediately. Remembering that local authorities are primarily responsible for disaster situations that occur within their jurisdictions, municipalities can reach out to provincial/territorial and federal governments for assistance if the situation exceeds local capacity. "Local governments are closest to the people and their problems, and make the decisions that count in their communities. They have the greatest ability to affect chance, but need support and resources from provincial and federal government to drive action" (Moghal, Z. and Peddle, S., 2016, p.22)

A well-prepared community can extend its local capacity by pre-determining contacts and resources and launching a comprehensive response using local and regional products and services. "Even small actions taken in advance will enable you to be in a better position to respond, and shorten your recovery time" (EDA, 2019, p.17). Local product and service vendors have an inherent knowledge of the community and immediate access to equipment and supplies that can be leveraged

to increase swift response and recovery efforts. In the event of total destruction or loss of a local business, a directory of neighbouring contacts and product and service vendors can be called upon. In Slave Lake, it was observed that "supporting local business is also an important consideration as businesses in turn supported the wellbeing of returning residents in many cases" (KPMG, 2012, p.128). A related example from Slave Lake is provided as "the owner of the *No Frills* store contacted RCMP and invited them to enter the store to take the supplies that they required for the Emergency Operations Centre" (KPMG, 2012, p.128) – an excellent example of local business support for the municipal response while minimizing product loss due to fire or lack of power for refrigeration, etc.

During recovery, which is often the most prolonged phase of a disaster, the use of local product and service vendors can be a significant factor in economic recovery and help to build community spirit and unity. Following the devastating fires in Slave Lake, "there was at times a certain level of animosity from the community towards contractors from outside the region who were perceived to be taking advantage of the disaster" (KPMG, 2012, p.130). While time is of the essence and external resources may be necessary to advance re-entry and the resumption of normalcy following a disaster, the use of local and regional product and service vendors can provide numerous economic and community benefits.

"Involving businesses in disaster preparedness helps ensure their specific needs are addressed in emergency plans, accelerates their recovery and increases their overall resilience. While local government has the legal responsibility to address disaster risks and make emergency management plans, businesses and the business community will recover faster if they have taken preparedness steps in advance" (Economic Developers Alberta, 2019, p.22).

The EMLCanada.ca platform integrates aspects of local and regional engagement to help enhance community capacity to cooperate and collaborate in the preparation for, response to, and recovery from disaster situations.

Conclusion

"Historically, communities and governments have not partnered well with the private sector. In order to be successful, it is important that all parties understand what their unique resources, assets and needs are, and how they can best work together to achieve mutually beneficial results" (Economic Developers Alberta, 2019, p.22). Emergency Management Logistics Canada is a small business with a social purpose – to provide a unique opportunity for Canada's emergency management sector to better connect, save valuable time and resources by eliminating the need for traditional list-building, access cross-jurisdictional resources locally and nationally, and ultimately improve response to and recovery from disasters affecting local communities. The EMLCanada.ca platform serves as a repository for emergency management organizations, agencies, networks, NGOs, and vendors to build and maintain profile information as part of a collaborative and unifying database – locally, regionally, provincially, and nationally. The platform can be as effective for a region encompassing three communities as it is for 30 or 300 communities. A review of past incidents confirms the need to examine the traditional practice of building contact lists that are time-consuming, ineffective, and redundant.

References

Economic Developers Alberta. (2019). Community Toolkit for Economic Recovery and Resiliency – Canadian Version.

ICS Canada. (2019). ICS Canada Glossary of Terms. Retrieved from https://www.icscanada.ca/en/+AHJ.html.

KPMG. November 2012. Lesser Slave Lake Regional Urban Interface Wildfire – Lessons Learned. Produced by KPMG for the Alberta Emergency Management Agency, 2012. Accessed February 25, 2017 at: https://open.alberta.ca/publications/lesser-slave-lake-regional-urban-interface-wildfire-lessons-learned.

KPMG. May 2016 Wood Buffalo Wildfire Post-Incident Assessment Report; Prepared for Alberta Emergency Management Agency; Final Report; KPMG: Amstelveen, The Netherlands, 2017.

Moghal, Z., Peddle, S. (2016) At the Front Line of Flood: How Prepared are Ontario Communities? Retrieved from https://uwaterloo.ca/partners-for-action/sites/ca.partners-for-action/files/uploads/files/p4a_front_lines_of_the_flood_04jul16.pdf

Province of British Columbia. (2018). 2017 Freshet and Wildfires Provincial After-Action Review. Retrieved from https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/provincial-emergency-planning/embc_after_action_review_report_2017.pdf

Young RR, Peterson MR. Emergency management logistics must become emergency supply chain management. J Emerg Manag. 2014 Mar-Apr;12(2):171-87. doi: 10.5055/jem.2014.0171. PMID: 24828913.