



METRO VANCOUVER

Pre-disaster recovery planning

By Paul Kovacs

THE SCIENCE

Disaster damage in Canada has increased five to ten-fold over the past four or five decades. Most of the communities affected have had an emergency response plan to guide their efforts. Very few, however, had a pre-approved disaster recovery plan to direct rebuilding and reconstruction. In 2016, local and regional governments in Metro Vancouver identified the need to look in more depth at disaster recovery to address a gap in existing disaster management efforts.

Recovery from minor incidents will benefit somewhat from advance planning. Significant gains, however, are possible by planning in advance of large, catastrophic events. Rebuilding and reconstruction present opportunities to advance disaster resilience, as the most vulnerable elements of the current system may suddenly need rebuilding or relocation. A major disaster provides an opportunity to build back better. The foundation for successful recovery planning involves development of a vision for a disaster-resilient community. Catastrophic events introduce scope to consider relocation of structures at high risk and modernization of vulnerable structures.

There is often a one or two-year window following large disasters to consider implementing enhancements to community disaster resilience rather than rebuilding the community largely as it was. Pre-disaster recovery planning to develop a community vision can support bold action despite the limited time available. Pre-disaster recovery planning is rare in Canada but is more common in the United States and Japan.

THE TRIGGER

It is inevitable that the Vancouver area will experience a catastrophic event. This may involve a large earthquake, coastal flooding or river flooding. A number of recent studies have identified the potential for tens of billions of dollars in earthquake or flood losses, fatalities, injuries, and disruption. The release of these studies has increased public awareness of the risk.

The provincial Auditor General issued a number of reports challenging the province and the region to prepare for the risk of a catastrophic earthquake. The Insurance Bureau of Canada commissioned research into the impact of a severe earthquake. The Fraser Basin Council has published its analysis of the impact of catastrophic flooding.

Moreover, Vancouver, British Columbia and the Government of Canada have adopted the United Nation's Sendai Framework for Disaster Risk Reduction. One of the four priorities for action in the Framework involves recovery planning to build back better.



Figure 8: *The planning for regional recovery project adopted a whole-of-society, all-hazards approach. (Source: ICLR)*

THE APPROACH

The planning for regional recovery project adopted a whole-of-society, all-hazards approach. The primary resource team for the project involved local emergency managers from across the region. They were supported by a small advisory team of emergency managers, academics, and critical infrastructure partners. And the project was led by two members of the Integrated Partnership on Regional Emergency Management (IPREM) Steering Committee. This is similar to the best practices approach to pre-disaster recovery planning used in the United States.

In 2017, Metro Vancouver hosted two workshops to consider a recovery framework. A variety of stakeholders were invited to refine a vision for recovery. They also worked to identify the most urgent recovery needs for the region.

In 2018, the focus shifted to the development of a regional resilience recovery framework. The goal was to ensure a consistent approach to recovery and shared recovery priorities across the region. The project sought to enhance understanding of disaster resilience concepts and principles among stakeholders and decision makers. The project also sought to identify the responsibilities of critical partners and to establish expectations about timelines for recovery.

The third and final phase of the project will take place in 2019.

THE OUTCOME

Preparation of a resilience vision and pre-disaster resilience recovery framework for Metro Vancouver is well ahead of the efforts elsewhere, as most communities across

Canada do not have a recovery plan. It is too early to identify measurable outcomes, as the final report is not yet complete. Nevertheless, the project remains on track and appears to enjoy considerable support across the region. Development of a resilience vision has enhanced the strong collaboration and partnership across the region. There is benefit from the process of working together to prepare a recovery plan.

Most pre-disaster recovery plans in the United States address process and coordination issues. Moreover, they often address recovery from smaller-scale incidents, as these are the risks that are most likely to take place over the next five to ten years. All of these hazard recovery plans are welcome and useful, but they often do not present a bold resilience vision. In contrast, recovery planning based on catastrophic events introduces the potential for significant, transformative change in a community.

Metro Vancouver is exposed to catastrophic earthquake and flood risks. It will be interesting to see to what extent the final report addresses its recovery from catastrophic events, or proposes the value of further work to consider these risks.

A WORD FROM METRO VANCOUVER

When asked about her thoughts on the initiative pursued by Metro Vancouver, Shannon Peterson, Project Manager for the Integrated Partnership for Regional Emergency Management, mentioned that the true value of the Planning for Regional Recovery Project has been in building further trust through shared conversation toward disaster recovery in the Metro Vancouver region. Ms Peterson went on to say, "IPREM's approach has been to present opportunities to collaborate and expand awareness through engagement. Recovery and resilience are complex and layered conversations, addressing them pre-disaster will save time and capacity post-disaster. Relationships are key, we aim to build new and existing connections with partners, such as Non-Government Organizations, businesses and other social entities, at every step in the process. Having champions for the disaster recovery conversation, like those provided by IPREM's Recovery Project Champions from City of Vancouver and Ministry of Social Development and Poverty Reduction, ensures buy-in and support to move forward. It is through clarity of roles and responsibilities that local leaders and partners can effectively reduce impacts to communities and work toward a more resilient future."