



Symposium Outcomes

INTENT

The 2017 UR+ Vancouver symposium gathered participants from across Southwest BC to explore actionable strategies to reduce earthquake and flood risk in the Georgia Basin and help build long-term resilience to future disaster events and the impacts of climate change.

The symposium built on work underway across many disciplines at various levels of government. The intent

was to support a shift in conversation from hazard and risk analysis to an evaluation of risk reduction strategies, and to help build disaster resilience through proactive investments in mitigation and adaptation.

Though developed for the Georgia Basin, many of the policies and strategies proposed at the symposium are likely applicable in regional contexts across the country.



A UNIQUE COLLABORATION

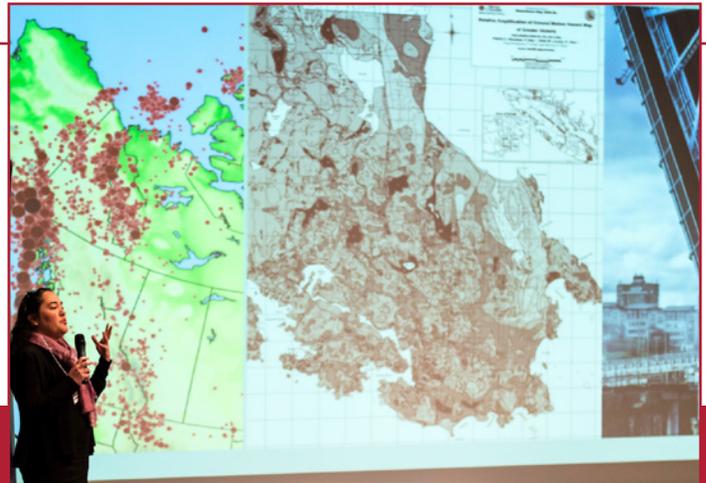
The symposium program was developed collaboratively by subject matter experts to tackle the most pressing issues and opportunities in risk identification, communication, and reduction. Symposium sessions were multi-disciplinary, highly participatory, and organized specifically to solicit and collectively develop policy proposals. Hundreds of practitioners and policy makers contributed their time and expertise at the symposium to develop recommendations for risk management and resilience.

ABOUT

UR+ Vancouver was held March 29-31, 2017, as part of a larger effort for collaborating and sharing knowledge of disaster risk management. The Understanding Risk (UR) Community convenes every two years at the global UR Forum. UR+ Vancouver was a spin-off event dedicated to issues in the region.



RECOMMENDED POLICIES AND STRATEGIES



RISK COMMUNICATION/ EDUCATION



DATA/ MAPPING/ MODELLING/ TOOLS

1. Increase access to training for groups that work with diverse stakeholders (e.g., “train the trainer”).
2. Learn from and build on programs that have been successful in communicating risk (e.g., ShakeOutBC).
3. Develop networks for critical infrastructure (CI) coordination, particularly to understand roles and responsibilities of different organizations.
4. Develop forums for sharing CI information and keep records.
5. Educate the public about the risk to critical infrastructure and develop realistic expectations of lifeline disruption in a major earthquake or flood (e.g., District of North Vancouver’s publicly accessible report *When the Ground Shakes*).
6. Facilitate risk communication via existing successful programs and services, and include new technologies, to reach diverse demographics and cross jurisdictional boundaries.
7. Reframe the value of risk reduction actions to focus on personal impacts and broad incentives.
8. Support local governments in funding and capacity-building efforts to engage communities.
9. Use creative ways to engage and motivate action, such as theatre or traditional knowledge.
10. Increase public awareness about prerequisites for Disaster Financial Assistance coverage.

1. Address knowledge gaps regarding tsunami risk (sources, effects, impacts) and use this to introduce tsunami design provisions into the building code.
2. Address data gaps in active fault studies, especially LiDAR and trenching.
3. Complete robust seismic microzonation maps for major urban communities at risk and develop seismic vulnerability/fragility functions specific for the region.
4. Develop regional, relative SLR monitoring, mapping, and scenarios for the Georgia Basin.
5. Continue to improve regional and provincial flood mapping/modelling and make compelling visual outputs to engage those affected.
6. Create a central and freely accessible information clearing house to share information.
7. Improve and develop tools and knowledge for analyzing regional costs and benefits of CI risk reduction investments.
8. Develop a web-based tool for communities to pool knowledge, avoid duplication, and optimize resources and expertise.



**BUILDINGS/ CODES/
CONSTRUCTION**



**PROCESS/
RISK GOVERNANCE/ FUNDING**

1. Support construction practice improvements that are simple yet not included in the building code.
2. Work to get the codes (e.g., CSA and NRC) to speak to each other with respect to terminology and thresholds such that the relative risk tolerances make sense.
3. Support performance-based design by increasing awareness of its benefits, which will help to align public expectations and government goals.
4. Establish a single authority within government to deal with natural hazards in the built environment, which will enable a risk-based approach and the use of performance-based designs.
5. Develop the financial and legislative framework to incentivize and facilitate the performance-based seismic retrofit of existing buildings.
6. Develop the financial and legislative framework to incentivize and facilitate resilient new and existing buildings.
7. Survey members of the public to understand what they expect from resilient new and existing buildings (e.g., life safety performance, damage mitigation, etc.).
8. Develop training programs for performance-based and risk-based design at both undergraduate and professional levels.

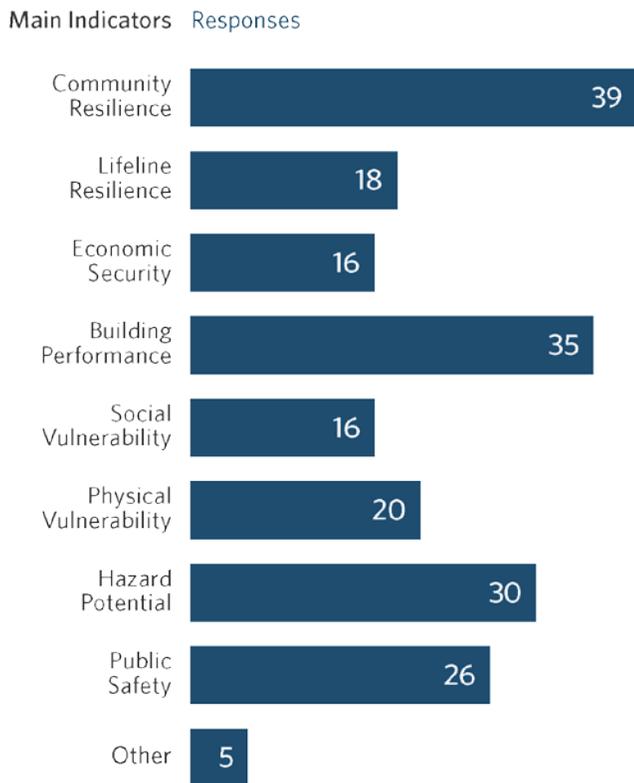
1. Organize another UR+ event, set up regional/ provincial resilience roundtables, and develop a provincial resilience strategy that addresses multiple hazards from a multi-disciplinary perspective.
2. Define the roles and responsibilities of different sectors to increase transparency and reduce gaps between research, legislation, and practice.
3. Make the business case for CI risk reduction to gain the necessary funding for risk reduction investments.
4. Use resilience initiatives to build relationships, including all members of a community, as early as possible.
5. Pre-finance disaster recovery by having municipalities enter a risk pool (like an RRSP), and then use re-insurance to increase economies of scale.
6. Show retrofit-benefit models to financial institutions to facilitate low-interest loans for retrofit projects.
7. Clarify which organizations/programs offer insurance coverage for which assets in the case of a hazard event.
8. Consider insuring important assets such as hospitals, schools, and other infrastructure.

INDICATORS

Effective risk governance requires the monitoring of risk-reducing actions within a resilience plan and the ability to assess whether risk is being managed within reasonable or tolerable thresholds. Accordingly, a significant focus of the UR+ event was to gain feedback on a series of proposed indicators or performance criteria for risk reduction.

Participants were asked which indicators were relevant and useful to them in communicating risk, understanding risk, and acting to reduce it.

Priority Indicators for Reducing Risk



NEXT STEPS

- Host the UR+ Vancouver symposium as an annual event to meet demand and report annually on progress with implementing strategies.
- Develop a mechanism that allows symposium participants to report back on the actionable strategies and how they are making progress.
- Consider a regional/provincial “resilience roundtable” as a means for reporting on actionable strategies, which could meet regularly between annual UR+ events to collaborate, share, and thereby increase local knowledge and capacity for disaster risk reduction; such a roundtable could feed into and learn from the national roundtable on Disaster Risk Reduction as well as global initiatives like the World Bank’s Understanding Risk community of practice.
- Obtain sustainable funding to support a resilience roundtable.

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