

# RESILIENCE



## MOVING IN A LIVABLE REGION

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## PRIORITIZING REGIONAL RESILIENCE & LIVABILITY

Resilience is the ability to adapt to and recover from difficulties, tragedies, and challenges faced by an individual or a group of individuals. Within the context of Metro Vancouver, it means that our region is able to adapt and thrive because it understands and is prepared for the foreseeable challenges it will face. It also means that our region develops in a manner that allows it to bounce back from vulnerabilities like sea level rise due to climate change.

The City of Vancouver is a participant in the 100 Resilient Cities program pioneered by the Rockefeller Foundation. As part of the work of the program, various shocks and stresses to the City were identified; this information can also be applied to a wider regional context.



Aging infrastructure, disease outbreak, earthquake, hazardous materials, infrastructure failure, lack of affordable housing, lack of social cohesion, and sea-level rise are all identified shocks and stresses we face. Building a resilient transit and transportation network that addresses challenges, and implementing a system that accommodates change will be important to improving our region's resilience.

### **COSTS AFTER A 9.0 MAGNITUDE EARTHQUAKE**

*\$75 billion*

### **COST OF ADAPTATION BY 2100 (2019 DOLLARS)**

*\$11 billion*

**including structural protections, utilities,  
property acquisition, seismic upgrades, etc.**

## QUANTIFYING THE COST OF DISASTER

In October 2013, the Insurance Bureau of Canada commissioned an earthquake study to estimate economic impact. In October 2012, Natural Resources Canada and the BC Ministry of Forests, Lands, and Natural Resource Operations put out a report on the cost of adapting to climate change.

# IDENTIFYING GAPS IN REGIONAL ADAPTATION CAPABILITIES

The "Climate Change Adaptation Scan and Gap Analysis" released by Metro Vancouver, in March 2015, provides us with an understanding where the gaps lie in our region's ability to adapt to and recover from the effects of climate change.

## HEALTH

Health issues have largely not been adequately integrated within existing local government adaptation activities. Contributing factors include jurisdiction issues, and the perspective that health aspects aren't viewed in a long-term lens.

## FUNDING TIMELINES

Funding criteria can vary from one program to another and can be a challenge to adaptation initiatives that require cumulative investments over indefinite periods. Cyclical program funding can cause unnecessary waiting periods for new funding programs to be instated.

## INSURANCE

Damage from increased rainfall and flooding has caused insurance claims to rise significantly. The Insurance Bureau of Canada is encouraging communities to adapt to severe weather faster to reduce the likelihood of infrastructure failure. Additionally, Canada, unlike the US and UK, does not have a national backstop for overland flood insurance.

## SMALL LOCAL GOVS

The analysis consisted of a survey of local governments in Metro Vancouver on their adaptation efforts, and noted a limited response from local governments with a very small population. It was suggested that a lack of resources could have contributed to this outcome.

## MAPPING

As of the report's release, Canada was the only G7 nation that did not have comprehensive floodplain mapping on a regular basis across the regional, provincial, and national levels. However, in BC, the BCREA and other NGOs have undertaken a multi-year effort for updated mapping.

- 1** Create a Compact Urban Area
- 3** Protect the Environment and Respond to Climate Change Impacts
- 5** Support Sustainable Transportation Choices

- 2** Support a Sustainable Economy
- 4** Develop Complete Communities

## PLACING METRO 2040 IN THE CURRENT DISCUSSION

Here are the five goals included in Metro 2040. This regional growth strategy has been cited in West Coast Environmental Law's climate adaptation implementation guide for having a clear adaptation focus.