



Emergency Management Update

June 2018

1. Emergency Management Guide – Auditor General for Local Governments
2. Next Generation Radio System
3. Information Systems
4. 2018 Full Scale Earthquake Exercise Planning
5. Post Earthquake Bridge Inspection Plan
6. Disaster Debris Management Planning
7. Public Alerting - AlertReady
8. Emergency Preparedness Week events
9. Volunteer & Staff Deployments 2017 Wildfires

- Guide to elected officials on emergency management programs
- Uses some City of Vancouver examples of successful programs (e.g. Disaster Support Hubs, neighbourhood resilience work)
- EM will review and compare our program to recommendations in guide

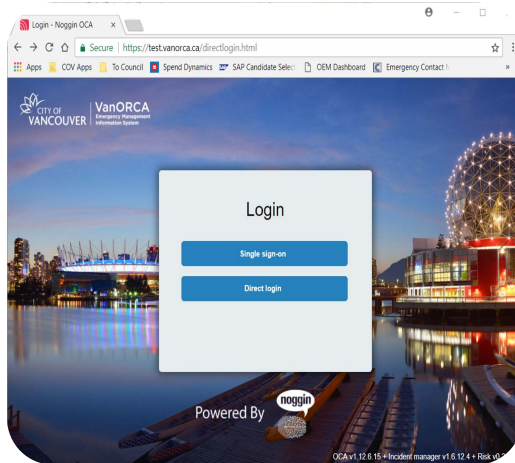


- E-Comm Radio System upgraded to new P25 system in 2017-2018
- Transition of Vancouver Fire and Police complete
- Old system decommissioned on April 3rd, 2018

Benefits:

- Increased resilience and coverage
 - Improved redundancy in radio system itself
 - Backup control site
 - 29 to 45 radio sites
 - Continued coverage in tunnels
- Encrypted system
 - Increases ability of police to share information on interoperable talk groups
 - Encryption keys changed regularly
- Increased safety
 - Building penetration and local radio-to-radio mode





Emergency Management Information System

- Supports EM Duty Officers and Emergency Operations Centre
- Incident tracking, logging, notifications, situational awareness, coordination



Electronic ESS Registration System pilot

- Partnership with
 - Emergency Management BC
 - Canadian Red Cross

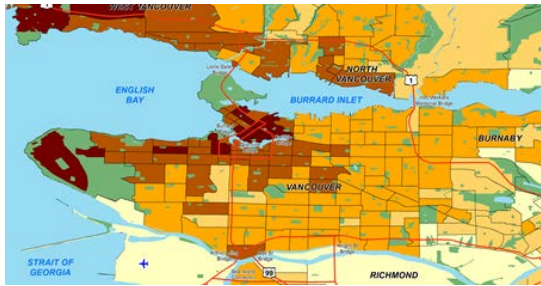
- Earthquake scenario
- Multiple-shifts, multiple-sites
- May 10, 2018
- Part of our multi-year training and exercise program

Exercise Objectives

- Damage assessment
- Mass care activities
- Activate and test components of department plans
- Engage community through Disaster Support Hubs
- Activate EOC and DOCs (department operations centres)
- Test response coordination



Exercise Scenario



- Moderate earthquake (approx. M 6.5 in Georgia Strait)
- Minor collapse of unreinforced masonry buildings
- Moderate damage to infrastructure
 - Water mains broken
 - Sewer lines damaged
 - Power lines damaged
 - Natural gas disruption
- Some liquefaction
- Periodic communications outages
- Aftershocks

Post Earthquake Bridge Assessment Plan

CITY OF VANCOUVER POST EARTHQUAKE INSPECTION GUIDE

BRIDGE ENGINEERING SERVICES - TASK 1A1
OUR REF: 2008-016-RPT001-0
30.17 SEPTEMBER

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STRUCTURE ID: GC-3 STRUCTURE NAME: WOODLAND DRIVE BRIDGE
BRIDGE SPECIFIC REFERENCE INFORMATION FOR POST-EARTHQUAKE LEVEL 1 INSPECTION

INSPECTION CHECKLIST

1. Is bridge open to traffic?
2. Has the bridge collapsed (partially or totally)?
3. Is there any obvious soil cracking/damage nearby?
4. Have the abutments slid or experienced loss of soil?
5. Is there any cracking in the abutment walls?
6. Have the piers tilted?
7. Is there any cracking of the piers (columns, crossbeams, bracing)?
8. Do the bearings appear shifted?
9. Do the bearings show any damage?
10. Do the steel girders appear shifted?
11. Is there any cracking or warping of the steel girders?
12. Are there any utilities damaged?
13. Is there any vertical or horizontal misalignment of the road/overlaid profile?
14. Do the deck joint openings appear excessive?
15. Is there a vertical or horizontal displacement of joints?

STRUCTURE SPECIFIC NOTES

If possible, the best initial approach to the bridge is from the north end. This will provide easiest access to perform an assessment of the Skyrain System (see next bullet) and is the side with the only means of access other than the river gate.

- There is a **SKYRAIN CANAL** crossing directly above the north end of the bridge. While not within the City's limits, its condition may necessitate the closure of the Woodland Drive Bridge.
- There is a **Storm Main** pipe structure just east of the bridge. Appropriate caution should be exercised as the pipe may have ruptured during the EQ.
- Access to the Abutments** to be achieved at the west side of the north abutment, and the east side of the south abutment to a type 12 key in roadway. Access to the bases of the piers is only possible from the north end of the bridge on the Mikrosam Daytrain cut-off access from the south.
- Multipinned in the Train Tracks below the structure is a strong indicator that soil displacement has occurred which can affect the stability of the abutments.
- Access Key Structure: A #12 profile bar is required to access gages as shown.

44 Bridges

Post Earthquake Inspection Guide

Easy to use tools

~12 million tonnes of debris from Vancouver forecast after large earthquake (480,000 truckloads)

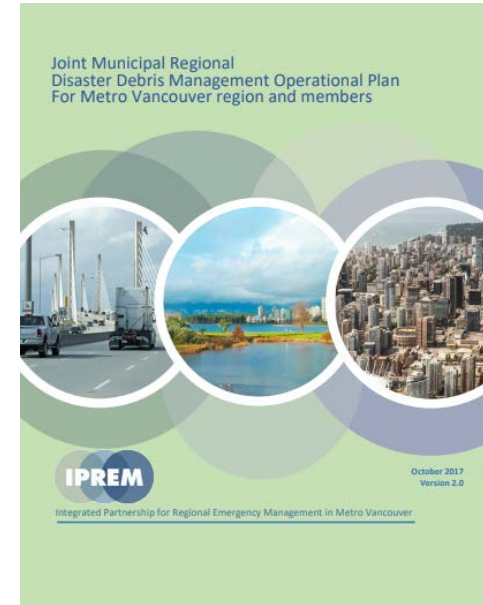
2017 - The City co-developed & validated Joint Municipal Regional Disaster Debris Operations Plan

Initial Response

- Prioritize road debris clearing
- Establish temporary debris staging

Longer Term Recovery

- Shared effort with other levels of gov't
- re-use, recycling, and energy recovery where possible






alertready.ca

AlertReady Test
May 9, 2019 13:55



- Designed to deliver critical and potentially life-saving alerts to Canadians through television and radio
- As of April 6, 2018, emergency alerts can also be sent to compatible wireless devices connected to LTE networks
- In BC, alerts will only issued through AlertReady for tsunamis at this time.
- We hope that local governments in BC will be able to issue alerts through AlertReady in the future, as they can in Alberta.
- More information on AlertReady in BC: <https://www.emergencyinfobc.gov.bc.ca/alert-ready-wireless-public-alerting/>
- Active alerts can be viewed at: <https://www.theweathernetwork.com/ca/alerts>

 EMERGENCY ALERTS now

EMERGENCY ALERT / ALERTE D'URGENCE
This is a TEST of the British Columbia Emergency Alerting System, issued by Emergency Management British Columbia. This is ONLY a TEST. If this had been an actual emergency or threat, you would now hear instructions that would assist you to protect you and your family. For further information go to www.emergencyinfobc.gov.bc.ca. This is ONLY a TEST, no action is required.



#IN IT TOGETHER

Emergency Preparedness Week Event

**Friday, May 11th, 2018 at
Canada Place**

- Earthquake simulator
- Information booths with activities
- Giant emergency preparedness Snakes and ladders!



Disaster Support Hub Community Exercise

- Third exercise hosted by Dunbar Emergency and Earthquake Preparedness group (one of 4 communities in the Resilient Neighbourhoods Program pilot)
- Community partners tested their ideas and procedures with neighbourhood residents using an earthquake scenario
- Exercises focused on four days after the earthquake which allowed participants to focus on early recovery





<https://www.youtube.com/watch?v=s52a7CvJ5qE&feature=youtu.be>

- Emergency management is starting to become part of day-to-day culture in some departments of the City
- Current focus is on preparation for the 2019 earthquake exercise which is driving significant planning efforts across the organization
- Community engagement continues through the Resilient Neighbourhoods Program and Vancouver Volunteer Corps
- Staff and volunteers are gaining valuable experience operationally by helping our other local governments and our provincial partners