

## Q&A – School Seismic Assessments on Vancouver Island/Haida Gwaii and Richmond

**Q: What are the seismic retrofit guidelines and who creates them?**

**A:** In 2004, the Ministry of Education (EDUC) engaged Engineers and Geoscientists British Columbia (EGBC), with support from the University of British Columbia Civil Engineering Department, to assist with the implementation of a seismic upgrade program for BC schools. This included the development of seismic retrofit guidelines (SRG) which are seismic assessment tools and guidelines for the performance-based seismic retrofit of BC school buildings.

**Q: How do EDUC and EGBC work together on the school Seismic Mitigation Program (SMP)?**

**A:** Advice and technical assistance from EGBC is provided to the EDUC through the association's Seismic Peer Review Committee. The committee is comprised of professional engineers with specific expertise in seismic assessment and retrofits of buildings, appointed by the Council of Engineers and Geoscientists BC.

EDUC has also worked with EGBC to fund the establishment of a Technical Review Board consisting of structural and geotechnical engineers. The board provides technical reviews of Seismic Project Identification Reports (SPIRs), responds to questions and comments regarding the application of the guidelines, and advises the Seismic Peer Review Committee on innovative seismic retrofit techniques which should proceed to formal testing.

**Q: What are SPIRs and Rapid Assessments?**

**A:** SPIRs are templated structural engineering reports that confirm the risk rating for a block (High 1, High 2, High 3, Medium or Low), provide conceptual design for the seismic upgrading, as well as a Class C construction budget, a schedule and identification of potential project risks. SPIRs are the backbone of all structural upgrade projects undertaken since they were first put into use in 2012. Rapid Assessments are a high level document that captures basic information about the blocks and confirms the risk level.

**Q: Why are schools being reassessed?**

**A:** Changes to the 2015 National Building Code (NBC2015) increased the intensity and duration of assumed ground force motions from the Cascadia subduction zone. These changes are reflected in the SRG third edition (SRG3), which was released in the summer of 2017. This assessment project is being implemented to confirm the level of risk to schools on Vancouver Island and Haida Gwaii (VI & HG) as they will be most affected by the SRG3 changes. SRG3 also included changes to the assumed performance of structures located on soft soils. For this reason, assessments will also be completed on schools in the Richmond School District (SD38).

**Q: How many schools are being reassessed and which ones?**

**A:** There are approximately 175 schools on Haida Gwaii and Vancouver Island being reassessed. The list of schools will be available at the completion of the reassessments.

School Districts	Estimated # of Blocks	Estimated # of Schools
SD50 Haida Gwaii	11	4
SD61 Greater Victoria	102	30
SD62 Sooke	24	11
SD63 Saanich	37	8
SD64 Gulf Islands	21	7
SD68 Nanaimo-Ladysmith	95	36
SD69 Qualicum	16	7
SD70 Alberni	21	8
SD71 Comox Valley	43	15
SD72 Campbell River	25	12
SD79 Cowichan Valley	56	21
Vancouver Island		
SD84 West	7	3
Vancouver Island		
SD85 North	46	12
SD93 CSF	2	1
<b>TOTALS</b>	<b>506</b>	<b>175</b>

**Q: Will more schools be rated high risk?**

**A:** With the changes to SRG3, there is a possibility that school blocks previously identified as having Medium or Low-risk may now have a High-risk ranking.

**Q: When will the public know if their school is added to the SMP?**

**A:** All assessments will be completed in the fall of 2018 after which the Ministry will update the Seismic Mitigation Program Progress Report available on the Ministry’s website.

**Q: How will projects be prioritized?**

**A:** Projects will be prioritized by each school district through their Annual Five-Year Capital Plans submitted to the Ministry. Priority for funding of seismic projects primarily includes consideration of the level of risk, with the funding of H1 and H2 risks generally receiving the highest priority consideration by the Ministry. However, H3 blocks may be prioritized for funding based on their unique circumstances or characteristics. This includes being the only school serving a community, or where the required mitigation is of a low cost and can be accomplished within a short timeline following allocation of capital funding.

**Q: Who is paying for the assessments?**

**A:** The Ministry of Education has funded the reassessments.