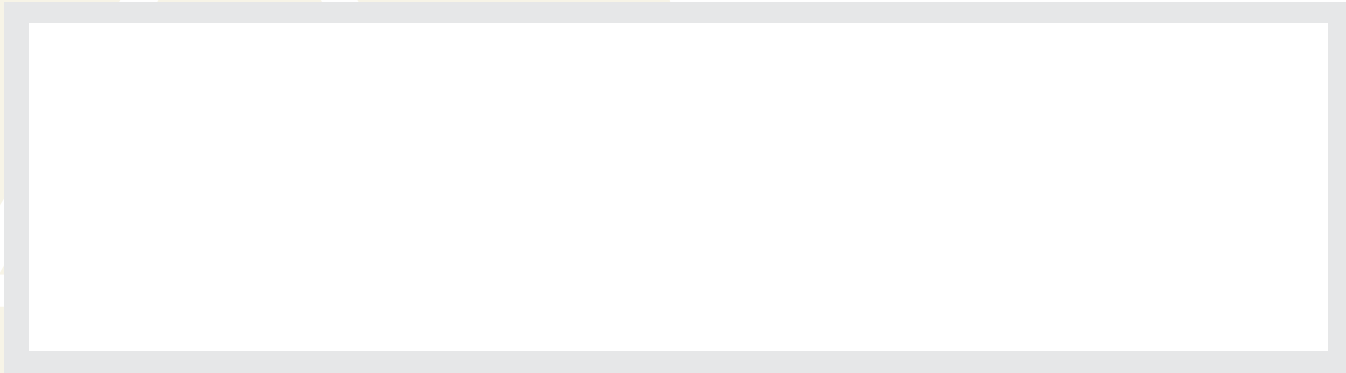




Report 12, 2008/09 - Planning for School Seismic Safety

As at July 2010

Introductory comments from Ministry of Education



Recommendations addressed in previous follow-up report(s)

RECOMMENDATION	STATUS
Recommendation 5: The ministry and boards of education work together to ensure future seismic projects are integrated into a long-term capital planning framework.	Substantially implemented

Outstanding recommendations

RECOMMENDATION AND SUMMARY OF PROGRESS	STATUS
<p>Recommendation 1: The ministry identify how much of the program it can deliver within the available budget, and use this information to confirm future priorities and funding for the structural program.</p> <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: The Ministry has worked with APEGBC and UBC to complete risk assessment of all schools in seismic zones. APEGBC/UBC completed development of the enhanced risk calculator tool based on research and analysis of the performance of over 30 building types during the three types of seismic activity (subduction; subcrustal; crustal). The Ministry engaged a quantity surveyor experienced with school seismic projects to provide a global estimate of the upgrade costs by risk category. Typical structural costs and soft costs were included in the estimates.</i></p> <p><i>Planned: The new assessment data will be used to prioritize future seismic upgrading projects, and estimate the overall costs to complete the program. The focus of remediation will be on high-risk blocks within individual schools. Funding can be more strategically directed at those structural elements in the schools which are of the highest priority for seismic upgrading using life-safety criteria.</i></p>	Partially implemented



Outstanding recommendations continued...

RECOMMENDATION AND SUMMARY OF PROGRESS	STATUS
<p>Recommendation 2: The ministry confirm whether the current levels of funding to school districts for non-structural remediation are sufficient to address non-structural needs.</p> <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: The Ministry has engaged expert consultant (VFA Canada) to complete a building condition assessment of all public schools in the province. UBC assisted VFA in developing assessment methodologies based on Canadian Standard CSA-S832 to evaluate non-structural building components. VFA has completed assessment of approximately 40% of all schools, and will record the status of non-structural upgrades for all public schools in seismic risk zones.</i></p> <p><i>Planned: A program of implementation of non-structural projects and strategies, including the level of funding required, and strategies for monitoring and tracking completed work, will be determined over the coming year. Non-structural deficiencies in high risk blocks will be addressed as structural upgrades are implemented; non-structural work is included in the structural cost estimates.</i></p>	<p>Partially implemented</p>
<p>Recommendation 3: The ministry consolidate its current risk management activities into a comprehensive risk management framework, including the monitoring of significant external risks.</p> <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: The Ministry has engaged APEGBC, working with the Canadian Society of Civil Engineering and the UBC Soder Business School to assist with development of the risk management framework. Improvements to the Ministry's capital asset management framework will enable better management of risk on approved capital and seismic projects.</i></p> <p><i>Planned: As framework is fully developed, communicate seismic risk reduction framework to public schools.</i></p>	<p>Partially implemented</p>
<p>Recommendation 4: The ministry:</p> <ul style="list-style-type: none"> ♦ make it a matter of urgency to implement a program delivery model and commit sufficient resources to it; and ♦ fully evaluate all options before deciding on how the program will be delivered. <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: The Ministry provided additional resources to the Vancouver School Board for a comprehensive review of 60 of its schools in recognition of the complexities of its long range facilities plan. This comprehensive planning methodology will serve as a template for other large school districts. Based on findings from the Clay Brick Pilot Analysis, the Ministry will consider additional capital funding to expedite the construction phase of two VSB schools as the next phase of the project.</i></p> <p><i>Planned: The VSB comprehensive plan will form the basis for comprehensive planning and program delivery in all seismic-zone districts. The Clay Brick Pilot Analysis will be initiated in 2010.</i></p>	<p>Partially implemented</p>



Outstanding recommendations continued...

RECOMMENDATION AND SUMMARY OF PROGRESS	STATUS
<p>Recommendation 6: The ministry require boards of education to collect information about the progress and status of non-structural mitigation programs, and use this information to assess whether the status and rate of progress of non-structural mitigation is acceptable and whether funding is adequate.</p> <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: VFA Canada has been engaged to complete a building condition assessment of all public schools in the province. Data recorded will include the status of non-structural upgrades for all schools in seismic-risk zones.</i></p> <p><i>Planned: Non-structural deficiencies in high risk blocks will be addressed as structural upgrades are implemented; cost is included in structural cost estimates. The level of funding required, the program for implementation of non-structural projects, and monitoring strategies for progress and completion will be determined in the next year.</i></p>	<p>Partially implemented</p>
<p>Recommendation 7: The ministry work in partnership with boards of education to develop and implement an information plan that will inform the public about seismic hazard, risk and the constraints around the program, and give the public opportunities to provide input on future program objectives and priorities.</p> <p>Actions taken, results and/or actions planned</p> <p><i>Action to date: School districts have been informed of advances in research and analysis, and resultant updated risk assessments. Web-based materials regarding school seismic risk and program status updates are under development for public access, and to encourage public engagement.</i></p> <p><i>Planned: As enhanced risk assessments are completed, APEGBC and UBC will assist the Ministry by providing technical support in the development of the Ministry's communication strategies; and in the development of web-based materials for public access to be coordinated between the APEG School Seismic Upgrade Program website and the Ministry website on the school seismic upgrade program. This will provide direct public access to seismic hazard and risk materials, enabling a better informed public.</i></p>	<p>Partially implemented</p>