March 18, 2014

Benefits of Cost Sharing Jointly Determined Priority Capital Projects

Background

- In a 2010 report[1], the Auditor General advised government that the cash balances held by school districts and colleges were well in excess of what is needed for operating purposes, and that excess cash held by government entities results in higher borrowing costs to government.
- Since that report, government's Public Accounts reflect these cash balances have increased by 26 per cent. As at March 31, 2013, SUCH sector entities held $2.8 billion in cash and temporary investments. Much of this cash came from government operating and capital grants funded by debt.
- The Auditor General released an update[2] on his 2010 report on March 18, 2014 that reaches similar conclusions.
- *Budget 2014* made reference to the new capital funding policy's cost sharing and debt reduction initiatives[3].

Benefits of improved government cash management

- The primary fiscal constraint on government is the debt-to-GDP ratio. This measurement is viewed by debt rating agencies as a means of assessing credit worthiness. Government's success in maintaining a stable track in this regard is the main reason for our retention of the AAA credit rating and the associated lower borrowing costs versus other jurisdictions.
- Government's three year Fiscal Plan includes approximately $3.6 billion in capital funding over that period. This funding is borrowed and therefore directly impacts the taxpayer-supported debt-to-GDP track. Each $200 million reduction in government debt represents approximately 0.1% drop in this key metric.
- Preliminary government estimates indicate that there may be as much as $500 million in cash and short term investments in excess of operational requirements and/or not subject to external restrictions held by school districts. Utilization of these funds to reduce government's debt obligations (e.g., by jointly funding capital projects) results in reduced working capital balances which is consistent with the Auditor General's recommendations, and can make a significant difference to government's debt-to-GDP ratio.
- The *2014 Budget and Fiscal Plan* forecasts a debt-to-GDP ratio of 18.4% ($43.1B / $234.1B) for fiscal 2014/15, but is projected to decline to 17.8% by 2016/17 ($45.5B / $254.8B). This declining trend includes an assumption on the success of this cash management initiative.

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1 See Aspects of Financial Management, August, 2010, here:
http://www.bcauditor.com/pubs/2010/report4/aspects-financial-management

2 See Working Capital Management since 2010, here:
http://www.bcauditor.com/pubs/2014/report14/working-capital-management-2010

3 See "Strategic Debt Management" topic box in the *2014/15 Budget and Fiscal Plan* (B&FP) beginning page 48, here:
http://www.bcbudget.gov.bc.ca/2014/bfp/2014_Budget_Fiscal_Plan.pdf

GENERAL ISSUE:

The primary objective of the Seismic Mitigation Program (SMP) is to achieve a life-safety standard for public schools by minimizing the probability of local structural collapse as a result of a seismic event.

FACTS AND FIGURES:

- **Since the inception of the SMP:**
  - **— 140 projects completed;**
  - **— 8 under construction;**
  - **— 11 proceeding to construction; and**
  - **— 54 supported.**
- **With the above 213 projects underway, there are another 104 schools remaining to be addressed.**
- **Since 2001, government has spent or committed $2.2 billion to seismically upgrade or replace 213 high-risk schools.**
  It is anticipated it will cost a further $600 million to address the remaining 104 high-risk schools in the province.

BACKGROUND:

- In March 2004, the Ministry initiated seismic assessments of 877 schools within 37 school districts located in high-risk seismic zones.
- In November 2004, Government committed to a $1.5 billion plan for the seismic upgrading of 749 schools over 15 years to make BC schools earthquake safe.
- In 2005, SMP approval of 95 projects announced as part of a 3-year SMP capital plan.
- Since 2005, a technical team with members from the Association of Professional Engineers and Geoscientists (APEGBC) and the University of BC's (UBC) Earthquake Engineering Research Facility has continued to refine the risk assessment and mitigation strategies through experience in actual seismic upgrade projects, extensive laboratory testing at UBC's world-class shake table lab, and peer review by leading international structural experts.

- APEGBC's work was the basis of a new assessment methodology that led to a reassessment of the remaining high-risk schools in 2010.
- Schools were categorized as:
  - **High 1** - Most vulnerable structures; at risk of widespread damage or structural failure; not repairable after event. Structural and non-structural upgrades required.
  - **High 2** - Vulnerable structures; at risk of widespread damage or structural failure; likely not repairable after event. Structural and non-structural upgrades required.
  - **High 3** - Isolated failure of building elements such as walls are expected; building likely not repairable after event. Structural and non-structural upgrades required.
  - **Medium** - Isolated failure to building elements is expected; non-structural elements (such as bookshelves, lighting) are at risk of failure. Non-structural upgrades required.
    Buildings to be upgraded or replaced within the Capital Plan when it has reached the end of its useful life.
  - **Low** - Least vulnerable structure. Would experience isolated damage and would probably be repairable after an event. Non-structural upgrades may be required.
- The SMP now focuses on addressing schools with high risk blocks (H1/H2/H3).
- In May 2012, APEGBC's new reassessment results were made public, along with the role APEGBC had been fulfilling under contract with the Ministry. The results reduced the number of projects that had not been addressed from 522 to 152 at that time.
  - The 152 remaining projects were identified as Phase 2 of the SMP with an estimated total cost of $1.3 billion.
    (Note: Government had already identified $1.05 billion in the 10-year capital plan for Phase 2 seismic projects).
  - 14 projects were supported to proceed at an estimated cost of $122 million.
- In March 2013, feedback from school districts increased the number of remaining Phase 2 projects from 152 to 161.
- In May 2013, Government approved a three-year spending plan that supported an additional 45 projects to proceed at an estimated cost of $584 million.
- The Seismic Retrofit Guidelines have received a number of awards from the engineering community, both provincially and nationally:

— In 2013, the Ministry (in partnership with APEGBC, UBC`s Earthquake Engineering Research Facility and four structural engineering firms) won the following awards:
  - The ***Award of Excellence*** and the ***Engineering a Better Canada Award*** at the 2013 Canadian Consulting Engineering Awards Gala; and,
  - The ***Lieutenant Governor's Award for Engineering Excellence*** and an ***Award of Excellence*** at the 2013 Awards for Engineering Excellence in British Columbia.

— The ***Excellence in Innovation in Civil Engineering*** from the Canadian Society of Civil Engineering in 2010.

- The Ministry of Education, APEGBC and UBC agreed to share the Seismic Retrofit Guidelines with the US Federal Emergency Management Agency (FEMA).
- As of April 2014, the following numbers represent progress of schools that have been or are in progress of being seismically upgraded, either through the SMP, or through the capital plan:

SMP Status	
Completed schools	140
Under construction	8
Proceeding to construction	11
Supported	54
Total of Above	**213**
Remaining to be addressed	104

Primary Contact:	**Prepared by:**
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MINISTRY OF EDUCATION
BRIEFING NOTE

PREPARED FOR: Honourable Peter Fassbender, Minister, for **Information** at the request of Resource Management Division

SUBJECT: School District No. 38 (Richmond) seismic and capital projects information for a meeting between Honourable Teresa Wat (MLA for Richmond Centre) and the Richmond Board of Education on April 4, 2014.

BACKGROUND:

Enrolment, Capacity Utilization, etc.

- For the 2013/14 school year, School District No. 38 (Richmond) (SD38) has 20,747 students enrolled, a decline of more than 2,611 students (11.2%) since 2000/01.
- This decline in enrolment has led to at least 3000 surplus seats in the School District, or a utilization rate of approximately 86%.
- A copy of the School District Profile for School District No. 38 (Richmond) is attached.

Seismic Mitigation Program

- Based on engineering assessments of BC schools, in 2004 government committed to a $1.5 billion plan to seismically upgrade 749 schools over 15 years.
- Since 2005, an APEGBC/UBC technical team has continued to refine the risk assessment and mitigation strategies through experience in actual seismic upgrade projects, extensive laboratory testing at UBC's Earthquake Engineering Research Facility, and peer review by leading international structural experts. This work was the basis of a reassessment of high-risk schools in 2010.
- The 2010 assessment had a significant impact as it reduced the overall number of high-risk schools requiring seismic upgrading from 524 to 162 schools currently.
- Many of the buildings removed from the high-risk rankings were one and two storey wood frame structures. APEGBC's research and analysis determined many of these buildings do not have high risk of structural collapse. This single issue had a significant impact on Richmond's schools, reducing the number of high risk schools from more than 20 to five.
- More recently, detailed engineering on Gilmore Elementary, a project supported to proceed in 2013 with High 2 risk, determined the school had High 1 risk. This led SD38 to take a more detailed look at a number of their schools, concluding that in many cases the risk was higher than the 2010 assessment results.
- When advised of the results of SD38's work, Ministry staff brought this issue to the attention of the APEGBC/UBC team. APEGBC's team concluded more work was needed as they felt the higher risk ratings driven by soft soils and the potential for liquefaction may be overly conservative. A letter from APEGBC outlining this issue and the steps they will be taking to better understand the potential impacts to soft soils was provided. It was initially estimated the work would conclude by December 2013.

- All of the above, including the APEGBC letter, were communicated to SD38 staff on August 26th. A copy of the letter and the email summarizing discussions from earlier that day are attached.
- Work to confirm the risk to a large number of Richmond schools has taken longer than first expected, and is still underway. However, on a conference call on March 12th with SD38, ministry and APEGBC representatives, APEGBC did concede the soft soils analysis had not developed the previously expected results, and there was a strong potential for some schools to be classified as having increased risk.
- APEGBC's Technical Review Board is currently reviewing the assessment work conducted by structural engineers working for SD38. A report summarizing the soft soils issue and the review results is expected to be sent to the ministry shortly.
- This issue is of the highest priority. The ministry will share any information as it is developed and will work with the school district to address any projects that may come about from this issue.

Capital Projects

- Since 2001, more than $94 million has been spent on capital projects in School District 38. This includes new and replacement schools, seismic upgrades and space required to allow the introduction of Full Day Kindergarten.
- In late 2011 a project to provide additional space at Henry Anderson Elementary was supported. The School District is still working to complete a Project Definition Report (PDR) to determine the appropriate scope and budget for this project.
- The last capital plan submitted by the School District last fall indicated that the following projects are their highest ranked requests:
    - New City Centre Elementary School
    - Building Envelope Remediation at Robert J Tait Elementary
- The school District recently disposed of the closed Steveston Secondary, funds from this will likely be used towards the acquisition of a site for the proposed City Centre Elementary.

DISCUSSION:

- The school District is currently in the process of completing two PDRs, one for the seismic project at James Gilmore Elementary and one for the additional space at Henry Anderson Elementary.
- Once the PDRs are submitted and reviewed Project Agreements can be entered into to have these projects proceed to design and construction.
- The School District should plan for future seismic remediation work based on the recent reassessment of the individual building risks. The follow up from APEGBC should be available shortly to confirm recent discussions.
- Efforts need to continue to rationalize the excess capacity in areas of the School District while ensuring the appropriate spaces in developing areas of the community.

LINKS TO OTHER MINISTRIES: (If applicable)

Attachment(s)

<u>Contact Information</u> Resource Management Division 250-356-7814	**DF**	**Approved by:**
	ADM Initial	**Rob Wood** **Deputy Minister**
		Date signed: April 3, 2014

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August 26, 2013

Mr. Phillip Chambers
Regional Manager & Manger Responsible for
the Seismic Mitigation Program
Capital Management Branch
Ministry of Education
PO Box 9151, Stn Prov Govt
Victoria BC V8W9H1

Dear Sir;

Re: Seismic Mitigation Program - Seismic Risk of Wood Frame Buildings on Soft Soils

As you are aware, the APEGBC Technical Review Board (TRB) had been established to review school seismic upgrade projects to ensure the consistent application of the *Seismic Retrofit Guidelines* (SRG) and to identify further areas of research that would enhance the Ministry's Seismic Mitigation Program. It has come to our attention that wood frame school buildings on soft soils need improved rapid assessment techniques to ensure consistent and reliable results. Herein, we outline an opportunity to quickly address this issue through the current program to refine the application of the SRG.

The influence of soft soils on the risk assessment of buildings varies with each structure. Currently, where soft soils have a significant impact on the performance of the structure, the SRG recommends a custom site response analysis to avoid being unnecessarily conservative. This more refined analysis often reduces the demand on the structure and therefore the risk categorization and the cost of upgrading. While the cost of the custom site response analysis is warranted for Structural Project Identification Reports (SPIR) and detailed design, it is cost prohibitive to include as part of a Rapid Assessment. We have reviewed several rapid assessments for wood frame schools in Richmond and it is our opinion that the results likely overstate the risk because the rapid assessment procedure uses conservative soils amplification without consideration of custom site response analysis.

The benefits of the custom site response analysis have been demonstrated for the Garden City School in Richmond. In that analysis, soil amplification had little impact on the demand on the structure, and the building performed as if it were on firm ground. To improve the validity of the Rapid Assessments we recommend the following:

1) The APEGBC / UBC Seismic Retrofit team perform site specific soils analysis on a sample of school sites in Richmond representing typical soil profiles.
2) The results of these analyses to be published as an addendum to the current SRG and rapid assessment procedures, permitting more reliable risk assessments for schools on soft soils. It is anticipated that this would be complete by December 2013.

We thank you for your attention to this matter and we are look forward to your feedback.

C / Mill.

Andrew Mill, PEng, StructEng, CP, FEC
Chair, APEGBC Seismic Peer Review Committee

John Wallace

John Wallace, PEng, StructEng, FEC
Chair, APEGBC Technical Review Board

BRITISH
COLUMBIA

April 2, 2014

Ref: 173497

To: All Superintendents

All of you should be aware of communication that Minister Peter Fassbender has had with Teresa Rezansoff, BCSTA President, dated March 31, 2014 (attached).

This communication was prefaced by a recent Auditor General report which raised the issue of many public sector agencies holding cash in excess of what is needed for operating purposes.

As part of the cash management strategy introduced in Budget 2014, government is working with individual government organizations on the use of this cash to address mutual objectives. For school districts, this involves cost sharing major capital projects that are priorities for both government and school districts. By doing so, government is able to reduce the amount of borrowing required to fund capital projects and at the same time make progress toward the long-term goal of gradually reducing these cash balances.

I would like to clarify a number of items related to the cost sharing of the major capital projects initiative. The cost sharing of capital projects applies only to projects that are approaching the project agreement stage. It does not apply to projects with existing project agreements, unless the project is experiencing cost pressures that exceed the project agreement budget.

On a case-by-case basis, as capital projects near the project agreement stage, government will work with boards of education to determine how much school district cash is available to contribute to the cost of the capital project. The amount of cash available will be determined by collaboratively reviewing district's financial records and school district priorities.

Where cash is deemed to be available for cost sharing, the school district will be expected to contribute up to 50 percent of the capital cost of the project.

Where boards of education may have previously designated funds for operating or capital priorities, these priorities will need to be reassessed. This may result in a board having to shift funds from a previously approved school district priority to a major capital project to be cost shared with government.

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Ministry of Education
Office of the Deputy Minister

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PO Box 9179 Stn Prov Govt
Victoria BC V8W 9H8

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In the event that a school district is deemed to have no available cash, the project will be funded with provincial capital.

Please contact Joel Palmer (A/Executive Director, Capital Management Branch Joel.Palmer@gov.bc.ca) if you have questions about capital projects or Ian Aaron (Director, School District Financial Reporting Ian.Aaron@gov.bc.ca) if you have questions as to how the amount of cash available will be determined.

Sincerely yours,

Rob Wood
Deputy Minister

Attachment

pc: All Secretary-Treasurers
Teresa Rezansoff, British Columbia School Trustees Association

BRITISH
COLUMBIA

March 31, 2014

Teresa Rezansoff, President
BC School Trustees Association
Email: teresa.rezansoff@sd51.bc.ca

Dear Ms. ~~Rezansoff~~: Teresa

I am writing as follow up to our recent conversations regarding government's cash management strategy and cost sharing school district capital projects.

As you know, government has made a firm commitment to balancing the provincial budget. During these challenging times, this requires careful debt-to-GDP management to maintain British Columbia's valuable triple-A credit rating. Part of this involves careful balance sheet management.

The auditor general issued a report in 2010 indicating that many public sector agencies were holding cash in excess of what is needed for operating purposes. A follow up report on March 18, 2014, presented similar conclusions. One of the ways government is addressing this issue is through the creation of Provincial Treasury's Central Deposit Program (CDP), where voluntary deposits by government organizations enable government to use the cash for debt management purposes until the cash is needed by the agencies. I commend school districts for being strong participants to the CDP, with $300 million currently on deposit that is helping reduce cost of government debt.

As part of the cash management strategy introduced in Budget 2014, government is working with individual government organizations on the use of this cash to address mutual objectives. For school districts, this involves cost sharing major capital projects that are priorities for both government and school districts. By doing so, government is able to reduce the amount of borrowing required to fund capital projects and at the same time make progress toward the long term goal of gradually reducing these cash balances on government's balance sheet.

I must stress that the cost sharing of capital projects applies only to projects that are approaching the project agreement stage. It does not apply to projects with existing project agreements, unless the project is experiencing cost pressures that exceed the project agreement budget.

One of the challenges will be establishing the amount of cash that is available for cost sharing. On a case by case basis, as capital projects near the project agreement stage, government will work with boards of education to determine how much school district cash is available to share the cost of the capital project.

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I know that some boards of education will be faced with difficult choices, some of which may require changes to school district priorities. However, this government was elected on a commitment to balanced budgets, which requires that we effectively manage the provincial debt-to-GDP ratio and maintain a triple-A credit rating. Government is working with all of our partner organizations, including boards of education, to achieve these goals that are important to the future of our province.

As always, I appreciate our collaborative relationship in our co-governed education system. I look forward to working with you on these initiatives.

Sincerely,

Peter

Peter Fassbender
Minister

GENERAL ISSUE:

In a 2010 report, updated in March 2014, the Auditor General advised government that the cash balances held by school districts were more than what was needed for operational purposes.

FACTS AND FIGURES:

- **As of April 22, 2014, 34 school districts had a total of $342M of cash on deposit with Provincial Treasury's Central Deposit Program (CDP).**
- **As at June 30, 2013, school districts had a combined total of $1.1B in cash and short-term investments.**
- **After accounting for cash held to meet short-term obligations, contributions restricted by an external contributor, school-generated funds, and cash restricted for capital projects, school districts had a combined total of $258M in cash and short-term investments as at June 30, 2013.**

BACKGROUND:

- During the 2011 school year, the Ministry of Education, working collaboratively with secretary-treasurers, used forecasting of cash flow requirements to adjust the timing of grant payments to school districts to more closely match their cash spending patterns.
- From 2011 to 2012, Provincial Treasury, the Ministry of Education, and secretary-treasurers of select school districts worked together to pilot a program where their idle cash balances were deposited with Provincial Treasury to earn a competitive rate of return. These deposits were used to offset government cash requirements, reducing debt costs and debt levels.
- As a result of a 2012 Lean initiative, the Central Deposit Program (CDP) was launched by Provincial Treasury in February 2013. Deposits to the program from Education, Health and the Crown Corporations have grown to a current total of $1,240M, with $342M deposited from thirty-four school districts.
- Balance sheet management involves the review of existing cash balances across all government organizations to identify amounts not required for ongoing operational needs.

- Ongoing balance sheet management will involve discussions with individual government organizations (ie. school districts) on the eventual use of any available cash to address jointly-determined objectives.
- School district available cash may be used to finance government approved capital projects in order to reduce projected capital debt requirements and achieve interest cost savings.
- Government funds both operating and capital spending requirements. Under the new process, operations continue to be funded however school districts are expected to contribute available cash to upcoming capital project budgets, thereby reducing provincial capital requirements.
- Capital grants are still anticipated to fund the majority of Education projects, and projects with existing Project Agreements will be unaffected.
- Details of the proposed balance sheet management process have been discussed with Boards of Education and the Boards' senior employees.
- School districts and SUCH sector entities in general, have resisted government direction on the utilization of cash balances for capital projects.

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