



**2012/13**  
**Capital Plan**

**Capital Plan Instructions**

Resource Management Division  
May 2012

# 2012/13 CAPITAL PLAN - CAPITAL PLAN INSTRUCTIONS

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## **PART I: OVERVIEW**

### **1 Introduction**

One of the core functions of the Ministry of Education is to allocate funds for the K-12 public education system. These funds include capital funding for school construction and operating funding for ongoing renovations and upgrading required to maintain the condition of existing capital assets. The Ministry is fiscally responsible for all aspects of the management of the capital procurement process with all costs associated with capital and operating funding incorporated within its budget.

#### **Capital Asset Management Framework**

In keeping with government's Capital Asset Management Framework, the Ministry has transferred accountability and responsibility for capital expenditures to boards of education, while retaining public accountability for ensuring that schools are planned, designed, constructed, and maintained in a cost-effective manner.

Under the Ministry's resulting project procurement process, boards of education are required to develop and maintain a comprehensive School District Facilities Plan (SDFP), and to submit a Project Identification Report (PIR) for each project determined to be of the highest priority for an upcoming five-year capital plan.

#### **School District Facilities Plan**

A comprehensive SDFP forms the basis for a board of education's capital investment decisions. Such plans take into consideration education program requirements and trends; operating capacities and current condition of existing facilities; current and anticipated changes in land use; student yield rates; community demographics; local community and economic development strategies; and other long-term planning considerations.

In terms of capital plan submissions to the Ministry, the SDFP provides the rationale for specific projects that may be proposed as part of a board of education's five-year capital plan. In addition, the SDFP provides a district-wide framework for other key local decisions, such as school consolidations, locations for district programs and maintenance priorities. The SDFP should outline concrete plans for a ten-year planning horizon with more general consideration for the longer term. The scope and emphasis of each SDFP will vary depending on the specific circumstances and priorities of each school district.

#### **Project Identification Report**

More specifically, a Project Identification Report (PIR) must be completed in support of each of a board's highest priority projects included in its capital plan submission. The PIR must:

- confirm, update and expand the project rationale and definition of scale as presented in the School District Facilities Plan;
- assess the relative costs and merits of potential options, including (but not limited to) considerations such as:
  - additions to existing school;
  - construction of new space;
  - adjustment of existing catchment areas;

- relocation of programs to better utilize existing space.
- include a Seismic Project Identification Report (SPIR) in the case of a seismic project request;
- develop comprehensive cost estimates for each option, including appropriate contingency allowances;
- include a comprehensive financial plan for the project;
- identify the range of risks associated with the project and outlined ways to transfer, reduce or mitigate those risks; and
- identify and evaluate partnership opportunities.

Completion of a PIR will be funded using existing school district financial resources, which includes Annual Facility Grant (AFG) funding. School districts will not be reimbursed or credited for the cost of a PIR unless the project progresses to a Project Agreement.

## **2. Capital Funding**

Each year, boards of education are required to submit a five-year capital plan providing details on high priority projects needed for their school districts. Eligible project categories are listed below:

- Capacity (new and additions including sites);
- Replacement (includes sites);
- Renovations
- Seismic Mitigation;
- Mechanical/Energy Upgrades
- Building Envelop Remediation
- Buses (new and replacement)

Upon receipt of all capital plan submissions, the Ministry analyzes individual project requests and the supporting Project Identification Report, allowing the request to be assigned a priority ranking on a provincial basis. Based on further analysis of the highest priority requests and PIRs, the Ministry establishes a long-term capital plan that will inform the decisions of the Minister and government's Corporate Capital Plan.

## **3. Capital Cost Drivers**

Four primary capital cost drivers should be considered with respect to the management of a board of education's capital asset base:

### **(a) Enrolment Changes**

The Ministry develops ten-year enrolment projections based on the analysis and interpretation of data from BC Stats. School districts are required to provide projected enrolments at individual schools, such that the sum for the individual schools agrees with the Ministry projections. School districts may choose to develop their own ten-year projections

based on local knowledge of future development and enrolment trends that can be presented to the Ministry in support of a capital plan submission.

School districts are required to develop a capital plan based on a ten-year projection horizon to allow identification of future site acquisition needs. All districts requesting the acquisition of new school sites or the expansion of existing school sites, in response to potential enrolment growth generated by new residential development, must have School Site Acquisition Charges (SSAC) in place before the Ministry will support a site request. Once SSAC have been established in a school district, updated ten-year enrolment projections will inform the district's annual consultations with its local government regarding the need for new school sites and the calculated values of the per-unit SSAC.

**(b) Facility Age and Building Condition**

Where facilities have been maintained in accordance with a long-term maintenance program but have reached the end of their functional or economic life, building renovation may be necessary to return a facility to an appropriate working condition. Alternatively, replacement of a facility may be warranted. In support of a requested renovation or replacement project, school districts must provide a facility condition assessment (FCA) report as completed by VFA under the Ministry's Capital Asset Management Services.

To qualify for capital funding, major renovation or replacement project requests must exceed \$1.5 million. Any renovation projects less than \$1.5 million are expected to be managed using Annual Facility Grant funding, with work scheduled over several years, if necessary, to complete the project. For 2012/13, the Ministry expects to make funding available for existing Building Envelope Program projects and new Mechanical/Energy Upgrade Program projects.

**(c) Seismic Risk**

The Ministry remains committed, under the Seismic Mitigation Program, to improving the safety of our public schools through the mitigation of seismic risks. This mitigation work includes structural upgrading projects that make existing schools more resistant to earthquakes, and non-structural seismic upgrading of operational and functional components that reduce life safety hazards within schools. Seismic remediation must be integrated into a board's overall capital planning strategy to effectively plan and implement priority seismic projects.

**(d) Student Transportation Services**

School buses are considered capital assets and any new or replacement buses are funded as part of a board of education's capital plan submission. Replacement of an existing school bus will be considered based on age, condition and mileage. New school buses will only be supported due to increased district enrolment, whereas buses required as a result of school consolidations are expected to be funded from operating cost savings.

## **PART II: DEVELOPING A CAPITAL PLAN**

### **1. Capital Plan Submission**

#### **(a) Capital Plan Forms**

The Ministry has a series of forms and reports available on its web-based Remote Data Entry Capital Planning (RDECP) system to assist school districts with their capital plan development and submission. RDECP can be accessed by designated users at:

[http://rdecpl.educ.gov.bc.ca/pls/rdecpl/rde\\_html\\_main\\_pk.rdecpl](http://rdecpl.educ.gov.bc.ca/pls/rdecpl/rde_html_main_pk.rdecpl)

When projects are requested in a board of education's capital plan, a CP-1 Capital Project Request Form must be completed for each project. Supporting documentation for the project requests must also be provided as part of the capital plan submission.

Each project request will appear on the CP-2 Five-Year Capital Plan Summary, which should form the basis of the submission that is approved by a board of education.

For the purposes of mandatory school site acquisition charge legislation, requests for new school sites should be outlined in the CP-2 Five-Year Capital Plan Summary of proposed capital expenditures over the next ten years. School site acquisition charges are established by boards of education based on the value of Ministry-approved eligible school sites. For further information, please refer to the Implementation Guide: School Site Acquisition Charge on the Ministry's Capital Planning Resources webpage at:

<http://www.bced.gov.bc.ca/capitalplanning/ssac/ssacguide.pdf>

The Ministry prepares ten-year enrolment projections for the province and for each school district based on population trends identified by BC Stats. School inventories and school district projections are reported in the CP-3 School District Summary of Capacities and Projected Enrolment Form. School districts must use this form to enter their ten-year enrolment projections on an individual school basis for Kindergarten, elementary and secondary students.

A CP-4 School Capacity and Enrolment Worksheet should be completed for each requested project. The form allows identification of all neighbouring schools potentially affected by a proposed project and calculates the space ranking for that project.

### **2. Project Budgets for Capital Planning Purposes**

#### **(a) Area Standards**

Ministry of Education Area Standards (05/2012) data are incorporated into the CP-1 Project Request Forms. Two versions of the CP-1 Form (Elementary; Middle and Secondary) are linked to space standard tables according to the specified facility type. Space requests are entered in the design aid sheets, which are linked to the tables for elementary, middle or secondary schools.

## **(b) Allowances, Rates and Costing Factors**

All factors associated with the development of capital budgets are published in the 2012/13 Capital Plan Allowances, Rates and Costing Factors Supplement. These values will be adjusted, where necessary, to calculate the total project budget prior to the signing of a Capital Project Funding Agreement.

### **Unit Rate**

An estimated capital budget will be calculated for each school construction project (i.e., new schools, additions, replacements) included in a capital plan on the basis of set unit rates for new construction of elementary, middle and secondary school space.

### **Supplementary Building Allowance**

School districts are required to determine the ground conditions of a site prior to its acquisition, as outlined in the Ministry's School Site Selection Guide, which can be found on the Ministry's Capital Planning Resources webpage at:

<http://www.bced.gov.bc.ca/capitalplanning/projectmanagement/documents/siteselectionguide.pdf>

Where an unusual ground condition exists, a preliminary analysis of the site condition and its associated costs will be required prior to acquisition of the site.

**Note:** The unit rate used to provide a budget estimate of construction costs for a capital project assumes a level site with normal load bearing capacity; otherwise, an appropriate ground factor should be selected to reflect the abnormal site conditions within the building footprint.

### **Site Development and Supplementary Site Allowances**

A Site Development Allowance has been developed for differently sized new buildings and additions. This allowance is intended to provide for the completion of most items associated with the scale of development, with the exception of any additional costs associated with any abnormal site conditions. The Supplementary Site Allowance must be calculated separately to include items not covered under the Site Development Allowance.

### **Development Cost Charges and Off-Site Service Charges**

School districts must comply with Government guidelines related to funding support for local government Development Cost Charges, off-site service charges, and bylaw requirements. For further details, please refer to the Capital Project Budget Guidelines for Local Government Service Charges and Bylaw Requirements (updated March 25, 2009) on the Ministry's Capital Planning Resources webpage at:

<http://www.bced.gov.bc.ca/capitalplanning/resources/budget-guidelines.pdf>

### **Planning and Design Fees**

For the purposes of capital planning, planning and design fees for school projects will be calculated as a percentage of the estimated construction and site development costs. Basic fee rates of 10 percent for new construction and 16 percent for renovations, including seismic mitigation work, have been set for new project requests. Planning fees for new construction are further subject to adjustment, based on project size, on a sliding scale.

### **Equipment and Freight Rate Allowances**

Equipment allowances for elementary, middle, and secondary schools are determined as a percentage of the base budget rate for construction. For replacement or rejuvenation projects, the equipment allowance is based on 25 percent of the equivalent new allowance. A Freight Rate Allowance is included to reflect variations across the province in shipping costs associated with the acquisition of equipment.

### **Location Factors**

Costing factors for location have been developed for all school districts, with some allowances for variations within specific school districts. The Location Factor is based on a combination of two variables, geographic factor (location based) and economic factor (market based).

### **School Buses**

All requests for school bus acquisitions included as part of a board of education's capital plan submission will be reviewed on an individual basis. Where approved by the Ministry, bus acquisition funding will be based on a capital allowance. School districts must procure their school buses using the Request for Standing Offer (RFSO) process managed by the Ministry and the Association of School Transportation Services of British Columbia (ASTSBC).

Details of the RFSO can be found on the ASTSBC webpage at <http://www.astsb.org/>

Replacement of an existing school bus will be considered for the following situations:

- Mini-buses, which are 10-years old with at least 250,000 km;
- Conventional buses (24-76 passengers), 12-years old with at least 325,000 km;
- 84-passenger buses, which are 15-years old with at least 400,000 km; or
- None of the above applies, but the need for replacement can be substantiated.

Funding requests for school buses will be considered for inclusion in a Ministry's capital plan only where school districts have submitted the following supporting documentation:

- For additional buses for new routes or trips, documentation includes rationale for the request, and copies of route sheets and route maps
- For replacement of existing buses, documentation includes the latest inspection report verifying age, condition and kilometres:
  - if bus replacement is earlier than provided in Ministry guidelines, documentation also includes rationale for the request and maintenance costs record
  - where the capacity of a replacement bus is to be upgraded, documentation must include rationale for the request, and copies of route sheets and route maps.

**Note:** Once a bus has been replaced, it may not be used for any permanent routes.

## **PART III: 2012/13 CAPITAL PLAN**

### **1. 2012/13 Capital Plan Submission**

For the 2012/13 Capital Plan, eligible project categories are listed below:

- Capacity (new and additions including sites);
- Replacement (includes sites);
- Renovations
- Seismic Mitigation;
- Mechanical/Energy Upgrades
- Building Envelop Remediation
- Buses (new and replacement)

#### **Major Capital Projects**

School districts will need to confirm the priority and scope of any unsupported capacity, replacement and renovation projects, requested in their 2010/11 Capital Plan submissions and also include any new projects in these categories for the 2012/13 Capital Plan.

Consideration for seismic projects will be based on the results of a recent screening process and enhanced assessment methodology carried out by the APEGBC under contract with the Ministry.

Previously submitted Project Identification Reports will need revision, particularly to address changes in construction costs estimates and enrolment/ capacity utilization updates.

#### **Minor Capital Projects**

The Ministry expects to make funding available for the Building Envelope Program (BEP) and a proposed new Mechanical/Energy Upgrade Program (MEUP).

##### **(a) Building Envelope Program (BEP)**

School districts have been provided with a list of their currently identified and prioritized BEP projects. These projects should be reviewed within the context of the school district facility plan. School districts will work with their Planning Officer to confirm or amend the priority order, based on the planned utilization of the individual school facilities and other rejuvenation work that may be completed in conjunction with the BEP remediation work. Individual BEP projects may then be submitted as part of the 2012/13 capital plan submission.

##### **(b) Mechanical/Energy Upgrade Program (MEUP)**

All school districts may submit requests for mechanical system and other energy efficiency upgrades. In addition to upgrades to existing mechanical systems, there is funding available through the Carbon Neutral Capital Program (CNCP) for projects such as (but not limited to) major lighting upgrades and conversion for heating systems.

Project submissions will need to focus on reducing greenhouse gas emissions while improving school air quality (where applicable), reducing operating costs, and enhancing and extending the life of school facilities.

Supporting documentation for projects will include an engineer’s feasibility study report that identifies the project scope and schedule; validates the funding amount being requested; and provides estimates of energy savings, operating cost savings, and carbon footprint reduction.

## 2. 2012/13 Capital Plan Timelines

<b>2012/13 Capital Plan Timelines</b>	
<b>May 2012</b>	<ul style="list-style-type: none"> <li>• 2012/13 Capital Plan Instructions available on the Ministry’s Capital Planning Resources webpage</li> </ul>
<b>June – October 2012</b>	<ul style="list-style-type: none"> <li>• School districts to work with Planning Officers in updating capital projects and revising existing PIR under Phase One of the 2012/13 Capital Plan submission</li> <li>• School districts to work with Planning Officers updating seismic upgrade projects and revising PIRs for the 2012/13 Capital Plan submission</li> </ul>
<b>October 15, 2012</b>	<ul style="list-style-type: none"> <li>• Due date for boards of education to submit 2012/13 Capital Plan to Ministry, to include:               <ul style="list-style-type: none"> <li>- Updated electronic capital planning forms for capital projects</li> <li>- Updated PIRs for highest priority capital projects</li> <li>- Board of Education resolution adopting the 2012/13 capital plan submission</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>October – December 2012</b>	<ul style="list-style-type: none"> <li>• Ministry reviews all submissions and applies provincial ranking criteria to requested capital projects</li> <li>• Ministry sends echo reports to school districts with assigned provincial project rankings and, where applicable, approved site acquisition projects for the purposes of establishing school site acquisition charges</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Spring 2013</b>	<ul style="list-style-type: none"> <li>• Anticipated announcement of supported projects</li> </ul>



**2012/13  
Capital Plan**

**Appendices**

Resource Management Division  
May 2012

## **APPENDIX A: PROJECT IDENTIFICATION REPORT (PIR) GUIDELINES**

### **Purpose**

School districts must prepare a Project Identification Report (PIR) for each highest priority project being requested as part of a capital plan submission. While the scale, complexity and cost of preparing a PIR may vary considerably, it should consider various options to provide the required educational programs, estimate the scope, budget and schedule of the project as accurately as possible, and provide sufficient information to enable the Ministry to decide whether to include the project as part of its consolidated capital plan. An electronic copy of the completed PIR must be forwarded to the Ministry for Planning Officer review.

The task of project identification can be complex, requiring the services of experts in demographics, land use planning, community planning, building design, and building renewal. This work often requires the engagement of a multi-disciplinary team. The primary consultant and participants involved in the completion of the PIR should be identified in the electronic copy forwarded to the Ministry.

### **Project Rationale and Scale**

The background to the proposed project will be established in the School District Facilities Plan (SDFP). A summary of the SDFP and any updates must be included as part of the PIR, which:

- Explores and evaluates how demands may be met at alternative sites or facilities, including potential reconfiguration of district programs to optimize capacity utilization.
- Updates enrolment forecasts and context as outlined in SDFP with the objective of confirming or modifying capacity.
- Estimates the required area of the facility using design aid calculations augmented with additional analysis, where necessary.
- Provides a brief description of the rationale for the project (e.g., need for new space, renovation or replacement of a poor facility, or other reason).
- Confirms validity of the long-term role for the facility, including reference to the SDFP on how the facility fits within the plans for all schools and other capital needs in the school district.
- Confirms site area requirements based on capacity and expectations for future expansion.

### **Review of Development Options**

In many instances, the focus of the PIR will be on assessing the relative costs and merits of relevant physical development options, such as:

- Redevelopment of the existing facility, which may include several alternative architectural schemes.
- Replacement on the existing site, which may involve several approaches to site development.
- Replacement on a new site, which may involve comparing the fit, cost and location merits of several alternative sites, including general types of sites as well as specific sites.
- Additions to neighbouring schools.

The financial analysis of the options should include all associated costs, including preliminary estimates of:

- Temporary accommodation costs
- Site development and other local development charges
- Operating and maintenance costs over the life of the facilities.

Cost estimates must be as inclusive and accurate as possible, since the cost will be primary factor provided in the business case to select a preferred option.

Where new sites are needed, sufficient site search analysis must be conducted to determine that suitable properties are available and to provide a realistic estimate for the cost to acquire a candidate property.

### **Seismic Mitigation**

Since 2005, a technical team led by the Association of Professional Engineers and Geoscientists of BC (APEGBC), working with its partners at UBC, have continued to refine the risk assessment and mitigation strategies for seismic retrofits through experience in actual seismic upgrade projects, extensive laboratory testing at UBC's world-class Earthquake Engineering Research Facility, and peer review by leading international structural experts. This work was the basis of a new assessment methodology that led to a reassessment of the remaining high-risk schools. The new assessment categories (High 1, High 2, High 3, Medium and Low), as well as the new assessment results for the remaining schools to be addressed from the 2004 assessments have been recently communicated to schools districts.

School districts can now review the new assessment data and reprioritize schools in need of seismic retrofits. The assessment data provided looks at the risk of buildings on a block-by-block basis. If an individual school's highest risk block is a High 2 block, the school is categorized as a High 2 school. The initial focus will be on schools that have been categorized as High 1 or High 2 as they represent the greatest risk to life-safety. High 3 sites will be addressed in future years after the High 1 and 2 sites have been completed.

Please note the intent of future seismic retrofit projects is to address all seismic deficiencies for each school within one project. This means that a project to retrofit a High 1 school will also correct any High 3 blocks at the same time, as well as any non-structural issues. Non-structural requirements have been captured and are available in the Capital Asset Management System (CAMS).

When submitting projects for High 1 or 2 sites, it is suggested that detailed information in the form of a Seismic Project Identification Report (SPIR) and a Project Identification Report (PIR) be prepared and submitted with your one or two top seismic priority projects. Please also note that the Ministry will not consider projects for approval by government if they are not submitted with both a SPIR and a PIR.

The completion of a SPIR is a new process recently developed with the help of APEGBC. The purpose of SPIR is to engage structural engineers to develop solutions for structural upgrades, along with improved cost estimates for completing the work. The process provides for ongoing interaction between the structural engineer of record and a Technical Review Board comprised of APEGBC members. A template document has been developed for the SPIR's, along with a

predetermined fee structure. For new seismic projects, school districts should complete the SPIR prior to undertaking the PIR as the results will impact the options contemplated in the PIR.

APEGBC has provided a guideline document (Appendix G) that also includes fee structures for structural engineers engaged to complete SPIR's

### **Consideration of Partnership Opportunities**

Identify potential partnership opportunities as early as possible, including:

- Exploration of the facilities, operational, management and funding aspects of a possible joint development with public or private partners.
- Development of the facilities program to sufficient detail, such that operational issues are addressed and realistic cost estimates for the joint development can be prepared.
- Preparation of capital and operating cost estimates in sufficient detail to obtain commitment from all parties.
- Development of a business case for the partnership opportunity — the business case must be sufficiently developed to demonstrate viability for private sector involvement.

### **Procurement Method**

Review the relative merits of the various procurement methods in relation to the project and its market context, giving due consideration to the best approach to maximizing value for money and managing project risks. A more detailed review of procurement options will form a part of the Project Definition Report (PDR) required for supported projects.

### **Financial Plan**

Provide information relating to the proposed project that includes:

- An estimate of the total project cost.
- The identification of all associated capital costs that will be avoided as a result of the project.
- An estimate of the long-term operational cost impacts of the project, including an analysis of the facility life cycle costs, where applicable.
- The identification of all local funds that will be contributed to the project.
- A budget that is sufficiently detailed and comprehensive to accurately compare options, as well as provide the Ministry with a realistic capital cost estimate for budget development.
- An analysis that demonstrates that the proposed development is within the Ministry's defined construction cost unit rates and supported supplementary costs.
- Sufficient site analysis to allow the identification of site development and other costs associated with site variables.
- The identification of the scope of renovations and upgrades should be sufficiently investigated to generate a realistic cost estimate.

### **Risk Management**

Identify all significant issues that may affect the project's scope, cost or schedule, and outline ways to transfer, reduce or mitigate those risks. Cost estimates for applicable contingencies must be identified and included in the budgets for the various options being considered.

## **SCHEDULE A – Project Budget Estimate**

A detailed project budget estimate must be submitted as part of the PIR. The project budget must be summarized on the Financial Summary form, as shown on page A-7.

### **Ministry Area Standards**

Ministry area standards are published in the Ministry of Education - Area Standards (05/2012), available on the Ministry's Capital Planning Resources webpage at:

<http://www.bced.gov.bc.ca/capitalplanning/resources/areastandards.pdf>

Space allowances apply to all capital plan projects irrespective of the procurement process.

### **Ministry Unit Rates**

Ministry unit rates will apply to all capital plan projects irrespective of the procurement process; however, set unit rates do not apply to renovation projects or seismic mitigation projects, which must be considered for budgeting on an individual project basis.

### **Allowances, Rates and Costing Factors**

Allowance, rate and costing factors associated with the development of capital budgets are published in the 2012/13 Capital Plan Allowances, Rates and Costing Factors Supplement. These will apply to all capital plan projects irrespective of the procurement process

### **Development Cost Charges and Off-Site Service Charges**

School districts must comply with government guidelines related to funding support for local government Development Cost Charges, off-site service charges, and bylaw requirements. For further details, please refer to the Capital Project Budget Guidelines for Local Government Service Charges and Bylaw Requirements (issued March 25, 2009) on the Ministry's Capital Planning Resources webpage at:

<http://www.bced.gov.bc.ca/capitalplanning/resources/budget-guidelines.pdf>

### **Site Development**

A Site Development Allowance has been developed for differently sized new buildings and additions. This allowance is intended to provide for the completion of most items associated with the scale of development, with the exception of any additional costs associated with any abnormal site conditions.

### **Supplementary Site**

Supplementary site and building costs are defined as those costs that are unavoidable, extraordinary, significant, site-specific costs, not accounted for and not affordable within the construction budget. The Supplementary Site Allowance must be calculated separately to include items not covered under the Site Development Allowance.

The construction budget is established using Ministry unit rates, cost allowances and factors. Supplementary costs therefore cover only premium costs for extraordinary work that do not form

part of the normal costs of building and are not covered under the Ministry's unit rates or allowances for site development (e.g., demolition, asbestos removal, site contamination, retention ponds required during construction, temporary accommodation).

One area of concern for "Supplementary Costs" is where costly design or servicing stipulations are being placed by third party entities, (e.g., local government, Work Safe BC). In such situations, it is important that the design team identify clearly the source of the expense, its value and the impact on the budget.

It is important that supplementary funding be considered a funding of "last resort", and not inappropriately used to increase a project's total budget. Where high cost supplementary issues are raised, different options should be reviewed by the design team.

### **Planning and Design Fees**

For the purposes of capital planning, planning and design fees for school projects will be calculated as a percentage of the estimated construction and site development costs. Basic fee rates of 10 percent for new construction and 16 percent for renovations have been set for new project requests. Planning and design fees for new construction are further subject to adjustment, based on project size, on a sliding scale.

### **Contingency Planning and Allowances**

The use of contingency planning and allowances affords the design team a measure of flexibility within their budget and schedule to effectively manage project costs.

For other items, where the cost of a specific item of work cannot be determined within a reasonable level of confidence, an appropriate contingency may be assigned:

- a. For items of work covered by a fixed Ministry allowance, such as the approved unit rate or site development allowance, the estimated cost of the work plus the design contingency and any economic adjustment must remain within the Ministry allowance.
- b. For an item of work that meets the definition of a supplementary cost, a design contingency, up to a maximum of 10 percent of the estimated cost, may be included in the project budget.
- c. The Ministry contingency allowance of 3 percent for new space and 5 percent for renovations should be considered as construction contingencies and not used during design.

### **Equipment and Freight Rate Allowances**

Equipment allowances for elementary, middle, and secondary schools are determined as a percentage of the base budget rate for construction. For replacement or rejuvenation projects, the equipment allowance is currently based on 25 percent of the equivalent new allowance.

A Freight Rate Allowance is included to reflect the variations across the province in shipping costs associated with the acquisition of equipment.

**Location Factors**

Costing factors for location have been developed for all school districts, with some allowances for variations within specific school districts. The Location Factor is based on a combination of two variables, geographic factor (location based) and economic factor (market based)..

**Other**

All costs of the project not specifically provided for elsewhere in Schedule B – Financial Summary are to be included in this section. In addition to the items listed and any other items particular to the project, the PIR is required to provide an estimate of the costs expected for the completion of the Project Development Report (PDR).

**Identified Risks**

Provide cost estimates for all significant issues identified in the PIR as risks potentially affecting project scope, cost or schedule.

## Financial Summary Form

**School Name:**  
**Project No:**  
**Project Description:**

Nominal Capacity	Kindergarten	Grade 1 - 7	Grade 8 - 12	Grade Configuration
Existing				
Approved				
Additional				

**Allowable Site Area (ha)**

**Allowable Building Area (sqm)**

Total Allowable Area   
 Less: Previously Existing Space   
 Add: Area to be Demolished   
 Area of New Space   
 Allowable Area of Renovations

**Unit Rate for Construction (\$/sqm)**

New   
 Renovations

**Maximum Allowable Budget**

Site Acquisition   
 Development Cost Charges   
 Offsite Costs   
 Site Development   
 Supplementary Site   
 Construction:      New   
                             Renovation   
 Supplementary Building   
 Fees   
 Contingency:      Design   
                             Construction   
 Equipment   
 Other:              Project Insurance   
                             LEED Gold Measures & Certification   
                             Hazardous Material Removal   
                             Environmental & Site Remediation Costs   
                             Temporary Facilities   
                             Project Management   
                             Demolition

**Escalation:** To Capital Project Agreement

Total Funding

**Identified Risks "Not to Exceed" Contingencies**

Environmental Site Risks   
 LEED Gold Measures & Certification   
 Asbestos Remediation   
 Mould Remediation   
 Hazardous Material Removal During Construction   
 Unexpected Soil Conditions   
 Third Party Partnership Agreements   
 Land Value Adjustments

**Total Identified Risks**

**Escalation** From CPA to Effective Start of Construction

**Funding Source**

Capital Plan   
 Capital Reserve   
 Land Capital Reserve   
 Local Capital Reserve   
 Annual Capital Grant   
 Other   
 Total

## SCHEDULE B – Design Aid Sheet

A design aid sheet for the project must be provided as part of the PIR.

### DESIGN AID SHEET FOR ELEMENTARY SCHOOLS

Grades: K to 7

School Name: ABC ELEMENTARY

Facility Code: \_\_\_\_\_

Date: \_\_\_\_\_

District: XX (XXXXXXXXXX)

School Capacity: • Nominal: Kindergarten - 20 Elementary - 250  
 • Operating: Kindergarten - 19 Elementary - 233

Agreed Nominal / Operating Capacity:

\_\_\_\_\_  
 Ministry of Education

\_\_\_\_\_  
 Date

This sheet is for use with the procedures in the Ministry of Education - Area Standards

PART 1 - BASIC AREAS				
Space Function	A - Existing	B - Allowable	C - Deficit	D - New
Administration / Health				80
Gen. Instruction				600
Gen. Storage				40
Gym Activity				380
Gym Ancillary				65
Media / Tech. Centre				160
Multi-Purpose				100
Spec. Education				120
Mechanical				65
Kindergarten				90
Design Space				430
* Other				
Sub-Total	Ai	Bi		Di 2,330.0
• Surplus classroom area included in DESIGN space = <input type="text"/>				
PART 2 - TOTAL AREAS				
	E - Existing		F - New	
Total Basic Areas	Ai		Di	2,330.0
			Ji	
<b>Total Gross Allowable Area</b>				<b>2,330.0</b>

#### Comments:

#### \* Other:

### **SCHEDULE C – Facility Condition Assessment**

The results of a facility condition assessment, completed by VFA under the Ministry's Capital Asset Management Services, must be included as part of the PIR for a renovation, replacement or seismic mitigation project.

The Ministry Summary Report providing the Facility Condition Index for the school will be included as Schedule C.

### **SCHEDULE D – Life Cycle Cost Analysis**

The results of a life cycle cost analysis generally should be provided as part of the PIR for a renovation or replacement project, including a seismic mitigation project where building operating costs may be materially affected.

The life cycle study period will be 40 years.

The following are the minimum criteria to be considered in the life cycle analysis:

- Capital investment
- Unplanned maintenance
- Planned annual maintenance, including interior retrofit
- Operating costs including energy
- Utility costs
- Status of non-structural seismic
- Cyclical renewals including roofing
- Planned expenditures to bring the facility into compliance with the building code (e.g., accessibility, fire suppression, electrical, exits)
- Residual value of existing building
- Residual value of replacement building

The life cycle cost analysis is expected to determine the most cost-effective option, based on capital and life-cycle cost assessments, functional and educational program requirements, energy and operating efficiency, and life expectancy targets.

## **APPENDIX B: CP-1 CAPITAL PROJECT REQUEST FORM**

As part of the web-based capital planning system, school districts must complete a CP-1 Form for each project provided in Year One to Year Five of their capital plan submission. All information related to those projects not supported for funding in a previous year can be brought forward by one year and updated. Only new requests require completion of a new CP-1 Form.

Please note the following aspects of the CP-1 Capital Project Request Form:

1. School board project ranking categories (i.e., High, Medium or Low) are provided on the CP-1 Form. Planning Officers will work with school districts to ensure that project evaluation criteria and methodologies are consistent with those of the Ministry, in order to produce a closely correlated rank order. The Ministry will then apply standard technical criteria to evaluate and rank all requests from across the province. The Ministry will 'echo' its ranking back to each school district. For Capital projects it should be noted that only those projects that have a PIR submitted will be ranked by the Ministry.
2. Project codes are used by the Ministry to sort project requests into various categories for evaluation and prioritization. A list of the project codes is provided on page A-11.

The project codes are assembled into two distinguishing categories, capacity or non-capacity, which are ranked based on different sets of criteria. Capacity projects include those projects that result in an increase in student capacity, change in grade structure (e.g., from elementary school to middle school) through the construction of new space, or the reconfiguration of internal spaces with changes in use. These projects are ranked based on capacity utilization for the area where the project is being requested. Projects that do not result in an increase in the capacity or change in grade configuration of a facility are considered non-capacity projects, even though they may result in increased area. These projects are ranked based on facility condition (i.e., facility condition assessment or seismic risk ranking), but will only be considered if supported by capacity/utilization data.

Addition projects that include significant renovations or replacement projects that include an increase in capacity may be supported by the Ministry. However, for the purposes of capital planning, a separate CP-1 Form must be completed for each of these two construction activities, as different evaluative criteria are applied to each of these project types. A determination may also be made as to the feasibility and benefits of combining an upgrade with an increase in capacity.

3. Unlike the prescribed project codes, there is an expanded field where project descriptions must be entered by school districts. The description should identify project specifics, such as the change in capacity; type of additional spaces; and location (where this may be ambiguous). Sample phrases are provided on page A-12. Description is not limited to these phrases but should be used, where possible.
4. For the existing capacity of a school, the capacity will appear as recorded on the CP-3 School District Summary of Capacity and Projected Enrolments Form.
5. Financial estimates must be provided in current dollars and not inflated for future years.
6. The source of funding included for site acquisition projects may include land capital funds, which are generated through the collection of school site acquisition charges.
7. The source of funding for other capital projects may include Ministry of Education-restricted capital, local capital, or other (e.g., community funds).

## **PROJECT CODES**

### **Capacity Related School Projects**

- ADD Addition [increases the area of an existing school with a resulting increase in capacity; includes planning and completion phases]
- NEW New School [new facility; includes site acquisition, planning and completion phases]
- SITEEXP Site Expansion [increases site size of an existing school]

### **Non-Capacity Related School Projects**

- REPLACE Replacement School [completely replaces an existing school with a new facility or partially replaces a portion of an existing school; may include site acquisition phase; includes planning and completion phases.]
- RENO Renovation [upgrades an existing facility with no change in capacity; includes planning and completion phases]
- SPS Seismic Project Structural [structural seismic mitigation, includes planning and completion phases]

### **Minor Capital Projects**

- MECHUP Upgrades to mechanical systems of an existing facility to increase energy efficiency and reduce carbon emissions. **Note:** This code will also be used to identify any potential CNCP projects
- BEP Building Envelope Program [remediates premature building envelope failure]

### **Other Projects**

- BUSNEW New School Bus
- BUSREP Replacement School Bus

## **PROJECT DESCRIPTIONS**

<b><u>Project Code</u></b>	<b><u>Project Title</u></b>	<b><u>Project Description</u></b>
NEW	Name of School	New 40K/300 capacity elementary
ADD	Name of School	Increase capacity from 40K/200 to 40K/300
REPLACE	Name of School	Replace existing 40K/350 capacity elementary with new 40K/300 capacity elementary
	Name of School	Replace 1953 classroom block
RENO	Name of School	Renovations required to upgrade facility
SITEEXP	Name of School	Expand site to accommodate school addition
SPS	Name of School	Upgrade resistance to seismic loading
MECHUP	Name of School	Upgrade mechanical system or Carbon Neutral Capital Project
BEP	Name of School	Remediate building envelope
BUSNEW		One new 72 passenger bus
BUSREP		Replace buses no. 1234 & 1235 (1 – 84, 1 - 72 PASS)

## **APPENDIX C: CP-2 FIVE-YEAR CAPITAL PLAN SUMMARY**

The intent of the CP-2 Five-Year Capital Plan Summary is to communicate to the Ministry how a school board wishes to schedule capital projects proposed for a five-year planning timeframe, including site acquisitions. Site acquisitions proposed for the sixth through tenth years of this planning timeframe are collapsed into Year Five of the CP-2 Five-Year Capital Plan Summary.

The CP-2 Summary allows projects to be organized, as follows:

### **1. Projects by Year**

The Five-Year Capital Plan reflects an orderly sequence of capital works, and is an indication of funding needs by year. The amount indicated for each project is only an estimate for capital planning purposes.

Under the capital project approval process, a project requiring purchase of a site must be entered as two separate project phases normally requiring financial information in two different capital years. The two phases are:

- site acquisition; and
- planning/completion.

### **2. Project Priority**

Each capital project must be assigned a numerical ranking, ordered from highest to lowest priority. Indicate the priority from “1 to n” sequentially, starting with “1” as the school board’s highest priority. The same priority number may not be assigned to more than one project.

Within project categories the highest ranked project will be considered the first or highest priority within that project type.

## **APPENDIX D: CP-3 SCHOOL DISTRICT SUMMARY OF CAPACITY AND PROJECTED ENROLMENT FORM**

Each school district should review the enrolment data provided in the CP-3 School District Summary of Capacity and Projected Enrolment Form. The facility statistics, such as nominal capacity, reflects data from the Ministry's facility inventory. The historical enrolment reflects the approved student headcount enrolment with the following exclusions:

- Continuing Education
- Correspondence
- Home School Registrations
- Students Younger than School Age
- Students Older than School Age
- International Students

The Ministry projection of school district enrolment is shown as district totals for Kindergarten, elementary and secondary. Using the Ministry enrolment projections as a base, enrolment breakdowns by grade-type and school must be provided on the CP-3- School District Summary of Capacities and Projected Enrolment Form. School Districts must ensure that the sum of the individual schools agrees with the Ministry projections.

If a school district chooses to develop its own ten-year projections based on local knowledge of future development and enrolment trends, these projections may only be entered into its CP3 Form with agreement by the Ministry.

School districts may submit all projected school-based enrolments in a prescribed spreadsheet format, which in turn will be uploaded by the Ministry into its web-based system for use by school district users.

## **APPENDIX E: CP-4 SCHOOL CAPACITY AND ENROLMENT WORKSHEET**

The CP-4 School Capacity and Enrolment Worksheet calculates the level of need, based on the operating capacities, current enrolments and projected enrolments of all schools in a particular geographic area of a school district.

Completion of the CP-4 Worksheet consists of identifying all neighbouring schools that may be affected by a project. Neighbouring schools include all schools in the area that may be considered part of a single large catchment area and whose enrolments are likely to be affected by the requested project. In urban areas, this catchment area is usually a three-kilometer radius for elementary schools and a five-kilometer radius for secondary schools. In rural areas, where busing is common, this radial distance should be increased.

Geographic features, such as rivers, ravines, or major arterial roads, may reduce the catchment area in some instances.

## APPENDIX F: BOARD OF EDUCATION CAPITAL PLAN RESOLUTION SAMPLE

For the Ministry to process a capital plan submission, a copy of the board of education's resolution that adopts the capital plan must be included as part of the hard copy supporting documentation submitted to the Ministry. A sample resolution is provided below.

*(District Letterhead)*

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*(Date)*

That the Board of Education of School District No. \_\_ *(school district name)* approve the Capital Plan as outlined on the attached summary.

I hereby certify this to be a true copy of the resolution for approval of the Capital Plan adopted by the Board of Education, the \_\_\_\_\_ day of \_\_\_\_\_, 201x

*(Signature)*

\_\_\_\_\_  
Secretary Treasurer

## SUMMARY OF SPIR GUIDELINES

The Seismic Project Identification Report (SPIR) is a new report format that documents the seismic retrofit concepts proposed for a seismically deficient school block.

The Ministry of Education (Ministry) requires that a School District submit an SPIR for any school block as the first step in the District's request for seismic retrofit funding. APEGBC, as the Ministry's technical advisor for the Seismic Mitigation Program, was requested by the Ministry to develop the format and technical requirements for the SPIR.

SPIRs are due diligence documents that are designed to present seismic upgrading options to assist seismic safety planning by both the School District and the Ministry. The expectation is that SPIR information will guide the seismic upgrading of school blocks in a safe and cost-effective manner.

Selected general requirements for the preparation of an SPIR include the following:

- (a) **SPIR Funding:** A School District is required to initially fund the preparation of the SPIR. The Ministry will reimburse the School District through the Certificate of Approval mechanism after the project funding has been approved.
- (b) **Renewal:** The scope of the SPIR is to include only that work (structural, architectural, mechanical and electrical) to implement the seismic upgrade. Renovation or renewal work is excluded if such work is not an essential part of the seismic upgrade.
- (c) **Prime Consultant:** The prime consultant for the preparation of the SPIR shall be a structural engineer who has attended both the SPIR Guidelines workshop on April 20, 2012 and the Seismic Retrofit Guidelines 1st edition (SRG1) workshop on September 30, 2011.
- (d) **Construction Cost Estimate:** A qualified cost consultant shall prepare a Class C construction cost estimate for the seismic upgrade (cost consultant report an appendix in SPIR).
- (e) **Multi-disciplinary SPIR Consulting Team:** The majority of SPIRs are anticipated to require nominal architectural, mechanical, electrical and geotechnical engineering services. The prime consultant shall make a request to the Technical Review Board (TRB) for approval of additional funding for such services at the onset of the SPIR. The TRB will then recommend additional funding to the Ministry, as required.

The consulting fee schedule for the preparation of an SPIR for one classroom block is given in Table 1. These fees are the total fees of the multi-disciplinary team. The fees for the cost consultant are expected to be in the 15% – 20% range of the total fees.

If a consultant is retained to prepare SPIRs for several high risk blocks at a given school (one SPIR for each of several blocks), the consultant fees are calculated on a block-by-block basis, not on the basis of the aggregate floor area for the given blocks. The one qualification is for multiple similar blocks. Fees for similar blocks are 80% of the fees given in Table 1.

Refer to the SPIR Guidelines 1st edition manual for further details on the preparation of an SPIR and on SPIR consulting fees.

**Table 1: Consulting Fees for a SPIR for One Classroom Block**

<b>Floor Area</b>	<b>Consulting Fees</b>
$\leq 1000 \text{ m}^2$	\$10,000
$5000 \text{ m}^2$	\$25,000
$> 5000 \text{ m}^2$	\$5 / $\text{m}^2$

**Notes:**  
(1) Fees based on floor areas documented by District.  
(2) Above fees exclude HST.  
(3) Fees for building in the (1,000 m<sup>2</sup> – 5,000 m<sup>2</sup>) range calculated by interpolation.