



**2015/16**  
**Capital Plan**

**Capital Plan Instructions**

Planning and Major Projects  
June 2015

# 2015/16 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 and constructed 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 (SDFP)**

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.

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 and locations for district programs. The SDFP should have 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.

#### **\*NEW - Project Identification Report (Light)**

**A Project Identification Report (Light) (PIR) must be completed in support of each of a board's highest priority projects included in its capital plan submission that will help the Ministry compare funding priorities across the 60 school districts and against the Ministry's priorities.**

**The PIR (Light) must include:**

- **Problem statement and project rationale (reason for the investment) and definition of scale as presented in the School District Facilities Plan;**

- **Demonstration that the school district has looked to resolve the problem with existing program funds and by modifying the use of the existing assets. (E.g. problem exceeds the ability of the School District to manage with local funds and / or the school district has explored altering programs and catchment areas to level out capacity pressures and cannot reasonably do so)**
- **A table of preliminary costs estimates and benefits (return on investment) of potential options, including (but not limited to):**
  - relocation of programs to better utilize existing space;
  - adjustment of existing school catchment areas;
  - additions to existing area schools;
  - construction of new schools.
- **Enrollment and projection table for the school and surrounding schools**
- **A notional project funding plan and table outlining any potential cost sharing**
- **A risk analysis that identifies the range of risks associated with the project and outline ways to transfer, reduce or mitigate those risks**
- **A notional project schedule**
- **A table that shows how the investment meets one or more of the Ministry's five priorities listed below**
- **For seismic mitigation projects, include a similarly structured Seismic Project Identification Reports Light (SPIRs) for high risk, high priority projects within your school district.**

**The Ministry will notify the School District of projects aligned with the Ministry's current priorities and determined to be a high provincial priority and will request detailed PIRs / SPIRs on a project specific basis.**

**PIR / SPIR completion costs will be funded using existing school district financial resources. School districts will be reimbursed or credited for the cost of a PIR after the approval and signing of a Capital Project Funding 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 (including sites);
- Renovations;
- Seismic Mitigation;
- Routine Capital;
- Building Envelope Remediation;
- Buses (new and replacement).

**\*NEW - Upon receipt of all capital plan submissions, the Ministry analyzes individual project requests and the supporting PIR Light, and determines priority investments based on the following criteria:**

- 1. Addressing high risk safety deficiencies.**
- 2. Contributing to ensuring the existing school assets are maintained at or better than the provincial average of 0.43.**
- 3. Ensuring the school is a critical part of the district infrastructure for the investment return period.**
- 4. Ensuring school districts are managing the schools within their districts to optimal utilization.**
- 5. Supporting areas of rapid growth linked to major economic development.**

### 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 for 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.

**NEW** - Additionally, school districts are requested to provide a utilization map, including the scale of the map, that depicts the placement of schools within the districts, labels the grade configuration of the school, identifies the catchment areas, and labels the current capacity and utilization of each school.

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

Where facilities 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 the summary pages from a school's Facility Condition Assessment (FCA) report as completed by VFA Canada under the Ministry's Capital Asset Management System.

To qualify for capital funding, major renovation or replacement project requests must exceed \$1.5 million or be accepted by the Ministry as a priority within the Routine Capital Program. Any renovation projects less than \$1.5 million are expected to be managed using Annual Facility Grant funding.

#### (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.

SPIRs are a mandatory first step in defining the scope, schedule, budget and risks for any seismic structural upgrade project. This template document is supported through a peer review process in partnership with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).

Further information about the Seismic Mitigation Program and SPIRs are located on under Appendix A (PIR Guidelines/Seismic Mitigation) and Appendix G (Summary of SPIR Guidelines).

**(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 Forms**

The Ministry has a series of online 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.

**NEW - For the submission of the Buses Capital and Routine Capital, please use the appended forms for the initial submission due September 15, 2015. This will allow the ministry to establish priorities and approve projects for delivery prior to March 31<sup>st</sup>, 2016.**

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 – **including the information submitted by September 15, 2015 pertaining to buses and routine capital.**

For the purposes of mandatory school site acquisition charge legislation, requests for new school sites should be entered into the CP-1 Capital Project Request Form and appear 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://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/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 school 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

Published Ministry of Education Area Standards (05/2012) 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.

<http://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/areastandards.pdf>

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

All factors associated with the development of capital budgets as published in the 2015/16 Capital Plan Allowances, Rates and Costing Factors Supplement are incorporated into the CP-1 Project Request Form.

<http://www2.gov.bc.ca/gov/content/education-training/administration/resource-management/capital-planning/current-resources>

More detailed information on the Allowances, Rates and Costing Factors is available in the Capital Plan Appendices.

These values will be updated, where necessary, to calculate the total project budget prior to the signing of a Capital Project Funding Agreement.

### (c) 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 annual 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 at <http://www.astsbc.org/>

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

- Type A2 mini-buses (20-29 passengers), which are more than 10-years old or have more than 250,000 km;
- Type C conventional buses (34-76 passengers), which are more than 12-years old or have more than 325,000 km;
- Type D-RE & Type D-FE (80+ passengers), which are more than 15-years old or have more than 400,000 km; or,
- None of the above applies, but the need for replacement can be substantiated.

**Note:** Seating capacity is based on manufacturers' specifications of three per seat, although different configurations are possible.

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, rationale for the request and copies of route sheets and route maps;
- For replacement of existing buses:
  - the latest Ministry of Transportation inspection report verifying the bus unit number, age, condition and number of kilometres;
  - If bus replacement is earlier than provided in Ministry guidelines, the reasons for early replacement and recent maintenance costs records are required;
  - Where the capacity of a replacement bus is to be increased, the rationale for the request must be provided.

**Note:** A bus that has been replaced may not be used for any permanent routes, and once a bus has been claimed for replacement under no circumstances may it be claimed again.

**(e) Routine Capital Projects (available funding determined annually)**

Routine Capital projects are designated as major or minor on the basis of the estimated total project cost and are investments that will extend the life of the existing asset. These include:

Any minor project estimated at less than \$100,000 should not be included in the Five-Year Capital Plan submission. Alternatively, these minor projects may appropriately be funded from a school board’s Annual Facilities Grant, where the projects are for the purpose of maintaining the fabric of an existing building.

Routine Capital projects must meet Generally Accepted Accounting Principles (GAAP) for capital improvements. Investments not eligible for Routine Capital funding include, but are not limited to day to day wear and tear, painting, flooring, parking and driveway repairs, playfield repairs.

Mandatory Supporting Documentation for Capital Program (Year One) Project Requests	
Type of Project	Supporting Documentation
Electrical Upgrade	<ul style="list-style-type: none"> <li>• independent consultant’s report to determine scope of work and estimated cost</li> </ul>
Energy Upgrade	<ul style="list-style-type: none"> <li>• independent consultant’s report to determine scope of work and estimated cost</li> </ul>
Health and Safety	<ul style="list-style-type: none"> <li>• report from a building inspector, local health inspector, WorkSafe BC inspector, architect, or engineer</li> </ul>
Mechanical Upgrade	<ul style="list-style-type: none"> <li>• independent consultant’s report to determine scope of work and estimated cost</li> </ul>
Roofing	<ul style="list-style-type: none"> <li>• independent roofing consultant’s report to determine scope of work and estimated cost</li> </ul>

**ROUTINE CAPITAL PLANNING PROJECT CODES**

ELECUP	Electrical System Upgrade
ENERGY	Energy Management [includes energy retrofits; energy saving performance contracts]
HEALTH	Health and Safety Upgrade
MECHUP	Mechanical System Upgrade
ROOFREP	Roof Replacement

**All Routine Capital project requests should be submitted using the appended Excel spreadsheets by September 15, 2015 and be included in the complete Capital Plan submission due November 2, 2015.**

The ministry will review Routine Capital plan submissions and will establish priorities based on the criteria previously identified plus priority will be given to improvements that:

1. Address issues affecting safety or the effective functioning of the school.
2. Will have the greatest impact on the Facilities Condition Index.
3. Are in schools identified with identified long-term utilization.
4. Are in schools with unique significant importance to the District.
5. Where the benefits over the costs of the improvements are positive over the appropriate time horizon for the investment.

District must submit the completed appended Routine Capital Priority list by September 15, 2015 separately from the Capital Plan submission and should also include the same information within the capital plan submission. This is a one-time requirement for a duplicate submission and will not be required into the future.

### **ROUTINE CAPITAL PLANNING PROJECT CODES**

ELECUP	Electrical System Upgrade
ENERGY	Energy Management [includes energy retrofits; energy saving performance contracts]
HEALTH	Health and Safety Upgrade
MECHUP	Mechanical System Upgrade
ROOFREP	Roof Replacement

## **PART III: 2015/16 CAPITAL PLAN**

### **1. 2015/16 Capital Plan Submission**

For the 2015/16 Capital Plan, eligible project categories are listed below:

- Capacity (new and additions including sites);
- Replacement (including sites);
- Renovations;
- Seismic Mitigation;
- Mechanical Upgrades & Major and Minor Routine Capital;
- Building Envelope Remediation
- Buses (new and replacement)

### **Major Capital Projects**

School districts will need to confirm the priority and scope of any previously unsupported seismic, capacity, replacement and renovation projects, requested in their 2013/14 Capital Plan submissions and also include any new projects in these categories for the 2015/16 Capital Plan.

Previously submitted Project Identification Reports will need to be revised, particularly to address changes in construction costs estimates and to update enrolment/ capacity utilization. Note: Only projects with current PIRs (or other required reports) will be ranked by the Ministry.

### **Mechanical Upgrade Program (MECHUP) & Routine Capital Projects**

All school districts may submit requests for mechanical system upgrades.

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 emission reductions and operating cost savings.

*For the 15/16 submission, due September 15, 2015*, districts are required to submit an excel spreadsheet list of individual Routine Capital projects that meet the Routine Capital categories along with the following information per projects:

Name of school, type of project, cost estimate, FCI prior to investment, estimated FCI post investment, school utilization, project school utilization over the next 10 years, identification of which project could be substantially completed prior to March 31, 2016.

### **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 facilities 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 2015/16 capital plan submission.

### **NEW - School Buses**

**For 2015/16, all requests for school bus replacements must be submitted using the attached Excel spreadsheet.**

The following supporting documentation is required for each replacement bus request:

1. the latest Ministry of Transportation inspection report verifying the bus unit number, age, condition and number of kilometres;
2. if the bus replacement is sooner than the age and mileage criteria shown above, the reason for early replacement is required. Recent maintenance costs records are also required; and
3. where the capacity of a replacement bus is to be increased, the rationale for the request must be provided.

Copies of documentation are acceptable. Please ensure all photocopies are legible and that electronic copies are scanned on high resolution.

The Fleet or Unit number is historically a 4-digit number broken down as follows:

- Digit 1 (or 1 & 2 for newer buses) is the capital plan year in which the bus was approved, according to the following convention:
  - Year 2000 = “0”, Year 2001 = “1”, etc, to Year 2009 = “9”; and
  - Year 2010 = “A0”, Year 2011 = “A1”, Year 2013 = “A3”, etc.
- Digit 2-3 (or 3 & 4 for newer buses) is the SD number; and
- Digit 4 (or 5 for newer buses) is the rank of bus approved that year, where the 1<sup>st</sup> bus is a “0”.

Additional buses for new routes must be requested separately via a formal request to the Ministry. The request must include copies of route sheets and route maps, as well as enrolment data, to substantiate the request.

**Note:** A bus that has been replaced may not be used for any permanent routes, and once a bus has been claimed for replacement, under no circumstances can it be claimed again.

District must submit the completed appended Routine Capital Priority list by September 15, 2015 separately from the Capital Plan submission and should also include the same information within the capital plan submission. This is a one-time requirement for double submission and will not be required into the future.

## 2. 2015/16 Capital Plan Timelines

<b>2015/16 Capital Plan Timelines</b>	
<b>July 2015</b>	<ul style="list-style-type: none"> <li>• 2015/16 Capital Plan Instructions available on the Ministry’s Capital Planning Resources webpage</li> </ul>
<b>July – November 2015</b>	<ul style="list-style-type: none"> <li>• School districts to work with Planning Officers in updating capital projects, preparing new PIRs and revising existing PIRs for the 2015/16 Capital Plan submission</li> <li>• School districts to work with Planning Officers updating seismic upgrade projects and revising PIRs for the 2015/16 Capital Plan submission</li> </ul>
<b>NEW September 15, 2015</b>	<ul style="list-style-type: none"> <li>• List of Routine Capital Projects &amp; List of School Bus Capital needs                             <ul style="list-style-type: none"> <li>• Provide Routine Capital lists on Excel spreadsheet format</li> </ul> </li> </ul>
<b>November 2, 2015</b>	<ul style="list-style-type: none"> <li>• Due date for boards of education to submit 2015/16 Capital Plan to Ministry, to include:                             <ul style="list-style-type: none"> <li>- Updated electronic capital planning forms for capital projects</li> <li>- New or Updated PIRs for highest priority capital projects</li> <li>- Board of Education resolution adopting the 2015/16 capital plan submission</li> </ul> </li> </ul>
<b>November – December 2015</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 including site acquisition projects for the purposes of establishing school site acquisition charges</li> </ul>



**2015/16  
Capital Plan**

**Appendices**

Planning and Major Projects  
June 2015

## **APPENDIX A: PROJECT IDENTIFICATION REPORT LIGHT GUIDELINES**

### **Purpose**

A Project Identification Report (Light) (PIR) must be completed in support of each of a board's highest priority projects included in its capital plan submission that will help the Ministry compare funding priorities across the 60 school districts and against the Ministry's priorities.

It should estimate the scope, budget, schedule and risks 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. A hard copy and an electronic copy of the completed PIR must be forwarded to the Ministry for Planning Officer review.

The primary consultant and participants involved in the PIR preparation should be identified. Also, each PIR should be dated and include a project number if available.

The PIR Light will help the Ministry establish provincial priorities. If a project is selected, the Ministry will notify the School District and request more detailed analysis of options, costs and benefits as well as schedule and financials. For the Capital Plan submission we are only seeking enough detailed to help make an informed prioritization decision.

### **The PIR (Light) must include:**

- **Problem statement and project rationale (reason for the investment) and definition of scale as presented in the School District Facilities Plan;**
- **Demonstration that the school district has looked to resolve the problem with existing program funds and by modifying the use of the existing assets. (E.g. problem exceeds the ability of the School District to manage with local funds and / or the school district has explored altering programs and catchment areas to level out capacity pressures and cannot reasonably do so)**
- **A table of preliminary costs estimates and benefits (return on investment) of potential options, including (but not limited to):**
  - **relocation of programs to better utilize existing space;**
  - **adjustment of existing school catchment areas;**
  - **additions to existing area schools;**
  - **construction of new space schools.**
- **Enrollment and projection table for the school and surrounding schools**
- **A notional project funding plan and table outlining any potential cost sharing**
- **A risk analysis that identifies the range of risks associated with the project and outline ways to transfer, reduce or mitigate those risks**
- **A notional project schedule**
- **A table that shows how the investment meets one or more of the Ministry's five priorities listed below**



- **For seismic mitigation projects, include a similarly structured Seismic Project Identification Reports Light (SPIRs).**

**The Ministry will notify the School District of projects aligned with the Ministry's current priorities and determined to be a high provincial priority and will request detailed PIRs / SPIRs on a project specific basis.**

**PIR / SPIR completion costs will be funded using existing school district financial resources. School districts will be reimbursed or credited for the cost of a PIR after the approval and signing of a Capital Project Funding Agreement.**

### **Options Analysis and Scale**

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

### **Review of Development Options**

In many instances, the focus of the PIR Light will be on assessing the notional relative costs and benefits options to resolve the problem. This could include:

- Reconfiguring existing programming and catchments
- Adding capacity within an existing school
- Replacing an existing school
- Expanding the school onto an different or new site
- Adding a new school on a new site

The PIR Light should include a table and enough supporting information to demonstrate these options have been considered and to outline the estimate costs and benefits of each. And, to identify a preferred option.

The notional cost estimates of the options should include all associated costs, including preliminary estimates of:

- Temporary accommodation costs
- Site development and other local development charges
- Risk reserve allowances (i.e., hazardous material removal, soils issues)
- Operating and maintenance costs over the life of the facilities (Life Cycle Costing).

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

Where new sites are needed, identification of suitable properties that may be available and their estimated costs to acquire a candidate property is helpful and will form part of the consideration.

## **Seismic Mitigation Program – SPIRS only required upon request of the Ministry**

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 were communicated to schools districts in May 2012. The assessment data provided identifies 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.

Government's current focus is on those schools classified with a High 1 or High 2 risk 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. Within this framework, school districts are responsible for developing priorities for their projects, completing SPIRs to define the scope of work required to address the seismic structural deficiencies, and preparing PIR's in support of capital plan submissions.

Seismic retrofit projects are to address all high-risk seismic deficiencies for each school within one project (once a school has been upgraded, there should not be a reason to go back for additional/future seismic upgrades). 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 or seismic risk reduction of Operational and Functional Components (OFCs) issues

The completion of a SPIR is a process recently developed with the help of APEGBC. The purpose of the 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 SPIRs (including an SPIR Summary), along with a predetermined fee structure.

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

**\*NEW - SPIRs are only required upon request from Ministry staff on a project specific basis. School Districts are requested to utilize the PIR Light process for any of their high priority projects that are also high or moderate risk seismic schools.**

### **Financial Plan**

Provide information relating to the proposed project that includes:

- A budget that is sufficiently detailed to reasonably compare options (including potential risk reserves), as well as provide the Ministry with a notional capital cost estimate for budget development – based on approved unit rates and supported supplementary costs.
- The identification of the scope of renovations and upgrades should be sufficiently investigated to generate a notional cost estimate.
- The identification of potential cost sharing that could contribute to the project; these may include Local Capital, Land Capital, Restricted Capital and outside sources.
- The identification and estimate of benefits (ROI) 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.

### **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://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/areastandards.pdf>

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

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

Allowance, rate and costing factors associated with the development of capital budgets are published in the 2015/16 Capital Plan Allowances, Rates and Costing Factors Supplement. These will apply to all capital plan projects regardless of the procurement process.

<http://www2.gov.bc.ca/gov/content/education-training/administration/resource-management/capital-planning/current-resources>

These values will be adjusted, where necessary, to calculate the total project budget prior to the signing of a Capital Project Funding Agreement.

More detailed information on the Allowances, Rates and Costing Factors categories are listed below.

### **Ministry Base Budget Rates**

An estimated capital budget will be calculated for each school space project (i.e., new schools, additions, replacements) using Ministry Base Budget Rates regardless of the procurement process. Set unit rates do not apply to renovation projects or seismic mitigation projects; these must be considered for budgeting on an individual project basis.

### **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).

### **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://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/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 items associated with the scale of development, with the exception of any additional costs associated with any abnormal site conditions.

### **Supplementary Building and Site Allowances**

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 Base Budget Rate is 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.

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 Building and Site Allowances must be calculated separately to include items not covered under the Base Budget Rate Building budget and Site Development Allowance.

The construction budget is established using the Ministry Base Budget 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 Base Budget 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 identified, 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 (including seismic mitigation) have been established. Planning and design fees for new construction are further subject to adjustment, based on a sliding scale related to project size.

### **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 Base Budget Rates or site development allowance, the estimated cost of the work plus the design contingency and any associated 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 calculated as a percentage of the base budget rate for new construction. For replacement or rejuvenation projects, the equipment allowance is 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.

### **Other**

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

### **Identified Risks**

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

## SCHEDULE A – Project Budget Estimate

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

For space projects 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				800
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 Canada 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 summary sheets from this report are sufficient.

### **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
- 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
- Status of non-structural seismic

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 for major components.

## **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 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. 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, a 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.

2. 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. Descriptions are not limited to these phrases but should be used, where possible.
3. 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, only those projects that have a PIR (or other required reports) submitted will be ranked by the Ministry.
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 proposed sources of funding for other capital projects may include Ministry of Education Restricted Capital, Local Capital, or other (e.g., community funds).

## **CAPITAL 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]
- MECHUP Upgrades to mechanical systems of an existing facility
- 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
BEP	Name of School	Remediate building envelope
BUSNEW		One new 72 passenger bus
BUSREP		Replace 1232, 1234 & 0231 (1 – 84, 2 - 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 proposed capital projects for a five-year planning timeframe. Site acquisition requests may be included for a ten year timeframe (although budgets for sites in years six to ten will not be shown on the CP-2).

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 requests by year. The funding 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 School District priority ranking, ordered from highest to lowest. 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 Actual 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 (grades 1 – 7) and secondary (grades 8 – 12). 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 following discussion with the Ministry.

## **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-kilometre radius for elementary schools and a five-kilometre 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 \_\_\_\_\_, 2015

*(Signature)*

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



## APPENDIX G: SUMMARY OF SPIR GUIDELINES

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

The Ministry requires that a School District submit a SPIR for any eligible block within a school 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 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 must 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 must 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 must 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 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 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.

**APPENDIX H: School Bus Capital Plan Submission Format**

**2015/16 School Bus Capital Plan Submission**

School District  ◀ Enter your school district number in this cell

	Fleet/Unit #	VIN #	Year Purchased	Kilometers	Capacity	Body Type	Inspection Report Included (Y/N)	Meets Replacement Criteria (Y/N)	Comments
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

Prepared By:   
 Phone/Email:

Transportation Contact:   
 Phone/Email:

