MINISTRY OF EDUCATION AND CHILD CARE

SCHEDULE B COMPANION DOCUMENT

Allowances, Rates and Costing Factors for Capital Project Budgeting Purposes

2024/25
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Contents

INTRODUCTION

This document replaces the 2015/16 Capital Plan - Allowance, Rates and Cost Factors Supplement and the Capital Plan Instructions: Five-Year Capital Plan Submission for 2019/20 - Appendix D: Capital Project Budget Estimate.

This Schedule B Companion Document is to be used in the preparation of a Schedule B Project Budget to determine a capital project budget for either a new school, a full replacement school, an addition to an existing school, a partial replacement of an existing school, and a seismic structural upgrade project.

The Companion Document provides the various allowances, rates, and costing factors that will be used in creating budget line items in the Schedule B template. The Schedule B template will be used at various stages of project development including Project Development Report (PDR), Capital Project Funding Agreement (CPFA), cost consultant's design development reporting, and cost consultant's pre-tender reporting.

All Schedule B Capital Project Budgets prepared for projects must be submitted in the Excel format provided by the Ministry. Users may enter data in cells as noted and add extra rows for identified "Other" budget line items requiring input; otherwise, the template must not be further modified.

The space allocations, provided in this document, are used in conjunction with the base unit rates and allowances, rates, and costing factors to develop the capital budget. These components particularly apply to space projects under the Ministry's following major capital programs:

- Expansion Program (EXP), which includes new schools and additions to existing schools
- Replacement Program (REP), which includes partial replacements of existing schools and total replacements of existing schools
- Seismic Mitigation Program (SMP), which includes partial replacements of existing schools and total replacement of existing schools.

The Schedule B Companion Document also includes an overview of the Prototypical Budget Model (see Appendix A) used by the Ministry to determine base budget rates for elementary, middle and secondary schools. The prototypical outline specifications are intended to inform school districts and their design teams regarding the building elements included in the base budget rate model. The elemental percentages and design ratios will inform design teams about the distribution of the base budget rate between various building elements and the design ratios on which the models are based.

The base budget rates set out in the Companion Document are derived from the cost models, based directly on the prototypical outline specifications. The outline specifications are also provided in the Companion Document to inform decisions on whether building systems or components of a higher standard or greater cost than used in the models can be incorporated into a school design. It is fully expected that savings will be accomplished in other areas of the school

design, materials, and construction to compensate for the inclusion of any premium systems or components.

The intent is not to require strict adherence to the prototype provided in the design of each type of school; rather, design teams are able to use the prototype as a baseline against which adjustments may be considered – either by reducing or increasing various elements or ratios - to remain within the project capital budget that is calculated using the specified unit rate derived from the base budget rate.

It is important to note, the resulting construction budgets developed from the unit rates are not site specific. They relate to the building only, based on a reasonably level site that is fully serviced and has good sub-surface soil conditions requiring only a spread footing foundation for the building.

Included in the Companion Document are various tables that are used to modify the construction budget for site specific factors; building size; supplementary building and site issues; and site development costs.

- Space allocation refers to an area amount that is used to calculate in the calculation of a total construction budget for either:
  - New space, for a new school or an addition to an existing school, or
  - Replacement space, for a total replacement of an existing school or a partial replacement of an existing school.
- Although this area is expressed in square meters (m^2), it remains a convention used by the Ministry for budgeting purposes only and does not represent a measured dimension of area that is either currently in existence or proposed to be built.

1. DESIGN CAPACITY

Design Capacities of Schools
To assign a design capacity (i.e., formerly "nominal capacity') for each school, the Ministry has established a theoretical number of headcount students that will be accommodated in an instructional setting (Note: the term "headcount student" is used in distinction from "Full-Time Equivalent" (FTE) students, that are used for per-pupil operating funding purposes.)

This number does not represent any class size provision that may be in place under a contract between a school district and a local teachers union, which dictates the maximum number of students for which a teacher is responsible in an instructional setting.

Line 1.1 Existing Design Capacity

- Provides the current design capacity of an existing school, as recorded in the Ministry's inventory of facilities.
- This capacity will be used in determining the approved design capacity for a full replacement of an existing school, an addition to an existing school, or a partial replacement of an existing school.
- The Ministry and school district may need to review the functional spaces of an existing school to evaluate its current design capacity.

Line 1.2 Change in Design Capacity

- Provides any proposed increase or decrease in design capacity relative to the current design capacity of an existing school.
- This capacity will be used in determining the approved design capacity for a full replacement of an existing school, an addition to an existing school, or a partial replacement of an existing school.

Line 1.3 Approved Design Capacity

- Provides the design capacity of a school resulting from a proposed capital project.
- This capacity will be determined for a new school, a full replacement of an existing school; an addition to an existing school, or a partial replacement of an existing school.

Table 1: K-12 Design Capacities
Kindergarten = 20 students per instructional setting
Grades 1 to 12 = 25 students per instructional setting

2. SPACE ALLOCATIONS FOR CAPITAL PROJECT BUDGETING PURPOSES

Line 2.1 and 2.2 Space Allocations – School Space/Renovation Space

- A space allocation (m^2) will be assigned for a new school, an addition to an existing school, a full replacement of an existing school, or a partial replacement of an existing school.
- The space allocation will be based on the approved design capacity for the project.

Elementary Schools

- Kindergarten and Grades 1 to 7

Table 2.1(a): Elementary Space Allocations (m^2)										
Design Capacity										
200	225	300	325	350	375	400	425	450	475	500
Space Allocation (m^2)										
1,990	2,095	2540	2,655	2,780	2,895	3,005	3,125	3,230	3,355	3,470

Design Capacity											
525	550	575	600	625	650	675	700	725	750	775	800
Space Allocation (m^2)											
3650	3,745	3,865	3,980	4,095	4,190	4,320	4,420	4,535	4,660	4,765	4,865

Note: Kindergarten educational settings are accorded a greater space allocation, compared to Grade 1 to 7 elementary educational settings, in recognition of the specialize educational programming provided to the youngest students first attending school.

The Kindergarten space allocation is **110 m^2** per each planned instructional space, which compares to an elementary space allocation of **80 m^2** per planned instructional space. The Kindergarten space allocation includes 90 m^2 for instruction and 20 m^2 for design space.

For example, a 200-capacity school with two Kindergarten instructional spaces will have a total area allocation of 2,210 m^2 [1,990 m^2 + (2 x 110 m^2)].

Middle Schools

- Junior Middle Schools - Grades 6 to 8
- Senior Middle Schools - Grades 7 to 9

Table 2.1(b): Middle School Space Allocations (m^2)												
Design Capacity												
400	450	500	550	600	650	700	750	800	850	900	950	1,000
Space Allocation (m^2)												
4,210	4,780	5,090	5,500	5,740	6,020	6,495	6,640	6,900	7,600	7,835	8,080	8,540

Secondary Schools

- Secondary - Grades 10 – 12

Table 2.1(c): Secondary Space Allocations (m^2)								
Design Capacity								
400	450	500	550	600	650	700	750	800
Space Allocation (m^2)								
5,025	5,640	6,155	6,500	6,930	7,840	7,835	8,170	8,568
Design Capacity								
850	900	950	1,000	1,100	1,200	1,300	1,400	1,500
Space Allocation (m^2)								
9,120	9,590	9,895	10,240	11,140	11,770	12,400	13,055	13,685
Design Capacity								
1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
Space Allocation (m^2)								
14,395	15,040	15670	16,390	17,055	17,815	18,550	19,230	19,910

3. UNIT RATE

Unit Rate

- A calculated unit rate ($/m^2$) is used to determine the construction budget for a new school; an addition to an existing school, a full replacement of an existing school, or a partial replacement of an existing school.
- Unit rates are not used for calculating capital budgets for seismic upgrade projects.
- There are three variable components that will be used in the unit rate calculation:
  - base budget rate
  - project size factor
  - project location factor

Line 3.1 Base budget rate

- The three major cost drivers in construction considered under the Prototypical School Costing Model, in descending order of importance, are:
  - the amount of built space (i.e., gross floor area)
  - the building's enclosure (i.e., exterior envelope and roof), and
  - interior construction within the building
- The ratio - and therefore corresponding cost-efficiency - of the building's enclosure to its amount of built space is a major factor in the space allocation-based calculation of capital project budgets.

- The relative base budget rates determined for elementary, middle and secondary schools will be highly dependent on the final size of buildings, as smaller buildings are less cost-efficient with regard to some major building elements.
- Smaller elementary schools are typically single-storey construction that results in:
  - a 100 percent roof-to-gross floor area ratio
  - a 100 percent foundation-to-gross floor area ratio; and
  - a high building exterior envelope-to-gross floor area ratio
- Since the cost for these higher valued building elements are spread over a relatively smaller gross floor area, the base budget rate for elementary schools will be higher when compared to the base budget rates for middle schools and secondary schools.
- In contrast, a larger building (such as typical multi-storeyed middle schools and secondary schools) will spread the costs for roof, foundations, building structure, as well as specialized educational program settings, over a much larger gross floor area; this results in a correspondingly lesser cost on a base budget rate basis.
- The base budget rates of elementary, middle and secondary schools allow all new and replacement schools to be designed to meet but not exceed current building-related codes.
- The base budget rates for elementary, middle and secondary school provide for modern learning design; classroom technology systems; Leadership in Energy and Environmental Design® (LEED Gold); American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Energy Guidelines.

Table 3: Base budget rates

Type of School	Base budget rate
Elementary School	$2,850/m^2
Middle School	$2,840/m^2
Secondary School	$2,830/m^2

Line 3.2 Project Size Factors

- A project size factor is applied to each approved capital project to address the internal economies and diseconomies of scale found in school construction which is attributable to the size of the project itself.
- Internal economies of scale will apply to larger projects resulting in increased cost efficiency on a per-unit basis for materials and services required in the construction of new or replacement space.
- Conversely, internal diseconomies of scale will apply to smaller projects, resulting in a reduced cost-efficiency on a per-unit basis for the same types of required materials and services.
- The project size factor is not directly linked to the differential ratios providing the variation of base budget rates for elementary schools, middle schools and secondary schools (see Table 4).

Table 4: Project Size Factors			
Space Allocation (m^2)	**Elementary School**	**Middle School**	**Secondary School**
<500	1.05	1.05	1.09
500 to 999	1.04	1.05	1.09
1,000 to 1,999	1.02	1.05	1.09
2,000 to 2,999	**1.00***	1.05	1.08
3,000 to 3,999	0.99	1.04	1.07
4,000 to 4,999	0.98	1.03	1.05
5,000 to 5,999	0.98	1.02	1.04
6,000 to 6,999	0.98	**1.00***	1.04
7,000 to 7,999	0.98	0.99	1.02
8,000 to 8,999	0.98	0.98	1.02
9,000 to 9,999	0.98	0.98	1.01
10,000 to 11,999	0.98	0.98	**1.00***
12,000 to 20,000	0.98	0.98	0.98

Note: The 1.00, base size factor, represents a typical size school of that type.

Line 3.3 Project location factors

- The geographical location of a capital project will produce specific cost variations that must be applied to the base budget rate to permit the development of a defendable capital budget for either a new school, an addition to an existing school, a full replacement of an existing school, or a partial replacement of an existing school.
- The project location factors provided by the Ministry address the localized variations in construction costs due to seismic risk, climatic conditions, and market conditions for labour and materials.
- It is typical to see differing construction market volatilities and prices for materials and services across the province, requiring the development of individual project location factors for 75 different communities.
- Project location factors do not include local government building bylaws that only apply to a specific community; such unique requirements may instead by identified as a supplementary building budget item.
- Project location factors are intended to be updated by the Ministry twice during each calendar year, using the contracted services of qualified cost consultants.

A specified project location factor will be applied to allow for localized variations in construction costs due to seismic risk, climatic conditions, and market conditions for labour and materials.

Table 5: Project location factors		
SD No.	**Community**	**1st QUARTER 2024 (April) Location Factor**
5	Cranbrook	2.088
5	Fernie	2.064
6	Golden	2.054
6	Invermere	2.122
6	Kimberley	2.116
8	Creston	2.109
8	Kaslo	2.142
8	Nelson	2.103
10	Nakusp	2.190
19	Revelstoke	2.096
20	Castlegar	2.067
20	Trail	2.088
22	Vernon	1.962
23	Kelowna	1.990
27	Williams Lake	2.323
28	Quesnel	2.390
33	Chilliwack	1.867
34	Abbottsford	1.829
35	Langley	1.811
36	Surrey	1.811
37	Delta	1.871
38	Richmond	1.952
39	Vancouver	2.185
40	New Westminster	1.947
41	Burnaby	1.939
42	Maple Ridge	1.974
43	Coquitlam	1.972
44	North Vancouver	2.119
45	West Vancouver	2.131
46	Sechelt	2.306
47	qathet	2.401
48	Squamish	2.188
48	Whistler	2.417
49	Bella Coola	3.323
50	Haida Gwaii	3.504
51	Grand Forks	2.121
51	Midway	2.201
52	Prince Rupert	3.109

Table 5: Project location factors		
SD No.	**Community**	**1st QUARTER 2024 (April) Location Factor**
53	Keremeos	1.980
54	Houston	2.669
57	Prince George	2.312
58	Merritt	2.011
58	Princeton	2.101
59	Dawson Creek	2.847
60	Fort St. John	2.956
61	Greater Victoria	2.026
62	Sooke/Langford	2.026
63	Saanich	2.026
64	Ganges	2.166
67	Penticton	1.967
67	Summerland	1.970
68	Nanaimo	2.021
69	Parksville	2.085
70	Port Alberni	2.223
71	Courtenay	2.141
72	Campbell River	2.153
73	Kamloops	1.932
73	Clearwater	2.157
74	Cache Creek	2.202
74	Lillooet	2.231
75	Mission	1.921
78	Agassiz	1.981
78	Hope	2.060
79	Duncan	2.027
79	Lake Cowichan	2.055
81	Fort Nelson	3.090
82	Kitimat	3.415
82	Terrace	3.164
83	Armstrong	1.977
83	Salmon Arm	1.979
84	Gold River	2.768
85	Port Hardy	2.730
87	Stikine	4.193
91	Burns Lake	2.959
91	Vanderhoof	2.938
92	New Aiyansh	3.725

Note: School District No. 93 (Conseil Scolaire Francophone) will use the project location factor for the community in which an approved capital project will be undertaken.

Line 3.4 Unit Rate

- A unit rate ($/m^2) for construction is specifically calculated for each capital project.
- A unit rate will apply to a new school, an addition to an existing school, a full replacement of an existing school, or a partial replacement of an existing school.
- The unit rate is determined using the following equation:

Unit Rate ($/m^2) =
Base budget rate ($/m^2) x Project Size Factor (0.98 – 1.05) x Project Location Factor (≥1.000)

Note: Refer to Table 3 for an applicable base budget rate; Table 4 for an applicable project size factor; and Table 5 for an applicable project location factor.

CAPITAL PROJECT BUDGET

4. CONSTRUCTION ITEMS

Line 4.1 Construction – New Space or Replacement Space

- A budget item is included under the Schedule B to provide for the construction of new space for a new school or an addition to an existing school, or for the construction of replacement space for the full replacement of an existing school or the partial replacement of an existing school.

Line 4.2 Construction – Renovations (associated with Additions or Partial Replacements)

- A budget item is included under the Schedule B to recognize typical renovation work that may be required to tie-in an addition or a partial replacement to an existing school.
- The renovation factor is a percentage that applies to the construction total for new space or renovation space (see Line 4.1).
- A renovation factor will not be applied to any approved Neighbourhood Learning Centre (NLC) space allocation (see Line 6.9), as NLC capital funding would be used to address any identified renovation work.

Table 6: Construction - Renovation Factors (%)

Space Allocation (m^2)	Elementary School	Middle School	Secondary School
	Factors:		
< 250	20.0	21.0	22.0
250 to 499	15.0	15.5	16.0
500 to 749	12.0	12.5	13.0
750 to 999	9.5	10.0	10.5
1,000 to 1,249	7.5	8.0	8.5
1,250 to 1,499	6.5	7.0	7.0
1,500 to 1,749	5.5	6.0	6.0
1,750 to 2,000	5.0	5.5	5.5

Line 4.2 (a) Construction – Associated with Seismic Structural Upgrade and Seismic Structural Upgrade/Partial Replacement Projects Only

- A budget item is included under the Schedule B to account for the work required to seismically strengthen the building.
- The cost of this work is the value identified in the Seismic Project Identification Reports (SPIR). This is an input and not a calculation.

Line 4.2 (b) Construction – SPIR Adjustment Costs

- Associated with seismic structural upgrade and seismic structural upgrade/partial replacement projects only
- Input as applicable for updates due to Seismic Retrofit Guideline changes and economic adjustment from SPIR date.

Line 4.2 (c) Construction – Non-Structural Seismic Upgrade Costs Associated with Seismic Structural Upgrade and Seismic Structural Upgrade/ Partial Replacement Projects Only

- A budget item is included to account for non-structural seismic upgrades specific to a project.
- The budget amount must represent estimated costs that can be expected in the actual location of the school project at the time of tender close, and be inclusive of all associated costs, such as, contingency, taxes, escalation, and permits.
- An itemized description must be provided.

Line 4.3 Site Development Allowance

- A budget item is included under the Schedule B to recognize site development work that a school district may choose to undertake as part of an approved capital project.
- The site development allowance applies to a new school, a full replacement of an existing school, partial replacement of an existing school, or an addition to an existing school.
- The site development allowance provides funding for site work and site features, such as site preparation, site servicing, landscaping, fencing, concrete paving, asphalt paving, and site structures.
- Except in extraordinary circumstances approved by the Ministry, school sites for new schools and full replacement schools must provide the following features:
  - An all-weather playfield(s)
  - A playground for schools having a majority of elementary grades
  - Exterior signage
  - Flagpole
- Section 10 of Appendix A: Overview of the Prototypical Budget Model provides examples of other site development items that a school district may choose to be funded using the site development allowance.
- For partial replacement projects, the value of the site development allowance will be proportional to the area being replaced.
- The site development allowance does not apply to a seismic structural upgrade project.

Table 7(a): Site Development Allowance - Elementary Schools			
Construction Type			
New School on a New Site	**Replacement School on an Existing Site**	**500 m² Addition**	**1,000 m² Addition**
$1,450,000	$1,000,000	$125,000	$250,000

Table 7(b): Site Development Allowance – Middle and Secondary Schools					
Construction Type					
New School on a New Site (>1,500 capacity)	New School on a New Site (<1,500 capacity)	Replacement School on an Existing Site	500 m^2 Addition	1,000 m^2 Addition	2,000 m^2 Addition
$3,500,000	$2,500,000	$1,500,000	$125,000	$250,000	$500,000

Line 4.4 Site Development Location Allowance

- A budget item is included under the Schedule B in recognition that individual school districts face variations in costs for site development work due to differing seismic, climatic, and local market conditions.
- The site development location allowance for a capital project is calculated by multiplying an adjusted project location factor (refer to Table 5) by the site development allowance.

5. OWNER'S COSTS (SOFT COSTS)

Line 5.1 (a) Reports/Studies Allowance and Design Fees

- The reports/studies allowance provides project planning funds that are to be used for the preparation of a Project Definition Report (PDR) formally requested by the Ministry.
- The reports/studies allowance may also be used for geo-technical studies and environmental impact studies, which may be required to support the business case being presented in the PDR.
- The budget item included in the Schedule B for design fees is calculated by multiplying the total construction budget by the percentage assigned for each common type of school.

Table 8: Reports/Studies Allowance and Design Fees	
Reports and Studies Allowance	$150,000
Design Fees	
School Type	**Percentages**
Elementary	12.0
Junior Middle (Gr. 6-8) Senior Middle (Grades 7-9)	14.0
Secondary	15.0
Seismic Structural Upgrade Projects (all school types)	16.0

Note: A scale for design fees is no longer applicable.

Line 5.1 (b) Seismic Project Identification Report (SPIR) Fees

- SPIR costs will be included as known costs and are in addition to the reports/studies allowance, this is applicable to seismic replacement, seismic partial replacement, seismic structural upgrade projects only.

Line 5.2 Post-Contract Contingency Allowance – New Space/Replacement Space

- The post-contract contingency allowance is calculated by multiplying the total construction budget by the percentage assigned to each common type of construction project.

Table 9: Post-Contract Contingency Allowance	
Type of Construction	**Percentage**
New Construction	3.0
Replacement Construction	3.0

Line 5.3 Post-Construction Contingency Allowance - Renovations

- The post-construction contingency allowance – renovations may only be calculated for renovations associated with an addition to an existing school or the partial replacement of an existing school.
- This allowance recognizes renovation work that may require to tie-in an addition or a partial replacement to the existing school building.
- The post-contract contingency allowance - renovation is calculated by multiplying the construction (renovations) budget amount by the percentage.

Table 10: Post-Contract Contingency Allowance	
Type of Construction	**Percentage**
Renovations (associated with an addition/partial replacement)	10.0
Seismic Structural Upgrade Project	10.0

Line 5.4 Municipal Permits and Fees

- Municipal permits and fees that are known to be required by a local government may be identified as an owner's cost budget item.
- These fees will be identified from a schedule published by the local government.
- The budget item amount should be inclusive of all taxes and any other surcharges.

Line 5.5 Equipment Allowance – New Space

- The equipment allowance for new space only applies to a new school or an addition to an existing school.
- This equipment allowance is calculated, as follows:

Base budget rate X Space Allocation (New Space) X Applicable Percentage (from Table 11)

This allowance is to be used for the purchase of new equipment that will be needed for a new school or an addition to an existing school. The allowance will be based on the base budget rate for the type of school and the space allocation (new space)

Table 11: Equipment Allowance - New Space	
Type of School	**Percentage**
New Elementary School	13.0
New Junior Middle School (Grades 6, 7 & 8)	21.6
New Senior Middle School (Grades 7, 8, & 9)	21.6
New Secondary School	25.9

Note: Refer to Table 3 for an applicable base budget rate; and the space allocation (new space) as provided in Line 2.2 of the Schedule B.

Line 5.6 Equipment Allowance – Replacement Space

- The equipment allowance for replacement space only applies to a full replacement of an existing school or a partial replacement of an existing school

This equipment allowance is calculated, as follows:

Base budget rate X Space Allocation (Replacement Space) X Applicable Percentage (from Table 12)

An equipment allowance for the purchase of new equipment will be provided for a full replacement school or a partial replacement. The allowance is based on 75 percent of the Equipment Allowance - New Space, as provided in Table 11.

Table 12: Equipment Allowance - Replacement Space	
Type of Space	**Percentage**
Replacement Elementary School	9.75
Replacement Junior Middle School (Grades 6-8)	16.2
Replacement Senior Middle School (Grades 7-9)	16.2
Replacement Secondary School	19.4

Line 5.5 / 5.6 Equipment Freight Rate Allowance

- An equipment freight rate allowance will be provided to cover the expected costs related to the delivery of new equipment for a new school; an addition to an existing school; a full replacement of an existing school; or a partial replacement of an existing school.
- The allowance will be based on delivery to the location of the Board Administrative Office, which may be different from the actual location of the capital project.

This Allowance for Equipment – **New Space** is calculated, as follows:

Base budget rate X Space Allocation (New Space) X Applicable Percentage (from Table 11) X Applicable Freight Rate (see Table 13)

This Allowance for Equipment – **Replacement Space** is calculated, as follows:

Base budget rate X Space Allocation (Replacement Space) X Applicable Percentage (from Table 12) X Applicable Freight Rate (see Table 13)

Table 13: Freight Rate Allowance for Equipment

SD No.	Location of School District Office	Percentage Rate
5	Cranbrook	9.843
6	Invermere	10.193
8	Nelson	8.609
10	Nakusp	9.047
19	Revelstoke	8.806
20	Trail	8.609
22	Vernon	8.609
23	Kelowna	7.517
27	Williams Lake	7.403
28	Quesnel	7.513
33	Chilliwack	1.050
34	Abbotsford	0.000
35	Langley	0.000
36	Surrey	0.000
37	Delta	0.000
38	Richmond	0.000
39	Vancouver	0.000
40	New Westminster	0.000
41	Burnaby	0.000
42	Maple Ridge	0.000
43	Coquitlam	0.000
44	North Vancouver	0.000
45	West Vancouver	0.000
46	Gibsons	1.710
47	qathet	5.675
48	Squamish	0.957
49	Hagensborg	28.792

SD No.	Location of School District Office	Percentage Rate
50	Haida Gwaii	28.792
51	Grand Forks	8.609
52	Prince Rupert	15.020
53	Oliver	8.609
54	Smithers	11.490
57	Prince George	7.780
58	Merritt	8.609
59	Dawson Creek	11.840
60	Fort St. John	12.370
61	Victoria	3.420
62	Langford	3.570
63	Saanichton	3.290
64	Salt Spring Island	5.483
67	Penticton	8.609
68	Nanaimo-Ladysmith	3.170
69	Parksville	3.570
70	Port Alberni	3.940
71	Courtenay	5.238
72	Campbell River	5.238
73	Kamloops	7.517
74	Ashcroft	6.993
75	Mission	0.000
78	Hope	1.500
79	Duncan	3.530
81	Fort Nelson	17.891
82	Terrace	13.550
83	Salmon Arm	8.609
84	Gold River	5.675
85	Port Hardy	7.010
87	Dease Lake	20.680
91	Vanderhoof	8.966
92	New Aiyansh	14.720

Note: School District No. 93 (Conseil Scolaire Francophone) will use the freight rate allowance for equipment for the Board Administrative Office location for the host school district in which an approved capital project will be undertaken.

Line 5.7 Project Management Fees

- An allowance for project management fees may be identified as an owner's cost budget item.
- The allowance for project management fees allowance now uses a sliding scale, rather than a linear calculation, based on the value of the maximum capital project funding total.
- School districts may decide on the use of the project management fees allowance, including project planning, design and construction activities, project budget management, contract administration, capital delivery process management, administrative oversight of onsite construction, communication with stakeholders, and execution of project closeout.

Table 14: Project Management Fees Allowance	
Maximum Capital Project Funding Total	**Project Management Fees**
Less than $10.0 M	$93,000
$10 M to $30.0 M	$203,500
$30.0 M to $50.0 M	$293,500
$50.0 M to $70.0 M	$363,500
$70.0 M to $90.0 M	$413,500
$90.0 M to $110.0 M	$443,500

Line 5.8 Wrap-up Liability Insurance

- Wrap-up liability insurance coverage is required for all major capital projects.
- The calculation for this budget item is provided by Risk Management Branch, Ministry of Finance, which is responsible for the administration of the School Protection Program on behalf of the Ministry of Education and Child Care.

Table 15: Wrap-Up Liability Insurance
For new or replacement schools:
Calculated at $1.10 per $1,000 of Total Construction Budget, plus 0.01%
For renovations or seismic structural upgrades to schools:
Calculated at $1.575 per $1,000 of Total Construction Budget, plus 0.01%

Line 5.9 Payable Taxes for New, Replacement and Partial Replacement Projects

- An allowance is provided for payable provincial sales tax and general sales tax, for all major capital projects.
- The amount for this budget item is 4.4% calculated on all construction costs and owner's cost items (soft costs) excluding project management fees and insurance.

6. IDENTIFIED SUPPLEMENTAL ITEMS, IDENTIFIED RISK ITEMS, AND ECONOMIC ADJUSTMENT

One of the key concepts in developing base rates for elementary, middle and secondary schools is that they are based on prototypical schools (see Appendix A: Overview of the Prototypical Budget Model) ideally situated on a flat site with good bearing capacity allowing the use of spread footing foundation.

The budget for the new space or replacement space being built itself therefore has no costing risk since the unit rates provide for an appropriate budget for the construction of the space, irrespective of the actual building design that subsequently evolves following project approval. However, site issues do represent costing risks, since at project approval stage no substantial engineering has been undertaken to mitigate the site-specific situations that may give rise to increased construction costs.

As percentage allowances may not accurately address the potential costing risks involved, all unknown and non-formula driven site specific costs are therefore carried "below-the-line" in the Schedule B, under Section C: Capital Budget Project Reserve. At project approval stage, all such items are included as estimated costs provided for budgeting purposes only. Each item must be identified separately, complete with a description and outline specification of work potentially required to mitigate the extraordinary condition. The budget amount must represent estimated costs that can be expected in the actual location of the school project at the time of tender close, and be inclusive of all associated costs, such as planning and design fees, contingency, taxes, escalation, and permits. These costs will undergo subsequent examination by the Ministry and project cost consultant, both at a design development stage review and at a pre-tender phase review of the project, as defined in the Capital Project Funding Agreement.

To deal with common new school site situations – for example, sloping, or with poor bearing capacity, high water table, or rock - estimated supplementary building and supplementary site costs may be included as below-the-line budget line items in the Schedule B. Other budget items that may be placed below-the-line because of their uncertainty and variability are:

- Demolition
- Abnormal topographical or sub-surface conditions
- Offsite Services
- Municipal Building Codes and Bylaws
- Temporary Accommodation
- Economic Adjustment

Supplementary site & supplementary building budget items must be identified separately, complete with a description and outline specification of work potentially required to mitigate the extraordinary condition. The budget amount must represent estimated costs that can be expected in the actual location of the school project at the time of tender close, and be inclusive of all relevant owner's cost items, such as design fees, post-contract contingency, municipal fees, wrap-up liability insurance, taxes, and escalation.

Lines 6.1 & 6.3 Supplementary Site & Supplementary Building Budget Items

School districts are expected to undertake a preliminary analysis of potential ground conditions when considering the acquisition of a new school site. If the site is approved for acquisition, then the cost to mitigate any unusual soil, topography or subsurface conditions that were discovered or are suspected to exist that might impact the construction of new school space must be identified as a below-the-line item. Similarly, any area of an existing site that will be redeveloped for new or replacement school space will require an analysis to determine potential issues and their associated costs that will impact the construction of new or replacement school space.

Estimated costs to address supplementary building and supplementary site issues are defined as being unavoidable, extraordinary, significant, and site-specific, such that they cannot be managed within the approved construction budget. The supplementary building and supplementary site budget items must be calculated separately to provide for work not covered under the unit rate-derived construction budget or the site development allowance. Again, the construction budget is calculated using Ministry-established base budget rates, allowances, rates and factors. Supplementary costs therefore cover only premium costs for work that does not form part of the normal costs of building construction accounted for under the total capital project budget (i.e., above-the-line budget items).

One area of concern for project budget development are excessive supplementary costs that are attributable to costly design or servicing stipulations required by other public entities, (e.g., local government, WorkSafeBC). In such situations, it is important that the design team clearly identify the source of a below-the-line item, along with its estimated cost and the impact on the feasibility of the project budget.

It is important that supplementary items not be used to increase the total capital project budget reserve and unduly enlarge the maximum capital project funding total. It is fully expected that a school district and its design team will review any number of alternative approaches when presented with an expensive supplementary cost. This review process will be scrutinized by the Ministry as part of its review at the design development stage and pre-tender phase.

Line 6.1 Supplementary Building Budget Items - (Associated with New Space or Replacement Space) - Not applicable to Seismic Upgrades

- Supplemental items are premium costs for work not covered under the base budget rate for construction, as provided in Table 3.
- The base budget rate assumes sub-surface soil conditions that provide adequate load bearing pressure within the building footprint.

Examples of abnormal site conditions within the building footprint that pose potential additional project costs include:

Table 16: Supplementary Building Budget Items
Site topography requires cut and fill; or cut and imported fill
Site topography requires retaining capacity for foundation walls
Site topography requires stepped footings
Site topography requires exterior steps/ramps
Unsuitable subsurface material requiring over-excavation and back-filling
Surface or subsurface rock requiring blasting
Subsurface bearing condition requires pre-loading
Subsurface bearing condition requires piling
Subsurface bearing condition requires soil densification

Line 6.2 Supplementary Building - Renovation Budget Items (Associated with Additions, Partial Replacements, and Seismic Upgrades)

- Supplemental items are premium costs for work not covered by the funding provided in the construction – renovation factor, as outlined in Table 6.

Examples of renovations associated with an addition to an existing building or a partial replacement of an existing building that pose potential additional project costs include:

Table 17: Supplementary Building - Renovation Budget Items (Associated with Additions and Partial Replacements)
Hazardous material removal from existing building (e.g., asbestos, PCBs)
Temporary exiting requirements during construction
Install accessible elevator for existing two-storey building
Sprinkler system to previously un-sprinklered existing building
Upgrade existing main electrical service to provide supply to addition
Upgrade/revise existing mechanical service to provide supply to addition

Line 6.3 Supplementary Site Items

- Supplemental items are premium costs for work not covered under the site development allowance, as provided in Tables 7a, 7b and 7c.

Examples of site work that pose potential additional project costs include:

Table 18: Supplementary Site Budget Items
Parking spaces to comply with local government bylaw requirements
Site enhancement / remediation required by an external agency (e.g., Ministry of Environment protection requirements for salmon- bearing stream)
Removal of hazardous material (e.g., buried oil tank, contaminated soil)
New playfield on an existing site, where the existing field is unavoidably displaced by the full replacement of the existing school or an addition to the existing school.
New paved play area on an existing site, where the existing paved play area is unavoidably displaced by the full replacement of an existing school or an addition to an existing school.
Site enhancement / remediation required by an external agency (e.g., Ministry of Environment protection requirements for salmon- bearing stream)
Stormwater management mandated by local government
Extraordinary site access requirement (e.g., more than two entrances, unusually long driveway from road, unusually long fire lane)

Line 6.5 Abnormal Topographical or Subsurface Conditions

- These items are premium costs for work not covered under the site development allowance, as provided in Tables 7a, 7b and 7c.

Examples of abnormal site conditions that pose potential additional project costs include:

Table 19: Abnormal Topographical or Subsurface Conditions
Site topography of playfields requires cut and fill; or cut and imported fill
Site topography of playfields requires retaining walls
Site topography of playfields requires barriers/guards
Site topography of playfields requires steps/ ramps
Site topography of parking lot(s) requires cut and fill; or cut and imported fill
Site topography of parking lot(s) requires retaining walls
Site topography of parking lot(s) requires barriers/guards
Site topography of parking lot(s) requires steps/ramps
Unsuitable road subsurface bearing material requires over-excavation and back filling

Line 6.6 Allowable Offsite Expenses

Table 20: Allowable Offsite Expenses
New fire hydrants
New perimeter sidewalk and curbing
Service extension required to reach new site

Please refer to the **Capital Project Budget Guidelines for Local Government Service Charges and Bylaw Requirements** for more information.

Line 6.9 Neighbourhood Learning Centre

Capital funding for Neighbourhood Learning Centre (NLC) space may be included with some major capital projects to promote strong school-community partnerships that utilize school facilities to meet the needs of children, youth, families and the greater community.

- Eligible project types include new schools, replacement schools or, in some cases, a partial replacement, significant renovation or addition
- Budget allocation will be provided by school type and design capacity
- Districts must demonstrate the need for NLC space, including proposed uses and potential operators
- NLC space must be clearly identifiable and accessible to the community
- NLC funding must not be used to enhance the educational space (e.g., classrooms), design space (e.g., circulation), or non-instructional space (e.g., administrative offices) of the school

- Government's priorities must be a primary consideration when applying for NLC funding and designing NLC space
  - NLC space funded by the Ministry should be prioritized to support child care on school sites and any additional funding to supplement the NLC must be committed from the new Child Care Division or other funding partners prior to capital project funding approval.

Refer to Appendix B: Neighbourhood Learning Centre Capital Funding Guidelines for more information.

Table 21: Neighbourhood Learning Centre Space Allocation
NLC funding is determined based on the type of school and its design capacity. For elementary schools, Kindergarten capacity is to be included in the calculation. See Appendix B Figure 1.1.

Note: All proposed NLC uses are subject to individual review by the Ministry to determine eligibility for NLC capital funding.

Line 6.10 Identified Project Risks (Other)

i. The capital project budget allows for the inclusion of an allowance for mitigating any identified risks not budgeted elsewhere.

ii. The items included here must be the same as identified in the project risk management plan.

iii. Justification for inclusion of funding for each risk item must be provided in the Project Definition Report (PDR).

iv. Examples of risks to be included in this section are:
    1. Unforeseen issues with soils and site.
    2. Unforeseen issues with the existing building.
    3. Unforeseen conditions during renovation (associated with addition/partial replacement)
    4. Additional hazardous materials remediation.
    5. Additional municipal requirements not defined at project funding approval stage.

Line 6.11 Post-Construction Completion Audit Allowance

v. The post-construction completion audit allowance is only available upon request by the Ministry for the school district to undertake the audit

vi. The allowance may only be used to contract with an independent party, selected jointly by the Ministry and school district, to complete the audit

vii. Any contracts with design professionals and cost consultants should include the requirement to participate in the post-construction completion audit at no additional charge

Table 22: Post-Project Completion Audit Allowance	
Allowance	$50,000

APPENDIX A: OVERVIEW OF THE PROTOTYPICAL BUDGET MODEL

The outline specifications provided in Appendix A are not intended to be prescriptive, but to serve as a guide to school districts and their design teams, being indicative of the types of materials, components and systems included in the prototypical cost models for elementary, middle and secondary schools. The distribution of costs between the major elements and key design ratios are shown to aid school districts and their design teams in making cost-effective or value-added decisions in the design and construction of new schools, while remaining within the overall approved capital budget.

Elementary School
The elementary school model is based on a single storey, non-combustible building with the following statistics and outline specifications:

viii. Gross floor area: 2,875 m^2, footprint area: 3,010 m^2
ix. Average storey height: 4.35 m
x. Area of exterior walls (including area of glazing and doors): 1,600 m^2
xi. Roof area (measured on plan): 3,350 m^2

Note: Gross floor area is measured to the inside face of the exterior walls of all accessible space, plus an allowance of 150 mm multiplied by the perimeter length of all floor plates.

Middle School
The middle school model is based on a two-storey, non-combustible building with the following statistics and outline specifications:

xii. Gross floor area: 6,900 m^2; footprint area: 4,703 m^2; upper floor: 2,197 m^2
xiii. Area of all exterior walls (including area of glazing and doors): 4,475 m^2
xiv. Roof area (measured on plan): 5,219 m^2

Note: Gross floor area is measured to the inside face of the exterior walls of all accessible space, plus an allowance of 150 mm multiplied by the perimeter length of all floor plates.

Secondary School
The secondary school model is based on a two-storey, non-combustible building with the following statistics and outline specifications:

xv. Gross floor area: 12,300 m^2; footprint area: 7,544 m^2; upper floor(s) 4,756 m^2
xvi. Area of all exterior walls (including area of glazing and doors): 5,975 m^2
xvii. Roof area (measured on plan): 8,329 m^2

Note: Gross floor area is measured to the inside face of the exterior walls of all accessible space, plus an allowance of 150 mm multiplied by the perimeter length of all floor plates.

1. SUBSTRUCTURE

Element Cost Ratio	
Elementary	2.6%
Middle	2.6%
Secondary	2.6%

1.0 Standard Foundations

Outline Specification

- Spread (strip and pad) footings, brace bays and/or soil anchors

The cost model assumes stable sub-surface soil conditions with adequate load bearing pressure.

1.1 Special Foundations and 1.3 Basement Excavation Outline Specification

In addition to the base budget rate, premium costs of unusual sub-surface soil conditions, e.g., inadequate sub-surface bearing capacity requiring special foundations, soil stabilization or piling, and for site topography, e.g., a steeply sloping site, requiring a building configuration, such as basement or semi-basement will be considered as supplementary allowances. Special foundations (within the footprint of the building) will be categorized as a supplementary building cost.

2.0 STRUCTURE

Element Cost Ratio	
Elementary	18.9%
Middle	18.6%
Secondary	21.6%

2.0 Lowest Floor Construction

Outline Specification

- Excavation to formation level, granular base material.
- 125 mm reinforced concrete slab on grade, steel troweled finish to receive applied floor finishes.
- 150 mm slab in high floor loading areas, such as shops.

In an elementary school, the multi-purpose room has the floor is raised to form a stage area, with storage contained underneath. (Note: This space is not included in gross floor area calculations.) In an elementary school the slab on grade is extended by 1.2 m to provide an exterior walkway around the building.

2.1 Upper Floor Construction

Outline Specification

- Non-combustible construction: light steel frame, comprising standard open web steel joists (OWSJ), steel beams and columns, steel deck, 75 mm concrete topping

Note:

- Upper floor construction applies only to the cost models for middle and secondary schools
- The cost model includes structural design in compliance with current Lower Mainland seismic code; regional variations in seismic design loads are accounted for in specified Project Location Factors

2.2 Stair Construction Outline Specification

- Steel stair: concrete filled treads and steel risers

2.3 Roof Construction Outline Specification

- Non-combustible construction: light steel frame, sloped roof to the classroom block(s), extending 1.2 m outside of the line of the exterior wall, comprising standard open web steel joists (OWSJ), steel beams and columns, steel deck
- Standard OWSJ to multi-purpose, shops and gymnasium roof, flat roof structures sloped to drain
- Roof construction typically includes a Wood First element(s)

In an elementary school, the roof structures are pitched, with a flat roof sloped to drain for the gymnasium and multi-purpose room.

The cost models for the middle school and secondary school are based on a flat roof, sloped to drain, for gymnasium, multi-purpose room and other high-volume spaces. Included are 1.0 m overhangs, as necessary, for weather protection to high exterior wall areas. The roof structure over the classroom wing(s) are pitched.

Note: The cost model includes structural design in compliance with current Lower Mainland seismic code; regional variations in seismic design loads are accounted for in specified project location factors.

Element Cost Ratio	
Elementary	21.5%
Middle	18.4%
Secondary	11.2%

Note: In addition to the base rate, the project location factors include allowances for the increased cost of exterior enclosures due to climatic conditions in those areas of the province that are more extreme than contemplated in the lower mainland baseline model.

3.0 Walls Below Main Floor Outline Specification

No walls below main floor are included in the cost models.

3.1 Walls Above Main Floor Outline Specification

- Rainscreen wall assembly: consisting of 150 mm steel stud infill, interior gypsum board, sprayed on polyurethane exterior insulation, peel and stick membrane air barrier, 38 mm sub-girts, exterior gypsum board sheathing and exterior cladding

The elementary school model is based on a single storey structure with concrete masonry veneer or other durable vandal-resistant rainscreen assembly full height.

The middle and secondary school models are based on concrete masonry veneer or other durable vandal-resistant rainscreen assembly up to window head height with metal cladding or other durable rainscreen wall assembly above window head height.

3.2 Windows Outline Specification

- Double glazed, thermally broken, low-E glazing, institutional quality window units
- Casement type opening windows
- Sunshades, window eyebrows and/or light shelves, based on local climatic conditions, to reduce interior heat gain
- Exterior vandal-proof shutters to ground floor windows

3.3 Doors & Glazed Screens

Outline Specification

- Hollow metal insulated exterior doors and pressed steel frames, with institutional grade hardware
- Painted steel framed storefront type glazing for main entrances
- Tempered safety glass for entrance doors and sidelights
- One entrance door is universally accessible

3.4 Roof Covering Outline Specification

- Sloped roof (typical for an elementary classroom block):
  - extending 1.0 m outside of the line of the exterior wall
  - roof covering assembly consisting of rigid insulation on top of the roof deck and standing seam metal roof with concealed fasteners

- Flat roof (typical for a middle school and secondary school; elementary gymnasium; and multipurpose room):
  - roof covering assembly consisting of SBS-type two-ply membrane roofing system and rigid insulation (roof structure sloped to drain)
- WorkSafeBC-mandated fall restraint equipment

4.0 PARTITIONS AND DOORS

Element Cost Ratio	
Elementary	7.2%
Middle	6.1%
Secondary	7.6%

4.0 Fixed Partitions

Outline Specification

- Steel stud and drywall partitions
- Acoustic insulation between classrooms, and between classroom and corridor walls

4.1 Moveable Partitions Outline Specification

- Operable walls and open learning areas to provide for collaborative project space(s)

The middle school and secondary school models include an electrically operated vertical or horizontal curtain in the main gymnasium.

4.2 Internal Doors

Outline Specification

- Institutional quality, stain grade, hardwood veneered, solid core wood doors
- Pressed steel frames
- Institutional-type hardware suitable for universal accessibility
- Glazed sidelight to classroom doors

5.0 INTERIOR FINISHES

Element Cost Ratio	
Elementary	7.7%
Middle	8.0%
Secondary	7.8%

5.0 Floor Finishes

Outline Specification

- Sheet flooring with rubber base for corridors, all classrooms, multi-purpose room, staff and universally accessible washrooms
- Ceramic tile for student washrooms and wet areas
- Carpet with rubber base for administration office and library

The elementary school model includes cushioned resilient flooring in the gymnasium.

The middle school and secondary school models include sealed concrete for industrial education, arts, service, and custodial spaces; and sprung hardwood sports floor in the gymnasium.

5.1 Ceiling Finishes Outline Specification

- Lay-in, exposed grid, acoustic tile suspended ceiling, with perimeter gypsum board bulkheads throughout
- Suspended painted gypsum board ceilings in washrooms, change rooms, and kitchens
- Acoustic roof deck finish, if steel deck is exposed, and acoustic panels as required for gymnasium, drama/choral rooms, shops and multi-purpose rooms

5.2 Wall Finishes Outline Specification

- Painted wall finishes throughout, directly applied to gypsum board, concrete or concrete masonry interior partitions

Elementary Schools

- Painted MDF or stain grade hardwood veneered plywood wainscot 1.2 m high to corridor walls
- Ceramic wall tiling to door head height in student washrooms
- Painted gypsum wall board in staff and universally accessible washrooms
- Painted MDF or stain grade hardwood veneered plywood paneling in gymnasium 2.4m high. Applied acoustic wall treatment 2.4 m high above to gymnasium, drama/choral and multi-purpose rooms

Secondary and Middle Schools

- Ceramic wall tiling to door head height in student washrooms
- Hard wall surface to locker rooms
- Painted gypsum wall board in staff and universally accessible washrooms
- Hard wall surface to 2.44 m high for corridors (except behind lockers) and to rear wall of classrooms
- Material (e.g., plywood backing to stud and gypsum board; or “Fibrerock VH1” high-density fibre-reinforced gypsum core and heavy-duty paper-faced type X drywall)
- Painted MDF or stain grade hardwood veneered plywood paneling:
  - to 3.65 m high and applied acoustic wall treatment above
  - to 3.65 m high in gymnasia
  - hard wall and acoustic treatment in shops
  - acoustic treatment to drama/choral and multi-purpose rooms.

Element Cost Ratio	
Elementary	5.5%
Middle	7.4%
Secondary	6.9%

6.0 Fittings and Fixtures

Outline Specification

- Millwork, white boards, tack boards
- Washroom and change room accessories, toilet partitions
- Interior signage

Note: Millwork requirements will largely be dependent on curriculum and teaching requirements.

6.0 Equipment

Outline Specification

- The elementary school model is based on the following gymnasium equipment:
  - two manually operated side swing
  - four fixed basketball backstops
  - floor mounted net sockets
- The middle and secondary models is based on the following gymnasium equipment:
  - four electrically operated ceiling-mounted basketball backstops
  - two manual side-swing basketball backstops
  - four fixed basketball backstops
  - Floor-mounted net sockets
  - manually operated bleachers
- Fume hoods in labs and prep areas utilizing hazardous chemicals
- Separate recirculating dust collectors for woodwork shops and metalwork shops

Note: Equipment for laboratory, shops, and kitchens, and other gymnasium equipment (i.e., scoreboards, shot clocks, nets, games equipment) are to be funded using the Equipment Allowance.

6.1 Conveying Systems Outline Specification

- The middle school model and secondary school model include a 2,500 lb. / 1,135 kg. capacity hydraulic two-stop passenger elevator
- Elementary schools with a design capacity of greater than 450 students will require a 2,500 lb. / 1,135 kg. capacity hydraulic two-stop passenger elevator

Note: Elevators for elementary schools must be budgeted as a Supplementary Building identified risk item.

7.0 MECHANICAL SYSTEMS

Element Cost Ratio	
Elementary	18.3%
Middle	18.3%
Secondary	21.3%

The design of the heating, ventilation, air conditioning, plumbing, and fire protection systems must comply with:

- British Columbia Building Code
- British Columbia Plumbing Code
- ASHRAE Standard 62
- ASHRAE Standard 90.1
- Model National Energy Code for Buildings
- NFPA 13

7.0 Plumbing and Drainage Outline Specification

- Floor mounted flush valve water closets in student washrooms and change rooms
- Flush tanks water closets elsewhere
- Single loop, 52° C. / 125° F., high-efficiency gas-fired domestic hot water (DHW) system
- Limit stop faucets to sinks, lavatories, showers
- Water Fixture Requirements:
  - tank type water closet - 6.0 L/flush
  - urinals – 3.8 L/flush
  - showerhead – 9.5 L/minute
  - sink and lavatory faucets - 9.5 L/minute
  - metering faucets – 0.95 L/cycle

7.1 Fire Protection Outline Specification

- Sprinkler and standpipe systems in accordance with the latest edition of NFPA 13
- Dry sprinklers will be provided in areas subject to freezing
- Wet sprinkler systems will be provided in the remaining areas of the building

7.2 HVAC

Outline Specification

- All mechanical heating and cooling equipment are high efficiency
- Main air handling systems provide for a100 percent economizer cycle
- Heat recovery units to be installed for main air handling systems will be based on local climatic conditions
- Two-speed fans or variable speed drives that reduce airflow to unoccupied areas of the building
- Carbon dioxide sensors and occupancy sensors that control outdoor air ventilation
- HVAC equipment may not contain CFC-based refrigerants

- Locate outdoor air intakes distant from sources of odor and outdoor pollution, including washroom exhaust, kitchen exhaust, boiler flues, etc.
- Gas-fired heat generation (if the primary energy source) by high-efficiency boilers, high turndown furnaces, or ground source heat pumps.
- Minimum outdoor air ventilation to meet the requirements of the latest edition of ASHRAE Standard 62 (including an allowance for the efficiency with which air is distributed through the building and individual rooms)
- Minimum total ventilation air supply capacity of 5 litres per second/m^2 for all occupied spaces, except 6.25 litres per second/m^2 for assembly spaces and rooms without natural ventilation openings greater than 2 percent of the room's floor area
- 30 percent dust spot filters with the capacity to provide 80 percent filters at a later date
- System is arranged so that failure of any one component will not prevent the delivery of sufficient heat to avoid freeze-up and the continuation of school operations
- Mechanical cooling to spaces with more than one computer per 5 m^2
- Mechanical cooling to classrooms without external windows

Note: In addition to the base rate, the Project Location Factors include allowances for the increased cost of HV systems due to climatic conditions in those areas of the province that are more extreme than contemplated in the Lower Mainland baseline model.

7.3 Controls

Outline Specification

- Direct digital control and monitoring of the HVAC system, with remote communication and control capability
- Separate zone control for each classroom and for other major functional areas, except single zone control for groups of adjacent spaces with similar thermal characteristics (e.g., administration office)

7.4 Building Systems Commissioning Outline Specification

- Verify and ensure building systems and equipment are installed as per design and calibrated to operate as intended.

8.0 ELECTRICAL SYSTEMS

Element Cost Ratio	
Elementary	7.9%
Middle	9.5%
Secondary	9.4%

8.0 Service and Distribution

Outline Specification

- Indoor unit substation
- 600V and 120/208V secondary distribution
- Power factor correction capacitor bank

8.1 Lighting, Devices and Heat Outline Specification

- Direct T8 fluorescent lighting with standard K12 lenses to all areas, except deep cell parabolic type fixtures in administration office, library and areas of high concentrations of computers
- Direct T5 fluorescent lighting in the gymnasium
- LED exit lights and emergency lighting, as required by code
- Low voltage switching with occupancy sensors for classrooms, gymnasium, multi-purpose and shops
- Drama room lighting (receptacles, light supports, dimmer rack, and rough in)
- Building-mounted HID exterior lighting with photocells and time clock
- Surge protection on computer room panel boards
- Connections and emergency shut-downs to shop equipment
- Connections to kitchen equipment

8.2 Systems

Outline Specification

- Addressable fire alarm system
- Data and media retrieval conduit, cabling, outlets and patch panels
- Public address system, including classroom intercom
- Telephone system
  - central panel (interfaced with PA system)
  - wiring
- Sound system for gymnasium, music and drama room
- Passive security intruder alarm system to corridors, administration office, library, shops, business education, and areas of high concentrations of computers or equipment

9.0 ALLOWANCES

Element Cost Ratio	
Elementary	10.3%
Middle	11.1%
Secondary	11.9%

- Overheads and profit
- Inspections
- Material testing
- Building permit fees

10.0 SITE DEVELOPMENT

Examples of basic site development include:

- Site preparation to clear, grade, drain and provide building/site services
- Playfield(s)
- Grass
- Access roads, as may reasonably be required
- Fire lanes where required by the B.C. Building Code
- Bus drop-off area
- Paved pathways and entrance ways around the perimeter of the building
- Asphalt paved play areas
- Grounds sprinkler systems
- Sub-surface drainage systems in locations with demonstrated need
- Fencing necessary for safety and school property protection purposes
- Chain link backstop
- Steps, ramps and retaining walls, including associated handrails
- Site lighting required for safety and loss protection
- Flag pole
- Bike racks
- Shrubs, trees, playground equipment, seats and other landscaping features

APPENDIX B: NEIGHBOURHOOD LEARNING CENTRE CAPITAL FUNDING GUIDELINES

Program Objectives

Capital funding for Neighbourhood Learning Centre (NLC) space may be included where supported in major capital projects to promote strong school-community partnerships that utilize school facilities to meet the needs of children, youth, families and the greater community.

When a school district is supported to proceed to business case development for a project the Ministry will inform the school district if their project is eligible for NLC funding. Through the business case development, the district will identify NLC uses based on the needs of the surrounding community. Eligibility for NLC funding is always determined on a case-by-case basis through discussions with the Ministry. It is understood that the total area of NLC space constructed will vary between projects, being dependent on the type of NLC uses.

This guideline applies to all school districts undertaking a new school or replacement school project, or in some cases, significant partial replacement, renovation or addition projects.

Needs Determination:

NLC space use should be developed locally through a collaborative approach that reflects the unique needs of each school, the surrounding community, and First Nations. All proposed NLC use is subject to review by the Ministry during business case development to determine eligibility for NLC capital funding. Government's mandated priorities must be a primary factor when planning NLC use.

Establishing NLC use, future demand, and potential partner organizations should be considered when developing Long Range Facilities Plan (LRFP). The request for NLC should reference the Community Use section of the District's LRFP, or other community planning documents, to support the proposed facility and demonstrate how it meets long-term community needs, including First Nations.

A key requirement of any NLC space is for the use to be clearly identifiable and for it to be accessible to the community. The NLC budget is inclusive of supporting areas such as design and mechanical space.

During the business case development of the project, the school district will be required to provide rationale for the NLC and show how it will functionally provide the community benefit. NLC funding may be used to create additional multi-purpose space or larger gym if it will be used outside of school hours for community purposes, including before and after school care in support of Government's commitment to creating new child care spaces.

While NLC funding is only inclusive of community use space outside of school hours, where 0 - 4 year old child care is an identified community need, school districts are encouraged to work with the Ministry to seek joint funding to accommodate 0-4 year old spaces during the business case development. All joint funding must be committed from the new Child Care Division or other funding partners prior to capital project funding approval.

Funding Partners:

School districts may work with other partners to secure joint funding to supplement the NLC funding provided by the Ministry. Examples of funding partners include municipalities, local business, local industry, and the new Child Care Division. Any third-party funding must be confirmed when the business case is finalized, before the Ministry seeks final project funding approval from Treasury Board. The scope, schedule and budget associated with NLC space, and any space funded by a third party, must be included as part of the overall capital project, and must be committed prior to project approval.

Budget Determination and Approval:

NLC capital funding is allocated by the Ministry based on school type and design capacity (including Kindergarten for elementary schools) and is included within the supplemental items in the project's capital budget during business case development. Again, any provision of NLC funding for a project will be based on the school district submitting a business case demonstrating the demand for the proposed facility, identifying the users and operators, and how the NLC use will benefit the community.

The NLC Capital Budget Allocation Table (Fig 1.1) is an all-inclusive cash allowance and is not subject to escalation but is multiplied by the project location factor to account for location specific costs.

Fig 1.1 NLC Capital Budget Allocation Based on School Type and Design Capacity		
	Design Capacity*	Budget (Millions)**
(K + E) Elementary	100-175	**1.0**
	180-325	**1.5**
	330-425	**1.8**
	430-600	**2.1**
	605-800	**2.4**
Middle	200-350	**1.6**
	375-550	**2.0**
	575-800	**2.3**
	825-1,000	**2.6**
Secondary	750-900	**2.6**
	925-1,200	**2.9**
	1,225-1,600	**3.2**
	1,625-2,100	**3.5**
	2,125+	**3.8**

* To determine budget allocation for a capacity not listed, please contact your capital planning officer

**Budget based on Schedule B Companion Document, Allowances Rates and Costing Factors. Apply school district project location factor to determine total budget.

NLC capital funding may only be used for the intended purpose of creating the NLC space itself and may not be used to enhance a school's educational space, design space, or other non-educational spaces already funded as part of a capital project budget (e.g., additional classrooms, increased circulation space, increased administration space). NLC funds are carried in Supplemental Items and are released upon review by the Ministry, typically post-tender, when costs are better understood. This review ensures that approved NLC capital funds will be used in compliance with the stated intentions of these guidelines.

The Ministry does not provide any operating funds for the NLC space that has been constructed as part of a capital project. Ongoing operating costs are the responsibility of a school district, which may be recovered through rental agreements with parties utilizing NLC space.

NLC Examples:

Supported uses for NLC by facility type include, but are not limited to:

Elementary	Child care, Indigenous or cultural spaces, children and family resources
Middle	Child care, Indigenous or cultural spaces, children and family resources, community/seniors' centres, libraries, community kitchen, expanded gymnasium
Secondary	Child care, public health centre, Indigenous or cultural spaces, post-secondary collaborations, expanded gymnasium

Summary:

- Eligible project types include new schools, replacement schools or, in some cases, a partial replacement, significant renovation or addition
- Budget allocation will be provided by school type and design capacity
- Districts must demonstrate the need for NLC space, including proposed uses and potential operators
- NLC space must be clearly identifiable and accessible to the community
- NLC funding must not be used to enhance the educational space (e.g., classrooms), design space (e.g., circulation), or non-instructional space (e.g., administrative offices) of the school
- Government's priorities must be a primary consideration when applying for NLC funding and designing NLC space
- NLC space funded by the Ministry should be prioritized to support child care on school sites and any additional funding to supplement the NLC must be committed from the new Child Care Division or other funding partners prior to capital project funding approval.

Supporting Documents:

- Schedule B Companion Document: https://www2.gov.bc.ca/assets/gov/education/administration/resource-management/capital-planning/current-resources/schedule_b_companion_document.pdf
- Ministry of Education and Child Care - Capital Planning: https://www2.gov.bc.ca/gov/content/education-training/k-12/administration/capital/planning
- Ministry of Education and Child Care – Child Care BC: https://www2.gov.bc.ca/gov/content/family-social-supports/caring-for-young-children