

2010/11 Capital Plan

Allowances, Rates and Costing Factors Supplement

(For Capital Planning Purposes Only)

Resource Management Division

March 2010

PREFACE:

The 2010/11 Capital Plan Allowances, Rates and Costing Factors Supplement is to be used in conjunction with the 2010/11 Capital Plan Instructions in the preparation of 2010/11 Capital Plan submissions. The Supplement contains the various allowances, rates, and costing factors for calculating the budgets for capital projects included in a board of education's capital plan submission to the Ministry of Education.

These values are provided for capital planning purposes only. Project budgets will be finalized in the Capital Project Funding Agreement co-signed by the Board Chair and Minister of Education.

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Notes to 2010/11 Capital Plan Allowances, Rates and Costing Factors Supplement:

• **Table 5: COSTING FACTORS FOR LOCATION** Updated to 2nd Quarter 2009.

TABLE 1(a): Base Budget Rates For Construction of New School Projects				
Type of School Base Budget Rate				
Elementary School	\$1035/m ²			
Middle School	$1050/m^2$			
Secondary School	\$1065/m²			

TABLE 1(b): Base Budget Rates For Construction of Addition Projects				
Type of School Base Budget Rate				
Elementary School	\$1035/m ²			
Middle School	$1050/m^2$			
Secondary School	$1065/m^2$			

TABLE 1(c): PERCENTAGE RATES FOR RENOVATIONS ASSOCIATED WITH ADDITION PROJECTS

Note: The actual percentage rate for a new addition having an area between those listed in Column 1 is determined by interpolating the two corresponding costing factors to one decimal place. Percentage rates for new addition areas greater than 2000 m² will be determined on an individual basis.

New Addition Area	Percentage of	New Addition Const	ruction Budget
	Elementary School	Middle School	Secondary School
0 to 250 m ²	20.0	21.0	22.0
500 m ²	15.0	15.5	16.0
750 m ²	12.0	12.5	13.0
1,000 m ²	9.5	10.0	10.5
1,250 m ²	7.5	8.0	8.5
1500 m ²	6.5	7.0	7.0
1750 m ²	5.5	6.0	6.0
2000 m ²	5.0	5.5	5.5

TABLE 1(d) Typical Renovation Items Associated with Addition Projects

Note: Specific renovation items must be identified for addition projects submitted as part of the Five-Year Capital Plan submission.

Item:	Included in	Supplementary
	Allowance	Building Item
General		
- Reconfigure space immediately adjacent to addition	Yes	
- Localized demolition	Yes	
- Demolish existing school	No	Yes (Cost estimate)
- Hazardous material removal (e.g., asbestos)	No	Yes (Cost estimate)
Access		
 Increase exiting for existing building 	Yes	
Upgrade handicapped accessibility	Yes	
(except two-storey elevator)		
- Install handicapped elevator for existing 2-storey	No	Yes (Cost estimate)
building		
Loss Prevention		
- Adjustments to existing sprinkler system where affected		
by addition/minor extensions to serve addition	Yes	
- Upgrade existing fire alarm system	Yes	
- Fire separation between existing building and addition	Yes	
- Sprinkler system to previously unsprinklered building	No	Yes (Cost estimate)
Electrical Service		
- Upgrade main service to supply addition	Yes	
Mechanical Service		
- Upgrade/revise existing service to supply addition	Yes	
Structural Seismic Mitigation		
- Upgrading to existing building	No	Yes (Cost estimate)

TABLE 2: Costing Factors for Project Size								
Elementary School Middle School Secondary School								
Gross Floor Area (m ²)	Costing Factor	Costing Factor	Costing Factor					
< 500	1.05	1.05	1.09					
500	1.05	1.05	1.09					
1,000	1.04	1.04	1.08					
2,000	1.02	1.03	1.07					
3,000	1.00	1.02	1.06					
4,000	0.99	1.01	1.05					
5,000	0.98	1.00	1.04					
6,000	N/A	0.99	1.03					
7,000	N/A	0.98	1.02					
8,000	N/A	0.97	1.01					
9,000	N/A	0.96	1.00					
10,000	N/A	0.95	0.99					
12,000	N/A	N/A	0.98					
15,000	N/A	N/A	0.96					
17,000	N/A	N/A	0.95					
20,000	N/A	N/A	0.93					

Note: The actual costing factor for a qualifying new school or an addition to an existing school having an area between those listed in Column 1 is determined by interpolating the two corresponding costing factors to three decimal places.

Table 3: Supplementary Building Allowance	
Premium ¹ costs for abnormal site conditions within the building footprint:	Costing Factor ²
• 5 – 10 percent sloping site requiring: cut and/or imported fill; retaining capacity for foundation walls; stepped footings; exterior steps/ramps	0.01
• >10 percent sloping site requiring: cut and/or imported fill; retaining capacity for foundation walls; stepped footings; exterior steps/ramps	0.03
• Limited site area requiring conversion from a single-storey to a two-storey elementary (for <4,000 m² buildings only)	0.03
Unsuitable subsurface material requiring over-excavation and back-filling	0.03
Surface or subsurface rock requiring blasting; or bearing condition requiring pre-loading	0.05
Subsurface condition requiring piling or soil densification	0.08
Underground parking required by municipal bylaw	\$15,000/stall
Total cost of the following items:	Cost
• Fire code-mandated sprinklers for previously unsprinklered building (addition project)	Cost estimate
• Fire code-mandated handicapped elevator for existing two-storey building (addition project)	Cost estimate
Handicapped elevator for <i>required</i> two-storey new building, where cost model is a one-storey building	Cost estimate
Seismic upgrading to existing building (addition project)	Cost estimate
Demolition and disposal of existing building (replacement project)	Cost estimate
Hazardous material removal and disposal, including asbestos, PCBs (addition project; replacement project)	Cost estimate

Footnotes:

- 1 Unit rates for construction already provide for typical work in these areas. The Supplementary Building Allowance therefore covers only premium costs for extraordinary work not covered under the unit rates.
- 2 Costing Factors are provided for budgeting purposes. Supplementary Building Cost Factors are multiplied by (*adjusted unit rate x approved new area*) and carried as a separate line item on the request form. Supplementary Building items should be compiled to form a budget total for this funding category; however, individual items and amounts or factors must be identified.

TABLE 4: COSTING FACTORS FOR LOCATION
A costing factor for location may be applied to projects in specified school districts to allow for variations in construction costs due to design loads and local market conditions.

	CATION	2 nd QUARTER 2009
		Location
District No.	Town	Factor
5	Cranbrook	2.483
5	Fernie	2.524
6	Golden	2.560
6	Invermere	2.585
6	Kimberley	2.558
8	Creston	2.601
8	Kaslo	2.601
8	Nelson	2.513
10	Nakusp	2.804
19	Revelstoke	2.756
20	Castlegar	2.541
20	Trail	2.541
22	Vernon	2.190
23	Kelowna	2.169
27	Williams Lake	2.764
28	Quesnel	2.755
33	Chilliwack	2.066
34	Abbotsford	2.042
35	Langley	2.007
36	Surrey	1.997
37	Delta	2.007
38	Richmond	2.025
39	Vancouver	2.140
40	New Westminster	2.055
41	Burnaby	2.093
42	Maple Ridge	2.077
43	Coquitlam	2.077
44	North Vancouver	2.233
45	West Vancouver	2.259
46	Sechelt	2.587
47	Powell River	2.765
48	Squamish	2.504
48	Whistler	2.776
49	Bella Coola	3.911
50	Haida Gwaii	3.892
51	Grand Forks	2.430
51	Midway	2.416
52	Prince Rupert	2.764
53	Keremeos	2.367
53	Oliver	2.367

TABLE 4: Costing Factors for Location (cont.)				
LOC	CATION	2 nd QUARTER 2009		
		Location		
District No.	Town	Factor		
54	Houston	2.705		
57	Prince George	2.589		
58	Merritt	2.384		
58	Princeton	2.467		
59	Dawson Creek	3.004		
60	Fort St. John	3.071		
61-63	Greater Victoria	2.581		
64	Ganges	2.769		
67	Penticton	2.214		
67	Summerland	2.214		
68	Nanaimo	2.484		
69	Parksville	2.515		
70	Port Alberni	2.710		
71	Courtenay	2.670		
72	Campbell River	2.721		
73	Kamloops	2.208		
73	Clearwater	2.444		
74	Cache Creek	2.396		
74	Lillooet	2.505		
75	Mission	2.218		
78	Agassiz	2.324		
78	Норе	2.328		
79	Duncan	2.578		
79	Lake Cowichan	2.678		
81	Fort Nelson	3.234		
82	Kitimat	3.308		
82	Terrace	2.906		
83	Armstrong	2.331		
83	Salmon Arm	2.395		
84	Gold River	2.573		
85	Port Hardy	2.919		
87	Stikine	4.366		
91	Burns Lake	2.816		
91	Vanderhoof	2.733		
92	New Aiyansh	3.810		

Note: Location costing factor for School District No. 93 (Conseil Scolaire Francophone) is the factor for the community in which a CSF facility is located.

TABLE 5: PLANNING FEES SCALE FOR NEW CONSTRUCTION PROJECTS							
Project Area (m ²)	<1000	1000	2500	4000	6000	8000	>8000
Percentage Rate of Construction Cost:	11.0	11.0	10.0	9.75	9.5	9.0	9.0

Table 6(a): SITE DEVELOPMENT ALLOWANCE ELEMENTARY SCHOOLS						
Item	Building Type					
	New Building on New Site	New Building on Existing Site	500 m ² Addition	1000 m ² Addition		
Site Preparation (incl. clearing, grading, base prep)	Y	Y	Y	Y		
Playing Field (not incl. all-weather drainage)	Y	N	N	N		
Paved Play Area	Y	Y	N	N		
Concrete Paving - Building perimeter	Y	Y	Y	Y		
- Building entrance	Y	Y	N	Y		
- Walkways	Y	Y	N	Y		
Asphalt Paving - Drop off	Y	Y	N	N		
- Roads & parking	See Table 7(c)	See Table 7(c)	See Table 7(c)	See Table 7(c)		
Perimeter Fencing	Y	Y	N	N		
Exterior Signage	Y	Y	N	Y		
Flag Pole	Y	Y	N	N		
Garbage Enclosure	Y	Y	N	N		
Bike Racks	Y	Y	N	Y		
Road Crossing	Y	Y	N	Y		
Landscaping	Y	Y	Y	Y		
Services to building:						
- Electrical	Y	Y	N	Y		
- Mechanical	Y	Y	N	N		
- Connection Charges	Y	Y	N	N		
Sub total: Note: Apply appropriate	\$363,000	\$259,000	\$16,000	\$57,000		

Table 6(b):								
		EVELOPMENT A						
	MIDDLE	AND SECONDAR	RY SCHOOLS					
Item		Building Type						
	New Building on New Site (1/4 1500 capacity)	New Building on New Site (>1500 capacity)	New Building on Existing Site	500 m ² Addition	1000 m ² Addition	2000 m ² Addition		
Site Preparation (incl. clearing, grading, base prep)		Y	Y	Y	Y	Y		
Playing Field (not incl. all-weather drainage)	Y	Y (2 fields)	N	N	N	N		
Paved Play Area	Y	Y	Y	N	N	N		
Concrete Paving - Building perimeter	Y	Y	Y	Y	Y	Y		
- Building entrance	Y	Y	Y	N	Y	Y		
- Walkways	Y	Y	Y	N	Y	Y		
Asphalt Paving								
- Drop off	Y	Y	Y	N	N	Y		
- Roads & parking	See Table 7(c)	See Table 7(c)	See Table 7(c)	See Table 7(c)	See Table 7(c)	See Table 7(c)		
Fencing	Y	Y	Y	N	N	N		
Exterior Signage	Y	Y	Y	N	Y	Y		
Flag Pole	Y	Y	Y	N	N	N		
Garbage Enclosure	Y	Y	Y	N	N	N		
Bike Racks	Y	Y	Y	N	Y	Y		
Road Crossing	Y	Y	Y	N	Y	Y		
Landscaping	Y	Y	Y	Y	Y	Y		
Building Services								
- Electrical	Y	Y	Y	N	Y	Y		
- Mechanical	Y	Y	Y	N	N	Y		
- Connection Charges	Y	Y	Y	N	N	Y		
Sub total:	\$699,000	\$932,000	\$466,000	\$16,000	\$57,000	\$181,000		

Note: Apply appropriate location factor from Table 4 - Costing Factor for Location.

Sur The premium ¹ cost of the follow	TABLE 6(c) PLEMENTARY SITE ALLOWANCES ing items:	Costing Factor ²
Slope greater than 10 percent on playfields and parking lots requiring cut and		0.02
imported fill, retaining walls, barriers or guards, steps, etc. Unsuitable road subsurface bearing material requiring over-excavation and back filling.		0.03
Note: Apply appropriate location f	actor from Table 4 - Costing Factor for Locati	on.
The calculated cost of the follow	ing items:	
Roads and Parking (includes drainage and lighting)	 2.0 parking spaces per 25 students, Grades K-10 (based on nominal capacity) 4.5 parking spaces per 25 students, Grades 11 and 12 (based on nominal capacity) Allowance of \$1,800 per parking space 	
Note: Apply appropriate location f	actor from Table 4 - Costing Factor for Locati	
The total cost of the following it	ems:	
Premium cost of site enhancement	/ remediation required by external agency Air Protection requirements for salmon-	Cost estimate
Premium cost of abnormal site acce (e.g., more than two entrances, una unusually long fire lane)	ess requirements	Cost estimate
Premium cost of hazardous material removal (e.g., buried oil tank, contaminated soil)		Cost estimate
New playfield on existing site, where an existing field is unavoidably displaced by the new building or addition.		Cost estimate
New paved play area on existing site, where existing paved play area is unavoidably displaced by the new building or addition.		Cost estimate
	construction period. Portable relocation	Cost estimate
		† ~ ·

Footnotes:

1 Site Development Allowances Tables 6(a) and 6(b) already provide for typical site work. The Supplementary Site Allowance therefore covers only premium costs for extraordinary work not covered under the Site Development Allowances.

Cost estimate

Parking spaces to comply with local government bylaw requirements.

2 Costing Factors are provided for budgeting purposes. Supplementary Site Cost Factors are multiplied by the total construction value and carried as a separate line item on the request form. Total construction value is defined as the total estimated cost of: Site Development, Supplementary Site, Building, and Supplementary Building categories. Supplementary Site items should be compiled to form a budget total for this funding category; however, individual items and amounts or factors must be identified.

TABLE 6(d): ALLOWABLE OFFSITE EXPENSES		
Item	Cost	
New fire hydrants	Cost estimate	
New perimeter sidewalk and curbing	Cost estimate	
Service extension required to reach new site	Cost estimate	

TABLE 7:

EQUIPMENT ALLOWANCE

The equipment allowance will be calculated as a percentage of the base budget rate for new construction, multiplied by the approved area of new construction and freight rate allowance for the location of the school district office.

Type of Space	Percentage Rate
New Elementary School	13.0
New Junior Middle School (Grades 6, 7 & 8)	17.3
New Senior Middle School (Grades 7, 8, & 9)	21.6
New Secondary School	25.9

Note: The equipment allowance for secondary schools with a nominal capacity greater than 1200 students will be determined by the Ministry on an individual project basis.

TABLE 8:		
SD No.	FREIGHT RATE ALLOWANCE (ELecation of School District Office	-QUIPMENT) Freight Rate Allowance
		(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	Powell River	5.675
48	Squamish	0.957
49	Hagensborg	28.792
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

TABLE 8: (cont.) FREIGHT RATE ALLOWANCE (EQUIPMENT)				
SD No.	Location of School District Office	Freight Rate Allowance		
		(percentage rate)		
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	Норе	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: Freight rate allowance for School District No. 93 (Conseil Scolaire Francophone) is the allowance for the community in which a CSF facility is located.

TABLE 9:

CAPITAL ALLOWANCE FOR SCHOOL BUSES

Each year, a General Specifications and Standards List is sent to school bus suppliers for costing vehicles of different capacities and options.

The capital allowances for school buses are based upon the following criteria:

- · lowest cost submitted by suppliers for each school bus size
- projected increase in price between the time vehicles are costed by the bus suppliers and school districts can call tenders in the following spring
- Provincial Sales Tax
- Goods and Services Tax (at 1.60 percent)
- Current CDN/US dollar exchange rates

NOTE: THESE CAPITAL ALLOWANCES ARE FOR CAPITAL PLANNING PURPOSES ONLY.

Capacity	Base Allowance	
24-passenger	\$71,500	
34-passenger	\$107,000	
48-passenger	\$111,500	
54-passenger	\$112,000	
66-passenger	\$114,000	
70-passenger	\$114,000	
76-passenger	\$115,000	
84-passenger \$146,500		
Additional Allowances:		
Delivery		\$2,500
Wheelchair lift		\$7,500
Enhancements required to accommodate extreme operating		\$2,500
conditions (i.e., winter weather; road; topography), including		
non-slip differentials; shutters on radiators; booster pumps,		
air deflector covers, etc.		

Note: An additional allowance for school bus enhancements for extreme operating conditions may be applicable only to those school districts shown in Table 9(a): Additional Capital Allowance for School Buses - Extreme Operating Conditions.

Table 9(a):

ADDITIONAL CAPITAL ALLOWANCE FOR SCHOOL BUSES EXTREME OPERATING CONDITIONS

School District

SD No. 5 (Southeast Kootenay)

SD No. 6 (Rocky Mountain)

SD No. 8 (Kootenay Lake)

SD No. 10 (Arrow Lakes)

SD No. 19 (Revelstoke)

SD No. 20 (Kootenay-Columbia)

SD No. 22 (Vernon)

SD No. 23 (Central Okanagan)

SD No. 27 (Cariboo-Chilcotin)

SD No. 28 (Quesnel)

SD No. 47 (Powell River)

SD No. 48 (Sea to Sky)

SD No. 49 (Central Coast)

SD No. 50 (Haida Gwaii)

SD No. 51 (Boundary)

SD No. 52 (Prince Rupert)

SD No. 53 (Okanagan Similkameen)

SD No. 54 (Bulkley Valley)

SD No. 57 (Prince George)

SD No. 58 (Nicola-Similkameen)

SD No. 59 (Peace River South)

SD No. 60 (Peace River North) SD No. 67 (Okanagan Skaha)

SD No. 68 (Nanaimo-Ladysmith)

SD No. 69 (Qualicum)

SD No. 70 (Alberni)

SD No. 71 (Comox Valley)

SD No. 72 (Campbell River)

SD No. 73 (Kamloops/Thompson)

SD No. 74 (Gold Trail)

SD No. 78 (Fraser-Cascade)

SD No. 81 (Fort Nelson)

SD No. 82 (Coast Mountains)

SD No. 83 (North Okanagan-Shuswap)

SD No. 84 (Vancouver Island West)

SD No. 85 (Vancouver Island North)

SD No. 87 (Stikine)

SD No. 91 (Nechako Lakes)

SD No. 92 (Nisga'a)