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Construction Cost Guide 2015

Western Canada / Alberta and Prairies / Ontario / Quebec and Atlantic



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Altus Group

Cost Consulting & Project Management

By drawing on years of industry expertise and intelligence, our advice facilitates investment and development planning, transforming ventures from the abstract to the concrete.

Our comprehensive database, unmatched in the industry, ensures project costs are accurate and predictable, and project risks and delivery options are properly assessed and valued, assisting clients to make decisions with clarity and confidence.

HIGHLIGHTS



First RICS Regulated Firm Worldwide with 164 certified employees.



Enhanced data capabilities via Altus InSite and the acquisition of RealNet.



Expanded presence in Western Canada and into the US.



Innovative expertise in emerging fields such as infrastructure and P3 projects.



Superior market intelligence, specialized expertise and over 50 years of demonstrated experience, make our advantage your advantage.

We provide clients solutions through the following services:

- Cost Monitoring
- Cost Planning and Control
- Public Private Partnership (P3)
- Infrastructure
- Project Controls
- Receiver/Management Services
- Development Management
- Property Condition Assessments and Reserve Funds
- Claims, Legal Support and Scheduling
- Life Cycle Costing
- Project Management

Left: Naren Chande

Senior Executive Vice President,
Cost Consulting & Project
Management



Right: Michael Commons

Senior Executive Vice President,
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Management



Notes on Correct Use of Data

1. Guide Only

The construction cost data contained herein is of a general nature only and subject to confirmation with respect to specific circumstances.

The unit rates for the building types described are an average range only for that particular type of building. The unit rates assume that a level, open site exists with no restrictions from adjoining properties. It is assumed that stable soil conditions prevail. Average-quality finishes (unless otherwise stated), both to the exterior and interior, are also assumed.

Judgment factors must be applied within the average range to allow for:

- Quality
- Location
- Building shape, size and height
- Topography and soil conditions
- Schedule
- Site restrictions
- Market conditions
- Type of contract
- Extent of site works
- Design method
- User requirements
- Procurement advantage of developer/contractor

2. Construction Cost Escalation

An “escalation allowance” is a contingency (usually a percentage) added to the estimated construction estimate to allow for inflation in labour and material costs between the date of the estimate and the contract award. As the project moves closer to the onsite start date, the contingency reduces, reflecting the reduced risk of escalating costs.



2. Construction Cost Escalation (continued)

As we prepared this 2015 Guide, there has been a significant devaluation of the Canadian dollar and a material decline in crude oil price and other commodities. These factors will impact costs in 2015. Accordingly, it is even more imperative to have a detailed construction estimate prepared in order to obtain an accurate projection of your project construction costs.

3. Construction Costs Only

The unit costs outlined herein cover construction costs only. In all commercial developments, the project budget must also include development or “soft” costs. These would include some or all of the following:

- Land and related costs
- Architectural and engineering fees
- Government registered programs
- Insurance and bond costs
- Legal fees
- Special design consultants
- Special equipment and furnishings
- Management costs
- Site services outside the property
- Interest charges and lender's fees
- Marketing and advertising
- Levies
- Tenant incentives
- Permits and development charges
- Purchaser upgrades
- Appraisals
- Soil and environmental tests
- Land surveys
- Realty taxes
- Broker commissions
- Contingencies
- Rezoning costs
- Other municipal fees

4. Correct Measurement & Use of Square Foot

In preparing a “cost per square foot” guide, we must be clear on how we define the area used as the denominator to calculate this value. We have adapted the Canadian Institute of Quantity Surveyors’ definition, which dictates:

1. Measure each floor to the outer face of the external walls;
2. No deductions for openings at stairs, elevators or vertical ducts are made;
3. A deduction is made for a non-service vertical protrusion, e.g., atrium space;
4. Mezzanine floors are generally included;
5. Balconies are excluded; enclosed solariums in residential condominiums are included;
6. Sloping and stepped floors (auditoriums/movie theatres) are measured flat; and,
7. Exclude all external covered walkways.

The values calculated by building types that usually have underground parking (condominiums, offices and hotels) allow for an underground parking component of 30%. Rates for buildings where parking is not common (schools, hospitals and retail) will need parking costs added, based on the “parking garage rate” in the Guide.

5. Federal & Provincial Sales Taxes

The unit costs provided exclude Goods & Services Tax (GST) and Harmonized Sales Tax (HST), but include Provincial Sales Tax where applicable at the time of the release of this Guide. For further information, please contact our offices directly at cost@altusgroup.com.

Cost Data Parameters

Measurement & Application of Cost Per Square Foot (\$/Sq. Ft.)

Floor area above-grade is traditionally known as Gross Liveable Area (GLA), while the combined above and below-grade floor area is traditionally referred to as Gross Floor Area (GFA). To simplify calculation estimates, unit costs should be applied only to Gross Liveable Area (GLA) – under the assumption that GLA averages 70% of GFA. Unit costs should be applied to the 70,000-square-foot GLA as follows:

Applied Example: A 7-storey office (100,000 sq. ft.) building in the Greater Toronto Area (“GTA”):

Area of Building

Below Grade	30,000 sq. ft.	30%
Above Grade	70,000 sq. ft.	70%
Total (GFA)	100,000 sq. ft.	100%

Approximate cost is 70,000 sq. ft. x
\$170 - \$235 = \$11,900,000 - \$16,450,000

Notes: 1. All costs are in Q1 2015 dollars. 2. Unit costs cover construction costs only – all development or “soft” costs are excluded. 3. Rates are based on average standards and should only serve as basic guidelines. There is no substitute for a detailed estimate. 4. Unit prices exclude GST/HST. 5. Please refer to the Altus Group Cost Consulting Canadian Centre Index for individual city averages.

Altus Group Cost Consulting Canadian Centre Index (Provincial)

British Columbia (Indexed to Vancouver)

1. Victoria	108
2. Vancouver	100
3. Whistler	120
4. Southern Interior	95
5. Northern Interior	115

Western/Prairies (Indexed to Calgary)

1. Calgary	100
2. Edmonton	105
3. Regina/Saskatoon	102
4. Winnipeg	108

Ontario (Indexed to GTA)

1. Southwestern Ontario:	
Windsor	110
London	98
Tri-City (Cambridge, Kitchener, Waterloo)	99
2. Hamilton and Surrounding Areas	104
3. Niagara Peninsula	104
4. Barrie	105
5. Toronto:	
Downtown Core	115
GTA	100
6. Eastern (Kingston, Cornwall)	110
7. Ottawa	105
8. North (Sudbury, Thunder Bay, Trans Canada Corridor)	115

Quebec (Indexed to Montreal)

1. Montreal	100
2. Quebec City	98

Maritimes (Indexed to Halifax)

1. Halifax	100
2. St. John's, Newfoundland	115

NWT/Nunavut (Indexed to GTA)

1. Yellowknife	190
2. Iqaluit	240
3. Remote Communities	275

BUILDING TYPE			\$/Sq. Ft	VANCOUVER	CALGARY	EDMONTON	GTA
RESIDENTIAL	RESIDENTIAL CONDOMINIUMS/APARTMENTS	Basic Quality		185 - 210	185 - 250	200 - 260	170 - 195
		Medium Quality		205 - 250	245 - 290	255 - 305	180 - 240
		High Quality		245 - 320	280 - 375	295 - 395	235 - 400
		Point Towers - 50 - 80 Storeys (Medium Quality)		270 - 355	n/a - n/a	n/a - n/a	230 - 310
		Point Towers - 50 - 80 Storeys (High Quality)		340 - 450	n/a - n/a	n/a - n/a	300 - 450
	TOWNHOUSES (Excludes Underground Parking)	Row (Medium Quality)		100 - 120	115 - 150	120 - 155	75 - 120
		Stack (Medium Quality)		115 - 140	135 - 175	140 - 185	115 - 155
		Walk-Up Timber Frame (Basic)		135 - 155	115 - 150	120 - 155	70 - 135
		Walk-Up Timber Frame (Medium)		155 - 180	145 - 175	150 - 185	100 - 150
		Walk-Up Timber Frame (High)		185 - 240	170 - 225	180 - 235	150 - 215
	HOUSES	Speculative Basic Quality		100 - 165	120 - 140	125 - 145	90 - 120
		Speculative Medium Quality		165 - 225	130 - 185	135 - 200	120 - 240
		Speculative High Quality		225 - 350	225 - 340	235 - 355	240 - 390
		Custom Built		400 - 1,000	350 - 875	365 - 915	400 - 1,000
	SENIOR'S HOUSING	Congregate Care/Long-Term Care		225 - 305	230 - 315	240 - 335	195 - 260
		Assisted Living		190 - 245	205 - 275	215 - 290	160 - 200
INSTITUTIONAL	SCHOOLS	Elementary		180 - 205	170 - 225	180 - 235	155 - 175
		High School		205 - 255	210 - 290	220 - 305	180 - 225
		Technical/Vocational School		255 - 300	260 - 345	275 - 360	230 - 325
		Universities & Colleges		280 - 370	305 - 430	320 - 450	340 - 500
	HOSPITALS	Chronic Care		325 - 430	370 - 485	390 - 510	345 - 450
		Active Treatment/Acute Care		460 - 625	560 - 710	590 - 750	525 - 710
		Laboratories (Level 1 and 2)		455 - 575	465 - 650	485 - 680	450 - 590
COMMERCIAL	OFFICE BUILDINGS	Under 5 Storeys (With Surface Parking)		185 - 215	190 - 225	205 - 235	150 - 215
		5 - 10 Storeys		195 - 255	210 - 250	220 - 260	170 - 235
		10 - 20 Storeys		225 - 280	235 - 275	245 - 290	185 - 265
		20 - 30 Storeys		235 - 320	255 - 315	265 - 335	235 - 295
		Over 30 Storeys		240 - 360	295 - 385	310 - 405	260 - 365
	STORES	Strip Plaza		90 - 125	110 - 155	115 - 165	90 - 155
		Premium Outlet		145 - 175	150 - 180	155 - 190	110 - 175
		Enclosed Mall		190 - 255	210 - 310	220 - 330	180 - 230
		Anchor/Department Store		170 - 220	165 - 220	175 - 230	125 - 175
		Supermarket		150 - 180	165 - 220	175 - 230	130 - 180
		Discount Store		100 - 125	110 - 145	115 - 150	85 - 120
	HOTELS	Budget		140 - 195	155 - 210	165 - 220	130 - 165
		Four-Star Full Service		190 - 285	225 - 290	235 - 305	210 - 275
		Luxury		300 - 450	315 - 430	335 - 450	290 - 400
	PARKING GARAGES	Free-Standing (Above-Grade)		70 - 85	80 - 95	85 - 100	65 - 95
		Underground		85 - 105	100 - 140	105 - 145	90 - 160
INDUSTRIAL	LIGHT ENGINEERING FACTORIES & WAREHOUSES	28' Clear Height (20k - 50k Sq. Ft.)		80 - 100	90 - 110	95 - 115	70 - 100
		28' Clear Height (50k - 100k Sq. Ft.)		70 - 95	85 - 105	90 - 110	60 - 85
		28' Clear Height (100k - 200k Sq. Ft.)		60 - 90	80 - 95	85 - 100	50 - 70
SITE/SERVICING	SITE SERVICING	Local Roads - 8m Road Width (Per Metre)		2,500 - 3,200	2,800 - 3,500	2,900 - 3,700	2,800 - 3,600
		Arterial Roads - 9m Road Width (Per Metre)		2,700 - 3,800	3,000 - 4,200	3,100 - 4,400	3,000 - 4,200
		Arterial Roads - 12m Road Width (Per Metre)		3,500 - 4,100	3,800 - 4,600	4,100 - 4,800	3,800 - 4,600
		Private Roads - 6m Road Width (Per Metre)		2,200 - 2,500	2,300 - 2,900	2,400 - 3,000	2,300 - 3,000
		Residential Row Townhouses (Per Unit)		17,500 - 25,000	20,200 - 28,400	21,200 - 29,800	19,700 - 28,400
		Industrial (Per Acre)		120,000 - 200,000	126,700 - 194,400	133,000 - 204,000	128,000 - 196,900
		Commercial (Per Acre)		150,000 - 225,000	169,300 - 283,900	177,700 - 298,200	173,000 - 289,700

BUILDING TYPE			\$/Sq. Ft	OTTAWA	MONTREAL	HALIFAX	ST. JOHN'S
RESIDENTIAL	RESIDENTIAL CONDOMINIUMS/APARTMENTS	Basic Quality		175 - 190	150 - 180	130 - 160	150 - 170
		Medium Quality		190 - 210	180 - 220	150 - 185	165 - 195
		High Quality		210 - 245	210 - 335	185 - 250	215 - 280
		Point Towers - 50 - 80 Storeys (Medium Quality)		n/a - n/a	250 - 355	n/a - n/a	n/a - n/a
		Point Towers - 50 - 80 Storeys (High Quality)		n/a - n/a	335 - 410	n/a - n/a	n/a - n/a
	TOWNHOUSES (Excludes Underground Parking)	Row (Medium Quality)		100 - 140	95 - 130	85 - 125	125 - 150
		Stack (Medium Quality)		125 - 180	110 - 155	105 - 160	135 - 175
		Walk-Up Timber Frame (Basic)		90 - 135	75 - 130	75 - 125	100 - 140
		Walk-Up Timber Frame (Medium)		120 - 160	100 - 155	90 - 150	140 - 160
		Walk-Up Timber Frame (High)		160 - 220	145 - 205	130 - 190	175 - 230
	HOUSES	Speculative Basic Quality		90 - 125	85 - 115	80 - 125	120 - 145
		Speculative Medium Quality		115 - 200	125 - 180	95 - 160	150 - 180
		Speculative High Quality		225 - 390	200 - 330	165 - 265	185 - 275
		Custom Built		415 - 870	315 - 670	n/a - n/a	250 - 500
	SENIOR'S HOUSING	Congregate Care/Long-Term Care		210 - 280	165 - 285	165 - 250	190 - 280
		Assisted Living		170 - 205	130 - 200	145 - 200	165 - 225
INSTITUTIONAL	SCHOOLS	Elementary		175 - 215	150 - 185	235 - 285	270 - 310
		High School		215 - 250	160 - 190	260 - 295	280 - 320
		Technical/Vocational School		255 - 300	210 - 285	215 - 285	250 - 325
		Universities & Colleges		290 - 375	285 - 365	260 - 315	285 - 350
	HOSPITALS	Chronic Care		360 - 460	330 - 430	300 - 385	350 - 450
		Active Treatment/Acute Care		525 - 700	480 - 700	425 - 565	480 - 610
		Laboratories (Level 1 and 2)		425 - 570	420 - 535	360 - 485	400 - 550
COMMERCIAL	OFFICE BUILDINGS	Under 5 Storeys (With Surface Parking)		155 - 215	150 - 200	150 - 190	175 - 225
		5 - 10 Storeys		180 - 225	155 - 225	170 - 220	200 - 250
		10 - 20 Storeys		195 - 250	170 - 270	185 - 230	220 - 270
		20 - 30 Storeys		220 - 295	210 - 295	195 - 240	n/a - n/a
		Over 30 Storeys		n/a - n/a	245 - 365	n/a - n/a	n/a - n/a
	STORES	Strip Plaza		105 - 155	80 - 160	95 - 125	115 - 150
		Premium Outlet		135 - 160	n/a - n/a	n/a - n/a	n/a - n/a
		Enclosed Mall		185 - 220	165 - 215	170 - 215	185 - 240
		Anchor/Department Store		140 - 170	110 - 170	130 - 160	150 - 180
		Supermarket		145 - 180	105 - 140	115 - 170	135 - 175
		Discount Store		105 - 125	80 - 115	95 - 120	115 - 145
	HOTELS	Budget		145 - 195	135 - 195	165 - 210	180 - 220
		Four-Star Full Service		205 - 265	190 - 265	195 - 235	230 - 275
		Luxury		290 - 400	285 - 445	230 - 290	290 - 350
	PARKING GARAGES	Free-Standing (Above-Grade)		75 - 100	50 - 85	90 - 110	110 - 135
		Underground		105 - 165	65 - 115	100 - 125	130 - 155
INDUSTRIAL	LIGHT ENGINEERING FACTORIES & WAREHOUSES	28' Clear Height (20k - 50k Sq. Ft.)		85 - 110	70 - 100	90 - 115	110 - 135
		28' Clear Height (50k - 100k Sq. Ft.)		80 - 100	55 - 90	95 - 120	115 - 140
		28' Clear Height (100k - 200k Sq. Ft.)		75 - 90	50 - 75	100 - 135	120 - 140
SITE/SERVICING	SITE SERVICING	Local Roads - 8m Road Width (Per Metre)		2,800 - 3,800	2,700 - 3,500	2,600 - 3,400	2,900 - 3,600
		Arterial Roads - 9m Road Width (Per Metre)		3,000 - 4,400	2,900 - 4,200	2,800 - 3,700	3,000 - 4,200
		Arterial Roads - 12m Road Width (Per Metre)		3,900 - 4,800	3,700 - 4,600	3,700 - 4,400	4,000 - 4,800
		Private Roads - 6m Road Width (Per Metre)		2,300 - 3,000	2,200 - 2,900	2,200 - 2,700	2,400 - 2,850
		Residential Row Townhouses (Per Unit)		21,000 - 29,800	19,100 - 27,600	18,200 - 25,800	22,000 - 30,000
		Industrial (Per Acre)		131,000 - 203,700	123,000 - 188,700	116,200 - 185,400	135,000 - 210,000
		Commercial (Per Acre)		179,000 - 303,500	165,000 - 276,400	161,600 - 257,500	185,000 - 290,000

Brief Description of Building Types

1. Office Buildings

The costs given are for speculative office buildings. Basic mechanical and electrical services, washrooms, and finishing of ground floor entrance lobby and elevator lobbies to upper floors are included. The cost of tenant partitioning and finishes, with the exception of ceiling and column finishes, are excluded. The cost of finishing this space can fluctuate widely between \$50/sq. ft. - \$125/sq. ft. depending on the density of partitioning and the quality of finishes.

2. Shopping Centres/Retail

The cost of providing parking facilities (traditionally grade-level parking) is excluded from the unit cost provided. The CRU space is considered shell. The public space is finished.

3. Schools & Colleges

The costs given exclude any allowance for fixtures, furnishings and equipment (FF&E), and for building and site supplementary costs.

4. Hospitals

With more than 40 subcategories of space types available in hospitals, the mix of costs can fluctuate significantly depending on the type of facility being constructed, the mix of beds to surgeries and building configuration. Parking is excluded.

5. Seniors' Housing

Costs can fluctuate significantly depending on whether the facility is operated for a profit or is community based, the level of care and the services provided to residents.

6. Hotels

The costs exclude any allowance for FF&E, but each operator has its own definition. The cost for a budget hotel assumes no restaurant or bar facilities and minimal meeting/conference areas. The costs of four-star and luxury full-service hotels include dining and conference facilities, spa services and special-use lounges.

7. Parking Garages

The costs for below-grade parking garages assume that temporary support to the excavated sides of the proposed garage is required, and that there are no extraordinary conditions (water, contaminated soil, close proximity to underground systems, etc.). For above-grade garages, the area of the roof should be excluded from the floor area calculations, notwithstanding that this may be usable area. The "efficiency" of garages (parking area/stall) is also a useful cost guideline.

8. Residential Condominiums & Apartments

The costs provided are for high-rise residential. The square-foot costs of condominiums vary significantly depending on the unit size, quality of finishes, complexity of design, location and services provided within the building.

9. Townhouses

The floor area of the basement and garage should be excluded from the calculation of the applicable floor area to be used with the unit rate provided. Parking is excluded.

10. Houses

As with townhouses, the area of the basement and garage should be excluded. Prices vary significantly depending on the number and type of units constructed in the development, as well as the quality of the project.



11. Light Engineering Factories & Warehouses (Light Industrial)

The costs given assume that the façade is finished on three sides with architectural block and one side with facebrick. The warehouse space is "shell," but heated. Mezzanine area excluded. A finished office component comprising approximately 15% of the area is included.

12. Site Servicing

The rates for residential site servicing are based on costs per centre line of road and allow for underground storm, sewer, water and hydro services, earthworks, curbs, asphalt roadways and sidewalks. Items such as berms, retaining walls, noise barrier fences, entrance features, storm ponds, landscaping and external services are excluded. The higher end of the specified range should be used for municipalities, which require crusher run limestone in lieu of granular materials for the base road construction and/or where curb or road sub drains are required. Arterial road costs may be partially recoverable from the local municipality or region. The rates for townhouse servicing are provided on a per unit basis. The rates for industrial and commercial site servicing are provided on a per acre basis.

Altus Group is a leading provider of independent commercial real estate consulting and advisory services, software and data solutions. We operate five Business Units, bringing together years of experience, a broad range of expertise and technology into one comprehensive platform: Research, Valuation & Advisory; ARGUS Software; Property Tax; Cost Consulting & Project Management; and Geomatics. Our suite of services and software enables clients to analyze, gain insight and recognize value on their real estate investments.

We have approximately 2,300 employees located in offices around the world, including North America, Europe and Asia-Pacific. Our clients include some of the world's largest real estate industry participants, including financial institutions, investment funds, insurance companies, accounting firms, real estate organizations, real estate investment trusts, healthcare institutions, industrial companies, foreign and domestic private investors, real estate developers and lenders, governmental institutions and firms in the oil and gas sector.

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- Budgeting, Forecasting
- Leasing Management



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