

Construction Cost Guide

2014

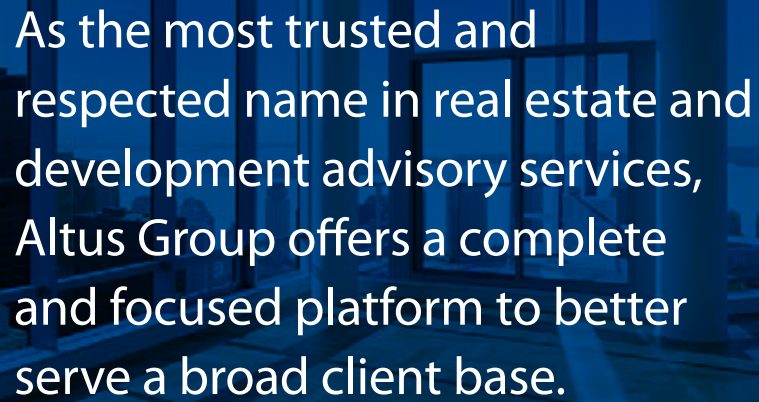
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As the most trusted and respected name in real estate and development advisory services, Altus Group offers a complete and focused platform to better serve a broad client base.

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.

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- 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

Notes On Correct Use Of Cost 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.

As we prepared this 2014 Guide, we observed a softening in cost escalation generally, with zero escalation in certain areas. There are a number of dynamic factors at play in the current market – including the U.S. economic recovery and currency fluctuations – that will invariably impact construction costs in Canada. 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 \$175 - \$235 = \$12,250,000 - \$16,450,000

Notes: 1. All costs are in Q1 2014 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	105

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	99
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		GREATER TORONTO AREA	
OFFICE BUILDINGS	Under 5 Storeys (With Surface Parking)		185	- 215	185	- 215	195	- 225	145	- 215
	5 - 10 Storeys		195	- 255	200	- 240	210	- 250	175	- 235
	10 - 20 Storeys		225	- 280	225	- 265	235	- 280	185	- 265
	20 - 30 Storeys		275	- 355	245	- 305	255	- 320	235	- 295
	Over 30 Storeys		n/a	- n/a	285	- 370	300	- 390	265	- 365
SHOPPING CENTRES/RETAIL	Strip Plaza		85	- 115	105	- 150	110	- 160	90	- 145
	Premium Outlet		135	- 165	145	- 175	150	- 185	110	- 175
	Enclosed Mall		190	- 255	200	- 300	210	- 315	180	- 230
	Anchor/Department Store		150	- 205	160	- 210	170	- 220	125	- 175
	Supermarket		150	- 180	160	- 210	170	- 220	130	- 180
	Discount Store		100	- 115	105	- 140	110	- 145	85	- 120
SCHOOLS & COLLEGES	Elementary		180	- 205	165	- 215	175	- 225	155	- 175
	High School		205	- 255	200	- 280	210	- 295	180	- 210
	Technical/Vocational School		255	- 300	250	- 330	265	- 345	230	- 300
	Universities & Colleges		280	- 370	295	- 415	310	- 435	340	- 450
HOSPITALS	Chronic Care		325	- 430	355	- 465	375	- 490	345	- 450
	Active Treatment/Acute Care		460	- 625	540	- 685	565	- 720	525	- 710
	Laboratories (Level 1 & 2)		455	- 575	445	- 625	465	- 655	450	- 590
SENIORS' HOUSING	Congregate Care/Long-Term Care		225	- 305	220	- 305	230	- 320	205	- 260
	Assisted Living		190	- 245	195	- 265	205	- 280	165	- 200
HOTELS	Budget		140	- 195	150	- 200	160	- 210	130	- 165
	Four-Star Full Service		190	- 285	215	- 280	225	- 295	210	- 275
	Luxury		300	- 450	305	- 415	320	- 435	290	- 400
PARKING GARAGES	Free Standing (Above Grade)		65	- 80	75	- 90	80	- 95	65	- 95
	Underground		75	- 95	95	- 135	100	- 140	90	- 150
RESIDENTIAL CONDOMINIUMS & APARTMENTS	Basic Quality		175	- 215	180	- 240	190	- 250	170	- 195
	Medium Quality		195	- 250	235	- 280	245	- 295	190	- 235
	High Quality		245	- 295	270	- 360	285	- 380	235	- 400
	Point Towers - 50 to 80 Storeys (Medium Quality)		260	- 355	n/a	- n/a	n/a	- n/a	250	- 310
	Point Towers - 50 to 80 Storeys (High Quality)		340	- 450	n/a	- n/a	n/a	- n/a	310	- 450
TOWNHOUSES	Row (Medium Quality)		95	- 115	110	- 145	115	- 150	90	- 120
	Stack (Medium Quality)		115	- 140	130	- 170	135	- 180	115	- 155
	Walk-Up Timber Frame (Basic)		135	- 155	110	- 145	115	- 150	80	- 135
	Walk-Up Timber Frame (Medium)		150	- 175	140	- 170	145	- 180	110	- 150
	Walk-Up Timber Frame (High)		185	- 240	165	- 215	175	- 225	150	- 215
HOUSES	Speculative (Basic Quality)		100	- 165	115	- 135	120	- 140	80	- 120
	Speculative (Medium Quality)		165	- 225	125	- 180	130	- 190	110	- 240
	Speculative (High Quality)		225	- 350	215	- 325	225	- 340	240	- 390
	Custom Built		400	- 1,000	335	- 840	350	- 880	400	- 1,000
LIGHT ENGINEERING FACTORIES & WAREHOUSES (LIGHT INDUSTRIAL)	28' Clear Height (20,000 - 50,000 Sq.Ft.)		80	- 100	85	- 105	90	- 110	70	- 95
	28' Clear Height (50,000 - 100,000 Sq.Ft.)		70	- 95	80	- 100	85	- 105	60	- 80
	28' Clear Height (100,000 - 200,000 Sq.Ft.)		60	- 90	75	- 90	80	- 95	50	- 70
SITE SERVICING (Includes Underground Storm, Sewer, Water, Hydro, Earthworks, Curbs, Asphalt Roadways & Sidewalks)	Local Roads - 8m Road Width (Per Metre)		2,500	- 3,200	2,700	- 3,400	2,800	- 3,600	2,800	- 3,500
	Arterial Roads - 9m Road Width (Per Metre)		2,700	- 3,800	2,900	- 4,000	3,000	- 4,200	3,000	- 4,100
	Arterial Roads - 12m Road Width (Per Metre)		3,500	- 4,100	3,700	- 4,400	3,900	- 4,600	3,800	- 4,500
	Private Roads - 6m Road Width (Per Metre)		2,100	- 2,500	2,200	- 2,800	2,300	- 2,900	2,300	- 2,900
	Residential Row Townhouses (Per Unit)		17,500	- 25,000	19,400	- 27,300	20,400	- 28,700	19,700	- 27,800
	Industrial (Per Acre)		115,000	- 165,000	121,800	- 186,900	127,900	- 196,200	128,000	- 193,000
	Commercial (Per Acre)		150,000	- 225,000	162,800	- 273,000	170,900	- 286,700	173,000	- 284,000

BUILDING TYPE		\$/Sq. Ft.	OTTAWA		MONTREAL		HALIFAX		ST. JOHN'S	
OFFICE BUILDINGS	Under 5 Storeys (With Surface Parking)		145	- 205	150	- 195	150	- 185	165	- 210
	5 - 10 Storeys		175	- 220	155	- 220	170	- 215	190	- 230
	10 - 20 Storeys		185	- 250	170	- 265	185	- 225	210	- 260
	20 - 30 Storeys		205	- 295	210	- 290	195	- 235	n/a	- n/a
	Over 30 Storeys		n/a	- n/a	245	- 360	n/a	- n/a	n/a	- n/a
SHOPPING CENTRES/RETAIL	Strip Plaza		95	- 155	80	- 155	95	- 120	105	- 135
	Premium Outlet		130	- 160	n/a	- n/a	n/a	- n/a	n/a	- n/a
	Enclosed Mall		175	- 215	165	- 210	170	- 210	175	- 230
	Anchor/Department Store		135	- 165	110	- 165	130	- 155	145	- 175
	Supermarket		130	- 180	105	- 135	115	- 165	130	- 170
	Discount Store		95	- 120	80	- 115	95	- 115	105	- 135
SCHOOLS & COLLEGES	Elementary		155	- 195	150	- 180	235	- 275	260	- 300
	High School		200	- 240	160	- 185	255	- 285	275	- 320
	Technical/Vocational School		250	- 295	210	- 280	215	- 275	240	- 310
	Universities & Colleges		285	- 365	285	- 360	255	- 305	280	- 340
HOSPITALS	Chronic Care		350	- 455	330	- 420	295	- 375	330	- 420
	Active Treatment/Acute Care		510	- 700	480	- 685	420	- 550	460	- 600
	Laboratories (Level 1 & 2)		420	- 570	420	- 525	355	- 470	390	- 520
SENIORS' HOUSING	Congregate Care/Long-Term Care		200	- 280	165	- 280	165	- 245	185	- 275
	Assisted Living		160	- 200	130	- 195	145	- 195	160	- 220
HOTELS	Budget		135	- 190	135	- 190	165	- 205	175	- 215
	Four-Star Full Service		195	- 260	190	- 260	195	- 230	230	- 275
	Luxury		260	- 400	285	- 435	230	- 280	280	- 350
PARKING GARAGES	Free Standing (Above Grade)		70	- 95	50	- 85	90	- 105	105	- 135
	Underground		95	- 160	65	- 115	100	- 120	125	- 150
RESIDENTIAL CONDOMINIUMS & APARTMENTS	Basic Quality		170	- 185	150	- 175	130	- 155	145	- 170
	Medium Quality		185	- 205	180	- 215	150	- 180	165	- 190
	High Quality		205	- 240	210	- 330	185	- 245	210	- 275
	Point Towers - 50 to 80 Storeys (Medium Quality)		n/a	- n/a	250	- 350	n/a	- n/a	n/a	- n/a
	Point Towers - 50 to 80 Storeys (High Quality)		n/a	- n/a	335	- 400	n/a	- n/a	n/a	- n/a
TOWNHOUSES	Row (Medium Quality)		90	- 125	95	- 125	85	- 120	115	- 145
	Stack (Medium Quality)		110	- 180	110	- 150	105	- 155	130	- 170
	Walk-Up Timber Frame (Basic)		80	- 135	75	- 125	75	- 120	90	- 135
	Walk-Up Timber Frame (Medium)		110	- 155	100	- 150	90	- 145	135	- 155
	Walk-Up Timber Frame (High)		150	- 220	145	- 200	130	- 185	170	- 220
HOUSES	Speculative (Basic Quality)		80	- 125	85	- 115	80	- 120	100	- 140
	Speculative (Medium Quality)		110	- 200	125	- 175	95	- 155	145	- 180
	Speculative (High Quality)		220	- 390	200	- 325	165	- 255	180	- 270
	Custom Built		415	- 870	315	- 655	n/a	- n/a	n/a	- n/a
LIGHT ENGINEERING FACTORIES & WAREHOUSES (LIGHT INDUSTRIAL)	28' Clear Height (20,000 - 50,000 Sq.Ft.)		80	- 105	70	- 100	90	- 110	105	- 130
	28' Clear Height (50,000 - 100,000 Sq.Ft.)		75	- 90	55	- 90	95	- 115	115	- 135
	28' Clear Height (100,000 - 200,000 Sq.Ft.)		65	- 80	50	- 75	100	- 130	120	- 140
SITE SERVICING (Includes Underground Storm, Sewer, Water, Hydro, Earthworks, Curbs, Asphalt Roadways & Sidewalks)	Local Roads - 8m Road Width (Per Metre)		2,800	- 3,600	2,700	- 3,400	2,600	- 3,300	2,900	- 3,600
	Arterial Roads - 9m Road Width (Per Metre)		3,000	- 4,200	2,900	- 4,100	2,800	- 3,600	3,000	- 4,200
	Arterial Roads - 12m Road Width (Per Metre)		3,900	- 4,600	3,700	- 4,500	3,700	- 4,300	4,000	- 4,800
	Private Roads - 6m Road Width (Per Metre)		2,300	- 2,900	2,200	- 2,800	2,200	- 2,600	2,400	- 2,900
	Residential Row Townhouses (Per Unit)		21,000	- 28,400	19,100	- 27,100	18,000	- 25,000	21,000	- 28,000
	Industrial (Per Acre)		131,000	- 194,000	123,000	- 185,000	115,000	- 180,000	130,000	- 210,000
	Commercial (Per Acre)		179,000	- 289,000	165,000	- 271,000	160,000	- 250,000	180,000	- 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 – \$100/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 may 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 (space/car) 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.

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 interrelated Business Units, bringing together years of experience and a broad range of expertise into one comprehensive platform: Research, Valuation and Advisory; ARGUS Software; Property Tax Consulting; Cost Consulting and Project Management and Geomatics. Our suite of services and software enables clients to analyze, gain insight and recognize value on their real estate investments.

Altus Group has over 1,800 employees in multiple offices around the world, including Canada, the United States, the United Kingdom, Australia and Asia Pacific. Altus Group's clients include financial institutions, private and public investment funds, insurance companies, accounting firms, public real estate organizations, real estate investment trusts, healthcare institutions, industrial companies, foreign and domestic private investors, real estate developers, governmental institutions and firms in the oil and gas sector.

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- Economic Consulting
- Expert Services
- Expropriation/Right of Way
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- Appraisal management
- Budgeting, forecasting
- Leasing management



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