



CANADIAN COST GUIDE 2017

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.

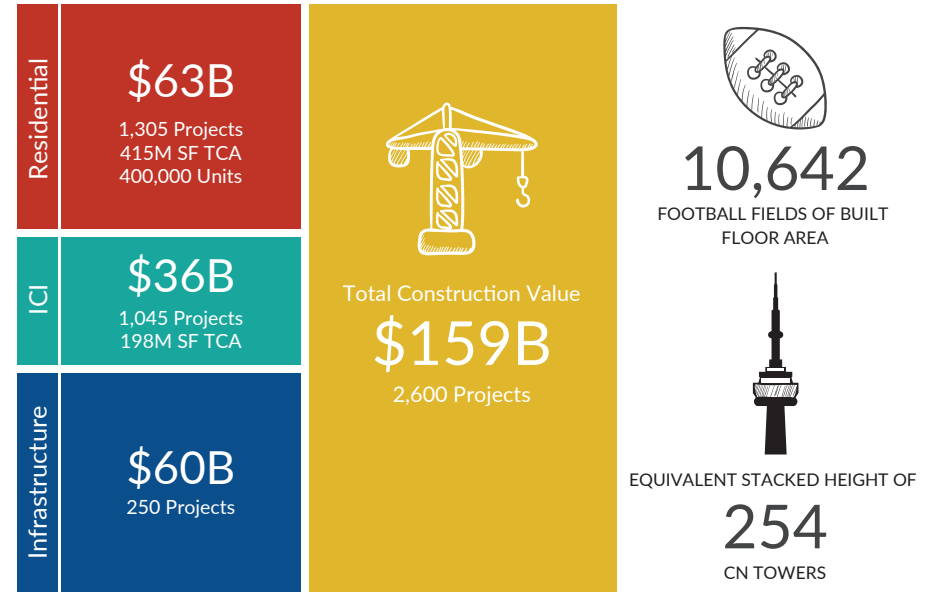
As the most trusted and respected name in real estate and development advisory services, Altus Group offers a complete and focused platform to better serve a broad client base.

Naren Chande
Senior Executive Vice President, Cost Consulting & Project Management

Michael Commons
Senior Executive Vice President, Cost Consulting & Project Management

CONSTRUCTION COST DATABASE

2,600 PROJECTS AND COUNTING...



*All values measured in current dollars.

DATA AND ANALYTICS

Our aggregated and geolocated cost data comes from thousands of projects monitored and estimated over the last 7 years and allows us to do the following for our clients:

- Analyze key performance metrics
- Residential and parking efficiency analysis
- Quickly & easily find comparable projects based on location and building attributes
- Predict site conditions based on knowledge of nearby projects
- Benchmark construction costs
- Benchmark soft costs
- Track escalation trends based on actual trade contracts
- Analyze costs based on building configuration (# of storeys, typical floor plate, # of units, size of units, location etc.)
- Construction efficiency analysis (ratios of concrete, rebar, formwork and cladding)
- Provide industry-leading informed advisory services by linking our data, 3D estimating system and ARGUS Developer.

ECONOMICS COMMENTARY

2017 ECONOMIC OVERVIEW

Canada's \$2 trillion economy is supported by over 35 million people. Net international migration will continue to increase in 2017. Looking forward, this factor along with continued employment and income growth should contribute to steady housing demand.

The expected growth in employment in 2017 is 190,000 net new jobs. Housing starts in 2017 are forecast to reach just under 200,000 units.

The Canadian dollar was on a downward trend compared to the U.S. dollar since the middle of 2012, and stabilized at about 75 cents in 2016. A modest recovery in oil prices in 2017 may also be followed by a stronger Canadian currency.

Economic growth in 2016 was strongest in the provinces of Ontario and British Columbia. In 2017, the Prairies will continue to recover in both housing starts and employment growth. Higher migration in Atlantic Canada is positive for improved job growth in 2017.



ECONOMIC MATTERS

- Demographics
- Retail/ Residential Study
- Construction Economics
- Planning Impacts
- Real Estate Markets
- Expert Testimony
- Forecasting

CONTACT

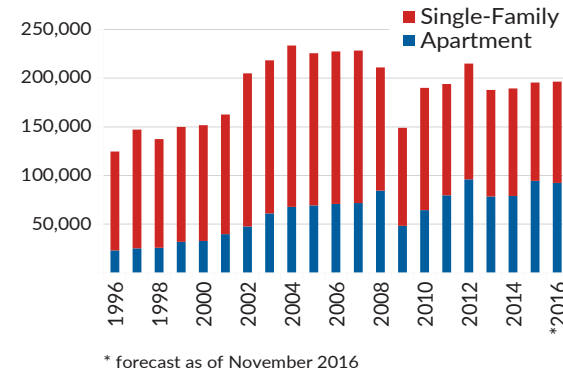
Altus Group Economic Consulting
416-641-9500
economics@altusgroup.com



Peter Norman
Vice President & Chief Economist

ECONOMICS COMMENTARY

HOUSING STARTS

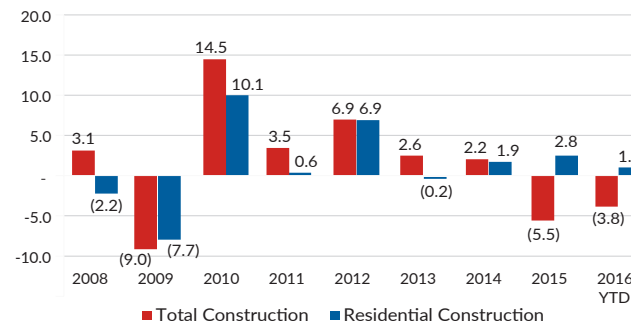


* forecast as of November 2016

- The total number of starts in 2016 came in just under 200,000 units.
- In 2016, single-family makes up 53% of all total starts in Canada, compared to 69% 10 years ago.
- Of the total starts in Canada, Ontario & BC make up 59.2%.

ANNUAL CONSTRUCTION INVESTMENT BY SECTOR

CANADA 2008-2016 (Year-Over-Year % Change)



RENOVATIONS



Spending on residential renovations totals about **\$70 billion** annually -- about **40% higher** than all construction investment in newly built dwellings.

Renovations account for **58%** of total residential construction spending in 2015.

QUICK STATS – CANADA

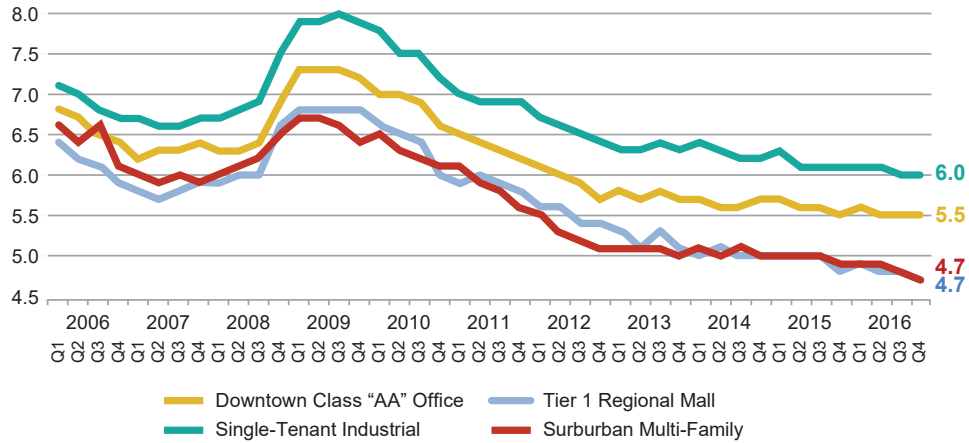
Total Population
35.2 million

Labour Force
19.3 million

Unemployment
1.41 million
7.3%

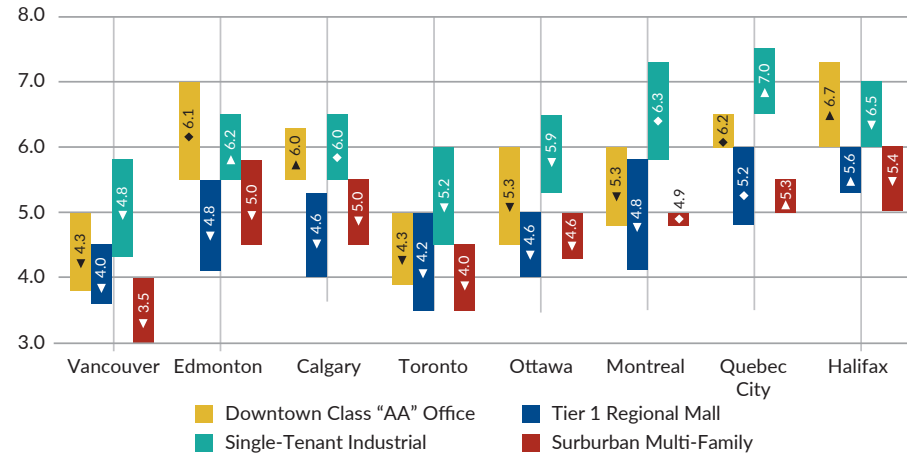
ECONOMICS COMMENTARY

CAPITALIZATION RATES, CANADA* 2006-2016



*Select market includes: Vancouver, Edmonton, Calgary, Toronto, Ottawa, Montreal, Quebec and Halifax

CAPITALIZATION RATES, MAJOR MARKETS Q4 2016



Arrows indicate directional movement from previous survey. Movement is defined as a change of more than 0.10 and due to rounding some arrows may not reflect actual movement.

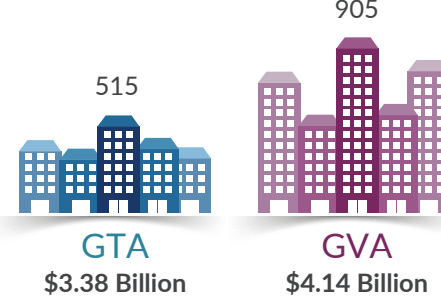
Source: Altus InSite © 1999-2016 Altus Group Limited

ECONOMICS COMMENTARY

RESIDENTIAL LAND

Transactions and Total \$ Volumes

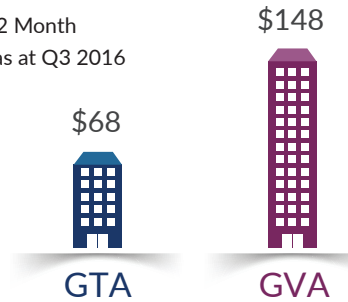
Q1 2016 to Q3 2016



HIGH DENSITY RESIDENTIAL LAND

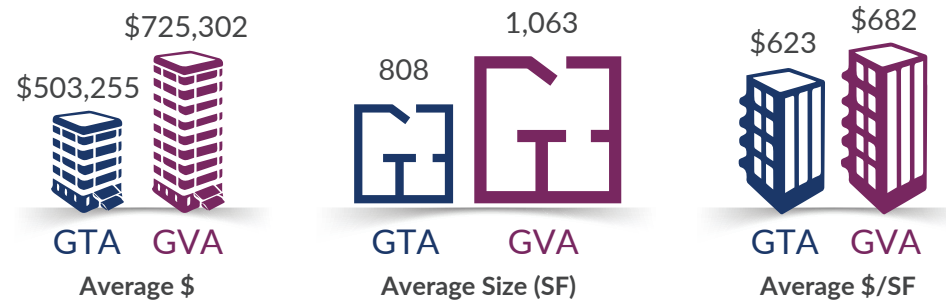
Average \$/SF Buildable

Trailing 12 Month Average as at Q3 2016



NEW HOME CONDO/APARTMENT

Based on Unsold Inventory as at Q3 2016



For the latest New Homes Research, please contact datasolutionsinfo@altusgroup.com

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.

As we prepared this 2017 Guide, there has been uncertainty due to possible changes in US economic policies as it relates to NAFTA and interest rates. The undetermined outcome of the trade implications of Brexit are also at play. Accordingly, it is imperative to have a detailed construction estimate prepared in order to capture prevailing market conditions at that time and 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 lenders' fees
- Marketing and advertising
- Levies
- Tenant incentives
- Permits and development charges
- Purchaser upgrades
- Appraisals
- Soil and environmental tests
- Land surveys
- Property taxes
- Broker commissions
- Contingencies
- Rezoning costs
- Other municipal fees
- Developer profit

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 adopted 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 for 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.

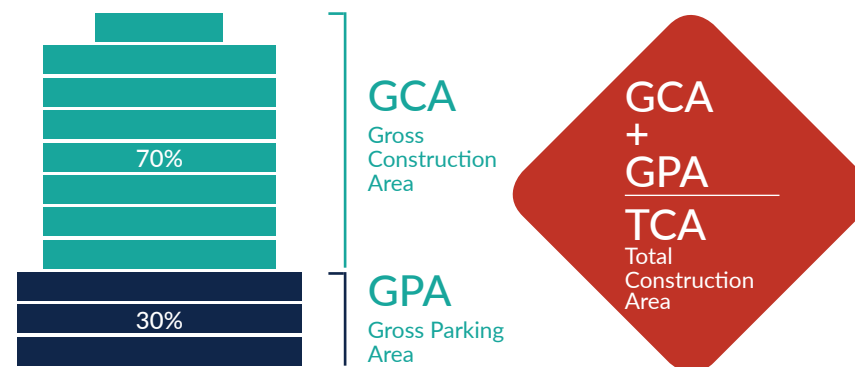
5. FEDERAL & PROVINCIAL SALES TAXES

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

Private Sector Only



Measurement and Application of \$/Sq. Ft.

Unit costs should be applied only to the GCA – under the assumption that GCA averages 70% of TCA.

Example	Calculation
A 7-storey, 100,000 sq. ft. Class B office building in the GTA	GCA = 70,000 sq. ft. 70%
	GPA = 30,000 sq. ft. 30%
	TCA = 100,000 sq. ft. 100%

Approximate cost is*:

BUILDING	70,000 sq. ft. x \$170 to \$250/sq. ft. = \$11.9M to \$17.5M
TENANT FITOUT	70,000 sq. ft. x \$35 to \$85/sq. ft. = \$2.5M to \$6.0M
TOTAL	\$14.4M to \$23.5M

- * Notes: 1. All costs are in Q1 2017 dollars. 2. Unit costs cover hard construction costs only – all development or “soft” costs are excluded. 3. Rates are based on typical 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

CANADIAN COST INDEX

British Columbia (Indexed to Vancouver)

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

Western/Prairies (Indexed to Calgary)

1. Calgary	100
2. Edmonton	103
3. Regina/Saskatoon	102
4. Winnipeg	103

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	103
8. North (Sudbury, Thunder Bay, TransCanada Corridor)	115

Quebec (Indexed to Montreal)

1. Montreal	100
2. Quebec City	98

Atlantic/Maritimes (Indexed to Halifax)

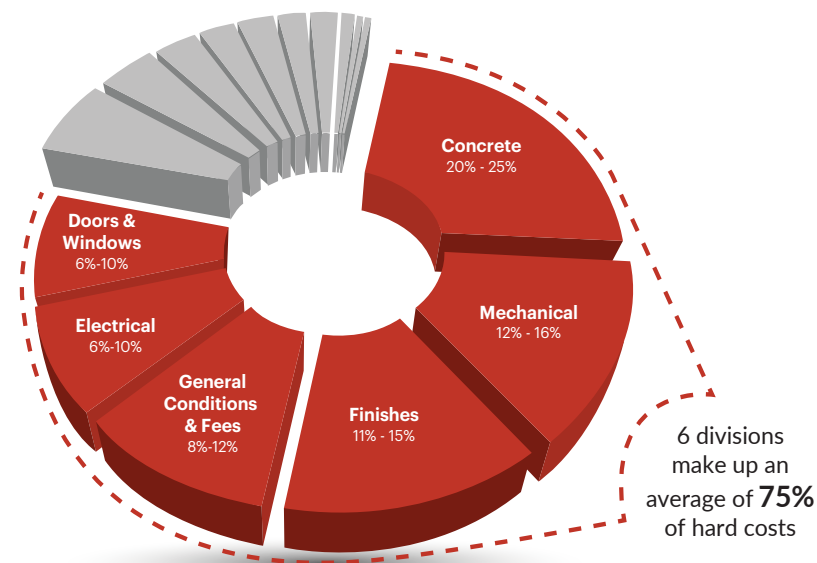
1. Halifax	100
2. St. John's, Newfoundland	105

Territories (Indexed to GTA)

1. Yellowknife	170
2. Iqaluit	240
3. Remote Communities	275

SPOTLIGHT ON: COST RISKS

TYPICAL HIGH RISE RESIDENTIAL



ANALYZING PRICING RISKS IN RESIDENTIAL CONSTRUCTION

Based on our high rise residential construction data, approximately 75% of construction costs are in 6 divisions, and 25% are in the remaining 10 divisions. Many factors can affect the cost of these items including:

- Raw material pricing (including tariffs)
- Pricing changes due to exchange rate
- Oil prices can affect transportation costs
- Labour pricing
- Labour availability
- Site logistics
- Quality

PRIVATE SECTOR: WESTERN CANADA

BUILDING TYPE		\$/Sq. Ft	Vancouver	Calgary	Edmonton	Winnipeg
RESIDENTIAL	CONDOMINIUMS/APARTMENTS (Includes Underground Parking)	Up to 6 Storeys (Hybrid Construction)	200 - 250	160 - 205	160 - 205	165 - 210
		Up to 12 Storeys	235 - 280	205 - 245	205 - 245	210 - 250
		13-39 Storeys	250 - 315	235 - 260	240 - 270	240 - 270
		40-59 Storeys	260 - 330	240 - 260	240 - 260	245 - 270
		60+ Storeys	315 - 350	n/a - n/a	n/a - n/a	n/a - n/a
	WOOD-FRAMED RESIDENTIAL	Premium for High Quality	50 - 170	50 - 145	50 - 145	55 - 150
		Row Townhouse with Unfinished Basement	110 - 175	110 - 135	115 - 140	110 - 140
		Single-Family Residential with Unfinished Basement	125 - 215	115 - 125	120 - 130	115 - 130
		3-Storey Stacked Townhouse	140 - 195	130 - 160	135 - 165	130 - 160
		3-Storey Walk-Up Building (No Elevator)	160 - 190	140 - 160	145 - 165	140 - 160
		Up to 4-Storey Wood-Framed Condo	155 - 195	130 - 160	130 - 160	130 - 160
		5 to 6-Storey Wood-Framed Condo	190 - 235	130 - 165	150 - 160	130 - 170
	Custom-Built Single-Family Residential	400 - 1,000	350 - 810	350 - 825	355 - 830	
Additional Cost for One Level Underground Parking	75 - 120	85 - 115	85 - 115	90 - 120		
SENIORS' HOUSING	Retirement Home - Congregate Care/Assisted Living	205 - 255	185 - 235	180 - 250	190 - 240	
COMMERCIAL	OFFICE BUILDINGS (Over 5 Storeys incl. Underground Parking)	Under 5 Storeys with Surface Parking (Class B)	195 - 260	170 - 210	170 - 220	175 - 215
		5 - 30 Storeys (Class B)	250 - 285	170 - 265	170 - 270	175 - 275
		5 - 30 Storeys (Class A)	265 - 335	215 - 265	215 - 280	220 - 275
		31 - 60 Storeys (Class A)	290 - 380	260 - 360	260 - 380	270 - 370
		Interior Fitout (Class B)	35 - 105	25 - 85	25 - 85	30 - 90
		Interior Fitout (Class A)	90 - 155	70 - 125	70 - 125	70 - 125
	RETAIL	Strip Plaza	100 - 145	100 - 145	110 - 150	105 - 150
		Supermarket	160 - 205	150 - 200	165 - 205	155 - 205
		Big Box Store	175 - 210	150 - 200	165 - 205	155 - 205
		Enclosed Mall	205 - 280	200 - 270	210 - 285	205 - 275
	HOTELS	Budget	165 - 220	150 - 190	155 - 200	155 - 195
		Suite Hotel	245 - 285	180 - 205	180 - 215	185 - 210
		4-Star Full-Service	225 - 320	230 - 270	230 - 285	235 - 275
Premium for Luxury		80 - 150	95 - 125	95 - 135	100 - 130	
PARKING	Surface Parking	5 - 20	5 - 15	5 - 15	5 - 15	
	Parking Garages - Free-Standing (Above-Grade)	85 - 115	70 - 90	75 - 95	75 - 95	
	Parking Garages - Underground	90 - 125	80 - 135	95 - 140	85 - 135	
INDUSTRIAL FACILITIES	Warehouse	80 - 125	80 - 105	80 - 110	85 - 105	
	Urban Storage Facility	75 - 120	70 - 105	70 - 110	70 - 105	
	Data Centre - Tier III	530 - 825	440 - 740	440 - 775	450 - 755	
	Pharmaceutical Lab	500 - 700	375 - 580	375 - 610	385 - 595	
	Manufacturing Facility	265 - 345	225 - 315	225 - 330	230 - 320	

PRIVATE SECTOR: EASTERN CANADA

BUILDING TYPE		\$/Sq. Ft	GTA	Ottawa/Gatineau	Montreal	Halifax	St John's
RESIDENTIAL	CONDOMINIUMS/APARTMENTS (Includes Underground Parking)	Up to 6 Storeys (Hybrid Construction)	175 - 250	175 - 225	150 - 200	160 - 220	160 - 220
		Up to 12 Storeys	205 - 265	190 - 240	175 - 230	185 - 235	185 - 240
		13-39 Storeys	205 - 270	195 - 255	190 - 260	190 - 240	n/a - n/a
		40-59 Storeys	220 - 295	n/a - n/a	205 - 280	n/a - n/a	n/a - n/a
		60+ Storeys	250 - 315	n/a - n/a	n/a - n/a	n/a - n/a	n/a - n/a
		Premium for High Quality	55 - 160	50 - 150	50 - 150	55 - 160	55 - 160
	WOOD-FRAMED RESIDENTIAL	Row Townhouse with Unfinished Basement	90 - 145	110 - 145	95 - 130	90 - 130	110 - 140
		Single-Family Residential with Unfinished Basement	105 - 200	105 - 135	90 - 115	85 - 130	105 - 135
		3-Storey Stacked Townhouse	125 - 160	135 - 165	110 - 155	110 - 160	130 - 170
		3-Storey Walk-Up Building (No Elevator)	125 - 160	130 - 160	100 - 155	95 - 150	130 - 155
		Up to 4-Storey Wood-Framed Condo	130 - 170	140 - 170	100 - 145	120 - 155	120 - 165
		5 to 6-Storey Wood-Framed Condo	145 - 185	140 - 170	n/a - n/a	120 - 165	120 - 170
		Custom-Built Single-Family Residential	400 - 1,000	415 - 870	315 - 670	250 - 500	260 - 550
Additional Cost for One Level Underground Parking		85 - 140	90 - 115	70 - 125	85 - 120	110 - 135	
SENIORS' HOUSING	Retirement Home - Congregate Care/Assisted Living	165 - 210	180 - 220	130 - 200	150 - 210	170 - 225	
COMMERCIAL	OFFICE BUILDINGS (Over 5 Storeys incl. Underground Parking)	Under 5 Storeys with Surface Parking (Class B)	165 - 230	170 - 215	150 - 200	160 - 200	165 - 210
		5 - 30 Storeys (Class B)	170 - 250	185 - 240	160 - 235	170 - 250	180 - 220
		5 - 30 Storeys (Class A)	200 - 300	205 - 255	190 - 270	190 - 230	210 - 250
		31 - 60 Storeys (Class A)	265 - 370	n/a - n/a	250 - 365	n/a - n/a	n/a - n/a
		Interior Fitout (Class B)	35 - 85	35 - 80	35 - 90	30 - 80	30 - 80
		Interior Fitout (Class A)	75 - 135	75 - 125	80 - 140	70 - 130	70 - 130
	RETAIL	Strip Plaza	100 - 160	115 - 160	80 - 160	100 - 150	115 - 160
		Supermarket	140 - 195	150 - 180	105 - 140	120 - 190	135 - 175
		Big Box Store	130 - 180	145 - 170	110 - 170	135 - 170	140 - 180
		Enclosed Mall	190 - 250	190 - 225	165 - 215	175 - 220	180 - 230
	HOTELS	Budget	140 - 175	150 - 195	135 - 195	170 - 220	175 - 220
		Suite Hotel	200 - 270	185 - 235	195 - 245	195 - 265	195 - 250
		4-Star Full-Service	220 - 285	215 - 270	190 - 265	210 - 250	220 - 265
Premium for Luxury		80 - 125	85 - 135	85 - 135	60 - 80	60 - 80	
PARKING	Surface Parking	5 - 15	5 - 15	5 - 15	5 - 15	5 - 15	
	Parking Garages - Free-Standing (Above-Grade)	65 - 100	75 - 95	50 - 85	95 - 115	100 - 130	
	Parking Garages - Underground	90 - 165	100 - 150	70 - 120	95 - 140	125 - 155	
INDUSTRIAL FACILITIES	Warehouse	65 - 95	80 - 100	60 - 95	95 - 125	100 - 130	
	Urban Storage Facility	70 - 90	80 - 100	n/a - n/a	n/a - n/a	n/a - n/a	
	Data Centre - Tier III	500 - 850	500 - 800	485 - 770	n/a - n/a	n/a - n/a	
	Pharmaceutical Lab	425 - 675	410 - 600	390 - 580	n/a - n/a	n/a - n/a	
	Manufacturing Facility	250 - 325	250 - 325	235 - 310	250 - 325	250 - 320	

PUBLIC SECTOR: WESTERN CANADA

BUILDING TYPE		\$/Sq. Ft
INSTITUTIONAL	EDUCATIONAL BUILDINGS	Elementary School
		Secondary School
		Private School
		Universities & Colleges - Teaching, Lecture Hall Bldg.
		Universities & Colleges - Laboratories (Level 1 and 2)
		Universities & Colleges - Student Residence
	HEALTH CARE	General Hospital/Acute Care
	Medical Clinic/Treatment Centre	
	Nursing Home - Chronic Care/Long-Term Care	
CIVIC	TRANSPORTATION BUILDINGS	Regional Airport Terminal
		International Airport Terminal
		Bus Terminal/Garage
	GOVERNMENT BUILDINGS	Fire/EMS Station
		Police Station - Local Detachment
		Police Station - Regional Headquarters
		Court House
		Operations Centre
		Penitentiary
		Municipal Office
		Library
	RECREATION/ENTERTAINMENT BUILDINGS	Ice Arena
		Community Aquatic Facility
		Multi-Use Recreational Centre
		Casino Facility
Performing Arts Building		
Museum/Gallery		

Vancouver	Calgary	Edmonton	Winnipeg
195 - 225	175 - 240	175 - 250	180 - 245
220 - 270	210 - 270	210 - 285	215 - 275
210 - 335	190 - 305	190 - 320	195 - 310
350 - 400	305 - 385	305 - 405	310 - 395
475 - 590	475 - 585	475 - 615	490 - 600
195 - 320	190 - 265	190 - 280	195 - 275
580 - 775	495 - 675	495 - 710	510 - 695
300 - 435	270 - 405	270 - 425	275 - 415
250 - 325	205 - 300	205 - 315	210 - 310
300 - 385	290 - 360	290 - 380	295 - 370
610 - 775	540 - 715	540 - 750	555 - 730
255 - 335	235 - 320	235 - 335	240 - 325
315 - 450	170 - 230	170 - 240	175 - 235
285 - 345	225 - 265	225 - 280	230 - 275
325 - 475	280 - 345	280 - 355	285 - 350
385 - 485	340 - 400	340 - 420	350 - 410
325 - 475	250 - 345	250 - 355	260 - 350
325 - 385	340 - 400	340 - 420	350 - 410
195 - 260	270 - 345	270 - 355	275 - 350
270 - 400	305 - 380	305 - 400	315 - 390
240 - 350	180 - 250	180 - 255	185 - 255
365 - 450	290 - 360	290 - 380	295 - 370
250 - 385	215 - 285	215 - 300	220 - 295
350 - 550	340 - 560	340 - 590	350 - 575
425 - 520	405 - 525	405 - 550	415 - 535
400 - 550	350 - 500	350 - 525	360 - 515

PRIVATE & PUBLIC SECTOR: WESTERN CANADA

SITE SERVICING	
SITE SERVICING	Local Roads - 8m Road Width (Per Metre)
	Arterial Roads - 9m Road Width (Per Metre)
	Arterial Roads - 12m Road Width (Per Metre)
	Private Roads - 6m Road Width (Per Metre)
	Residential Row Townhouses (Per Unit)
	Industrial (Per Acre)
	Commercial (Per Acre)

2,500 - 3,200	2,500 - 3,300	2,600 - 3,500	2,600 - 3,400
2,700 - 3,800	2,700 - 4,000	2,800 - 4,200	2,800 - 4,100
3,500 - 4,100	3,400 - 4,400	3,700 - 4,600	3,500 - 4,500
2,200 - 2,500	2,100 - 2,800	2,200 - 2,900	2,200 - 2,900
17,500 - 25,000	18,200 - 27,000	19,100 - 28,400	18,700 - 27,700
120,000 - 200,000	114,100 - 185,100	119,800 - 194,300	117,000 - 189,700
150,000 - 225,000	152,500 - 270,400	160,100 - 284,000	156,300 - 277,200

PUBLIC SECTOR: EASTERN CANADA

BUILDING TYPE		\$/Sq. Ft
INSTITUTIONAL	EDUCATIONAL BUILDINGS	Elementary School
		Secondary School
		Private School
		Universities & Colleges - Teaching, Lecture Hall Bldg.
		Universities & Colleges - Laboratories (Level 1 and 2)
		Universities & Colleges - Student Residence
	HEALTH CARE	General Hospital/Acute Care
	Medical Clinic/Treatment Centre	
	Nursing Home - Chronic Care/Long-Term Care	
CIVIC	TRANSPORTATION BUILDINGS	Regional Airport Terminal
		International Airport Terminal
		Bus Terminal/Garage
	GOVERNMENT BUILDINGS	Fire/EMS Station
		Police Station - Local Detachment
		Police Station - Regional Headquarters
		Court House
		Operations Centre
		Penitentiary
		Municipal Office
		Library
	RECREATION/ENTERTAINMENT BUILDINGS	Ice Arena
		Community Aquatic Facility
		Multi-Use Recreational Centre
		Casino Facility
Performing Arts Building		
Museum/Gallery		

GTA	Ottawa/Gatineau	Montreal	Halifax	St. John's
165 - 215	185 - 225	155 - 190	240 - 290	260 - 300
185 - 250	220 - 255	165 - 195	260 - 300	275 - 315
185 - 300	235 - 290	170 - 285	290 - 350	290 - 340
350 - 500	290 - 365	290 - 370	290 - 350	290 - 355
450 - 650	440 - 580	425 - 540	380 - 500	410 - 560
160 - 250	175 - 230	165 - 225	180 - 260	185 - 260
525 - 710	540 - 710	485 - 705	535 - 725	530 - 720
275 - 400	280 - 405	270 - 400	305 - 450	315 - 475
200 - 275	220 - 285	180 - 275	205 - 290	205 - 290
300 - 375	270 - 340	250 - 325	290 - 375	290 - 400
550 - 700	540 - 675	525 - 645	560 - 710	575 - 700
235 - 315	235 - 310	225 - 285	245 - 320	245 - 320
225 - 300	230 - 300	220 - 275	250 - 315	300 - 400
255 - 300	255 - 325	240 - 300	285 - 335	285 - 375
265 - 325	270 - 340	255 - 320	295 - 350	325 - 425
375 - 450	350 - 440	340 - 430	360 - 450	375 - 475
220 - 300	260 - 325	230 - 280	240 - 365	285 - 385
310 - 410	300 - 400	280 - 350	380 - 525	450 - 550
185 - 250	220 - 275	180 - 250	190 - 260	210 - 280
240 - 375	280 - 350	225 - 350	235 - 350	250 - 350
185 - 245	160 - 205	150 - 250	190 - 240	180 - 265
350 - 450	310 - 385	300 - 400	340 - 430	340 - 430
200 - 300	240 - 320	200 - 280	200 - 310	200 - 310
450 - 750	420 - 670	390 - 650	350 - 550	n/a - n/a
375 - 495	385 - 490	365 - 475	380 - 490	385 - 490
350 - 500	375 - 480	350 - 475	350 - 490	350 - 490

PRIVATE & PUBLIC SECTOR: EASTERN CANADA

SITE SERVICING	
SITE SERVICING	Local Roads - 8m Road Width (Per Metre)
	Arterial Roads - 9m Road Width (Per Metre)
	Arterial Roads - 12m Road Width (Per Metre)
	Private Roads - 6m Road Width (Per Metre)
	Residential Row Townhouses (Per Unit)
	Industrial (Per Acre)
	Commercial (Per Acre)

3,000 - 3,700	2,900 - 3,800	2,700 - 3,500	2,600 - 3,400	2,900 - 3,600
3,100 - 4,300	3,000 - 4,400	2,900 - 4,200	2,800 - 3,700	3,000 - 4,000
3,900 - 4,700	3,900 - 4,800	3,700 - 4,600	3,700 - 4,400	4,000 - 4,500
2,400 - 3,100	2,300 - 3,000	2,200 - 2,900	2,200 - 2,700	2,400 - 2,900
20,300 - 29,300	22,000 - 30,000	19,100 - 27,600	18,200 - 25,800	22,000 - 30,000
131,800 - 202,800	134,000 - 208,000	123,000 - 188,700	116,200 - 185,400	140,000 - 200,000
178,200 - 298,400	183,000 - 310,000	165,000 - 276,400	161,600 - 257,500	180,000 - 280,000

2017 COST GUIDE

BUILDING TYPE DESCRIPTIONS

General Notes

All costs exclude site development and premiums associated with signature architecture.



Residential

Condominiums/Apartments

Assume cast-in-place concrete structure for all condos unless otherwise noted. Hybrid construction could include any combination of alternate building structures, such as precast concrete and light-gauge steel. The premium for high-quality finishes should be applied to any of the condominium/apartment categories.

Wood-Framed Residential

The floor area of the unfinished basement and garage should be excluded from the area used with the unit rate provided. Parking is excluded from all unit rates; however, the additional cost for one level of underground parking below the wood-framed condos is noted.

Seniors' Housing

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

Commercial

Office Buildings

The costs assume base building construction only, including mechanical and electrical services, washrooms, and finishing of ground floor entrance lobby and elevator lobbies to upper floors. 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 depending on the density of partitioning and the quality of finishes. Costs assume stand alone buildings and are not representative of a component within a mixed-use building.

Retail

The costs given assume single-storey buildings with the exception of enclosed malls. The cost of providing parking facilities is excluded from the unit costs provided. The CRU space is considered shell. The public space is finished. Costs assume stand alone buildings and are not representative of a component within a mixed-use building.

Hotels

The costs exclude any allowance for FF&E, as each operator has its own definition. The cost for a budget hotel assumes no restaurant or bar facilities and minimal meeting/conference areas. Suite hotels assume a kitchenette. The costs of four-star full-service hotels include dining and conference facilities and special-use lounges. Premium for luxury should only be applied to the four-star full service hotel.

Parking

On-grade parking assumes an asphalt paved surface lot, including necessary curbs, line painting, storm servicing and pole lighting. Above-grade parking assumes open air structure. Below-grade parking assumes 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 services, etc.). Extra deep parking garages (7+ levels) and garages with site restrictions should be assessed on an individual basis. The "efficiency" of garages (parking area/stall) is also an important cost variable.

Industrial

Industrial Facilities

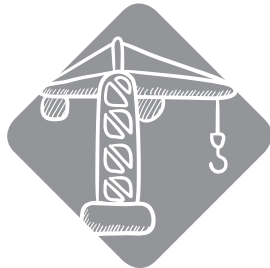
Warehouse space is based on heated shell space, excluding mezzanine areas. A finished office component is included.

Urban storage facilities are based on multi-level facilities, which have site constraints.

Data Centres are based on suburban sites, and include access flooring and redundant heating and cooling systems. Active hardware is excluded.

Pharmaceutical laboratory costs would vary depending on the level of testing and manufacturing involved. FF&E is excluded from the unit costs.

Manufacturing facilities are based on open spaces with high structures to allow space for equipment. FF&E costs are excluded.



Institutional

Educational Buildings

The costs given exclude any allowance for FF&E.

Health Care

With more than 40 subcategories of space types available in hospitals, the mix of costs fluctuate depending on the type of facility being constructed, the mix of beds, clinics and surgeries, as well as the building configuration. Parking and FF&E are excluded.

Civic

Transportation Buildings

Regional airport terminals are typically single storey facilities that have smaller gate and circulation capacity for local domestic flights and minimal amenities. International airport terminals are multi-level facilities with extensive amenity space for restaurants, retail stores, and have larger circulation space and gate capacity. Also included are spaces for customs and immigration control. Costs for surface and/or parking garages, airside infrastructure, and equipment are excluded.

Bus garages are slab on grade, single-storey, long span steel structures which include vehicle maintenance facilities and a small administration area. FF&E including vehicle lifts are excluded.

All buildings are based on suburban facilities with no site constraints. Any associated site work and parking are excluded from the unit costs. Costs assume a design standard equivalent to LEED Silver. Premiums associated with actual certification or Gold/Platinum are excluded.

Government Buildings

Fire/EMS Stations exclude any costs associated with training buildings.

Local police detachments would include offices and facilities for police and civilian members with minimal interview rooms and holding cells. Regional police headquarters would include all the same plus additional interview rooms, holding cells, training space, and administration.

Courthouses include judicial chambers, administration offices, holding cells, and courtrooms.

Operations Centre costs are based on the main facility only, including maintenance, storage, and administration areas. Any outbuildings would be an additional cost.

The range of costs for penitentiaries would vary based on the level of security and size of facility.

Municipal offices would include administration space for all municipal departments, meeting, conference rooms, council chambers, cafeteria, daycare facility, and significant atrium space.

Library costs would vary depending on the size and if they are stand alone or part of a multi-use facility.

Recreation/Entertainment Buildings

Ice arenas would include single pad to four pad facilities with spectator seating; unit costs are based on steel structures.

Community aquatic facilities include single or multiple pools, minimal spectator seating, change room facilities and fitness areas; unit costs are based on conventionally framed structures for the majority of the building, and glulam wood structure for the pool area.

Multi-use recreation centres could include any combination of fitness, gymnasium, daycare, community room, and administration space. Facilities with arena, pool, and multi-purpose areas should be based on the costs for each component combined together.

Casino/gaming facilities are assumed to be single storey buildings containing gaming floor (slots and/or table games), restaurants, bars, entertainment, and retail areas. Costs include fitout of the gaming floor, and exclude FF&E, slot machines/tables, and security system.

Recreation/Entertainment Buildings, Continued

Performing arts building unit costs would vary depending on the size and function of the facility. Acoustical treatment, theatre lighting, stage, and seating requirements would all impact the cost.

Museum and gallery costs vary depending on the purpose of the space; humidity and temperature control, redundant systems, and fire prevention would affect the costs.

Site Servicing

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 electrical services and street lighting, 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.

Excludes any requirement for oversizing of services for future development.

CONTRIBUTORS





Altus Group

Altus Group Limited is a leading provider of independent advisory services, software, and data solutions to the global commercial real estate industry. Our businesses, Altus Analytics and Altus Expert Services, reflect decades of experience, a range of expertise, and technology-enabled capabilities. Our solutions empower clients to analyze, gain market insight and recognize value on their real estate investments.

Headquartered in Canada, we have approximately 2,300 employees around the world, with operations in North America, Europe and Asia Pacific. Our clients include some of the world's largest real estate industry participants, spread across a broad variety of sectors.

Altus Analytics

SOFTWARE | DATA | CONNECTIVITY



Altus Analytics, the software and data solutions business of Altus Group, empowers global real estate clients and partners to work collaboratively to enhance decision making, drive performance and optimize transactional efficiency. Our solutions enable firms to better organize and manage data and connect with the right information and analytics to help them gain a complete picture of real estate assets, portfolios and transactions.

Altus Expert Services

EXPERIENCE | INDEPENDENCE | INSIGHT



Altus Expert Services, the professional advisory services business of Altus Group, delivers industry leading independent valuation, cost consulting, property tax and geomatics solutions. Our global expertise combined with technology-enabled services and regional market knowledge provides commercial real estate clients with greater insight to identify risks and maximize value on their investments.

This publication, or any part thereof, may not be reproduced or transmitted in any form, by any means, without the express written permission of Altus Group Limited in each specific instance.

Altus Group Limited makes no representation about the accuracy, completeness or suitability of the material represented herein for the particular purpose of any reader.

The 2017 Canadian Cost Guide was published in January 2017.

CANADIAN COST GUIDE

2017

For more information:

altusgroup.com

cost@altusgroup.com

(416) 641-9500