



Altus Group

# 2019 CANADIAN COST GUIDE

The trusted resource for Canadian real estate development and infrastructure construction costs.



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# ABOUT THIS GUIDE

## Understand the Construction Costs and Trends in Your Market

Building the preliminary construction budget for your real estate project requires insight into more than labour and material costs alone. The financial plan for your development or infrastructure investment is affected by global and local economic conditions, market trends, and advances in building materials, practices, and approaches.

Altus Group considers all these factors in our annual Construction Cost Guide to provide a forecast of construction hard costs across all asset classes in the Canadian marketplace.

Based on our proprietary database of historical project costs – including over 1,300 engagements in 2018 – our hard cost data tables facilitate simple benchmarking exercises supported by intelligence from our in-house quantity surveyors, economists, and market trend experts.

This guide is designed as an accessible tool for initial budgeting; however, we strongly advise that you seek independent professional advice to produce precise estimate and pro forma figures that reflect the specific conditions and details of your unique development and infrastructure undertakings.

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## ACCURATE DATA BASED ON REAL PROJECTS

### TOTAL

\$210 Billion

3,300 Projects

773M+ SF



### RESIDENTIAL

\$87 Billion

1,550 Projects

518M SF



### ICI

\$53 Billion

1,470 Projects

256M SF



### INFRASTRUCTURE

\$70 Billion

280 Projects



## About **ECONOMIC ADVISORY**

Our Economic Advisory team provides detailed market analysis, knowledge of economic conditions, and extensive forecasting experience.

We are dedicated to delivering insights that will help you better understand forecasting trends, projections, market dynamics, demographics, environmental, and municipal finance and policy that will impact your project.

For more information contact our Economic Advisory team at 416.641.9723 or [economics@altusgroup.com](mailto:economics@altusgroup.com).

# 2019 CANADIAN ECONOMIC OVERVIEW

What a difference a year can make. At the beginning of 2018 the Canadian economy was buoyed by very strong employment and GDP growth, but also faced many headwinds. Tightening mortgage rules, higher interest rates, a general uncertainty over trade conditions, and price and production cuts in the oil sector all combined to sew a seed of caution to aggregate demand, which ultimately slowed economic growth to an estimated 2.1%.

But positive factors remain in place for 2019, especially for housing and non-residential construction. Many housing markets ended 2018 in a “soft landing” as buyers and markets adjusted to the higher interest rates, but this pause also means no new mortgage rules on the horizon. Canada’s rate of international in-migration is at a record high and the boost to population growth is seen coast to coast. Higher population growth boosts housing demand and need for commercial space.

## THE REMARKABLE CANADIAN ECONOMY



**\$2.2 trillion dollars in 2018**



**37 million people**



**Projected for 2019**

- 210,000 new homes
- \$85 billion in residential renovation projects
- 300 million square feet of new ICI Construction

*Source: Altus Group, based on data from Statistics Canada*

# KEY MARKET TRENDS

2018 saw continued strength in the residential and commercial markets across the country, although higher interest rates, development costs, and mortgage policy changes weighed on the new housing markets. Commercial investment remained strong, as strong demand for office and industrial space resulted in a continued decline in vacancies. Vancouver and Toronto maintained their status as the strongest markets in the country, with Montréal also experiencing increasing investment and residential sales activity.

Looking ahead to 2019, housing demand is expected to remain robust; however, both consumers and developers will continue to be buffeted by rising interest rates and increasing construction costs – higher priced markets and built-forms being the most exposed. The commercial markets are expected to stay strong, with low vacancies and rising rents supporting new development, although higher interest rates and slowing economic growth – both in Canada and globally – could impact demand and new development activity.

## PLEASE NOTE FOR ALL CHARTS:

Data is based on information at end of Q3, 2018.

\*Other Greater Golden Horseshoe (GGH) means that the Greater Toronto Area (GTA) is not included.

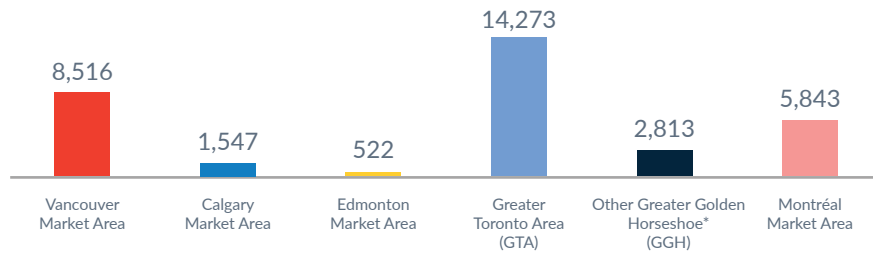
## About DATA SOLUTIONS

The Data Solutions team connects the Canadian real estate industry through the delivery of data with unparalleled breadth, integrity and relevance. Our national data platform provides you with the key benchmark metrics to assess development potential, understand market trends, and run project analysis. We have sampled several key metrics from across the market to provide you with numbers to support your basic analysis.

Please contact us for more information on our data products: [datasolutionsinfo@altusgroup.com](mailto:datasolutionsinfo@altusgroup.com).

## New Condominium Apartment Sales

Comparison of the total condominium apartments per market, showing the regional differences in consumer demand.

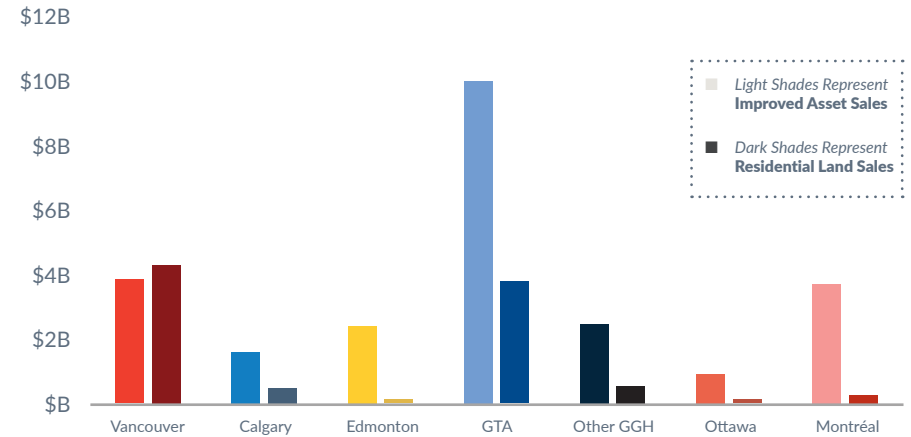


## Improved Property and Residential Land Sales

Market-by-market comparative analysis of total transaction volumes for residential land and improved properties.

Improved properties could include office buildings, retail centres, and industrial buildings.

Residential land sales are tracked by intended use, highlighting the approximate value of all land and sites bought for residential development.

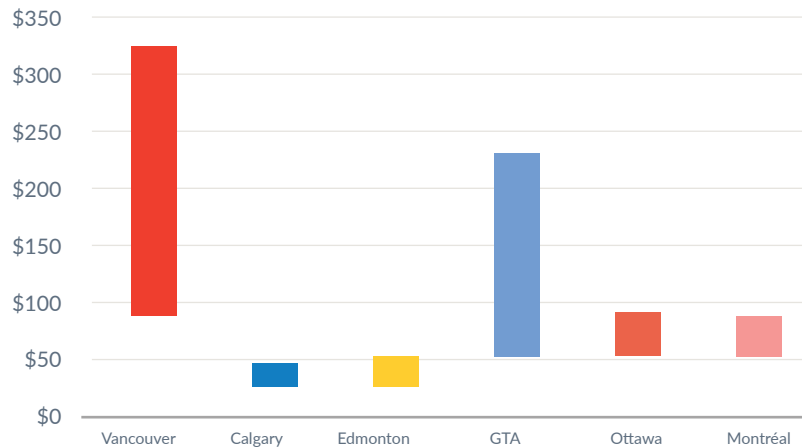


## Price per Square Foot Buildable Land Prices

Approximate dollar per square foot ranges for land (as a function of buildable area) for high-density residential developments.

Identifies the appropriate price per square foot of development potential on a site within your pro forma.

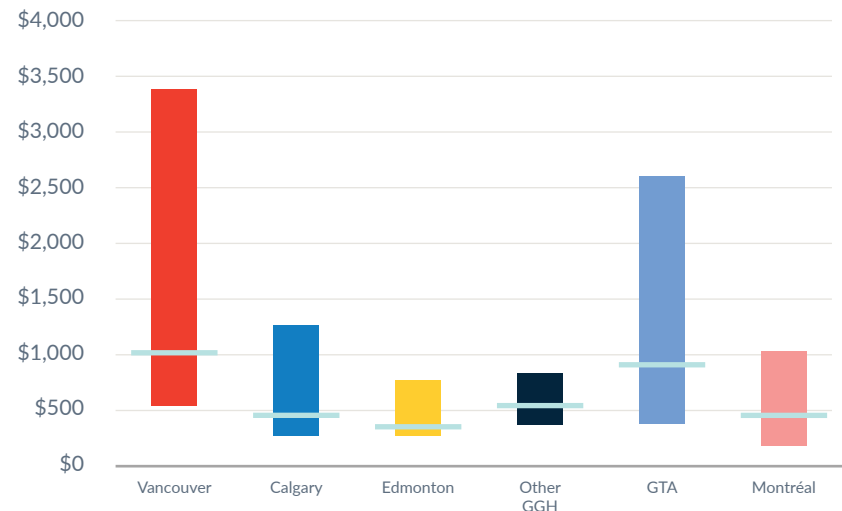
For example: if you want to build a 100,000 SF building in Calgary, you would pay between \$2.5M-\$4.5M for the land.



## Price per Square Foot for Condominium Apartments

Approximate dollar per square foot sale price range for high-rise apartment condominiums in markets across Canada.

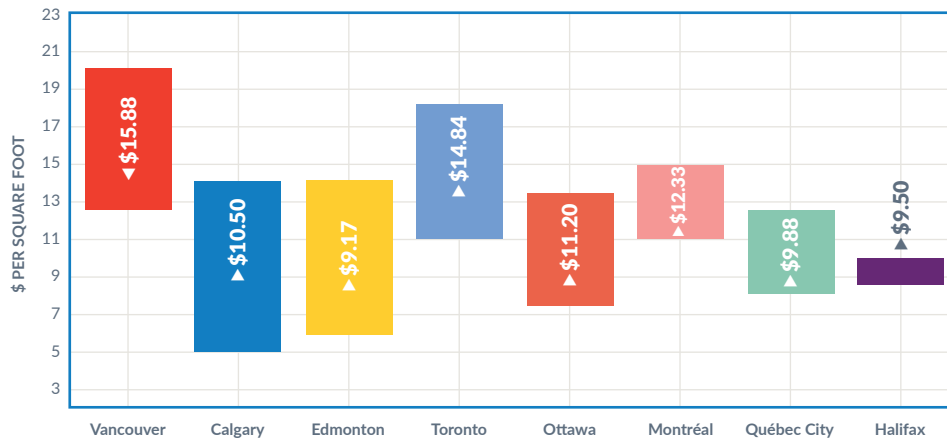
Useful information for pro forma analysis of a condominium development to show potential revenue across markets.



## Office Leasing Rates

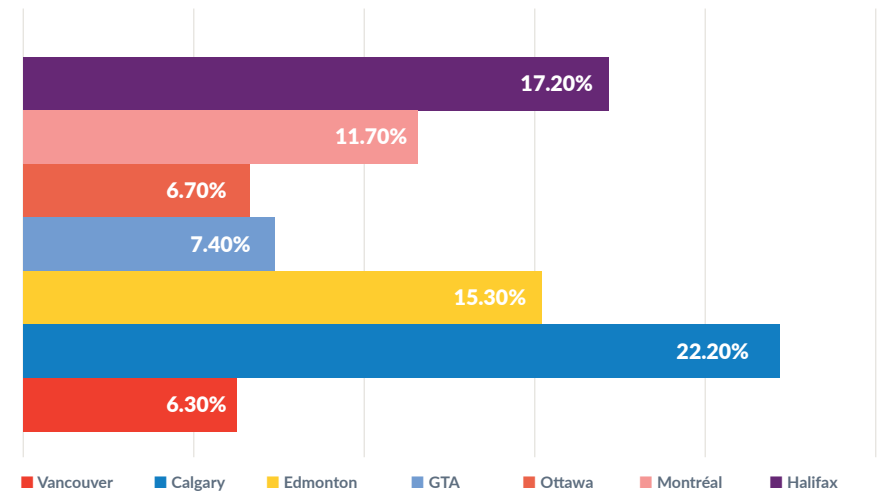
Market net effective rent ranges for suburban Class "A" office space across Canada in Q3 2018.

Arrows indicate directional movement from previous survey. Useful information for pro forma analysis of an office building. Movement is defined as a change of more than 0.10. Due to rounding, some arrows may not reflect actual movement.



## Office Vacancy Rates

Market-by-market comparative analysis of current office vacancy for Class "A" commercial office space across Canadian markets.



## Overall Capitalization Rates

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



# USING THE GUIDE

We have heard your questions and are addressing them in the 2019 edition of the Cost Guide. Key notes include information on: parking calculations, regional cost differences, high quality premiums, cost escalation, methodology for the Guide, and measurement guidance for use of the data.

## Frequently Asked Questions

**Q: If I am budgeting a building that has no underground parking area, can I use just the applicable rate for the above grade without adding any underground parking cost?**

A: Yes, the above grade costs include the cost of a slab on grade and associated footings.

**Q: In the Parking section, when would the Underground Parking Garages – Premium for Unusual Circumstances apply and what would it include?**

A: Underground parking garage costs can vary significantly depending on their site specifics, location, soil conditions, ground water conditions, shape, and depth. Examples where additional costs may be incurred include:

- Non-typical foundations due to poor soil stability
- Bath tubbing the underground due to groundwater or municipal regulations
- Soil conditions that increase excavation costs and/or shoring costs
- Unusually constricted site conditions (e.g. proximity to adjacent structures)
- Footprint shapes that increase the ratio of exterior wall area relative to floor area
- Non-typical floor heights and or specifications
- Remediation of contaminated soils or groundwater

**Q: Why does the cost of the same asset type differ so much between cities in some cases?**

A: The Cost Guide numbers reflect the probable costs of the identified type of building as it would typically be defined in that market. Not only do the costs of labour and materials differ between markets, the standards/specification of each building type may differ as well.

For example, the specification of a mid-quality condominium in Vancouver will typically be a higher specification than what is provided for a mid-quality condominium in Halifax. In addition, there are climatic and code variances between cities. For instance, the HVAC system required in Calgary will be different than the HVAC system required in Vancouver. These differences are also reflected in the numbers. The difference in the Cost Guide numbers is a composite of both the differences in labour and material cost and the differences in design.

**Q: In the Condominiums/Apartments section, what is the Premium for High Quality item, what does it include, and when does it apply?**

A: The Cost Guide numbers are representative of the level of finishes and design that would be considered “typical” of a mid-quality condominium/apartment in that city. If aspects of your building’s design are beyond what would be considered typical, you should be adding this premium. The delineation of what is and is not premium differs from market to market, but could include such things as: premium quality floor finishes, kitchen cabinetry, appliances, luxury building amenities, upgrades to exterior enclosure, etc.

**Q: What is the methodology used to determine the Cost Guide numbers?**

A: The Cost Guide numbers are determined through a combination of our historical data for each asset class in each city, overlaid with expert opinion and knowledge provided by the senior teams in each of our offices across the country.



**Q: I want to measure cost escalation from year to year. Will comparing the current Cost Guide numbers to previous Cost Guide numbers provide me a useful measure of annual cost escalation?**

A: We do not recommend using the Cost Guide to measure cost escalation. It is meant to be used as a tool for clients who are considering an appropriate conceptual budget for a building type in a specific market at a particular point in time. Its methodology thus allows all variables (design, costs, etc.) to vary from year to year and location to location to constantly reflect what is 'typical' of each market each year. What is typical of one city may not be typical of another city. Similarly, what is typical of a building type today, may not have been typical of the same building type 5 years ago. To provide an accurate measure of cost escalation – and isolate only the changes due to escalation of costs – all other variables would need to remain static.

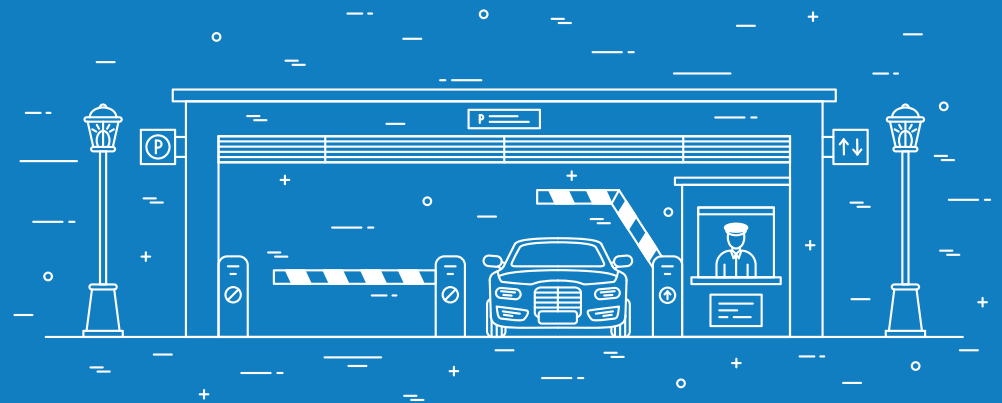
**Q: Can I apply the zoning floor areas calculated by my Architect to the unit rates in the Cost Guide?**

A: Using zoning floor areas to calculate costs is a common and potentially costly error. The Cost Guide rates are calculated using the Canadian Institute of Quantity Surveyors' definition of gross floor area, whereas zoning floor area definitions differ from municipality to municipality and often exclude significant areas of the building from the calculation. Thus, using the floor area measured per zoning definitions can result in underestimating costs by as much as 12%. If you do not have floor plans for your building when preparing your budget, you will need to "gross up" the zoning floor areas to account for the variance in definition. If you do have floor plans for your building, we strongly recommend having the floor areas properly measured in accordance with the Canadian Institute of Quantity Surveyors' *Method of Measurement of Construction Works*. See *Correct Measurement & Use of Square Foot* section on page 9.

## A NOTE ABOUT UNDERGROUND PARKING

Historically, the Condominium/Apartments and Office Buildings sections of the Cost Guide included the cost of underground parking area in the rates. To simplify things, we have adjusted our methodology.

The new methodology excludes underground parking costs from all building types. This means that you now must add the cost of the underground parking to the cost of your applicable building type.



# NOTES ON CORRECT USE OF DATA

## 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 exclusively 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.

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

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

## Construction Cost Escalation

An “escalation allowance” is a contingency (usually a percentage) added to the hard construction cost estimate to allow for inflation in labour and material costs between the date of the estimate and the date of 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 the 2019 Cost Guide, a cloud of economic uncertainty is gathering over an otherwise strong economy in most markets. Trade disputes, tariffs, and rising interest rates coupled with a shortage of contractors and skilled labour in some markets is underlying an increasingly difficult to predict construction market. In these changing market conditions, it is imperative to have a detailed construction estimate prepared to capture prevailing market conditions at that time and obtain an accurate projection of your project's construction costs.



## Hard Construction Costs Only

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

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

## Correct Measurement & Use of Square Foot

In preparing a “cost per square foot” guide, we must outline 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

**If the building includes underground parking areas, these costs need to be added based on the “Underground Parking Garage” rates in the Guide.**

## Federal & Provincial Sales Tax

The unit costs provided exclude Value Added Taxes (GST, HST and QST), but include Provincial Sales Tax (PST) where applicable at the time of the release of this Guide.

# PRIVATE SECTOR PRICE PER SQUARE FOOT

BUILDING TYPE		Vancouver	Calgary	Edmonton	Winnipeg
RESIDENTIAL	CONDOMINIUMS/APARTMENTS (Excludes Parking)				
	Up to 6 Storeys (Hybrid Construction)	190 – 260	180 – 250	175 – 245	180 – 250
	Up to 12 Storeys	200 – 280	185 – 260	180 – 260	185 – 265
	13-39 Storeys	210 – 275	200 – 245	190 – 255	190 – 260
	40-60 Storeys	215 – 280	200 – 260	200 – 260	200 – 265
	60+ Storeys	245 – 310	n/a – n/a	n/a – n/a	n/a – n/a
	Premium for High Quality	90 – 220	80 – 200	75 – 200	75 – 200
	WOOD FRAMED RESIDENTIAL				
	Row Townhouse with Unfinished Basement	125 – 195	115 – 145	120 – 145	115 – 150
	Single Family Residential with Unfinished Basement	140 – 250	120 – 180	125 – 180	120 – 185
	3 storey Stacked Townhouse	165 – 225	140 – 170	145 – 175	140 – 180
	Up to 4 Storey Wood Framed Condo	180 – 240	150 – 200	155 – 205	155 – 210
	5 to 6 Storey Wood Framed Condo	200 – 265	160 – 205	160 – 205	160 – 215
	Custom Built Single Family Residential	415 – 1,050	400 – 850	400 – 850	405 – 850
	SENIORS HOUSING				
Independent / Supportive Living Residences	205 – 300	170 – 260	175 – 265	175 – 270	
Assisted Living Residences	235 – 320	200 – 270	205 – 280	205 – 280	
Complex Care Residences	280 – 375	250 – 325	245 – 340	250 – 320	
COMMERCIAL	OFFICE BUILDINGS (Excludes Parking)				
	Under 5 Storeys (Class B)	215 – 270	180 – 245	180 – 255	185 – 255
	5 - 30 Storeys (Class B)	215 – 255	180 – 250	180 – 255	185 – 260
	5 - 30 Storeys (Class A)	240 – 305	215 – 285	215 – 290	220 – 290
	31 - 60 Storeys (Class A)	255 – 360	235 – 330	235 – 330	240 – 335
	Interior Fitout (Class B)	50 – 105	50 – 85	50 – 85	50 – 90
	Interior Fitout (Class A)	100 – 190	85 – 160	85 – 160	85 – 160
	RETAIL				
	Strip Plaza	120 – 175	105 – 165	110 – 170	110 – 170
	Supermarket	180 – 230	155 – 210	165 – 215	160 – 215
	Big Box Store	170 – 230	155 – 210	160 – 210	160 – 215
	Enclosed Mall	250 – 345	205 – 280	210 – 290	210 – 285
	HOTELS (Excludes Parking)				
	Budget	180 – 235	160 – 200	160 – 210	160 – 205
	Suite Hotel	295 – 340	230 – 290	235 – 295	235 – 295
4 Star Full Service	300 – 370	240 – 290	245 – 295	250 – 300	
Premium for Luxury	95 – 170	90 – 150	90 – 150	95 – 150	
PARKING					
Surface Parking	7 – 25	6 – 20	6 – 20	6 – 20	
Freestanding Parking Garages (above grade)	95 – 135	75 – 100	75 – 100	80 – 105	
Underground Parking Garages	115 – 170	110 – 155	110 – 155	110 – 150	
Underground Parking Garages (Single Level, Open Cut Excavation)	90 – 125	90 – 120	90 – 125	90 – 125	
Underground Parking Garages - Premium for Unusual Circumstances	40 – 175	30 – 120	30 – 120	30 – 120	
INDUSTRIAL	Warehouse	95 – 135	80 – 110	80 – 115	80 – 115
	Urban Storage Facility	95 – 140	80 – 110	80 – 115	80 – 115
	Data Centre - Tier III	595 – 975	490 – 920	490 – 945	490 – 950
	Pharmaceutical Lab	560 – 790	410 – 620	410 – 630	420 – 635
	Manufacturing Facility	300 – 395	240 – 325	245 – 340	250 – 345

# PRIVATE SECTOR PRICE PER SQUARE FOOT

BUILDING TYPE	GTA	Ottawa/Gatineau	Montréal	Halifax	St. John's	
RESIDENTIAL	CONDOMINIUMS/APARTMENTS (Excludes Parking)					
	Up to 6 Storeys (Hybrid Construction)	180 – 250	170 – 240	160 – 230	155 – 225	155 – 225
	Up to 12 Storeys	185 – 265	175 – 245	165 – 240	165 – 235	165 – 235
	13-39 Storeys	190 – 255	180 – 250	175 – 245	175 – 245	n/a – n/a
	40-60 Storeys	200 – 260	n/a – n/a	185 – 260	n/a – n/a	n/a – n/a
	60+ Storeys	225 – 280	n/a – n/a	n/a – n/a	n/a – n/a	n/a – n/a
	Premium for High Quality	75 – 200	60 – 165	65 – 175	65 – 170	65 – 170
	WOOD FRAMED RESIDENTIAL					
	Row Townhouse with Unfinished Basement	105 – 160	110 – 155	105 – 150	95 – 135	110 – 145
	Single Family Residential with Unfinished Basement	115 – 215	115 – 185	100 – 170	90 – 150	115 – 150
	3 storey Stacked Townhouse	135 – 180	145 – 175	120 – 170	115 – 165	135 – 170
	Up to 4 Storey Wood Framed Condo	150 – 200	155 – 190	120 – 180	125 – 160	130 – 170
	5 to 6 Storey Wood Framed Condo	160 – 215	155 – 190	140 – 190	125 – 170	130 – 185
	Custom Built Single Family Residential	400 – 900	430 – 890	370 – 740	250 – 500	290 – 610
	SENIORS HOUSING					
Independent / Supportive Living Residences	185 – 270	165 – 255	160 – 255	155 – 235	170 – 240	
Assisted Living Residences	210 – 295	195 – 260	190 – 270	180 – 250	185 – 260	
Complex Care Residences	250 – 330	240 – 305	235 – 295	215 – 290	225 – 300	
COMMERCIAL	OFFICE BUILDINGS (Excludes Parking)					
	Under 5 Storeys (Class B)	185 – 255	180 – 235	165 – 225	165 – 215	175 – 225
	5 - 30 Storeys (Class B)	190 – 265	190 – 245	170 – 235	170 – 240	180 – 250
	5 - 30 Storeys (Class A)	220 – 290	220 – 280	185 – 260	185 – 260	195 – 280
	31 - 60 Storeys (Class A)	235 – 340	n/a – n/a	220 – 340	n/a – n/a	n/a – n/a
	Interior Fitout (Class B)	60 – 95	50 – 85	50 – 95	50 – 90	50 – 90
	Interior Fitout (Class A)	90 – 200	85 – 150	85 – 155	85 – 145	85 – 145
	RETAIL					
	Strip Plaza	115 – 185	120 – 165	100 – 170	100 – 155	115 – 160
	Supermarket	155 – 215	155 – 190	130 – 180	125 – 190	140 – 185
	Big Box Store	145 – 200	150 – 175	130 – 180	140 – 185	140 – 185
	Enclosed Mall	215 – 295	200 – 255	195 – 270	185 – 260	200 – 250
	HOTELS (Excludes Parking)					
	Budget	160 – 210	155 – 195	150 – 205	175 – 220	155 – 190
	Suite Hotel	245 – 305	205 – 275	205 – 270	200 – 280	205 – 270
4 Star Full Service	255 – 330	235 – 300	220 – 290	220 – 290	235 – 290	
Premium for Luxury	95 – 160	85 – 140	90 – 150	60 – 100	75 – 110	
PARKING						
Surface Parking	8 – 20	6 – 18	6 – 16	6 – 16	6 – 16	
Freestanding Parking Garages (above grade)	75 – 110	75 – 100	70 – 100	95 – 115	100 – 130	
Underground Parking Garages	115 – 160	105 – 160	85 – 140	100 – 150	125 – 155	
Underground Parking Garages (Single Level, Open Cut Excavation)	90 – 120	95 – 130	90 – 120	90 – 125	90 – 130	
Underground Parking Garages - Premium for Unusual Circumstances	40 – 190	30 – 150	30 – 150	30 – 150	30 – 150	
INDUSTRIAL	Warehouse	75 – 105	85 – 105	65 – 100	95 – 130	95 – 130
	Urban Storage Facility	80 – 105	90 – 110	n/a – n/a	n/a – n/a	n/a – n/a
	Data Centre - Tier III	550 – 1,050	525 – 900	525 – 915	n/a – n/a	n/a – n/a
	Pharmaceutical Lab	465 – 735	430 – 650	435 – 665	n/a – n/a	n/a – n/a
	Manufacturing Facility	270 – 355	260 – 340	255 – 340	255 – 335	255 – 330

# PUBLIC SECTOR & SITE SERVICING PRICE PER SQUARE FOOT

BUILDING TYPE		Vancouver	Calgary	Edmonton	Winnipeg
INSTITUTIONAL	EDUCATIONAL BUILDINGS				
	Elementary School	225 – 290	180 – 250	185 – 260	190 – 255
	Secondary School	245 – 310	215 – 280	220 – 295	225 – 285
	Private School	235 – 395	195 – 315	200 – 330	205 – 320
	Universities & Colleges - Teaching and Lecture Hall Building	395 – 520	325 – 450	330 – 465	335 – 455
	Universities & Colleges - Laboratories (Level 1 and 2)	510 – 670	475 – 600	485 – 630	500 – 625
	Universities & Colleges - Student Residence	225 – 345	200 – 275	205 – 285	210 – 285
	HEALTH CARE				
	General Hospital/Acute Care	640 – 860	510 – 700	515 – 735	525 – 720
	Medical Clinic/Treatment Centre	350 – 495	280 – 425	280 – 435	285 – 430
CMIC	TRANSPORTATION BUILDINGS				
	Regional Airport Terminal	335 – 440	300 – 375	305 – 395	310 – 385
	International Airport Terminal	680 – 880	560 – 735	570 – 770	585 – 750
	Bus Terminal/Garage	295 – 385	245 – 300	250 – 310	255 – 305
	GOVERNMENT BUILDINGS				
	Fire/EMS Station	320 – 455	260 – 450	265 – 390	270 – 395
	Police Station - Local Detachment	315 – 370	275 – 325	280 – 340	285 – 340
	Police Station - Regional Headquarters	350 – 490	295 – 400	300 – 380	305 – 380
	Court House	425 – 580	400 – 510	405 – 535	415 – 540
	Operations Centre	335 – 485	265 – 380	270 – 390	270 – 370
	Penitentiary	375 – 480	370 – 450	375 – 460	380 – 460
	Municipal Office	230 – 295	245 – 315	250 – 330	255 – 330
	Library	310 – 455	310 – 400	315 – 415	325 – 415
	RECREATION/ENTERTAINMENT BUILDINGS				
	Ice Arena	250 – 355	200 – 275	205 – 270	210 – 275
	Community Aquatic Facility	420 – 510	335 – 430	340 – 450	345 – 450
	Multi-Use Recreational Centre	275 – 405	230 – 330	235 – 340	240 – 345
	Casino Facility	390 – 670	375 – 620	380 – 645	380 – 650
	Performing Arts Building	480 – 595	450 – 660	455 – 660	460 – 675
	Museum / Gallery	445 – 615	400 – 600	400 – 610	405 – 620
SITE SERVICING	SITE SERVICING				
	Local Roads - 8m road width (per metre)	2,800 – 3,800	2,700 – 3,500	2,800 – 3,700	2,800 – 3,700
	Arterial Roads - 9m road width (per metre)	3,000 – 4,200	2,900 – 4,200	3,000 – 4,400	3,000 – 4,400
	Arterial Roads - 12m road width (per metre)	3,800 – 4,500	3,600 – 4,600	3,700 – 4,800	3,700 – 4,800
	Private Roads - 6m road width (per metre)	2,500 – 2,900	2,300 – 3,100	2,400 – 3,200	2,400 – 3,200
	Residential Row Townhouses (per unit)	19,500 – 27,500	19,500 – 29,000	20,000 – 30,500	20,000 – 30,500
	Industrial (per acre)	130,000 – 225,000	120,000 – 220,000	120,000 – 220,000	120,000 – 220,000
Commercial (per acre)	165,000 – 275,000	165,000 – 300,000	165,000 – 300,000	165,000 – 300,000	

# PUBLIC SECTOR & SITE SERVICING PRICE PER SQUARE FOOT

BUILDING TYPE		GTA	Ottawa/Gatineau	Montréal	Halifax	St. John's
INSTITUTIONAL	EDUCATIONAL BUILDINGS					
	Elementary School	180 – 235	190 – 230	170 – 210	235 – 280	240 – 285
	Secondary School	205 – 275	220 – 260	185 – 240	265 – 300	275 – 315
	Private School	205 – 330	235 – 295	190 – 305	295 – 350	295 – 355
	Universities & Colleges - Teaching and Lecture Hall Building	365 – 525	310 – 410	325 – 420	305 – 380	305 – 380
	Universities & Colleges - Laboratories (Level 1 and 2)	495 – 695	460 – 620	460 – 595	395 – 500	420 – 580
	Universities & Colleges - Student Residence	180 – 280	180 – 240	175 – 260	185 – 260	185 – 260
	HEALTH CARE					
	General Hospital/Acute Care	580 – 780	560 – 725	525 – 765	540 – 750	540 – 730
	Medical Clinic/Treatment Centre	305 – 440	295 – 425	290 – 435	305 – 450	315 – 475
CIVIC	TRANSPORTATION BUILDINGS					
	Regional Airport Terminal	335 – 415	285 – 360	270 – 350	290 – 375	295 – 410
	International Airport Terminal	605 – 760	560 – 700	565 – 695	565 – 710	580 – 730
	Bus Terminal/Garage	260 – 340	245 – 330	245 – 305	245 – 320	245 – 330
	GOVERNMENT BUILDINGS					
	Fire/EMS Station	255 – 350	240 – 320	250 – 320	250 – 315	290 – 380
	Police Station - Local Detachment	285 – 340	265 – 340	270 – 335	285 – 335	285 – 375
	Police Station - Regional Headquarters	290 – 355	280 – 350	270 – 350	295 – 350	300 – 400
	Court House	420 – 570	380 – 475	375 – 475	375 – 450	375 – 475
	Operations Centre	255 – 330	260 – 330	250 – 325	245 – 365	285 – 385
	Penitentiary	340 – 445	320 – 420	315 – 410	380 – 525	425 – 525
	Municipal Office	205 – 270	220 – 275	200 – 270	195 – 260	210 – 280
	Library	290 – 440	285 – 360	255 – 380	235 – 350	250 – 350
	RECREATION/ENTERTAINMENT BUILDINGS					
	Ice Arena	205 – 265	185 – 250	185 – 270	200 – 250	190 – 270
	Community Aquatic Facility	385 – 490	335 – 425	325 – 435	365 – 460	350 – 450
	Multi-Use Recreational Centre	225 – 330	245 – 325	215 – 300	215 – 325	210 – 320
	Casino Facility	470 – 765	450 – 720	425 – 700	375 – 600	n/a – n/a
	Performing Arts Building	420 – 670	400 – 525	400 – 525	385 – 510	390 – 500
	Museum / Gallery	390 – 570	390 – 500	380 – 515	365 – 490	355 – 495
SITE SERVICING	SITE SERVICING					
	Local Roads - 8m road width (per metre)	3,300 – 4,000	3,100 – 4,100	3,000 – 3,800	2,900 – 3,700	3,200 – 4,000
	Arterial Roads - 9m road width (per metre)	3,400 – 4,600	3,200 – 4,600	3,200 – 4,600	3,100 – 4,100	3,300 – 4,300
	Arterial Roads - 12m road width (per metre)	4,300 – 5,100	4,200 – 5,000	4,000 – 5,000	4,000 – 4,800	4,100 – 4,600
	Private Roads - 6m road width (per metre)	2,600 – 3,400	2,500 – 3,300	2,400 – 3,200	2,400 – 3,000	2,600 – 3,100
	Residential Row Townhouses (per unit)	21,500 – 31,000	23,000 – 31,000	20,500 – 29,500	18,500 – 26,000	22,000 – 30,000
	Industrial (per acre)	142,000 – 218,000	139,000 – 216,000	132,000 – 204,000	120,000 – 190,000	145,000 – 210,000
Commercial (per acre)	192,000 – 320,000	190,000 – 322,000	175,000 – 298,000	165,000 – 265,000	185,000 – 300,000	

# CANADIAN COST INDEX

The following cost index is a reasonable approximation of the expected cost variance between the represented locations and their respective “Indexed to” city. Many factors may influence the cost variance in one region versus another and these factors may have a substantive impact on the actual cost variance between regions. These factors include:

- Variances in design between regions due to site, climatic, seismic, code or aesthetic reasons.
- The size and nature of the project and the availability of local trades versus the need to engage trades from neighboring regions.

- Differences in cost variances between trades. For example, for a given region a concrete structure might be a premium versus the index city and a wood structure could be a discount versus the index city.
- Material and labour costs and productivity factors.

A single number cannot adequately represent all possible variations in costs between regions. We recommend preparing a project specific estimate as early as possible to ensure that you have accurately estimated the costs.

## British Columbia

### INDEXED TO VANCOUVER

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

## Western / Prairies

### INDEXED TO CALGARY

<b>1. Calgary</b>	<b>100</b>
2. Saskatoon	102
3. Regina	102

## Ontario

### INDEXED TO GTA

1. Southwestern Ontario	
Windsor	110
London	98
Tri-City (Cambridge, Kitchener, Waterloo)	99
2. Hamilton & Area	104
3. Niagara Peninsula	104
4. Barrie	105
5. Toronto	
Downtown Core	115
<b>GTA</b>	<b>100</b>
6. Eastern (Kingston, Cornwall)	110
7. Northern (Sudbury, Thunder Bay, TransCanada Corridor)	115

## Québec

### INDEXED TO MONTRÉAL

<b>1. Montréal</b>	<b>100</b>
2. Québec City	98



# ABOUT THE COST & PROJECT MANAGEMENT GROUP



**Michael Commons**  
President

Our Cost & Project Management team is made up of over 160 people who are passionate about the real estate industry in markets across Canada. With knowledge and experience in quantity surveying, project management, infrastructure advisory, property condition assessment, and construction contract solutions across all asset classes, we deliver independent, accurate, and reliable advisory services to maximize the potential of your investment. Contact your local expert to find out more about this Cost Guide and optimize the value for money of your development.

## NEED HELP USING THIS GUIDE? CONTACT US TO...

- Analyze key performance metrics
- Analyze residential and parking efficiencies
- Benchmark and analyze costs based on location and building attributes
- Predict site conditions based on data from nearby projects
- Benchmark construction hard and soft costs
- Track escalation trends based on actual trade contracts
- Analyze construction efficiency (e.g. ratios of concrete, rebar, formwork and cladding)
- Provide advisory services supported by real data and industry-leading estimating and pro forma software

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# APPENDIX: BUILDING TYPE DESCRIPTIONS

*General: All costs exclude site development and premiums associated with unique architecture.*

## Private Sector

### RESIDENTIAL

#### Condominiums and Apartments

- Assumed cast-in-place concrete structure unless otherwise indicated.
- Hybrid construction could include any combination of alternate building structures, such as precast concrete and light-gauge steel.
- The premium for high-quality can be applied to any of the condominium/apartment categories.
- Parking is excluded from all unit rates and should be added accordingly.

#### Wood-Framed

- 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 and should be added accordingly.

#### Seniors' Housing

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

### COMMERCIAL

#### Office Buildings

- Assumed base building construction only, including mechanical and electrical services, washrooms, and finishing of ground floor entrance lobby.
- 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 the finishes.
- Costs assume standalone buildings and are not representative of a component within a mixed-use building.
- Parking is excluded from all unit rates and should be added accordingly.

#### Retail

- Assumed single-storey buildings with the exception of enclosed malls.
- The CRU space is considered shell.
- Public spaces within an enclosed mall are finished.
- Costs assume standalone buildings and are not representative of a component within a mixed-use building.

#### Hotels

- FF&E allowances are excluded, as each operator has its own definition, and the costs can vary significantly.
- Budget hotel assumes no restaurant or bar facilities and minimal meeting/conference areas.
- Suite hotels assumed to include a kitchenette.
- Four-star full-service hotels include dining and conference facilities and special-use lounges. Premiums 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.
- Freestanding (above-grade) parking assumes an open-air structure.
- Underground parking assumes that temporary support to the excavated sides of the proposed garage is required, and that there are no extraordinary conditions or unusual circumstances.
- Underground parking (single level, open cut excavation) assumes open site conditions and no requirement for shoring.
- Premium for unusual circumstances could be applied to account for issues such as but not limited to: poor soil conditions, excessive groundwater, environmental contamination, restricted site conditions, small or non-standard footprint shape, and non-typical floor to floor heights.
- The “efficiency” of garages (parking area/stall) is also an important cost variable.
- All parking unit rates should be applied to the area of parking required and not the associated building area.

## INDUSTRIAL

- 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. Active hardware is excluded.
- Pharmaceutical laboratory costs vary depending on the level of testing and manufacturing involved. FF&E is excluded.
- Manufacturing facilities are based on open spaces with high structures to allow space for equipment. FF&E is excluded.

## Public Sector

### INSTITUTIONAL

- Educational buildings exclude allowances for FF&E.
- Health care buildings: 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 surgical suites, 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 multilevel 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 any parking, airside infrastructure, or equipment are excluded.
- Bus garages are slab-on-grade, single-storey, long-span steel structures including 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 or parking is excluded from the unit costs.
- Costs assume a design standard equivalent to LEED Silver. Premiums associated with actual certification or Gold/Platinum design are excluded.

#### Government Buildings

- Fire/EMS Stations exclude any costs associated with training buildings.
- Local Police Detachments include offices and facilities for police and civilian members with minimal interview rooms and holding cells.
- Regional Police Headquarters include the same scope as a Local Police Detachment, plus additional interview rooms, holding cells, training space, and administration.
- Courthouses include judicial chambers, administrative offices, holding cells, and courtrooms.
- Operations Centre costs are based on the main facility only, including maintenance, storage, and administrative areas. Any outbuildings would be an additional cost.
- The range of costs for penitentiaries vary depending on the level of security and size of the facility.
- Municipal Offices include administrative space for all municipal departments, meeting and conference rooms, council chambers, cafeteria, daycare facility, and significant atrium space.
- Library costs vary depending on size and whether the building is standalone or part of a multi-use facility.

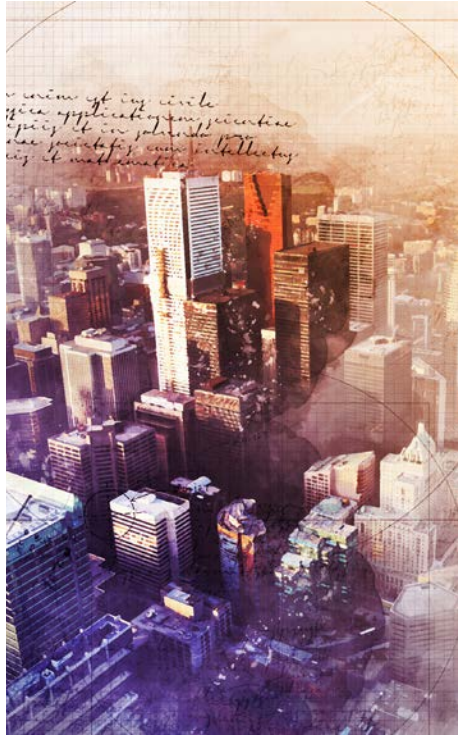


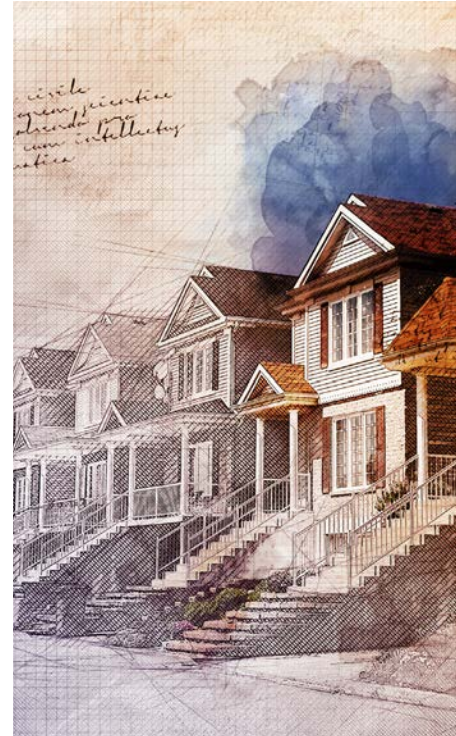
## Recreation / Entertainment Buildings

- Ice Arenas include single 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 most of the building.
- Multi-use Recreation Centres could include any combination of fitness, gymnasium, daycare, community room, and administrative space. Facilities with arena, pool, and multi-purpose areas should be based on the costs for each component combined.
- 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 fit-out of the gaming floor, but exclude FF&E, slot machines, tables, and security systems.
- Performing arts buildings unit costs 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 all impact the costs.

## Site Servicing

- The rates for residential site servicing are based on costs per centre line of road and allow for underground storm, sewer, water services, electrical services, 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 and include private roads within a complex subdivision.
- The rates for industrial and commercial site servicing are provided on a per acre basis.
- Costs exclude any requirement for oversizing of services for future development.







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## 2019 CANADIAN COST GUIDE



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