**THIRD QUARTER 2019** 

# **NORTH AMERICA** QUARTERLY CONSTRUCTION COST REPORT







# ON THE COVER

# 16 CHESTNUT A DENVER, COLORADO

The Class AA office building, 16 Chestnut, is located at the base of Millennium Bridge near Union Station in Denver, Colorado. 16 Chestnut is 19-stories, with 432,881 rentable square-feet and is equipped with a fitness center and bike storage facility. The project achieved LEED Platinum certification.

During the design of the project, RLB provided cost estimating services for design milestones including Conceptual Design, Schematic Design, and Design Development.

# NORTH AMERICA

Late this summer, the Business Roundtable released a new statement on the purpose of a corporation. The organization—an association of CEOs of America's leading and largest companies, including several major AEC firms—has typically promoted the point of view that corporations exist principally to serve their investors. But the new statement marked a significant expansion of that stance, and stirred up a controversy in some circles.

Rather than continuing to focus solely on profitability, the Roundtable's recent statement takes a position on several social issues. It commits to companies investing in their employees, protecting the environment through sustainable practices, and dealing fairly and ethically with suppliers (all long held RLB values).

The declaration from the Business Roundtable is a clear reflection of how the corporate world is changing, and how the meaning of corporate success has evolved to include the well-being of stakeholders as well as shareholders.

The AEC industries are also continuing to adapt to the evolving realities of the field, from attracting, training, and compensating a new generation of labor and leaders, to managing the role of Big Data and technology. At Rider Levett Bucknall, we've long seen the wisdom in pursuing a responsible balance between projects, people, and profit, and are pleased to see more businesses are recognizing that the definition of enrichment extends beyond the bottom line.



Julian Anderson FRICS President, North America

# NATIONAL CONSTRUCTION COST INDEX



Welcome to the third quarter 2019 issue of the Rider Levett Bucknall Quarterly Cost Report! This issue contains data current to July 1, 2019.

\$1,287 billion According to the U.S. Department of Commerce, construction-put-in-place during June 2019 was estimated at a seasonally adjusted annual rate of \$1,287.0 billion, which is

1.3% below
 2.1% below
 the June 2018 estimate of \$1,314.8 billion.

The National Construction Cost Index shows the changing cost of construction between July 2014 and July 2019, relative to a base of 100 in April 2001. Index recalibrated as of April 2011.

# **KEY UNITED STATES STATISTICS**



#### **Consumer Price Index (CPI)**

CPI continues to increase steadily, up from 251.9 in Q2 2018 to 256.1 in Q2 2019.

#### Gross Domestic Product\* (GDP)

GDP has increased at an annualized rate of 2.0% during the second quarter. This is a downward trend compared to previous quarters.



47

Q1 2019

10

#### Architectural Billings Index (ABI)

While ABI is temporarily up from the previous quarter, reporting at 49.1 during the second quarter, it still reports a score below 50, indicating a decrease in billings for that quarter.



#### **Construction Unemployment**

50.4

Q4 2018

51.1

Q3 2018

As skilled-labor shortages continue to be a challenge, construction unemployment dips to 4.0% during the second quarter.

#### National Unemployment

National unemployment rates continue to be historically low; reporting at a rate of 3.6% during the second quarter.



GDP represented in percent change from the preceding quarter, seasonally adjusted at annual rates. CPI quarterly figures represent the monthly value at the end of the quarter. Inflation rates represent the total price of inflation from the previous quarter, based on the change in the Consumer Price Index. ABI is derived from a monthly American Institute of Architects survey of architectural firms of their work on the boards, reported at the end of the period. Construction Put-in-Place figures represent total value of construction dollars in billions spent at a seasonally adjusted annual rate taken at the end of each quarter. General Unemployment rates are based on the total population 16 years and older. Construction Unemployment rates represent only the percent of experienced private wage and salary workers in the construction industry 16 years and older. Unemployment rates are seasonally adjusted, reported at the end of the period.

\* Adjustments made to GDP based on amended changes from the Bureau of Economic Analysis. Sources: U.S. Bureau of Labor Statistics, Bureau of Economic Analysis, American Institute of Architects.

# INDICATIVE CONSTRUCTION COSTS

	OFFICES				RETAIL SHOPPING			HOTELS				HOSE	PITAL	
	PR	IME	SECO	NDARY	CEN	ITER	ST	RIP	5 S	TAR	3 S	TAR	GEN	ERAL
LOCATION	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
USA														
Boston	325	500	225	325	200	300	150	240	400	580	275	390	425	675
Chicago	280	450	175	280	185	290	135	220	400	660	290	410	380	720
Denver	220	280	165	200	95	150	80	175	285	370	200	275	390	480
Honolulu	290	530	245	400	210	495	180	435	520	750	325	550	475	765
Las Vegas	160	295	135	190	115	500	80	145	400	550	150	300	400	500
Los Angeles	235	355	175	260	155	340	130	190	375	540	280	360	550	850
New York	400	600	300	400	275	425	175	300	400	600	300	400	500	750
Phoenix	190	350	150	200	120	250	80	150	400	550	170	300	425	525
Portland	200	270	150	200	170	270	155	225	300	400	220	320	405	540
San Francisco	320	500	280	370	275	400	240	350	460	660	390	530	490	725
Seattle	210	255	145	205	140	310	115	165	275	390	230	240	420	550
Washington, D.C.	325	550	225	325	175	300	140	200	400	600	250	390	500	750
CANADA														
Calgary	215	285	180	250	205	280	155	210	330	450	175	210	510	700
Toronto	210	280	190	270	230	280	120	160	400	500	205	265	500	700

# CONSTRUCTION INDUSTRY CONFIDENCE INDEX

The North American construction market continues to face labor shortages and material price increases, resulting in inflated constructions costs. These factors have led many to wonder when, rather than if, they can expect these and other factors to slowdown the market.

ENR's Construction Industry Confidence Index (CICI), launched in 2009, is a survey of different types of firms (Design Professionals, General Contractors and Subcontractors) and represents their overall view of the current and future construction market. The index is 51 in the third quarter of 2019, reflecting a drop of seven points since the previous quarter, and down 19 points year-over-year. The rating is still above 50, which is considered the threshold for negative sentiment regarding industry growth.

While it is expected that construction will face a downturn in the next year or so, this doesn't necessarily mean that the construction market is in trouble; it does mean a slowdown over the next 12-18 months, which may seem like a recession after the frantic pace of the last few years.

The data in the chart below represents estimates of current building costs in each respective market. Costs may vary as a consequence of factors such as site conditions, climatic conditions, standards of specification, market conditions, etc. Values of U.S. locations represent hard construction costs based on U.S. dollars per square foot of gross floor area, while values of Canadian locations represent hard construction costs based on Canadian dollars per square foot.

INDUS	TRIAL	PARKING			RESIDENTIAL			EDUCATION							
WARE	HOUSE	GROUND BASEMENT		MULTI-FAMILY SINGLE-FAMILY		ELEME	ELEMENTARY HIGH SCH		CHOOL	HOOL UNIVERSITY					
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
110	190	85	140	100	160	185	315	260	360	320	430	340	450	350	500
110	185	80	125	125	170	165	400	220	420	265	380	300	405	350	600
90	150	75	100	125	150	90	200	115	450	250	315	300	375	305	420
145	230	100	145	140	265	200	450	285	765	345	480	410	615	450	725
60	100	50	85	60	150	90	405	120	450	180	315	250	455	275	455
120	185	105	125	130	190	225	370	205	365	365	480	300	550	455	615
115	200	95	175	125	200	200	375	275	400	375	500	400	530	400	600
60	100	45	75	70	110	90	250	120	450	190	320	250	400	300	450
100	160	105	135	120	195	160	250	140	295	290	360	305	365	330	465
150	200	140	160	260	300	375	550	250	430	350	430	350	460	450	620
100	130	95	115	140	170	165	275	170	290	300	330	390	500	440	480
120	190	90	130	110	140	200	350	300	400	300	400	325	420	350	500
80	110	75	100	110	155	140	170	120	180	200	250	230	280	330	460
80	100	75	110	115	150	190	230	200	375	215	235	235	275	230	350



# **COMPARATIVE COST INDEX**



<0%

15%

City	July 2018	October 2018	January 2019	April 2019	July 2019	Annual % Change
• Boston	21,789	22,086	22,267	22,480	22,741	4.37%
Chicago	22,055	22,416	22,789	23,269	23,652	7.24%
• Denver	14,819	14,937	15,096	15,253	15,407	3.97%
• Honolulu	24,048	24,520	24,812	25,192	25,609	6.49%
<ul> <li>Las Vegas</li> </ul>	14,299	14,503	14,674	14,834	15,023	5.06%
• Los Angeles	21,266	21,567	21,792	21,526	21,769	2.37%
New York	25,628	26,000	26,244	26,524	26,771	4.46%
• Phoenix	14,795	15,013	15,203	15,376	15,578	5.29%
• Portland	16,023	16,315	16,630	16,843	17,023	6.24%
San Francisco	26,038	26,294	26,844	27,516	28,030	7.65%
Seattle	17,525	17,810	18,120	18,402	18,690	6.65%
• Washington, D.C.	20,660	20,987	21,528	21,617	21,846	5.74%

Comparative Cost Map and Bar Graph Indicate percentage change between July 2018 and July 2019.



Each quarter we look at the comparative cost of construction in 12 US cities, indexing them to show how costs are changing in each city in particular, and against the costs in the other 11 locations. You will be able to find this information in the graph titled Comparative Cost Index (above) and in the Cost and Change Summary (right).

Our Comparative Cost Index tracks the 'true' bid cost of construction, which includes, in addition to costs of labor and materials, general contractor and sub-contractor overhead costs and fees (profit). The index also includes applicable sales/use taxes that 'standard' construction contracts attract. In a 'boom,' construction costs typically increase more rapidly than the net cost of labor and materials. This happens as the overhead levels and profit margins are increased in response to the increasing demand. Similarly, in a 'bust', construction cost increases are dampened (or may even be reversed) due to reductions in overheads and profit margins.

The following escalation charts track changes in the cost of construction each quarter in many of the cities where RLB offices are located. Each chart illustrates the percentage change per period and the cumulative percentage change throughout the charted timeline.





COST INDEX LAS VEGAS









#### COST INDEX HONOLULU

#### COST INDEX LOS ANGELES



Our research suggests that between April 1, 2019 and July 1, 2019 the national average increase in construction was approximately 1.31%. Chicago, Honolulu, Phoenix, San Francisco, and Seattle all experienced increases over 1.3% in the guarter. Boston, Denver, Las Vegas, Los Angeles, New York, Portland, and Washington, D.C. experienced relatively modest gains of less than 1.3%.



**COST INDEX** PORTLAND 12% 8.5% 5.0% 1.5% 1.82% 1.93% 1.28% 1.07% -2.0% OCT 2018 JAN 2019 APR 2019 JUL 2019







#### COST INDEX WASHINGTON, D.C. 12%



#### **COST INDEX** SAN FRANCISCO

# CANADA

## **COMPARATIVE COST INDEX**



City	July 2018	October 2018	January 2019	April 2019	July 2019	Annual % Change
Calgary	18,833	19,247	19,582	19,379	19,493	3.50%
• Toronto	19,555	20,232	20,798	20,909	22,759	16.38%

Canada's economy grew 0.9% in the second quarter and is projected to increase for the balance of 2019. Q2 2019 is the strongest growth rate since Q2 2017. The construction market continues to be busy with current work, however there are some projects that have been canceled due to high pricing. This is freeing up trades' availability which in very isolated cases is starting to show a reduction in some trade pricing. For projects moving forward, the general trend remains, however, of shortages of labor driving trade pricing to its highest-ever levels. There are a number of large infrastructure projects on the market, with Infrastructure Ontario announcing in September their biggest ever pipeline for projects to the tune of \$65B, but many smaller public-sector projects are still being postponed, or at the very least, sent for re-design.



# COST INDEX TORONTO

### **KEY CANADIAN STATISTICS**



**Consumer Price Index (CPI)** 

Canada's CPI grows nominally but steadily, with a variance of 2.46% over the past four quarters.

#### Gross Domestic Product (GDP)

GDP experiences a slight increase; up 0.91% percentage change from the previous quarter.

# 133.7 133.6 136.0 137.0 Image: Constraint of the second seco



#### **Housing Starts**

Housing starts are up 58.21% from the previous quarter, and up 2.19% from this time last year.

#### Unemployment

Canada's unemployment remains relatively steady at 5.7% for the second quarter.



GDP represented in percent change from the preceding quarter, seasonally adjusted at annual rates. CPI quarterly figures represent the monthly value at the end of the quarter. Inflation rates represent the total price of inflation from the previous quarter, based on the change in the Consumer Price Index. General Unemployment rates are based on the total population 16 years and older. Construction Unemployment rates represent only the percent of experienced private wage and salary workers in the construction industry 15 years and older. Unemployment rates are seasonally adjusted, reported at the end of the period.



#### ABOUT RIDER LEVETT BUCKNALL

Rider Levett Bucknall is an award-winning international firm known for providing project management, construction cost consulting, and related property and construction advisory services – at all stages of the design and construction process.

VOTED #1 COST CONSULTANT IN WORLD ARCHITECTURE MAGAZINE 2016-2019



While the information in this publication is believed to be correct, no responsibility is accepted for its accuracy. Persons desiring to utilize any information appearing in this publication should verify its applicability to their specific circumstances.

This issue was compiled by Taryn Harbert with contributions from Cassie Idehara, Catherine Stoupas, Chris Harris, Daniel Junge, Edd Hamzanlui, Emile Ie Roux, Evans Pomegas, George Bergeron, Graham Roy, Grant Owen, James Casey, Joe Pendlebury, Lucy Liu, Maelyn Uyehara, Michael Moynihan, Paul Brussow, Peter Knowles, Philip Mathur, Robin Kankerwal, Scott Macpherson, and Simon James.

© September 2019 by Rider Levett Bucknall Ltd.

#### If you have questions or for more information, please contact us.

#### BOSTON

Phone: +1 617 737 9339 F-mail: BOS@us.rlb.com Grant Owen

#### CALGARY

Phone: +1 403 571 0505 E-mail: YYC@ca.rlb.com Contact: Terry Harron

#### CHICAGO

Phone: +1 312 819 4250 E-mail: ORD@us.rlb.com Contact: Chris Harris

#### DENVER

Phone:	+1 720 904 1480
E-mail:	DEN@us.rlb.com
Contact:	Peter Knowles

#### HILO

Phone:	+1 808 934 79
E-mail:	ITO@us.rlb.co
Contact:	Kevin Mitchell

#### HONOLULU

Phone:	+1 808 521 264
E-mail:	HNL@us.rlb.cc
Contact:	Erin Kirihara
	Cassie Idehara

m

#### KANSAS

+1 816 977 2740 E-mail: MCI@us.rlb.com Contact: Julian Anderson

#### LAS VEGAS

Phone:	+1 702 227 8818
E-mail:	LAS@us.rlb.com
Contact:	Paul Brussow

#### LOS ANGELES

Phone:	+1 213 689 1103
E-mail:	LAX@us.rlb.com
Contact:	Philip Mathur
	Brian Lowder

#### MAUI

Phone:	+1 808 875 1945
E-mail:	OGG@us.rlb.com
Contact:	Kevin Mitchell

#### **NEW YORK**

Phone: +1 646 821 4788 E-mail: NYC@us.rlb.com Contact:

#### PHOENIX

+1 602 443 4848 Phone: E-mail: PHX@us.rlb.com Julian Anderson Scott Macpherson

#### PORTLAND

+1 503 226 2730 Phone: PDX@us.rlb.com E-mail<sup>.</sup> Graham Roy

#### SAN FRANCISCO

Phone: +1 415 362 2613 SFO@us.rlb.com E-mail: Catherine Stoupas Contact:

#### SAN JOSE

+1 650 943 2317 Phone:

SJC@us.rlb.com Joel Brown

#### SEATTLE

Phone: +1 206 441 8872 E-mail: SEA@us.rlb.com Contact: Craig Colligan

#### ST. LUCIA

+1 758 452 2125 Phone: UVF@us.rlb.com Contact: David Piper

#### TORONTO

Phone: +1 905 827 8218 YYZ@us.rlb.com E-mail: Contact:

#### TUCSON

+1 520 777 7581 Phone: TUS@us.rlb.com Contact: Josh Marks

#### WAIKOLOA

Phone: +1 808 883 3379 E-mail: KOA@us.rlb.com Contact: Kevin Mitchell

#### WASHINGTON, DC

Phone:	+1 410 740 1671
E-mail:	DCA@us.rlb.com
Contact:	Kirk Miller

# rlb.com

...

Davita

ITTO

P

1 mil

THE

-