
FIRST QUARTER 2020

NORTH AMERICA

QUARTERLY CONSTRUCTION COST REPORT





ON THE COVER

UCHEALTH - STEADMAN HAWKINS CLINIC DENVER AND CU SPORTS MEDICINE ▲

ENGLEWOOD, COLORADO

The new build medical office building, UCHealth Steadman Hawkins Clinic Denver and CU Sports Medicine, is a world-class facility designed to treat and prevent injuries of all athletes. The sports performance program offers many services to patients including rehabilitation, surgery, imaging, occupational and physical therapy, orthopedics, and more. At the new state-of-the-art facility, advanced technologies and treatments are offered to enhance the overall quality of services for patients, from weekend warriors and professional athletes to those experiencing regular wear and tear or anyone needing treatment. UCHealth is the official health care partner to many professional sports teams including the Denver Broncos, Denver Nuggets, Colorado Avalanche and Colorado Rockies. UCHealth Steadman Hawkins Clinic Denver providers have helped many elite athletes recovery from injury and return to their sports.

RLB's extensive involvement with the project included providing cost estimating services during the early program and conceptual and schematic design phases. We assisted UCHealth in the selection of a general contractor and participated in the interview and review process. Once the contractor was selected, we conducted peer reviews of the contractor's design development phase estimates to develop an IGMP. We reviewed award recommendations from the contractor and reviewed the FGMP. We performed periodic schedule reviews during construction and tracked the status of the project in reports to UCHealth. As construction finalized, RLB provided change order review services.

NORTH AMERICA

The coronavirus outbreak has scrambled business on virtually every level, the construction industry included. Compounding the resultant uncertainty is the lack of a uniform reaction to the pandemic. Because they differ in classifying what is deemed essential and non-essential work, state and local governments have had mixed responses. For example, Boston suspended all regular work at construction sites, allowing only for emergency work approved by the city. In California, a state-wide shelter-in-place requirement is delaying some projects, as is the vast majority complying with the mandate.

Owners are cancelling relatively few projects outright, compared to those that are being suspended, put on hold, or being reconsidered. Those that have been scrubbed were likely already at the edge of penciling out financially, and the volatility of the stock market was probably too much for them to withstand.

My thought is that it's not the shutdowns themselves that will transform the construction industry; rather, the changes will stem more from the effects of the recession that will follow the closures. One example of this centers on the supply chain of construction goods and equipment.

Currently, Chinese factories are beginning to resume production, but it's going to be some time before they reach full capacity. Meanwhile, inventories already on-shore do seem to be sufficient to keep some small projects going. Looking ahead, architects and contractors will try to diversify their materials sources—specifically, beyond China—to provide more options in case of future major disruptions in the supply chain.

To return to the big picture: A prudent combination of science and economic stimulus will ultimately direct our recovery. Some government officials are indicating parts of the United States could be ready in a matter of weeks to ease (but not eliminate) the restrictions that have shuttered many businesses. Others have stated that without an effective therapy or a vaccine, the country could expect 18 months of rolling shutdowns as the outbreak recedes and then returns, assuming a W-shape recovery instead of a V-shape or U-shape model.

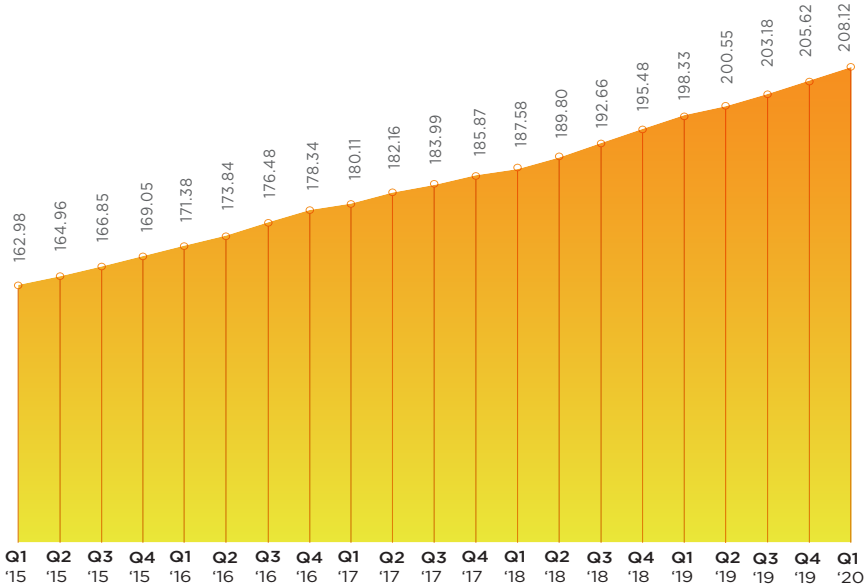
Particularly as we navigate these uncertain times, we all seek clarity that's informed by facts and science. At Rider Levett Bucknall, we have always placed a high premium on earning and keeping your trust, and we wish you strength and security as we continue to resolve these unprecedented challenges facing the AEC industries.



Julian Anderson FRICS
President,
North America

UNITED STATES

NATIONAL CONSTRUCTION COST INDEX



Welcome to the first quarter 2020 issue of the Rider Levett Bucknall Quarterly Cost Report! This issue contains data current to January 1, 2020. **Please carefully note, the data included in this report does not yet indicate effects of the COVID-19 pandemic.**

**\$1,369.2
Billion**

According to the U.S. Department of Commerce, construction-put-in-place during January 2020 was estimated at a seasonally adjusted annual rate of \$1,369.2 billion, which is

**1.8%
above**

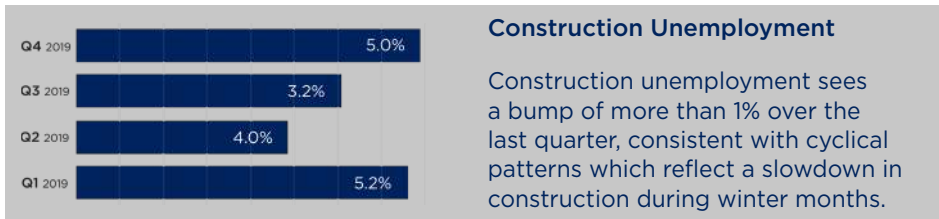
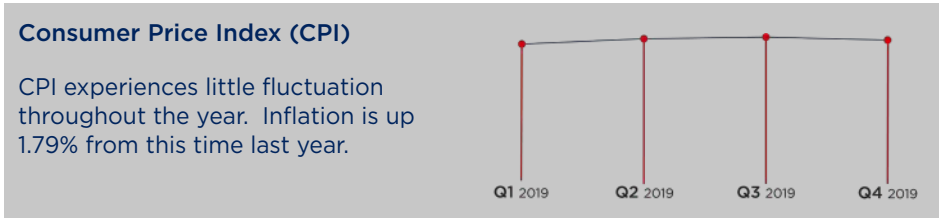
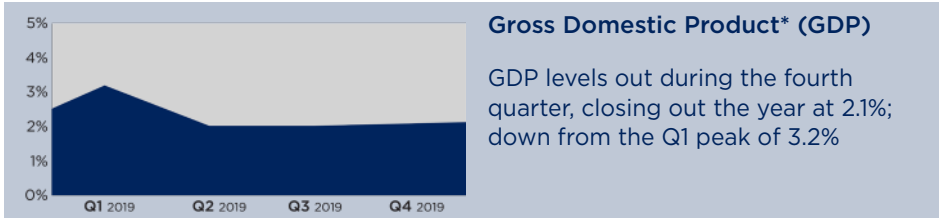
the revised December 2019 estimate of \$1,345.5 billion, and

**6.8%
above**

the January 2019 estimate of \$1,282.5 billion.

The National Construction Cost Index shows the changing cost of construction between January 2015 and January 2020, relative to a base of 100 in April 2001. Index recalibrated as of April 2011.

KEY UNITED STATES STATISTICS



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.

UNITED STATES

INDICATIVE CONSTRUCTION COSTS

LOCATION	OFFICES				RETAIL SHOPPING				HOTELS				HOSPITAL	
	PRIME		SECONDARY		CENTER		STRIP		5 STAR		3 STAR		GENERAL	
	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
USA														
Boston	350	550	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	235	300	165	200	95	150	80	175	300	500	225	325	400	550
Honolulu	295	540	250	410	215	500	185	440	530	765	330	560	485	780
Las Vegas	160	295	105	190	115	480	80	145	350	550	150	300	375	475
Los Angeles	240	360	175	260	155	345	130	190	380	545	280	365	610	925
New York	400	600	300	400	275	425	175	300	400	600	300	400	500	750
Phoenix	200	300	140	195	120	200	80	150	350	550	175	250	425	550
Portland	220	300	165	220	170	270	155	225	300	400	220	320	445	590
San Francisco	330	525	300	400	290	420	250	360	460	660	400	550	500	750
Seattle	210	255	145	205	140	310	115	165	275	390	230	260	430	550
Washington	325	550	225	325	175	300	140	225	400	600	265	390	500	750
CANADA														
Calgary	235	295	190	285	220	310	110	160	300	450	190	245	550	720
Toronto	220	300	190	280	230	280	120	160	400	500	205	265	500	700

AT-A-GLANCE: CONSTRUCTION COST CHANGE

As construction costs across the country continue to increase, RLB takes a historical view of the percentage change of year-on-year construction costs, dating back ten 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.

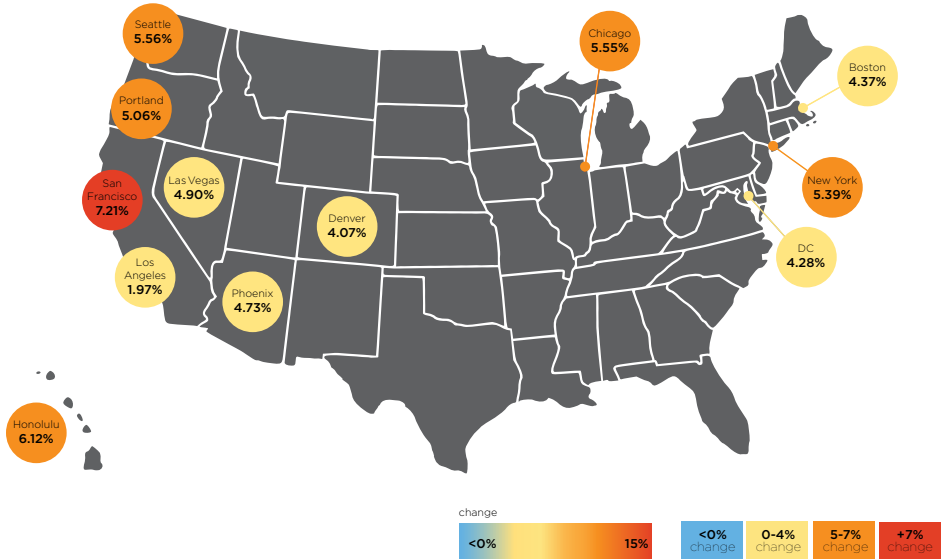
INDUSTRIAL		PARKING				RESIDENTIAL				EDUCATION					
WAREHOUSE		GROUND		BASEMENT		MULTI-FAMILY		SINGLE-FAMILY		ELEMENTARY		HIGH SCHOOL		UNIVERSITY	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
110	190	85	140	100	160	185	315	260	360	350	475	375	500	375	600
110	185	80	125	125	170	165	400	220	420	265	380	300	405	350	600
90	150	75	100	135	175	115	235	115	450	275	320	300	400	325	450
180	245	105	150	145	270	205	455	290	780	350	490	420	625	455	740
60	100	50	85	60	150	100	405	100	350	200	315	225	455	275	455
120	185	105	125	130	190	235	370	205	365	365	480	300	550	455	615
115	200	95	175	125	200	200	375	275	400	425	550	465	600	450	650
60	100	45	70	70	110	100	250	120	450	200	325	250	400	300	450
110	175	115	150	130	215	175	275	155	325	320	400	335	400	365	510
175	250	140	160	260	300	390	575	260	440	350	430	350	460	450	650
100	130	100	120	140	200	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
85	145	75	95	75	120	140	215	125	315	185	260	220	310	300	450
115	150	75	110	115	150	190	230	200	375	220	245	235	275	235	355

CONSTRUCTION ACTIVITY CYCLE



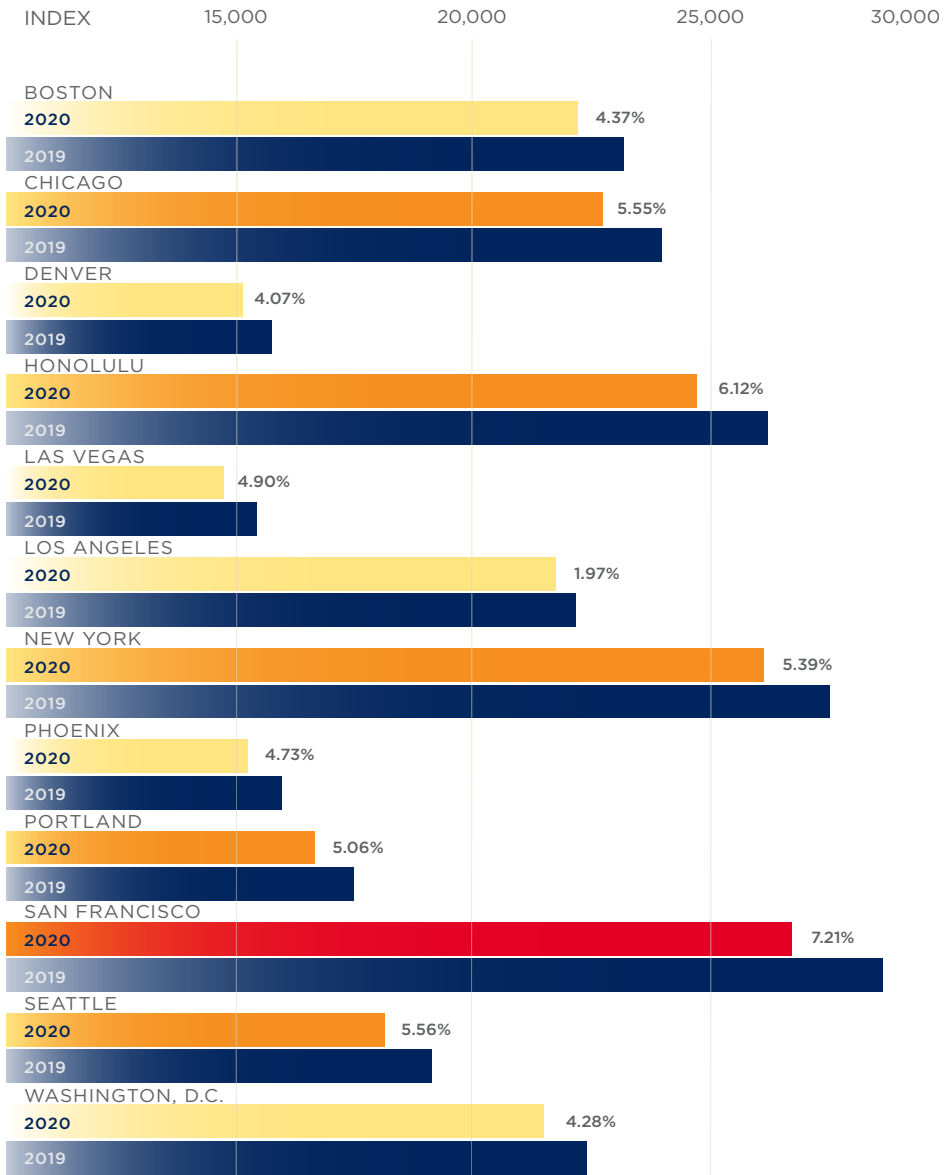
UNITED STATES

COMPARATIVE COST INDEX



City	January 2019	April 2019	July 2019	October 2019	January 2020	Annual % Change
• Boston	22,267	22,480	22,741	23,012	23,241	4.37%
• Chicago	22,789	23,269	23,652	23,826	24,055	5.55%
• Denver	15,096	15,253	15,407	15,578	15,711	4.07%
• Honolulu	24,812	25,192	25,609	26,055	26,331	6.12%
• Las Vegas	14,674	14,834	15,023	15,209	15,394	4.90%
• Los Angeles	21,792	21,526	21,769	21,819	22,221	1.97%
• New York	26,244	26,524	26,771	27,116	27,658	5.39%
• Phoenix	15,203	15,376	15,578	15,754	15,922	4.73%
• Portland	16,630	16,843	17,023	17,259	17,472	5.06%
• San Francisco	26,844	27,516	28,030	28,341	28,781	7.21%
• Seattle	18,120	18,402	18,690	18,915	19,127	5.56%
• Washington, DC	21,528	21,617	21,846	22,299	22,450	4.28%

Comparative Cost Map and Bar Graph Indicate percentage change between January 2019 to January 2020.



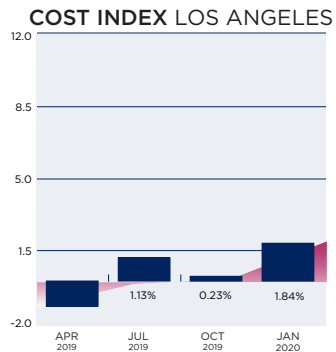
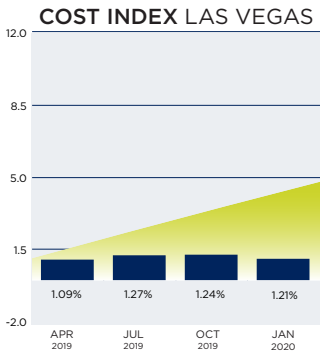
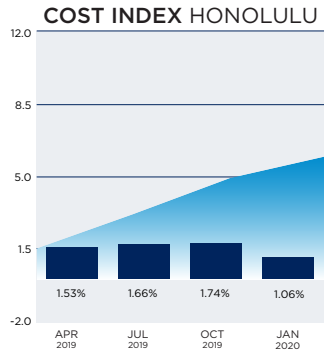
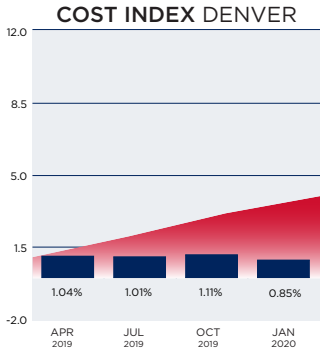
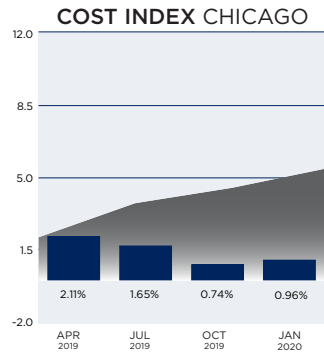
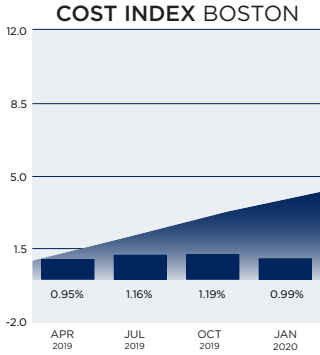
Each quarter we look at the comparative cost of construction in 12 US cities, indexing them to show how costs are changing in each city in particular, and against the costs in the other 11 locations. You will be able to find this information in the graph titled Comparative Cost Index (above) and in the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

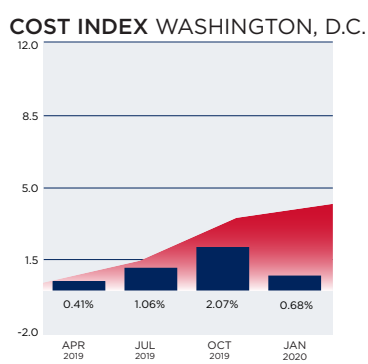
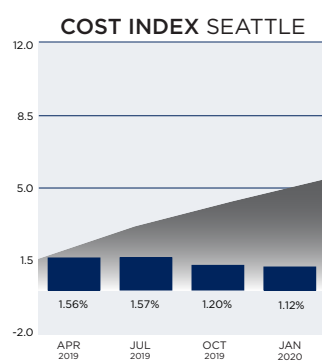
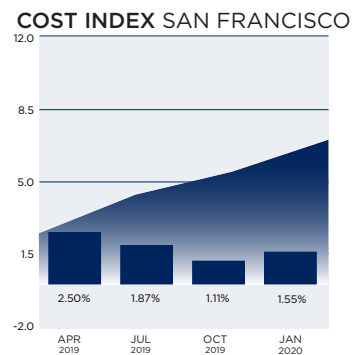
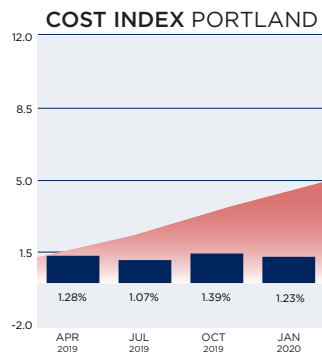
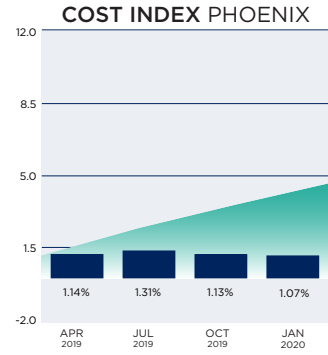
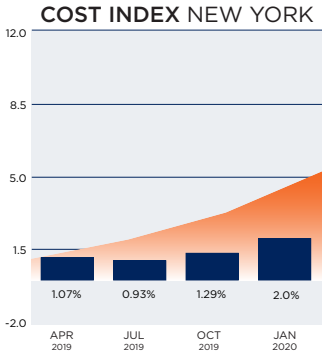
UNITED STATES

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.

 Percentage change per quarter  Cumulative percentage change for the period shown

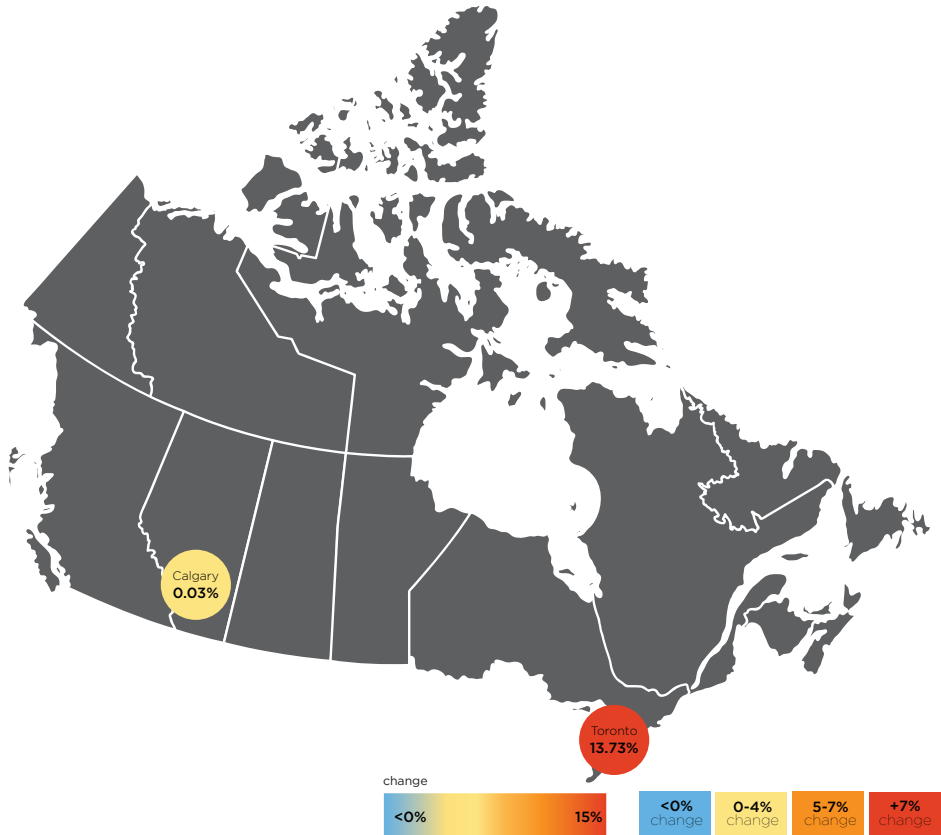


Our research suggests that between January 1, 2019 and December 31, 2019, the national average increase in construction cost was approximately 4.93%. Chicago, Honolulu, New York, Portland, San Francisco, and Seattle experienced the greatest annual increases, showing escalation above the national average. Boston, Denver, Los Angeles, Phoenix, and Washington, D.C. all experienced lower annual increases, ranging from 1.97% (Los Angeles) to 4.90% (Las Vegas).



CANADA

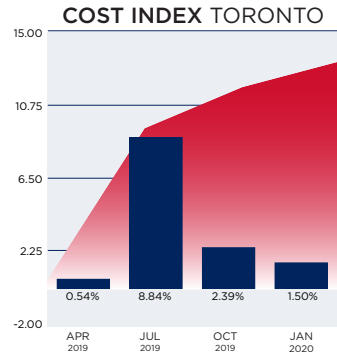
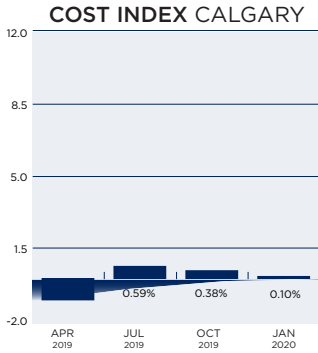
COMPARATIVE COST INDEX



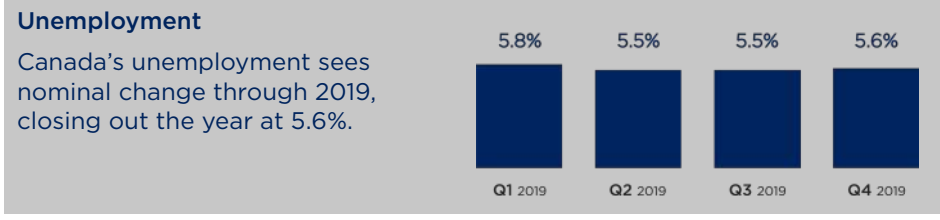
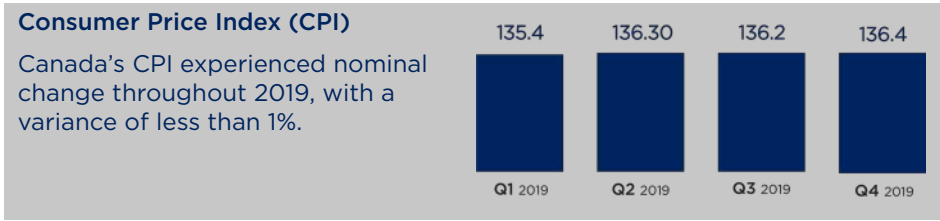
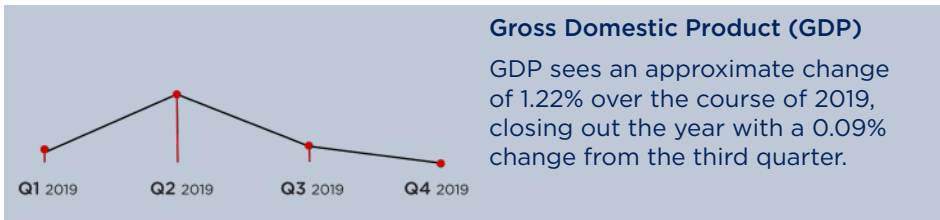
City	January 2019	April 2019	July 2019	October 2019	January 2020	Annual % Change
• Calgary	19,582	19,379	19,493	19,567	19,587	0.03%
• Toronto	20,798	20,909	22,759	23,303	23,653	13.73%

Canada continues to plan and tender an influx of infrastructure construction projects (e.g., Transportation, Civil, and Social Infrastructure). Construction costs remained steady in Calgary while Toronto continues to experience rising construction costs, primarily due to the volume of both public and private starts in the city and the resulting labour shortage to meet the demand (especially unionized labour).

The end of the quarter saw the mandatory shutdown of non-essential construction projects in several provinces due to the COVID-19 pandemic. The implications of such will have an impact on construction costs in the second quarter. Construction starts are on hold until the pandemic subsides, which is expected to result in a sharp and sudden increase in demand for materials and labor once quarantining is removed.



KEY CANADIAN STATISTICS



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.

Sources: Statistics Canada



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.

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COST CONSULTANT**
IN WORLD ARCHITECTURE
MAGAZINE 2016-2019



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