

USA REPORT

QUARTERLY CONSTRUCTION COST REPORT

FIRST QUARTER 2016



Visitor
Check-In



USA REPORT

AT A GLANCE

The headline news is good. The Labor Department reported that the number of people who filed for unemployment claims hit a 42-year low in late April (there were 247,000 claims; the lowest level since November 1973). At the same time the participation rate is up. Construction employment continues to increase giving confidence to those who wish to return to the industry; creating the apparent paradox of simultaneously rising total employment while the rate of unemployment ticks up. The price of oil and commodities remain subdued and talk about rapidly recovering prices mostly develops into to explanations for why price recoveries have stalled.

Construction price inflation in the last quarter remained relatively high at 5.5% p.a., when compared to CPI at 0.9% for the past 12 months, reflecting the impact of increasing amount of construction activity.

On the horizon is the shadow of the presidential election cycle which typically induces nervousness in investors and negatively impacts construction activity as November draws closer. Rider Levett Bucknall expects this cycle to generate somewhat more nervousness as the candidates seem to have focused more on addressing the electorate's frustration than on producing detailed economic policy.

OREGON STATE HOSPITAL SALEM, OREGON

Completed in 2012, the new Oregon State Hospital comprises 630,000 SF featuring a 620-bed facility, areas for patient housing, staff offices, counseling and treatment rooms, as well as indoor and outdoor recreation areas. Extensive on-site special studies helped to identify the facility's condition and optimal locations for anticipated improvements. The previous facility was divided to the north and south side of Center Street. The new facility, located to the south, required substantial demolition and partial renovation to the majority of the 500,000 SF of the on-site structures. The total cost of this project was \$334 Million.

Rider Levett Bucknall provided budget level cost planning, milestone estimates, CM/GC reconciliation and Value Engineering services for the construction of replacement Oregon State Hospital facilities.

NATIONAL CONSTRUCTION COST INDEX

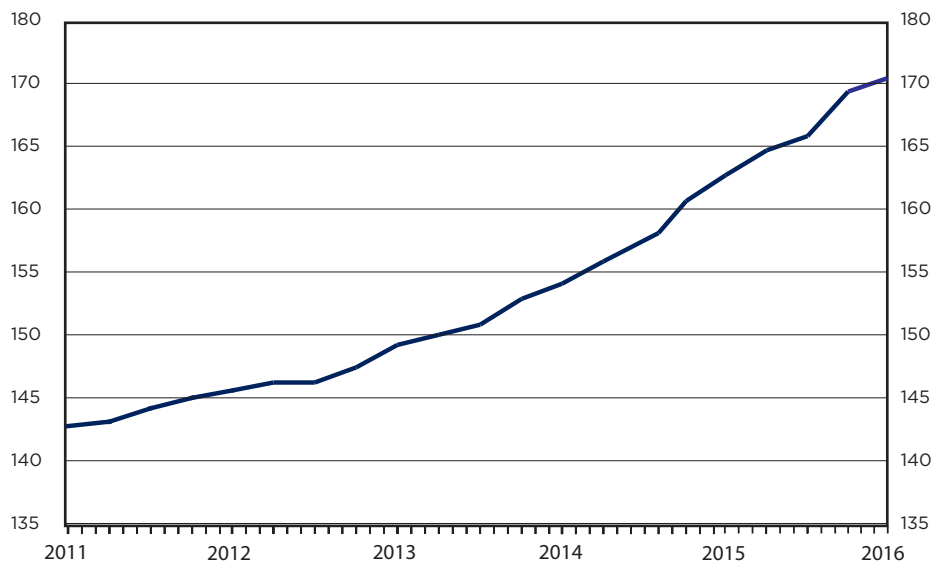
The National Construction Cost Index shows the changing cost of construction between January 2011 and January 2016, relative to a base of 100 in April 2001. Index recalibrated as of April 2011.

Date	Cost Index
January 2011	142.77
April 2011	143.42
July 2011	144.53
October 2011	145.29
January 2012	145.73
April 2012	146.35
July 2012	146.67
October 2012	147.74
January 2013	149.19
April 2013	150.75
July 2013	151.89
October 2013	153.09
January 2014	154.56
April 2014	156.33
July 2014	158.48
October 2014	161.11
January 2015	162.98
April 2015	164.96
July 2015	166.85
October 2015	169.05
January 2016	171.38

Welcome to the first quarter 2016 issue of Rider Levett Bucknall's Quarterly Cost Reports! This issue contains data current to January 1, 2016.

According to the U.S. Department of Commerce, construction put-in-place during December 2015 was estimated at a seasonally adjusted annual rate of \$1,116.6 billion, which is 0.1% above the revised November estimate of \$1,116.0 billion. The December 2015 figure is 8.2% above the December 2014 estimate of \$1,031.6 billion. The value of construction in 2015 was \$1,097.3 billion, 10.5% above the same period in 2014.

NATIONAL CONSTRUCTION COST INDEX



KEY UNITED STATES STATISTICS

	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Gross Domestic Product (GDP)*	0.2%	3.7%	2.1%	1.4%
Consumer Price Index (CPI)	236.1	238.6	237.8	236.5
Inflation (Quarter)	0.55%	1.07%	-0.34%	-0.60%
Architectural Billings Index (ABI)	51.7	55.7	53.7	50.9
Construction Put-in-Place (B)	\$966.6	\$1,064.6	\$1,094.2	\$1,116.6
Unemployment	5.6%	5.4%	5.1%	5.0%
Construction Unemployment	9.5%	6.3%	5.5%	7.5%

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.

Sources: U.S. Bureau of Labor Statistics, Bureau of Economic Analysis, American Institute of Architects

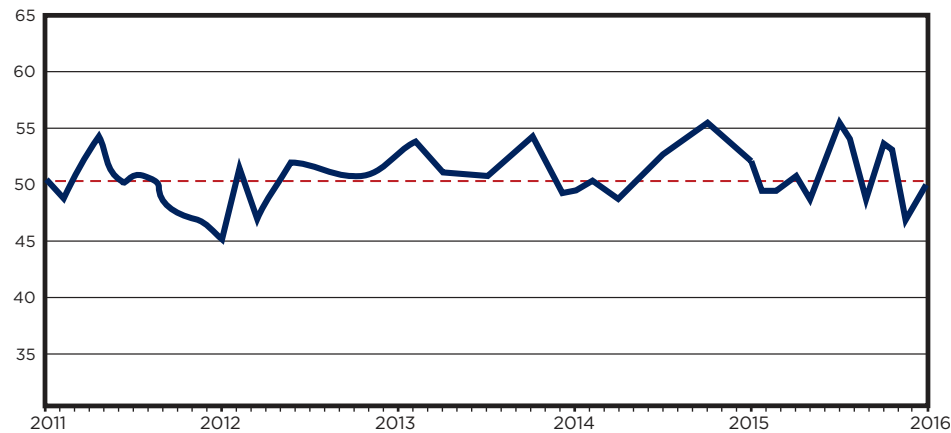
* Adjustments made to GDP based on amended changes from the Bureau of Economic Analysis.

INDICATIVE CONSTRUCTION COSTS

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 represent hard construction costs based on U.S. dollars per square foot of gross floor area.

	OFFICES				RETAIL SHOPPING				HOTELS				HOSPITAL		INDUSTRIAL		PARKING				RESIDENTIAL				EDUCATION					
	PRIME		SECONDARY		CENTER		STRIP		5 STAR		3 STAR		GENERAL		WAREHOUSE		GROUND		BASEMENT		MULTI-FAMILY		SINGLE-FAMILY		ELEMENTARY		HIGH SCHOOL		UNIVERSITY	
LOCATION	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
Boston	275	400	180	275	150	250	100	150	350	500	225	350	375	600	100	175	70	100	90	150	175	300	250	350	275	375	285	400	300	450
Chicago	230	360	120	180	115	210	100	130	250	450	180	210	310	580	100	130	65	110	90	130	130	210	150	325	190	350	190	370	250	375
Denver	160	255	115	175	90	145	70	135	200	310	150	185	370	455	90	150	50	70	90	120	85	190	90	400	245	300	260	310	285	400
Honolulu	285	530	245	400	210	495	175	435	515	745	325	545	475	760	145	225	100	145	140	265	195	445	280	760	340	475	405	610	445	720
Las Vegas	140	295	105	190	115	480	65	145	350	465	150	275	285	455	50	100	50	85	60	150	70	405	90	350	180	315	200	455	235	455
Los Angeles	200	300	140	210	125	280	100	160	300	450	200	275	400	600	95	160	95	115	110	155	150	245	150	310	310	410	325	445	340	490
New York	300	500	250	350	250	400	150	250	375	550	275	375	450	650	115	200	90	150	125	200	200	375	275	400	290	400	300	450	300	450
Phoenix	150	275	110	175	110	170	75	130	275	425	150	250	300	450	55	100	40	65	60	100	90	185	100	400	150	220	170	250	210	375
Portland	165	220	115	170	110	220	90	130	175	265	130	170	370	480	75	130	70	90	100	140	130	220	110	260	220	275	230	290	270	390
San Francisco	200	350	180	275	195	325	225	325	300	500	250	350	400	525	140	190	100	130	165	190	280	425	200	400	320	400	300	375	250	400
Seattle	165	205	115	160	115	200	95	135	185	275	140	180	320	435	75	110	65	85	85	125	120	235	100	235	105	250	230	300	265	395
Washington	250	350	175	250	125	250	100	150	325	475	225	325	375	600	90	150	65	100	80	125	175	300	250	350	275	350	275	375	300	450

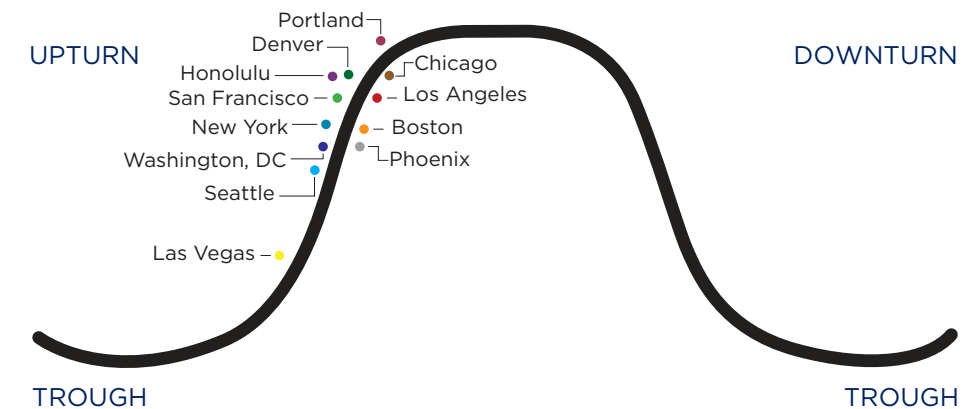
ARCHITECTURAL BILLINGS INDEX



As a leading economic indicator of construction activity, the Architectural Billings Index (ABI) reflects the approximate nine to twelve month lag time between architecture billings and construction spending.

The American Institute of Architects reported the December 2015 ABI score was 50.9 which is down from the September 2015 score of 53.7. This shows that demand for design services is again increasing however, we are concerned about the increased fluctuation within the graph.

CONSTRUCTION ACTIVITY CYCLE

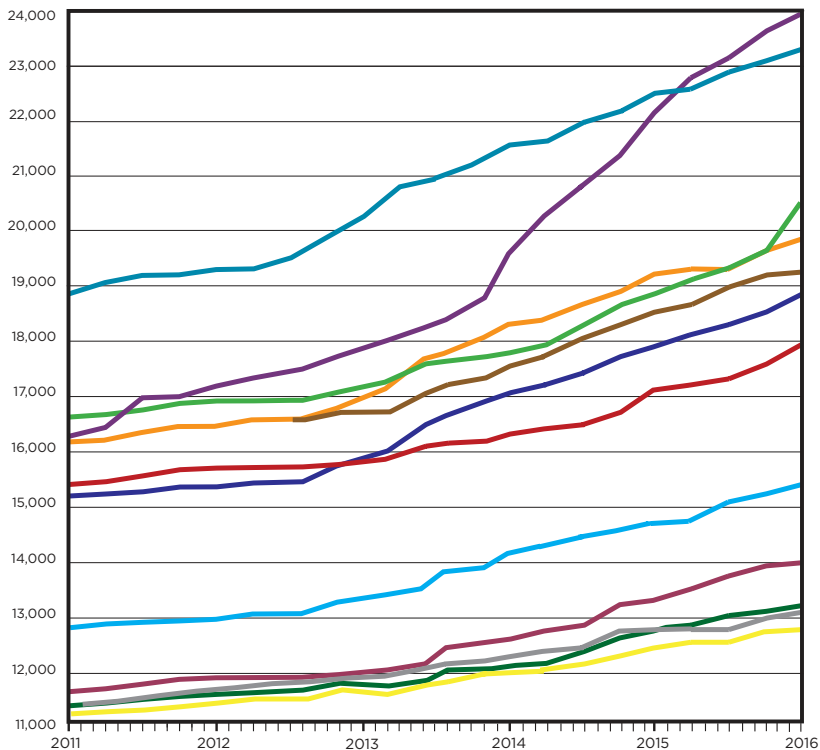


The chart above depicts the position of each city in a theoretical construction industry business cycle. The aim of the chart is to provide an overview of the relative performance of each city in the context of its own economy.

Each city has its own industry business cycle and as such, cities' cycles are not directly comparable with each other. As the amplitude and frequency of the cycle(s) are not expressed in this chart, there is no direct parameter of extend of the cycle or if its time period.

USA REPORT

COMPARATIVE COST INDEX



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).

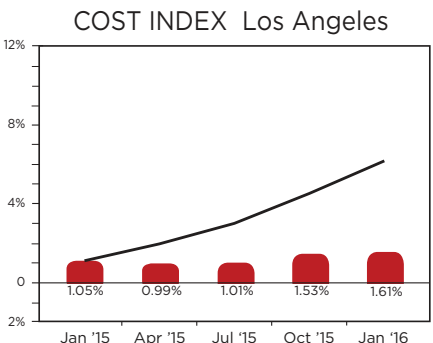
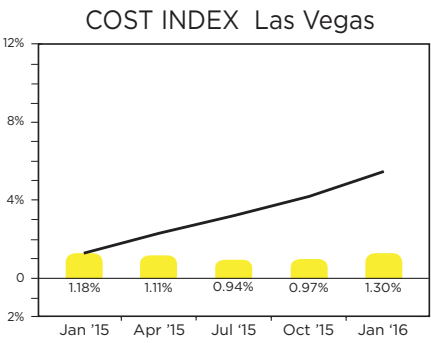
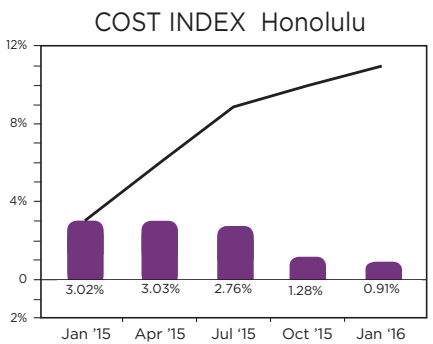
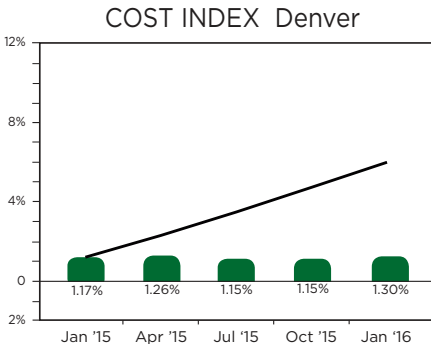
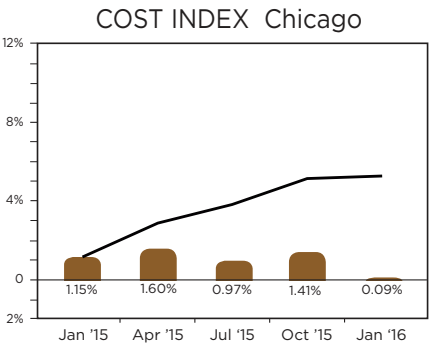
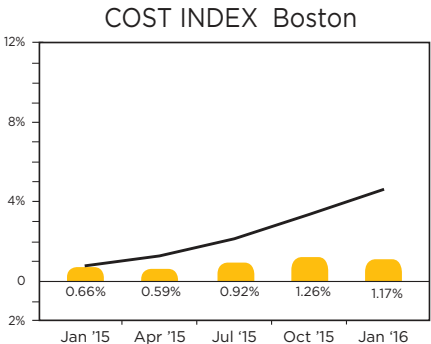
Our Comparative Cost Index tracks the 'true' bid cost of construction, which includes, in addition to costs of labor and materials, general contractor and sub-contractor overhead costs and fees (profit). The index also includes applicable sales/use taxes that 'standard' construction contracts attract. 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.

City	January 2015	January 2016	% Change
• Boston	19,106	19,868	3.99%
• Chicago	18,503	19,266	4.12%
• Denver	12,693	13,321	4.95%
• Honolulu	22,093	23,906	8.21%
• Las Vegas	12,463	13,011	4.39%
• Los Angeles	17,009	17,901	5.24%
• New York	22,507	23,395	3.94%
• Phoenix	12,709	13,178	3.68%
• Portland	13,380	13,997	4.61%
• San Francisco	18,861	20,639	9.43%
• Seattle	14,750	15,470	4.88%
• Washington, DC	17,980	18,777	4.43%

Our research indicates that between January 1, 2015 and December 31, 2015, the national average increase in construction cost was approximately 5.16%, down slightly from the previous annual average of 5.5%. San Francisco experienced the greatest annual increase, showing escalation of nearly 9.5%. Honolulu was not far behind, with an annual increase of approximately 8.2%.

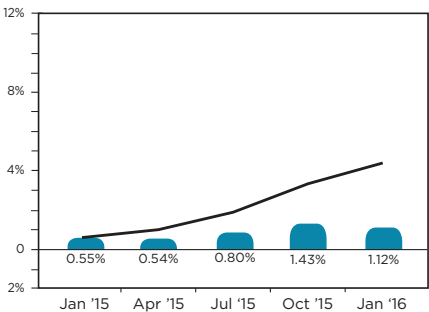
The following escalation charts track changes in the cost of construction each quarter in many of the cities where Rider Levett Bucknall offices are located. Each chart illustrates the percentage change per period and the cumulative percentage change throughout the charted timeline.

 Percentage change per quarter  Cumulative percentage change for the period shown

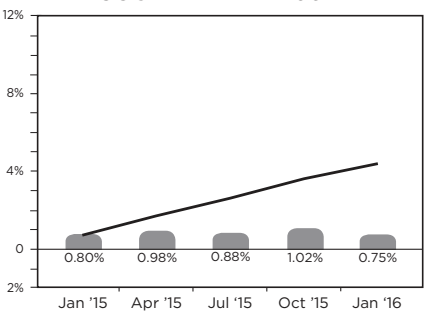


USA REPORT

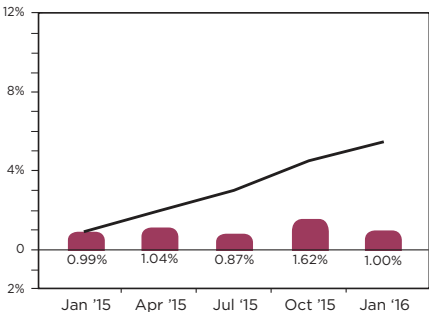
COST INDEX New York



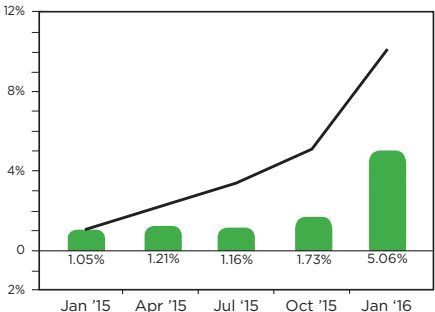
COST INDEX Phoenix



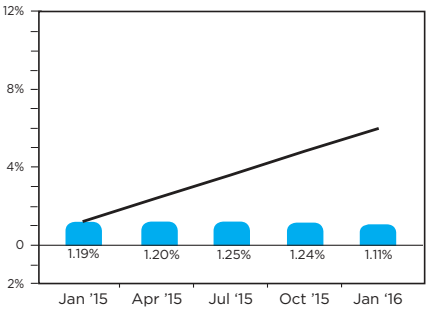
COST INDEX Portland



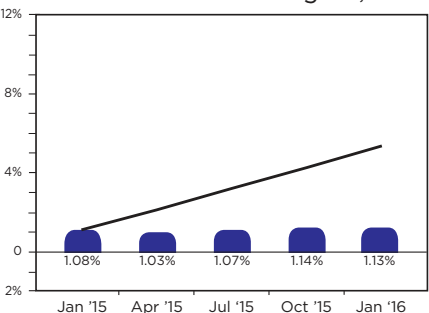
COST INDEX San Francisco



COST INDEX Seattle



COST INDEX Washington, DC



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 Evans Pomegas, Grant Owen, Jim Bergstrand, Jason Schultz, Paul Brussow, Maelyn Uyehara, Cassie Idehara, Simon James, Philip Mathur, Scott Macpherson, Graham Roy, Daniel Junge, George Bergeron, Steve Kelly, and Catherine Stoupas.

© April 2016 by Rider Levett Bucknall Ltd.

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

AUSTIN

Phone: +1 512 704 3026
E-mail: AUS@us.rlb.com
Contact: Ruben Rodriguez

BARBADOS

Phone: +1 246 432 5795
E-mail: robert.hoyle@bb.rlb.com
Contact: Robert Hoyle

BOSTON

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

CALGARY

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

CAYMAN ISLANDS

Phone: +1 345 946 6063
E-mail: martyn.bould@ky.rlb.com
Contact: Martyn Bould

CHICAGO

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

DENVER

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

GUAM

Phone: +1 671 473 9054
E-mail: GUM@us.rlb.com
Contact: Emile le Roux

HILO

Phone: +1 808 934 7953
E-mail: ITO@us.rlb.com
Contact: Kevin Mitchell

HONOLULU

Phone: +1 808 521 2641
E-mail: HNL@us.rlb.com
Contact: Tony Smith
Paul Brussow
Maelyn Uyehara

LAS VEGAS

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

LOS ANGELES

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

MAUI

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

NEW YORK

Phone: +1 212 952 1300
E-mail: EWR@us.rlb.com
Contact: Grant Owen

ORLANDO

Conventional Wisdom Corp.
Phone: +1 407 905 0002
E-mail: ideas@cwisdom.com
Web: www.cwisdom.com
Contact: David O'Neal, Rick Schmidt

PHOENIX

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

PORTLAND

Phone: +1 503 226 2730
E-mail: PDX@us.rlb.com
Contact: Graham Roy

SAN FRANCISCO

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

SEATTLE

Phone: +1 206 223 2055
E-mail: SEA@us.rlb.com
Contact: Steve Kelly

ST. LUCIA

Phone: +1 758 452 2125
E-mail: bradley.paul@lc.rlb.com
Contact: W. Bradley Paul

TORONTO

Phone: +1 905 631 8210
E-mail: YYZ@us.rlb.com
Contact: Joe Pendlebury

TRINIDAD & TOBAGO

Phone: +1 345 946 6063
E-mail: martin.bould@ky.rlb.com
Contact: Martyn Bould

TUCSON

Phone: +1 520 777 7581
E-mail: TUS@us.rlb.com
Contact: Joel Brown

WAIKOLOA

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

WASHINGTON, DC

Phone: +1 202 457 1450
E-mail: DCA@us.rlb.com
Contact: Grant Owen

RLB | Rider Levett Bucknall

A stylized map of North America, including the United States, Canada, Mexico, and the Caribbean. The map is light gray and set against a dark blue background. Numerous small white dots are scattered across the map, representing various locations. The dots are more densely clustered in the eastern United States and the Caribbean, with a few isolated dots in the western United States and Canada.

LOCATIONS

RIDER LEVETT BUCKNALL

Austin | Barbados | Boston | Calgary | Chicago
Cayman Islands | Denver | Guam | Hilo | Honolulu
Las Vegas | Los Angeles | Maui | New York | Phoenix
Portland | San Francisco | Seattle | St. Lucia | Toronto
Trinidad & Tobago | Tucson | Waikoloa | Washington, DC

CONVENTIONAL WISDOM

Orlando

www.rlb.com