

# Quarterly Construction Cost Report

2007 Second Quarter Issue



RLB | Rider Levett Bucknall

The San Diego County Operations Center retained architects Harley Ellis Devereaux for a new 90,000 square foot Medical Examiner/Forensics Center Building. This \$63 million complex comprises a main Medical Examiner Facility as well as the Veterinary Medicine Laboratories. The Medical Examiner facility will include a morgue with autopsy suite, laboratory space, histology/prep areas, case file storage and security area, all with new computer technology and complex ventilation systems. The Veterinary Medicine facility features laboratories for necropsy, clean rooms, holding, refrigeration and storage. Rider Levett Bucknall provided Cost Consultancy services throughout the design process.

Model created by Jennette La Quire, AIA, Harley Ellis  
Photograph taken by Jeff Lancaster of Lancaster Photographic Inc

## Welcome to the 2007 second quarter issue of our series of Rider Levett Bucknall Quarterly Cost Reports!

Welcome to the 2007 second quarter issue of our series of Rider Levett Bucknall Quarterly Cost Reports! This issue contains data current to April 1, 2007.

Each quarter we look at the comparative cost of construction in 12 U.S. cities, indexing them to show how costs are changing in each city in particular, and against the costs in the other 11 locations. You'll be able to find this information on the graph titled *Comparative Cost Index* and on the *Cost & Change Summary*.

Our *Comparative Cost Index* tracks the true bid cost of construction, which includes, in addition to costs of labor and materials, general contractor and subcontractor overhead costs and fees (profit). The index also includes applicable sales or 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 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.

**ACTIVITY:** According to the U.S. Department of Commerce, construction put in place during February 2007 was estimated at a seasonally adjusted annual rate of \$1,170.8 billion, 0.3% above the revised January estimate. The February 2007 figure is 2.4% below the February 2006 estimate. During the first two months of 2007, construction spending was 2.4% below the same period in 2006.

**WHAT'S HAPPENING TO CONSTRUCTION INFLATION?:** Earlier this year there was much speculation in the technical press that the bout of construction cost inflation experienced over the past few years had run its course and that inflation would be much tamer in 2007.

We disagreed. In our view, with the exception of housing construction (which has been dealing with a nasty post-bubble hangover), the underlying national and global demand for construction resources (labor, material, subcontractors, machinery, etc.) has not turned down sufficiently to provide any real drag on cost inflation.

In March 2007 AGC released its Construction Inflation Alert in which AGC Chief Economist, Ken Simonson, noted:

"From early 2004 to mid-2006, the construction industry was plagued by runaway materials cost increases. Many of these price increases have slowed or even reversed course modestly in recent months. Unfortunately, it seems likely that the current calm is only a lull between storms and not a return to the inflation-free period of 2001-2003. By the end of 2007, materials costs could be rising again at a 6-to-8% rate, with wages rising at a 5% pace."

The real worry for all involved in construction can be found later in the same AGC article, which precisely mirrors our concern on the same topic, and which said "*Price spikes are likely to be chronic for many construction materials, and to occur with little warning.*"

**INFLATION:** Our research suggests that between January 1, 2007 and April 1, 2007 the *national average* increase in construction cost was 2.29%. San Francisco, Los Angeles, Seattle and Las Vegas experienced the greatest increases, showing quarterly inflation greater than 3.5%, while construction costs in Denver and the New York Metro area saw less significant increases of just over 1%.

**FORECAST:** According to Rider Levett Bucknall data, first quarter construction inflation appears to be taking on an East/West split with far greater inflation being experienced in West-coast locations. Overall construction spending is down a little from the same period in 2006. This, along with a fall in some current material selling prices, appears to have resulted in smaller quarterly increases than previously seen.

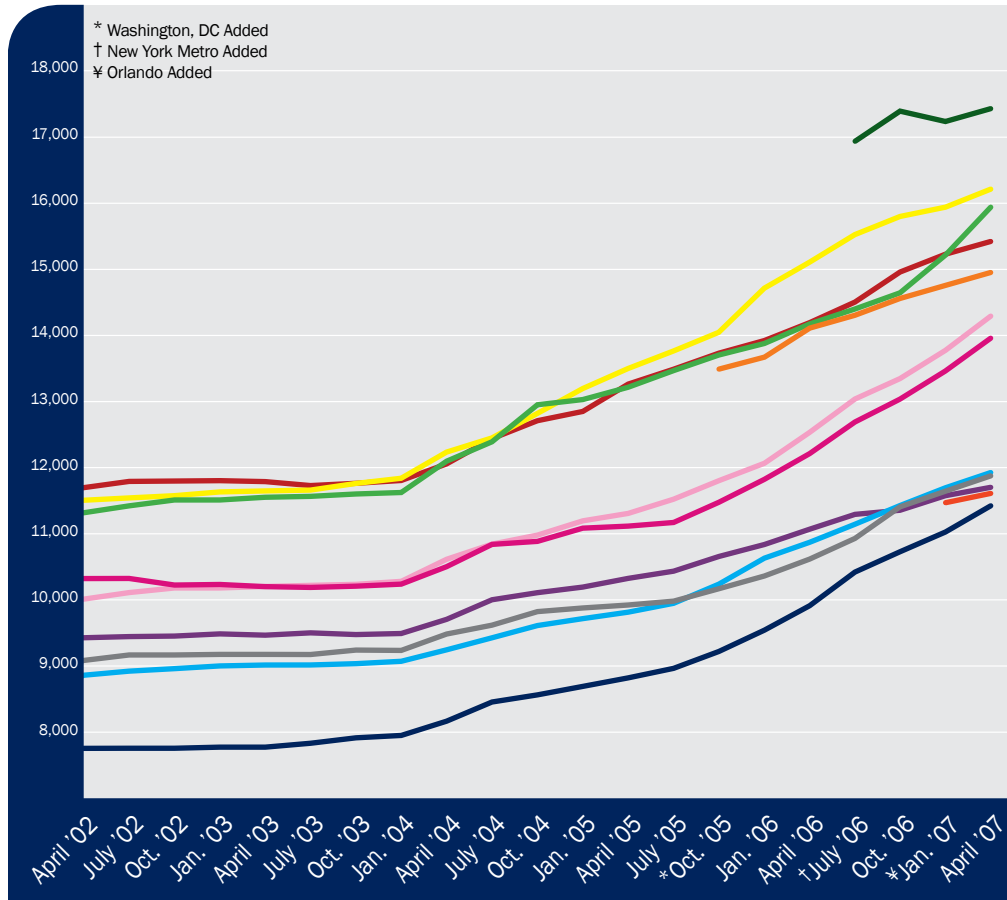
A gradual slowing in the economy in general is likely to affect the construction industry, but we believe this will not be noticeable until the end of this year. Construction volumes remain at historically high levels and this in itself will keep pressure on the selling price of construction projects.

Please don't hesitate to call if we can provide you with more information or if we can be of service to you in any way.

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 Sara Janes with contributions from David Barlow, John Gray, Ed Jameson, Chris McCarthy, Gus Oppermann, Grant Owen, Scott Macpherson, Simon Squire, Brad Taylor, Jay Weisberg, Nick Wood and Jian Zhou.

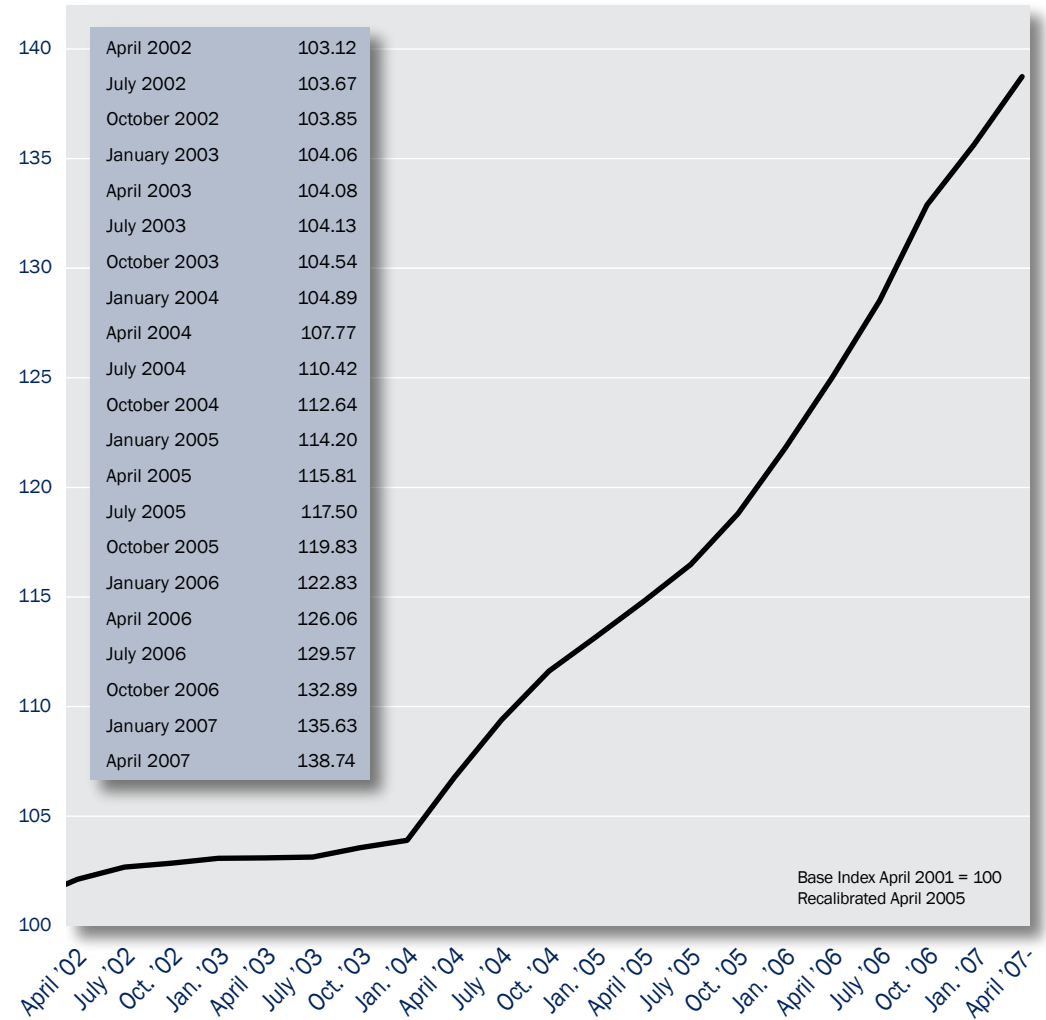
## Comparative Cost Index



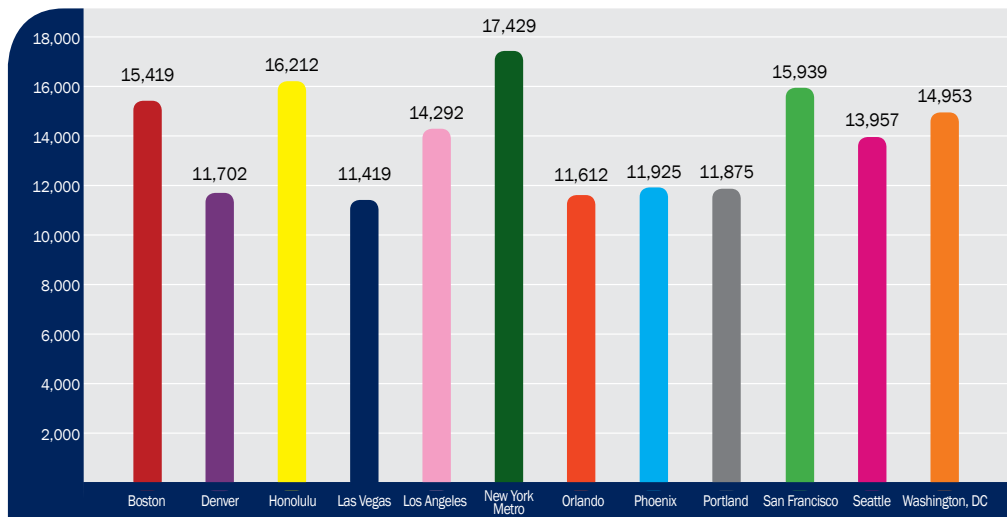
## Cost & Change Summary

	Cost Index	Percentage Change in Quarter
Boston	15,419	1.25%
Denver	11,702	1.10%
Honolulu	16,212	1.71%
Las Vegas	11,419	3.53%
Los Angeles	14,292	3.90%
New York Metro	17,429	1.10%
Orlando	11,612	1.22%
Phoenix	11,925	1.97%
Portland	11,875	2.00%
San Francisco	15,939	4.76%
Seattle	13,957	3.71%
Washington, DC	14,953	1.29%

## National Construction Cost Index



## Second Quarter Comparative Cost Index

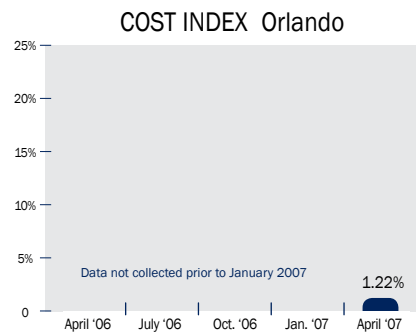
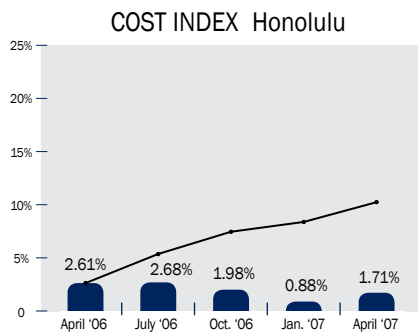
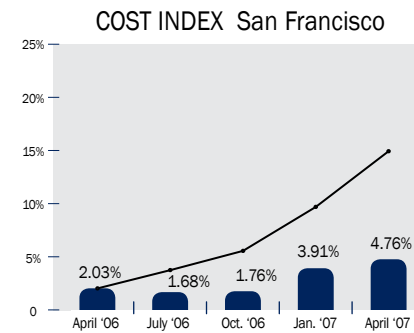
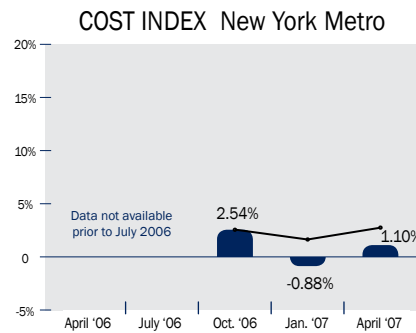
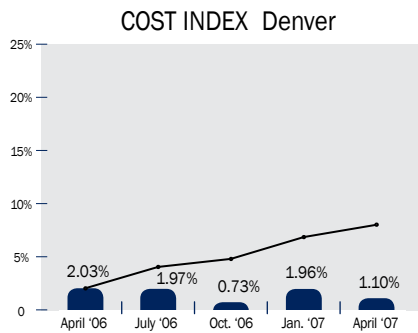
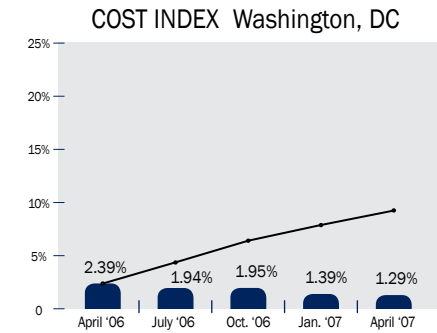
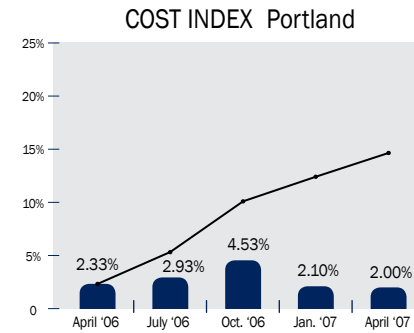
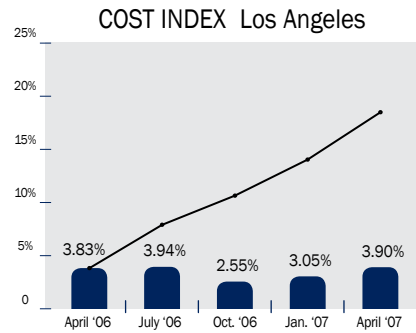
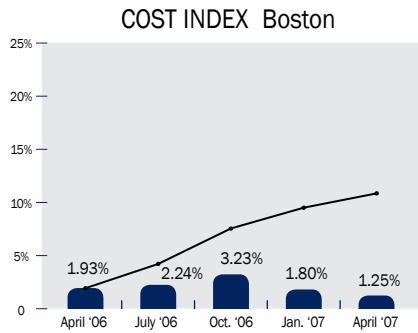
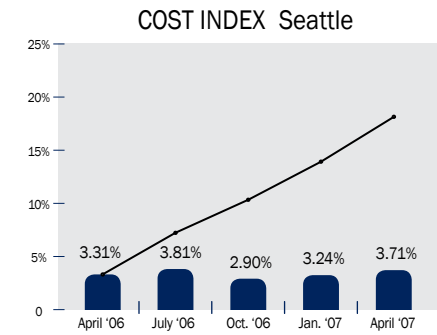
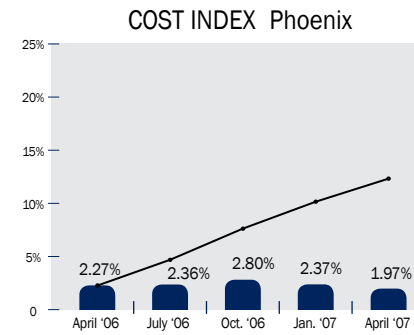
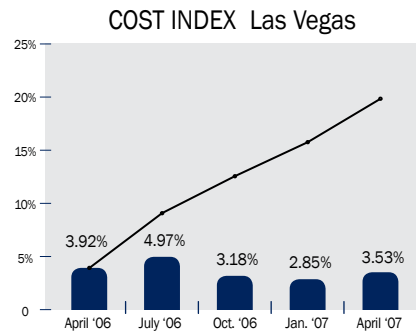


# Material Supply Prices & Indicative Construction Costs

			BOSTON	DENVER	HONOLULU	LAS VEGAS	LOS ANGELES	NEW YORK METRO	ORLANDO	PHOENIX	PORTLAND	SAN FRANCISCO	SEATTLE	WASHINGTON, DC
<b>MATERIAL SUPPLY PRICES</b>														
Asphalt Paving	ton		47.50	38.00	92.85	48.00	50.50	45.00	36.43	70.00	48.00	71.00	35.45	48.85
Gravel 1 1/2" to 3/4"	ton		11.00	23.65	23.60	16.59	25.00	41.42	27.78	21.50	15.80	28.50	18.88	11.22
Crushed Stone Base Course	ton		12.50	8.75	15.50	10.94	17.50	19.92	15.23	19.30	11.70	18.00	12.98	13.74
Sand-Concrete	ton		12.00	16.50	42.60	21.87	23.00	23.08	18.75	21.33	15.20	25.00	21.92	15.60
Cement	ton		85.00	152.25	167.58	120.68	175.00	200.00	134.58	135.00	139.80	180.00	152.03	89.34
Concrete Ready-Mix	3,000psi	cy	84.00	110.00	149.35	112.87	119.50	110.41	91.26	108.00	94.00	137.00	89.25	86.88
	4,000psi	cy	87.50	115.40	156.55	119.32	126.50	113.61	95.57	112.00	100.00	145.00	94.50	93.54
	5,000psi	cy	92.00	120.75	164.35	129.00	134.50	116.82	99.87	115.00	106.00	152.00	99.75	97.21
Concrete Blocks - 8"x8"x16"	C		139.00	143.75	167.00	164.48	155.00	127.50	170.30	132.00	160.00	175.00	154.35	133.00
Standard Modular Bricks	M		429.00	454.00	462.00	726.75	500.00	586.00	431.58	512.00	485.00	520.00	483.00	448.80
Rebar	ton		1,000.00	945.00	1,384.63	940.62	1,100.00	1,100.00	675.93	1,250.00	995.00	1,230.00	1,013.25	1,191.00
Structural Steel	ton		2,250.00	1,960.00	3,264.74	3,000.00	2,450.00	2,950.00	1,813.50	2,720.00	1,830.00	2,450.00	1,847.93	2,117.00
Lumber	bft		0.80	0.58	1.05	0.44	1.10	0.72	0.57	0.75	0.56	1.15	1.01	0.76
Glass	sf		5.55	5.15	6.50	4.10	7.50	5.92	5.21	6.00	5.75	8.00	10.06	5.68
<b>INDICATIVE CONSTRUCTION COSTS</b>														
Prime Office Bldg.	Low	\$/sf gfa	175	135	180	170	175	175	125	140	155	190	165	175
	High	\$/sf gfa	250	220	315	215	285	245	225	220	195	300	235	245
Secondary Off. Bldg.	Low	\$/sf gfa	150	95	140	125	125	140	110	110	105	135	115	135
	High	\$/sf gfa	200	150	230	165	190	195	160	180	145	200	200	195
Shopping Center	Low	\$/sf gfa	100	85	100	120	115	100	85	95	80	120	80	95
	High	\$/sf gfa	175	135	290	165	185	140	140	160	165	215	170	170
Strip Shopping	Low	\$/sf gfa	90	65	100	95	85	90	65	85	75	105	80	75
	High	\$/sf gfa	140	120	270	125	130	130	120	140	120	150	135	135
5 Star Hotel	Low	\$/sf gfa	185	165	325	235	240	185	165	205	165	245	210	190
	High	\$/sf gfa	300	255	440	295	325	265	255	280	260	340	280	290
3 Star Hotel	Low	\$/sf gfa	130	105	210	155	170	125	105	135	110	190	155	130
	High	\$/sf gfa	185	165	350	200	240	175	165	185	155	260	220	185
Above Ground Pkg.	Low	\$/sf gfa	60	40	55	55	50	55	45	55	50	65	65	55
	High	\$/sf gfa	80	70	80	80	90	85	80	85	75	100	85	80
Basement Pkg.	Low	\$/sf gfa	75	65	75	65	85	70	65	65	70	90	75	70
	High	\$/sf gfa	100	95	150	95	130	95	95	95	110	135	115	100
General Hospital	Low	\$/sf gfa	350	265	245	295	315	320	265	305	305	325	305	425
	High	\$/sf gfa	500	345	445	345	380	455	340	430	360	400	395	555
Warehouse	Low	\$/sf gfa	65	60	80	60	55	80	60	55	45	60	50	70
	High	\$/sf gfa	90	90	145	90	75	100	95	80	75	90	85	85
Multifamily Res.	Low	\$/sf gfa	125	70	115	90	130	125	70	95	80	140	110	85
	High	\$/sf gfa	190	140	270	140	210	175	140	185	160	230	225	170
Single Family Res.	Low	\$/sf gfa	150	80	180	100	110	150	110	95	90	125	115	140
	High	\$/sf gfa	235	185	510	200	220	225	195	290	175	300	290	230
Elementary School	Low	\$/sf gfa	195	115	125	180	185	145	115	155	170	195	215	170
	High	\$/sf gfa	240	150	275	260	275	210	150	200	205	290	310	230
High School	Low	\$/sf gfa	200	130	130	190	240	180	130	180	185	245	220	195
	High	\$/sf gfa	265	165	290	295	330	255	165	250	215	340	305	245
University Building	Low	\$/sf gfa	200	160	190	240	225	215	160	185	215	240	290	190
	High	\$/sf gfa	280	250	450	325	340	310	250	300	320	355	405	275

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

■ Percentage change per quarter  
 — Cumulative percentage change for the period shown



**MATERIALS PRICE SPIKES IN 2007:** As we noted in our opening narrative, construction material prices are likely to suffer price spikes again in 2007. The big question is "Why?". It is clearly not just local, regional or even national demand for materials and it clearly isn't just the effect of the growing Chinese economy; rather it is a broad combination of things. Perhaps the clearest explanation of the price volatility of base metals appeared in the *Financial Times* of 11 April 2007:

"Metal markets are in the middle of another price boom that may eclipse the one seen last spring, with copper, nickel, lead and tin all rising strongly in trading yesterday.

This boom is more broadly based than last year's, but supported by the same cocktail of factors; strong Chinese and global demand, constrained supplies, low levels of metal stock-piles and heightened financial speculation".

How much the "heightened financial speculation" contributes to the cost volatility one can only speculate, but it is a very hard factor to both gauge and predict.

And, it's not only the metals that are volatile, those interested in construction cost trends should also keep an eye on cement prices now that Cemex has raised its already generous bid for Rinker and looks like closing that deal.

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## LOCATIONS

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