

The building sector's labor daze

A SHORTAGE OF SKILLED WORKERS IS SENDING COSTS SKYWARD, AND THAT HAS BUILDERS FAVORING SIZE AND LUXURY TO MAKE THE NUMBERS WORK

RESIDENTIAL CONSTRUCTION: THE PRICE OF BUILDING MATERIALS

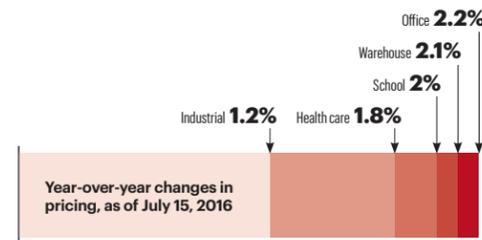
With a base year of 1982 (index value of 100), the producer price index for building materials is a gauge of the final prices for commodities that are paid for by home builders and developers. An index reading of 200 would indicate a doubling of prices since the base year.

Year*	Ready-mix concrete	Gypsum products	Softwood lumber	Waferboard and oriented strandboard	Steel mill products
2007	206.7	240.3	174.4	125.6	190.5
2008	212.2	209.2	166.6	160	246
2009	218.3	216	135.6	117.1	153.3
2010	212.3	220.8	162.9	165.3	204.8
2011	210.9	204.5	158.2	128	219.5
2012	215.4	236.6	176.3	163.9	209.9
2013	222.4	273.5	190.4	212.4	192.9
2014	232.7	290.6	204.5	159.9	201
2015	244	291.6	192.2	143.4	176.9
2016	251.9	296.2	202.2	182	168.8

Source: National Association of Homebuilders, as of June 30

NON-RESIDENTIAL CONSTRUCTION: PRODUCER PRICE INDEX

This index measures the price that contractors say they would charge to build nonresidential buildings — industrial, office, school, warehouse or health care facilities — and covers both materials cost and contractors' estimated overhead and profits.



Source: Associated General Contractors of America, using data from the U.S. Bureau of Labor Statistics

MASSACHUSETTS STATE OF MIND

The dollar value of nonresidential construction starts in New England.

State	Jan.-May 2015	Jan.-May 2016	Percent change
Massachusetts	\$2.8B	\$3.4B	22.9%
Rhode Island	\$258.3B	\$274.2B	6.2%
New Hampshire	\$492.5M	\$518.6M	5.3%
Maine	\$343.8M	\$359.3M	4.5%
Connecticut	\$1.54B	\$1.44B	-6.2%
Vermont	\$250.6M	\$207M	-17.4%
New England total	\$5.7B	\$6.2B	9.9%

The commonwealth has far outstripped its fellow New England compatriots in terms of nonresidential construction starts so far this year, comprising more than half of the entire region's nonresidential construction activity.

Source: ConstructConnect

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For Bob Leber, it's no secret that construction and real-estate development costs have been on the rise for years. Leber is senior vice president at Cosentini Associates, a New York-based building systems consulting engineering firm that employs 75 in Boston. Cosentini's local portfolio includes massive mixed-use projects such as Boston Properties' Hub on Causeway at North Station and Hines' planned tower at South Station.

Leber said his firm has seen double-digit construction price increases since 2012.

"That's not normal," Leber said in a recent interview. "That's out of the box."

What's driving the increases? For Leber, and for much of Massachusetts, it boils down to simple economics. The Great Recession drove many skilled laborers out of the construction trades industry and into petroleum-heavy states to work in oil or gas production; few of those workers have returned to take part in Boston's subsequent building boom. In fact, nationally the ratio of construction hires to job openings hit its lowest rate in May in nearly 20 years.

The result is a shortage in the supply of skilled labor in the building trades, a trend that's enabled everyone from mechanical contractors to steel manufacturers to punch their ticket when it comes to selecting the most attractive jobs at the most competitive rates. That in turn is turbocharging the cost of construction and, in turn, a preference among developers to favor big, luxury projects to better recoup their costs and lock in attractive returns.

Though each project has its own unique specifications, industry experts say contractors spend roughly half of construction costs on labor, with the balance going toward materials. As one example, Greg Williamson, vice president of preconstruction at BOND Brothers Inc., says labor typically comprises 40 percent to 60 percent of cost depending on trade and opportunities for prefabrication.

Everett-based BOND has recently provided preconstruction and construction-management services for Boston College's residence hall at 2150 Commonwealth Ave. in Boston, Stonehill College's sports complex expansion in Easton and a surgical building for Lawrence General Hospital.

Williamson said he's got the same problem as Leber when it comes to the availability of skilled subcontractors.

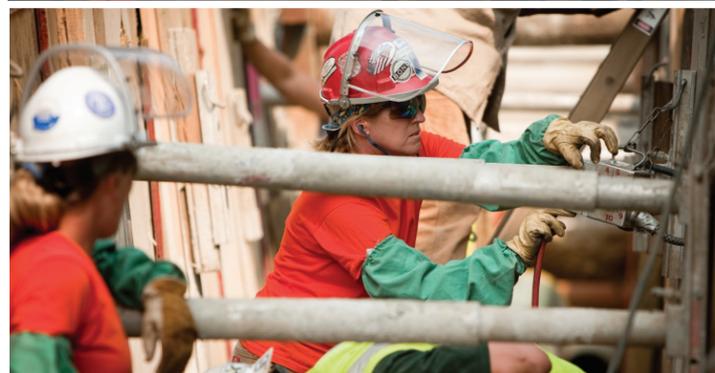
"There's not enough subcontractors of real size and capability for a lot of the large work that's going on, who can handle the workload and the demands of the design elements on all the buildings," said Williamson.

"(Subcontractors) get to pick and choose not only which jobs they want to participate with, which contractors that they want to work with — they also get to choose which price point they want to sit at," he continued. "There's an opportunity cost that goes along with that."

And it's not just the commercial side of the real estate business that's feeling the pinch. For two years running, a top concern at the National Association of Homebuilders has been access to workers, both builders and subcontractors, said Robert Dietz, chief economist and senior vice president for economics and housing at the Washington, D.C.-based trade association. The result has



COURTESY PHOTOS



BOND Brothers Inc., an Everett-based full-service construction firm, offers in-house laser scanning technology (above) and also supports apprenticeship programs with local unions. Greg Williamson, the firm's vice president of preconstruction, says labor costs typically comprise between 40 percent and 60 percent of overall development cost, depending on trade and opportunities for prefabrication.

been a shift to more high-end and luxury development to justify the cost of construction.

"We're currently close to 2006 levels of the share of unfilled jobs, despite the fact that the construction sector is really performing at 100 percent of capacity," Dietz said. "The result is supply and demand: wages are rising a little faster and, like residential construction and the overall economy, it is causing delays, which becomes embedded into the cost of housing."

While many contractors and subcontractors will provide anecdotal evidence of construction-price increases, it's tough to measure exactly how much construction costs have risen in a given year, said Ken Simonson, chief economist at construction trade association the Associated General Contractors of America.

The best measure to use nationally, Simonson said,

is the producer price index for nonresidential building construction. The index measures the price that contractors say they would charge to build for nonresidential buildings — industrial, office, school, warehouse or health care facilities — and covers both materials cost and contractors' estimated overhead and profits.

As of mid-July, the construction index was up 2 percent from a year earlier, AGC data show. Increases range from a 1.2 percent year-over-year boost for industrial properties to a 2.2 percent boost for office construction prices.

DEMAND IS STRONG

Massachusetts has far outstripped its fellow New England states in terms of commercial and non-residential construction starts so far this year. To date, the commonwealth has seen \$3.4 billion in nonresidential

construction starts since January — more than half of the \$6.233 billion in nonresidential activity for the six-state region, according to construction industry research firm ConstructConnect.

Meanwhile, in Greater Boston, residential construction starts have jumped 39 percent to \$2.2 billion from January to June, according to the most recent report from Dodge Data & Analytics. Nowhere is that construction activity clearer than in Boston proper, which has around 15 million square feet under development — much of which is luxury development.

The mismatch between available labor and construction demand coupled with fixed development costs has created a development sphere where, at least on the residential side, luxury work comprises the majority of construction activity.

The ultra-luxury Millennium Tower, for example, has almost fully sold out its 442 condos despite just opening July 15. Developer Millennium Partners said the 685-foot, 1.1 million-square-foot tower cost \$700 million to develop — roughly \$636 per square foot. As another example, One Seaport Square, a 1.1 million-square-foot mixed-use project going up now in Boston's Seaport District, has reported development costs of around \$800 million — or roughly \$727 per square foot.

On top of fixed costs such as zoning and land-use requirements, land-acquisition costs and union-labor contracts have together contributed to the rise in ultra-luxury developments, said NAHB's Dietz.

"That's a persistent issue up and down the residential construction sector," Dietz said. "You have to pass it on to the consumer at some point. Basic demand analysis, and how elasticities work, it will shift to the higher end where it's easier to pass those costs along. You see that in the apartment sector and you certainly see that in the single-family sector."

In the commercial market, BOND's Williamson said he tells owners "all the time" that when it comes to bringing on talented subcontractors, he's shopping for price as well as a certainty that the job will get done on time and on budget. Given the market's frothy demand for experienced labor, nothing comes cheap these days.

"They're not unreasonably priced, but nobody should expect any heavy discounts as you might have gotten back in 2009" following the economic downturn, he said. "In a private industry, it's not about necessarily awarding to the lowest bidder — it's awarding to the best value proposition. It's about a partnership going in. ... Many of these projects are more about certainty of delivery as much as they are about certainty of cost."

Construction experts said one way firms are working around the current work overload is by booking firms years in advance — developing a relationship and then promising work, if the subcontractors have space cleared on their schedule.

"That's the strategy I see being most successful in the marketplace," Leber said. Contractors will say to subs: "I know tomorrow you're so busy that you can't call me back. Are you busy in two years?"

That's the target approach at many Seaport District projects now, including Seaport Square parcels M1 and M2, Leber said.

"The idea is to try to make a partnership between everybody," he said. "I would love it if somebody would come to me and say, 'Hey, I can guarantee a job in 2019.' That would be pretty interesting to me."

▶ THE BIG NUMBERS

Construction job openings and hires, seasonally adjusted, in Massachusetts and nationally

69K

Total construction, mining and logging workers in the Boston, Cambridge and Newton region in May, up 8 percent — or 5,100 jobs — from a year prior.

188K jobs

The number of U.S. construction job openings in May, the month's highest total since 2007

303K hires

The number of U.S. construction positions filled in May

Did you know: The ratio of hires to openings hit the lowest May rate in the 17 years since the BLS has tracked the data, according to the AGC, "suggesting that the employment drop in May could have resulted from difficulty finding qualified applicants."

Source: Associated General Contractors of America, using data from the U.S. Bureau of Labor Statistics