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Construction Economics

Market Conditions in Construction

Summer 2015

Gilbane

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DATA INCLUDED IN THIS REPORT

DDA Construction Starts through June,
released July 22, 2015

US Census Construction Spending (Put-In-Place)
through June, released August 3, 2015

BLS Construction Jobs through mid-July,
released August 7, 2015

Producer Price Index Materials through June,
released July 22, 2015

Producer Price Index Markets through June,
released July 22, 2015

Architectural Billings Index through June,
released July 22, 2015

Dodge Momentum Index through July,
released August 7, 2015

Consumer Inflation Index through June,
released July 17, 2015

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Summary

CONSTRUCTION OUTLOOK

- › Construction spending is increasing at the fastest rate of growth since 2004-2005. The outlook is very encouraging.
- › Construction spending will grow 10%+ for 2015 and 8%+ in 2016.
- › In the first quarter of 2015, the seasonally adjusted annual rate for all spending averaged \$997 billion. In the last quarter of 2015, spending will average greater than \$1.100 trillion.
- › 2015 spending advances will be supported by the strongest gains in nonresidential buildings spending in eight years.
- › Construction starts for new nonresidential buildings for the last five quarters were the five highest since Q3 2008.
- › Residential spending in 2015 will resume the post-recession advance after a lackluster 2014.
- › Spending overall annual rate will increase at an average rate of growth near 1% per month for the next 12 months.
- › Spending for nonresidential buildings will increase at an average rate near 1.5% per month for the next nine months.
- › Residential spending will increase at a rate greater than 1% per month for the next 12 months.
- › Nonbuilding infrastructure spending, after a brief gain, will go flat or decline until moderate growth resumes in the fourth quarter of 2015. The better outlook is nonbuilding new starts from January to May 2015, which totaled the highest on record and that will improve spending. In 2016, spending will be up.

Q3 2015 OUTLOOK

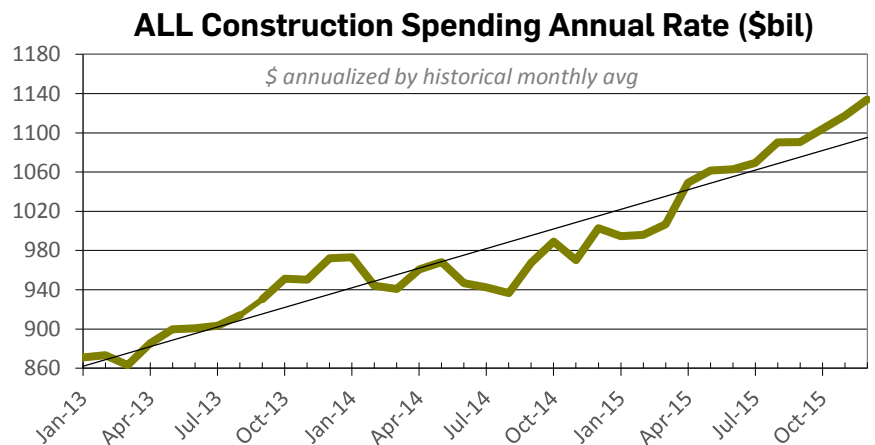
**\$1.06
Trillion**

**Average seasonally
adjusted annual rate for
all spending in Q2 2015**



FIGURE A:
All Construction Spending Rate of Growth 2013-2015

Total spending for all types of construction will grow 11% year over year from 2014 to 2015. The year started at an annual rate of spending near \$995 billion and should finish at a rate of \$1.100 trillion.



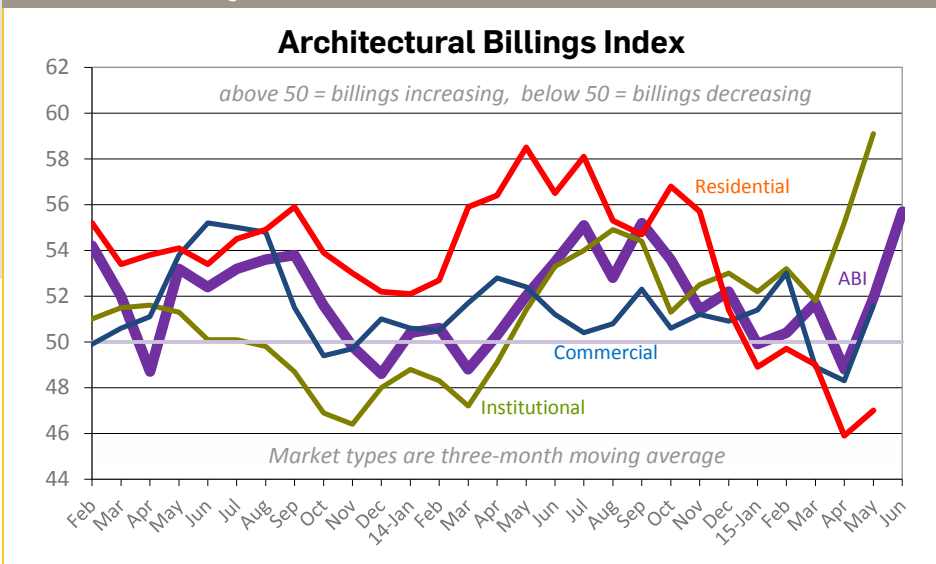
RESTRAINTS TO GROWTH

- › The BLS Job Openings and Labor Turnover Survey (JOLTS) for the construction sector for June is at 143,000 unfilled positions. The number of open positions has been over 100,000 for 26 of the last 28 months and has been trending up since 2012. An increase in job openings generally signifies that employers cannot find people with the right skills to fill open positions.
- › In a recent Associated General Contractors (AGC) survey, 80% of contractors indicated some difficulty in acquiring trained workers.
- › A recent National Association of Home Builders (NAHB) survey indicates labor shortages have become more widespread than reported in 2014.
- › New nonbuilding infrastructure work starts have been mixed over the last two years, with both new highs and new lows. Even with the most recent five months of new highs, the up and down spending pattern we've been seeing will continue at least until the end of 2016.
- › Housing starts were off to a slow start. In February and March, new starts dropped well below expectations and will hold down total starts for 2015.



Hiring workers with the right skills will be a key constraint to economic growth in 2015 & 2016.

FIGURE B:
Architectural Billings Index 2013-2015



THE EFFECTS OF RAPID GROWTH

- › From 2012 through 2014, the most current completed period, construction spending grew 21%. Inflation was 11%, so volume increased only 10%. However, work output increased by 13%. In this current growth cycle, productivity loss is at 3%.
- › 2015 predicted spending growth is near 11%. The current four-year period of spending growth (2012-2015) will be almost identical to 2003-2006 (33%) and 1996-1999 (32%), which have been the two fastest growth periods on record with two of the highest rates inflation and productivity loss.
- › As work volume begins to increase over the next few years, expect productivity to decline. There are many reasons why this will occur, among them: working longer hours until new workers are brought on; working more days; hiring less qualified workers; and acclimating new workers to the crew.
- › Growth in nonresidential buildings and residential construction in 2014 and 2015 will lead to more significant labor demand. This may lead to labor shortages in some trades. This will drive up labor cost.
- › Construction inflation is very likely to advance more rapidly than some owners have planned for, potentially requiring that some project budgets be revisited before projects can begin.
- › Construction inflation in rapid growth years is much higher than average long term inflation.
- › Long-term inflation is 3.3% for nonresidential buildings and 3.5% for residential buildings.
- › During rapid growth periods, inflation is 8% for nonresidential buildings and 9% for residential buildings.



This could be the breakout year for

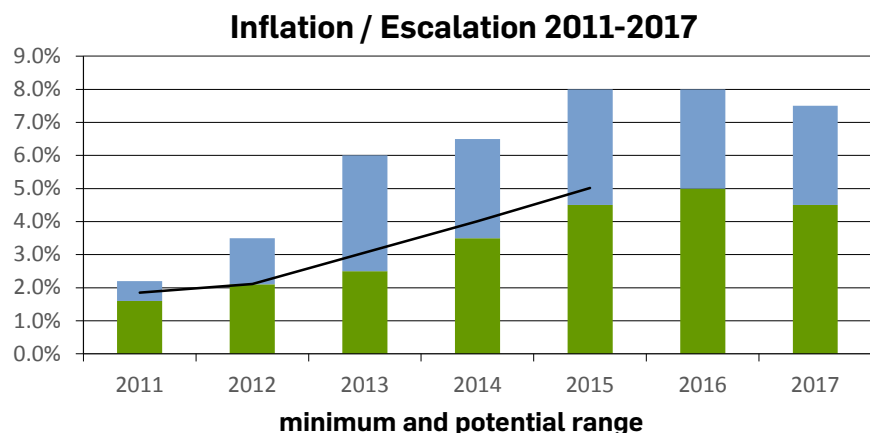
nonresidential buildings. The outlook now is for 20% growth in spending. Most of that gain is already recorded in new starts, the strongest in seven years. Escalation will climb to levels typical of rapidly growing markets.

FIGURE C:
Inflation / Escalation 2011-2017

In order to capture increasing margins, future escalation will be higher than normal labor and material cost growth. Lagging regions will take longer to experience high escalation. Residential escalation is currently near, or even above, the upper end of the range.

For escalation back to year 2000, see Figure 30. Recommended range:

- › 4.5% to 8% for 2015
- › 5.0% to 8% for 2016
- › 4.5% to 7.5% for 2017



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The information in this report is not specific to any one region. The information is limited to the United States and does not address international economic conditions.

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Data Sources

Along with countless news articles, these sources are used for data in this report:

- › American Institute of Architects – www.aia.org/practicing/economics/index.htm
- › American Iron and Steel Institute - steel.org
- › American Recycler - americanrecycler.com
- › Associated Builders and Contractors - abc.org
- › Associated General Contractors of America - agc.org
- › Bloomberg L.P. Financial News - Bloomberg.com
- › Bureau of Labor Statistics - Stats.BLS.gov
- › Construction Industry Round Table – cirt.org
- › CMD - CMDGroup.com (formerly Reed Construction Data)
- › Data Digest – DataDigest
- › Dodge Data & Analytics - construction.com/about-us/press
- › Economic Cycle Research Institute - businesscycle.com
- › Engineering News-Record - ENR.com
- › Financial Trend Forecaster - Fintrend.com
- › FMI Management Consulting - FMINET.com
- › IHS Global Insight - ihs.com
- › Institute for Supply Management - ism.ws
- › Metal Prices – metalprices.com
- › Producer Price Indexes - bls.gov/ppi
- › Random Lengths - randomlengths.com
- › U.S. Census Bureau - census.gov

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