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Service Beyond Estimation

Beyond Estimation

Market Outlook – Q3 2017

Vermeulens market reports are based on actual selling prices in the Institutional-Commercial-Industrial construction industry. Forecasts are based on leading indicators, and historical comparative analysis.

- **Construction Price** escalation nationally is trending to 4% per annum for Q3 2017.
- **Construction Cost Trendline:** Due to consistent increases in construction costs over the past few years, Vermeulens Index long term trendline is up from 3.3% to 3.4%.
- **Energy and commodity prices** have declined lately, offsetting the spike in metals and leaving the Dow Jones Commodities Index relatively flat.
- **Consumer Price Index:** After a flat first half of 2017, CPI is trending back to expected long term averages at 2.5%.

  Construction Dollar Volume has increased by 4.7% year over year (Sept 17/Sept 16). Year over year growth can be attributed to Residential and Infrastructure spending. Non-Residential spending has declined 1.3% year over year.
- **New York Stock Exchange:** The stock market remains at all-time highs, with Q3 seeing the NYSE break the 12,000 range for the first time and yielding a 4% increase in equities.
- **Growth in Employment:** Monthly rolling average job growth at the end of Q3 sits at 154,000 jobs, showing a continuation of the downward shift from the 249,000 average seen in the second half of 2014. This quarter's drop was mostly attributed to the 18,000 jobs added in September and likely impacted by the hurricanes.
- **Construction Job Growth:** We are at full employment in the construction sector. The first 3 quarters of 2017 have added 102,000 construction jobs nation-wide or 1.5%. Wage and profit increases in the sector will continue to draw employment from new entrants and other sectors.
- **Gross Domestic Product** exceeded expectations and increased by 3% this quarter.

Market Watch

Inflation and employment targets propel monetary policy, and subsequently construction prices. Although the target range for federal funds has increased, continuing low interest rates are good for stability in the interest rate sensitive construction sector.

"On a 12-month basis, overall inflation and the measure excluding food and energy prices have declined this year and are running below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

Storm-related disruptions and rebuilding will affect economic activity in the near term, but past experience suggests that the storms are unlikely to materially alter the course of the national economy over the medium term. Consequently, the Committee continues to expect that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, and labor market conditions will strengthen somewhat further. Higher prices for gasoline and some other items in the aftermath of the hurricanes will likely boost inflation temporarily; apart from that effect, inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but to stabilize around the Committee's 2 percent objective over the medium term.

The Committee decided to maintain the target range for the federal funds rate at 1 to 1-1/4 percent. The stance of monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a sustained return to 2 percent inflation. Tthe federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run.

In October, the Committee will initiate the balance sheet normalization program described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans."

https://www.federalreserve.gov/newsevents/pressreleases/monetary20170920a.htm

The table below looks at several key economic indicators that drive construction volume and costs. On balance, current indicators support stable construction growth in the short-term. Some shortages in local markets are maintaining construction prices above the Construction cost Trendline. Market activity and cost escalation continues to vary by region and project type.

Indicator	Effect	Current	Forecast
CPI Inflation	*Stable*	⇔	⇧
ICI Demand	*Stable*	⇔	⇔
Nom Interest Rates	*Low*	⇧	⇧
Real Interest Rates	*Low*	⇧	⇧
Government Spending	*Low*	⇔	⇔
Government Deficits	*Stable*	⇩	⇩
Financial Assets	*Stable*	⇧	⇧
Real Estate Assets	*Stable*	⇧	⇧
Construction Prices	*Moderating*	⇧	⇧
Construction Employment	*Rising*	⇧	⇧

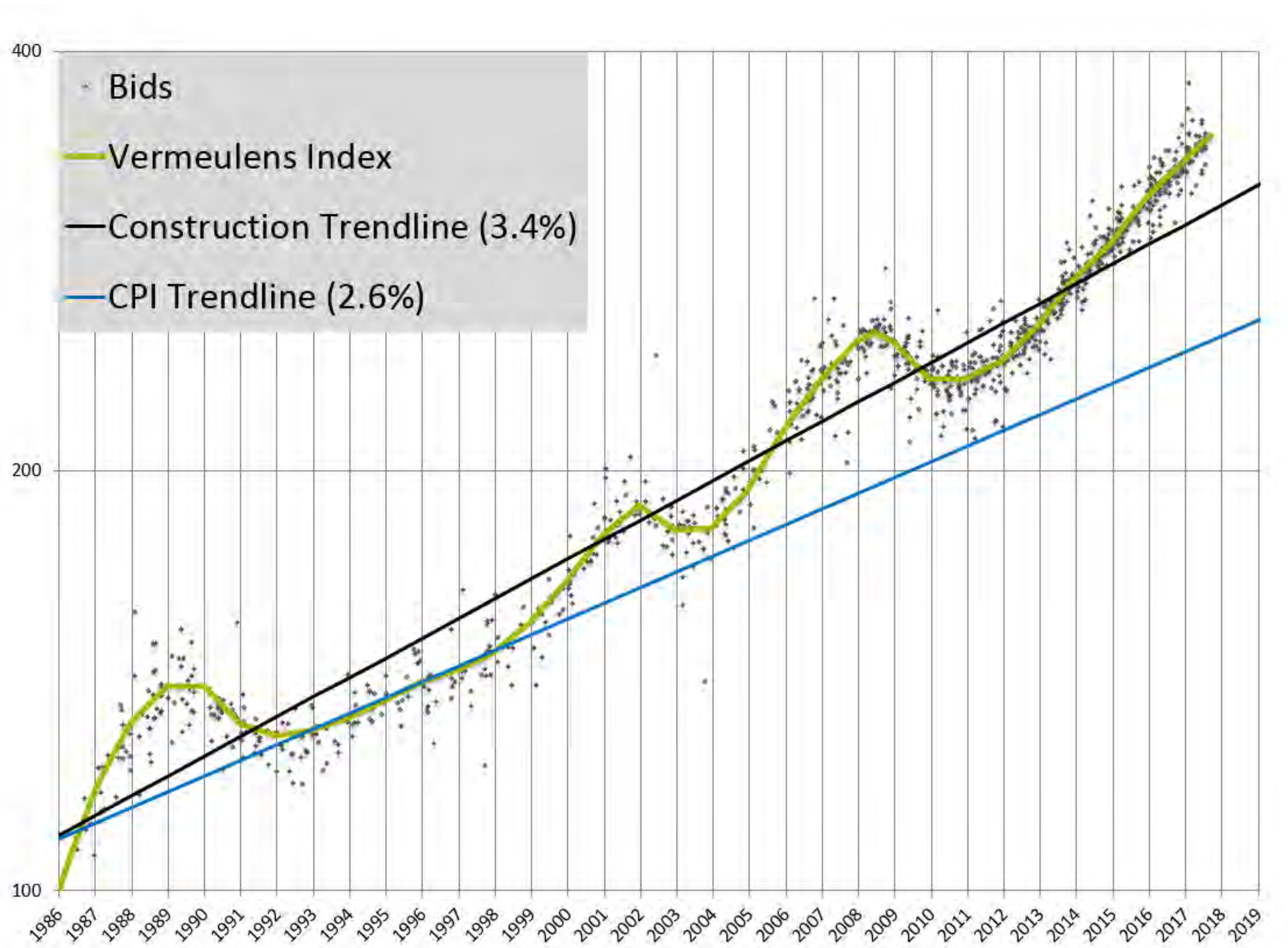
Vermeulens Construction Cost Index

- **As inflation in other sectors of the economy**—commodities for example—moderate and real interest rates reduce, escalation in the construction sector will continue to have room to increase at a higher rate.
- **Price increases for 2017** nationally are trending towards 5% annually.

For the past 30 years, construction costs have trended toward a 3.4% annually compounded escalation rate. The rate of escalation seen in construction costs relate to the target of 2 - 3% annual inflation and the monetary policy used to achieve this goal. Following a decline in 2014 due to energy prices, year over year CPI inflation is trending below the Federal Reserve's long-term targets.

Following the global recession construction selling prices for institutional projects fell by 14% from their peak in 2008. During 2011, Vermeulens saw an average selling price increase of 3%. This was followed by a 6% increase in 2012, 8% in 2013, 6% in 2014, 8% in 2015, 6% in 2016, and in 2017 prices are trending at 5%.

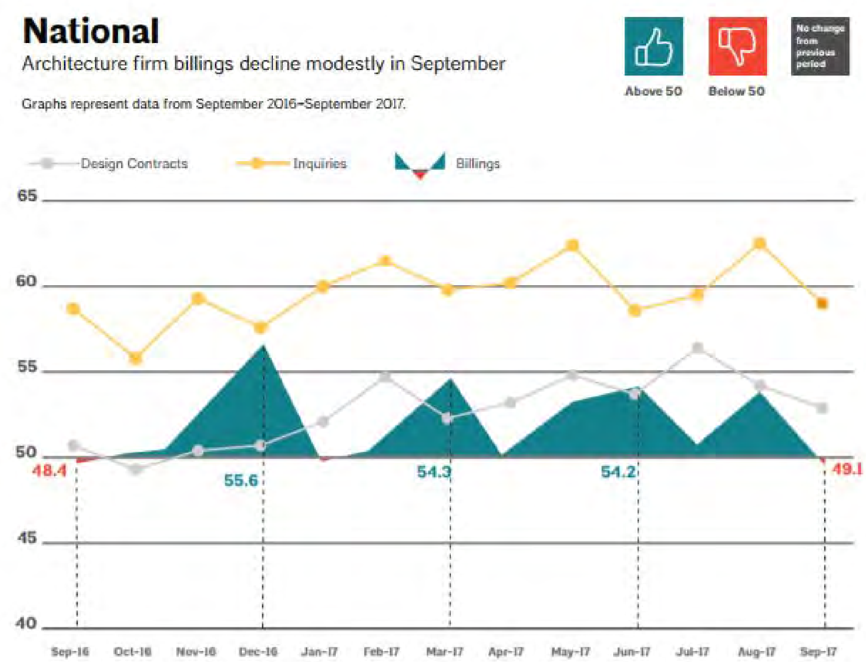
The chart below illustrates bid prices for Institutional Commercial Industrial (ICI) construction projects relative to the Construction Trendline (1986 = 100) and the 2.6% CPI Trendline.

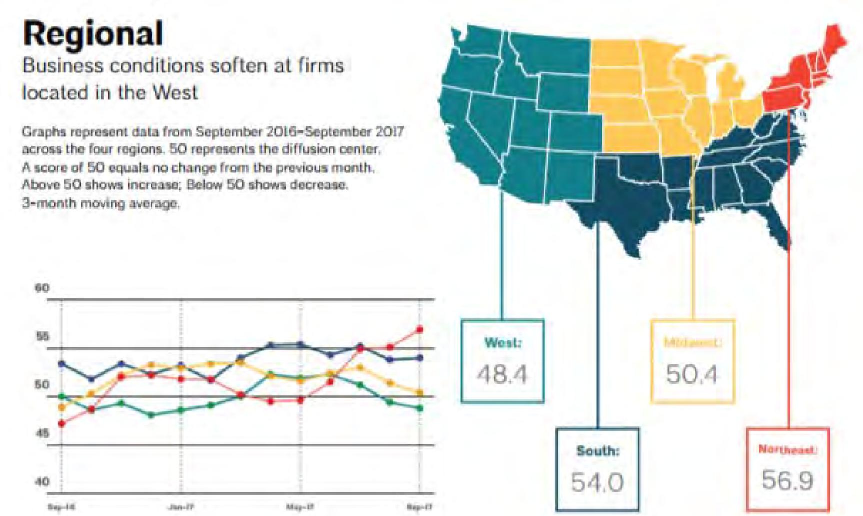


AIA Billings

Architectural billings are a leading indicator for future construction volume. A score greater than 50 indicates growth. Design fee billings typically indicate construction volume 9 -12 months in advance.

Architectural Billings saw a modest decline in September while inquiries continued to increase through the quarter. It is too early to determine whether the decline in billings is the beginning of a new trend or just a blip on the heels of hurricane season, making this something to keep an eye on in the coming months.





https://www.aia.org/pages/139321-abi-june-2017-firm-billings-start-summer-on

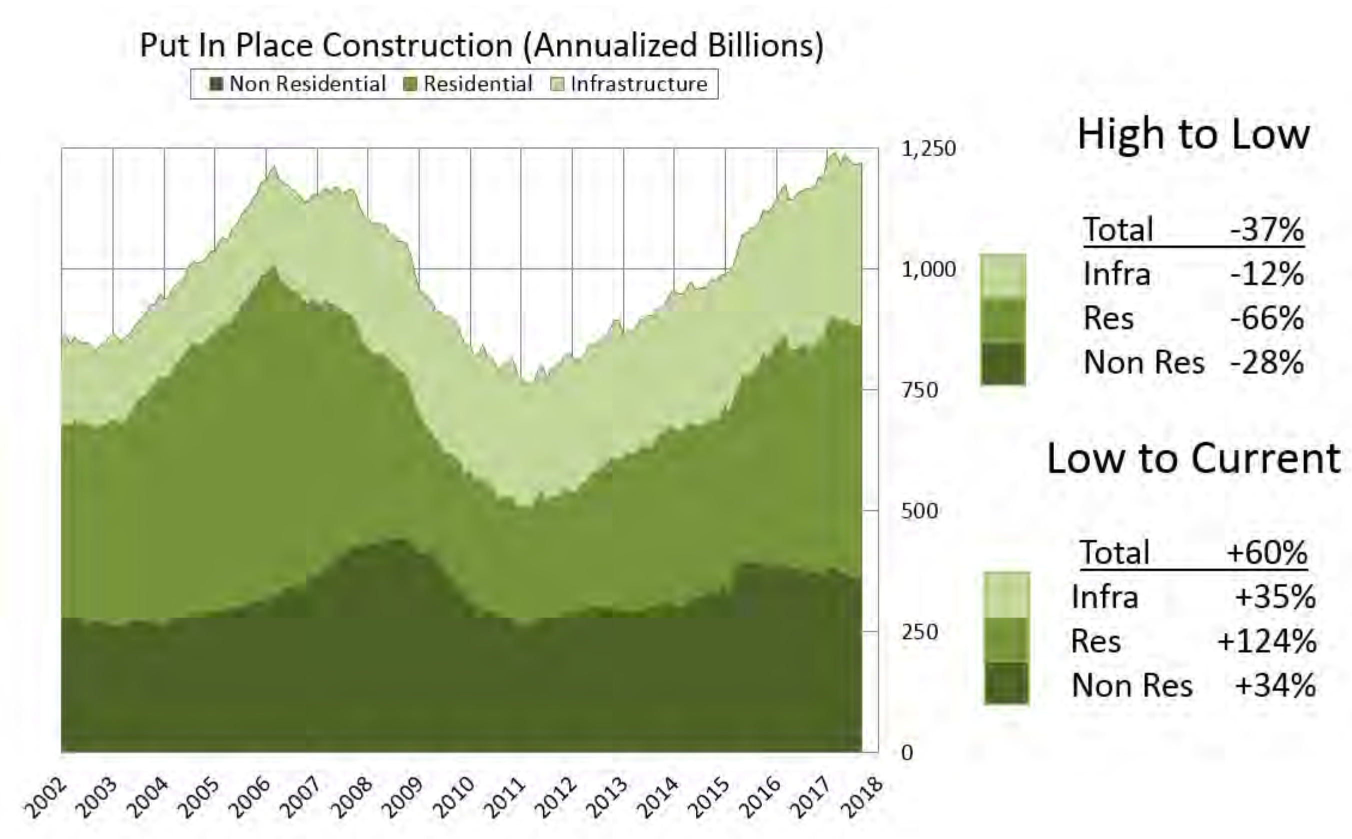
Put In Place Construction

Construction dollar volume has increased 4.7% year over year (Sept 16/Sept 17). Construction dollar volume is the number one driver of construction prices. As volumes increase and contractor bidding opportunities and backlogs grow, the margins included in a bid will grow.

Residential dollar volume has offset the non-residential decline and increased 14% year over year.

Non-Residential construction spending has seen a 1.3% decline year over year, reflecting weakness in commercial and industrial construction. Continued weakness in Non-Residential construction spending may result in reduced escalation in this sector.

Infrastructure spending has a 2.3% year over year increase.



http://www.census.gov/construction/c30/c30index.html

The NYSE and Commodity Prices

Commodity price declines stimulate the economy in general and allow room for employment, wage, and profit increases in the construction sector. Financial markets may be nearing the end of a restructuring period due to commodity price declines.

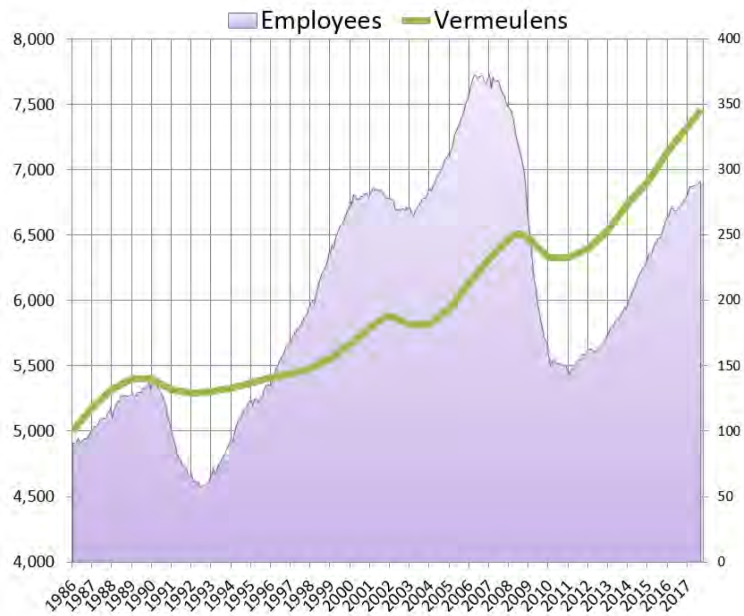
The NYSE (blue line) is an indicator of construction prices (Vermeulens index green line). Improving equity markets provide capital and investment spending for construction.

Commodity Prices (red line) are an input but not an indicator of construction prices. Economic growth since 2011 has been bolstered by lower commodity prices. The energy sector is particularly important as it underlies all economic activity. Construction prices have been impacted lately by a surge in industrial metals while energy and other sectors are showing decline, offsetting and keeping the Dow Jones Commodity Index relatively flat.

Labor Market

The inflationary level of employment growth has reset to a lower level as workers have left the construction labor market.

- **Unemployment** fluctuating between 4 - 6% will tend to put upward pressure on labor costs similar to 2004 - 2007.
- **Construction Job Growth** was 26,000 or 0.4%, this quarter.
- **Construction Labor Force Growth:** Wage and profit increases in the sector will draw new entrants as well as restructuring from other sectors of the economy (energy or exports, for example).



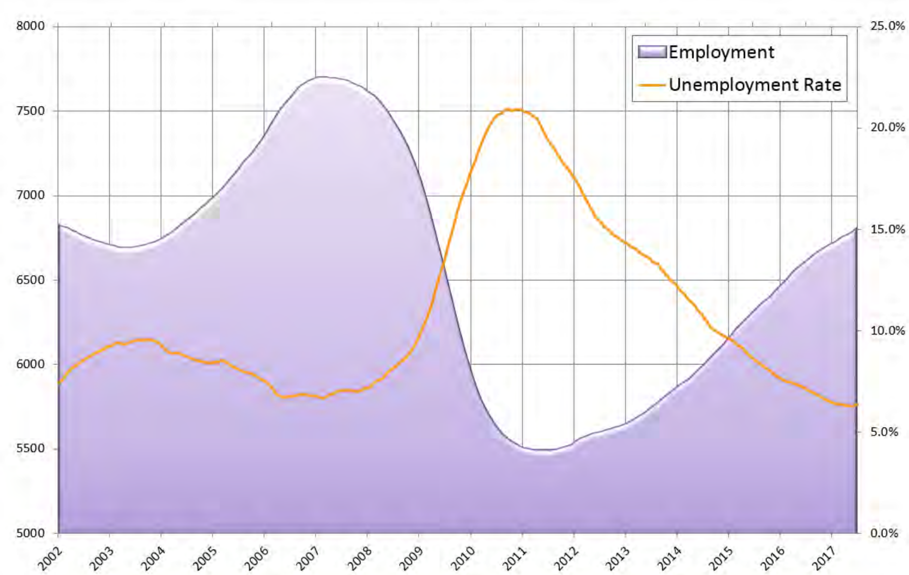
High to Low
Total
-8.7M (-6%)

Construction
-2.3M (-30%)

Low to Current
Total
+16.9M (+13%)

Construction
+1.5M (+27%)

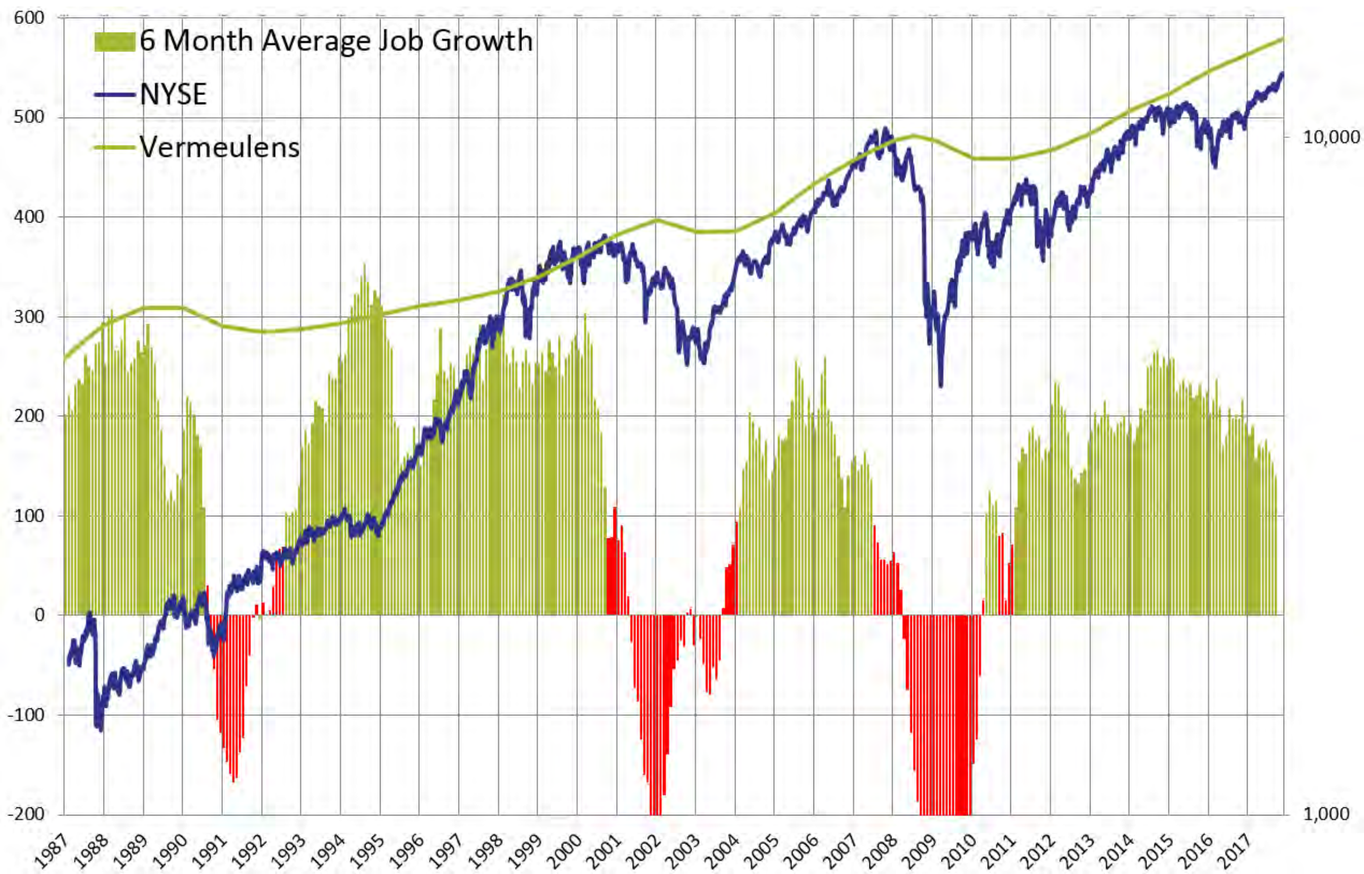
The Construction Unemployment Rate in the US has been cycling downward and appears to be stabilizing near the benchmark established in the mid 2000's.



Total Jobs & Market Performance

Total Jobs in the US economy saw its smallest single-month period of growth since 2010, adding only 18,000 jobs in September. Using 6-month average job growth as an indicator displays a continued slow-down in non-farm payroll employment since Q2 of 2014. This trend has become temporarily accelerated following the impact of the hurricanes, with the average falling from 177,000 new jobs at the end of Q2 to 154,000 jobs at the end of Q3.

The chart below removes short-term fluctuations in job growth by looking at a 6-month moving average of job growth. Dips in job growth temper wage demands. Negative job growth accompanies financial sector recessions. Sustained periods where job creation remains below 100,000 jobs/month has accompanied dips in construction pricing as illustrated by the red bars below. A recession is accompanied by job growth rates below the 100,000 jobs/month mark.

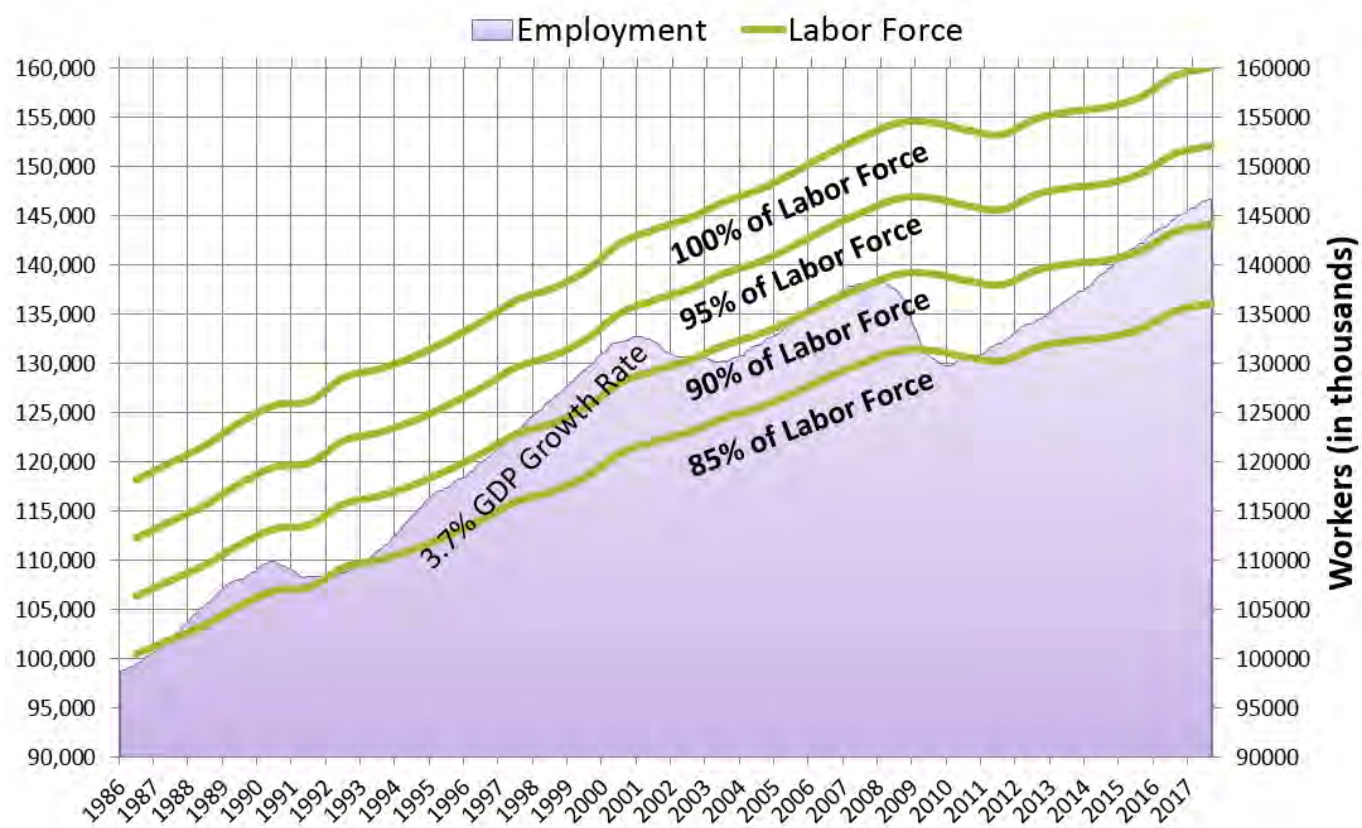


https://data.bls.gov/timeseries/CES0000000001

Employment Percentage of Total Workforce

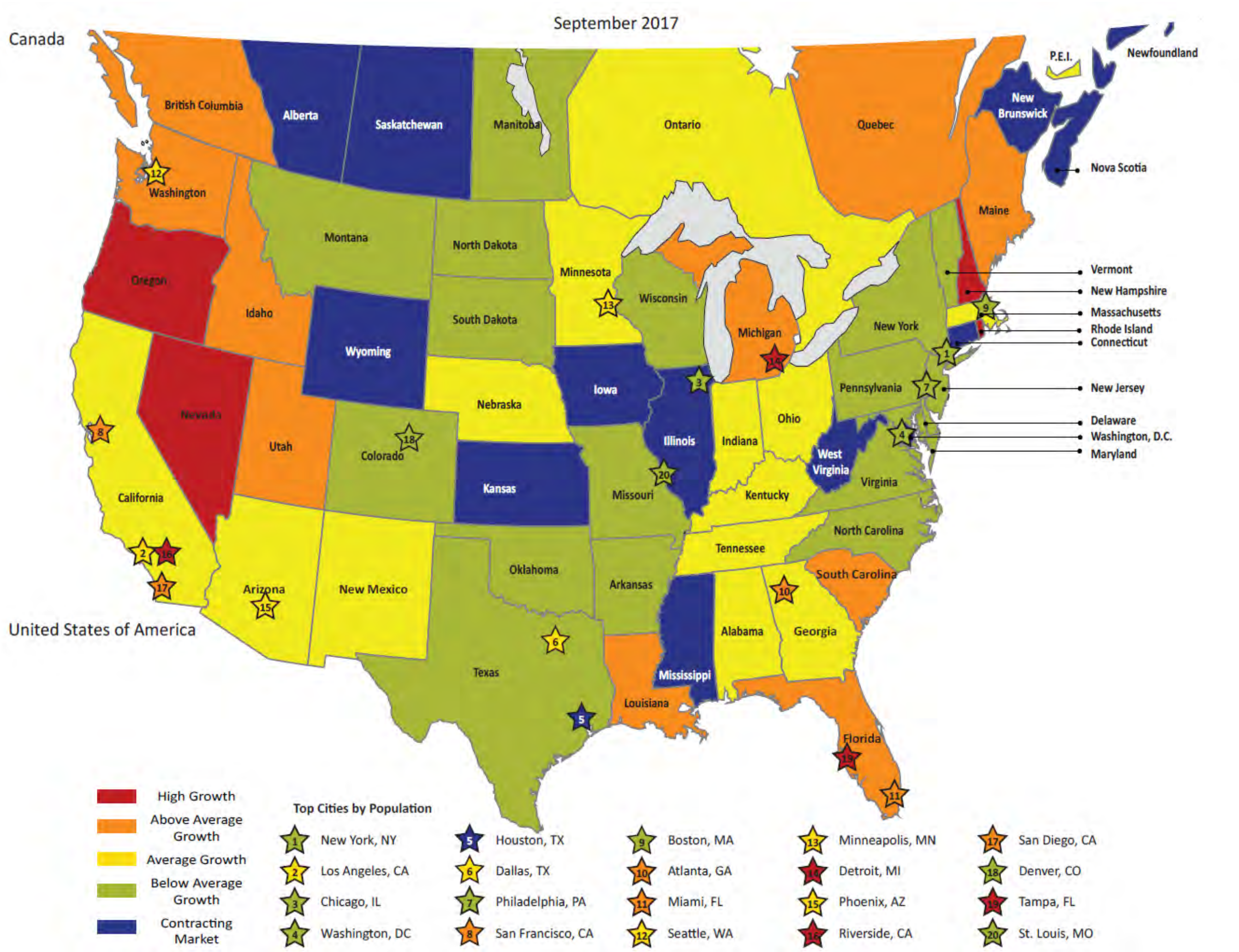
- **Total Employment** still has room to grow.

The chart below shows total employment as a percentage of the US workforce. The Federal Reserve will accommodate growth until full employment puts inflationary pressure on consumer prices above the 2% target. The workforce in the US continues to expand so the economy must produce at least 100,000 jobs/month to remain neutral. The Federal Reserve will continue to support strong employment growth over the medium term with low interest rates.



Construction Labor Growth Rate

Construction Labor Growth Rate is calculated by the current 12 month average in construction employment relative to previous years 12 month average in construction employment.



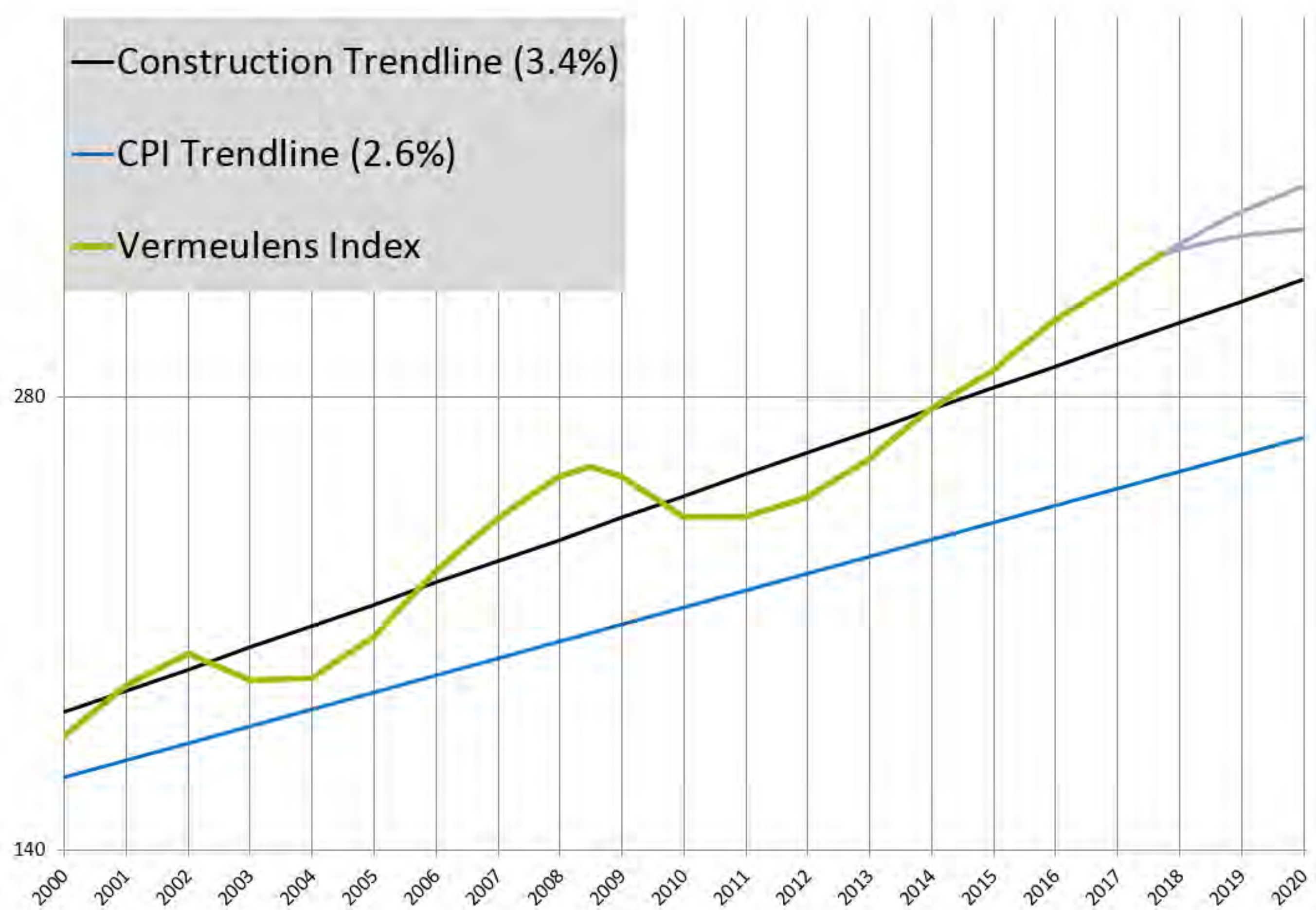
Growth	Forecast
High	7% - 9%
Above Average	5% - 7%
Average	4% - 5%
Below Average	3% - 4%
Contracting Market	TBD

Contact Blair Tennant for an in depth Analysis of your Sector at 214 789 2304 or btennant@vermeulens.com

Forecast - National Trend

- **Construction prices** are firm and stabilizing above the long term Trendline.

With the current labor, market at capacity, and continued stable construction volume, construction costs will remain above the Construction Cost Trendline for the medium term.



Vermeulens strives to give our clients the greatest possible value and results for their projects.

If you:
Need any help with your projects,
Want to set up a presentation to your group,
Would like to meet to see how we can help your team, and expand our business together,
Are looking for company information,

Please contact: Marisol Serrao, Director of Marketing at 617 273 8430 or mserrao@vermeulens.com.