

VALUE FOCUS

Construction & Building Materials

Third Quarter 2018



SEGMENT FOCUS

Roads, Bridges, and Highways

EXECUTIVE INDUSTRY TRENDS

Construction Overview

Construction & National GDP	1
Construction & National Unemployment	2
Value of Construction: Put-in-Place	3

Sector Focus: Roads, Bridges, & Highways

Government Funding for Highways and Government Consumption and Investment	5
Price of Cement	6
Yield on 10-Year Treasury	7
Industrial Production Index and Value of Utilities Construction	8

Sector Round-up

Nonresidential Construction	9
Residential Construction	10

Mergers and Acquisitions 12

Bellwether Stocks & Industry Participants 13

About Mercer Capital 16

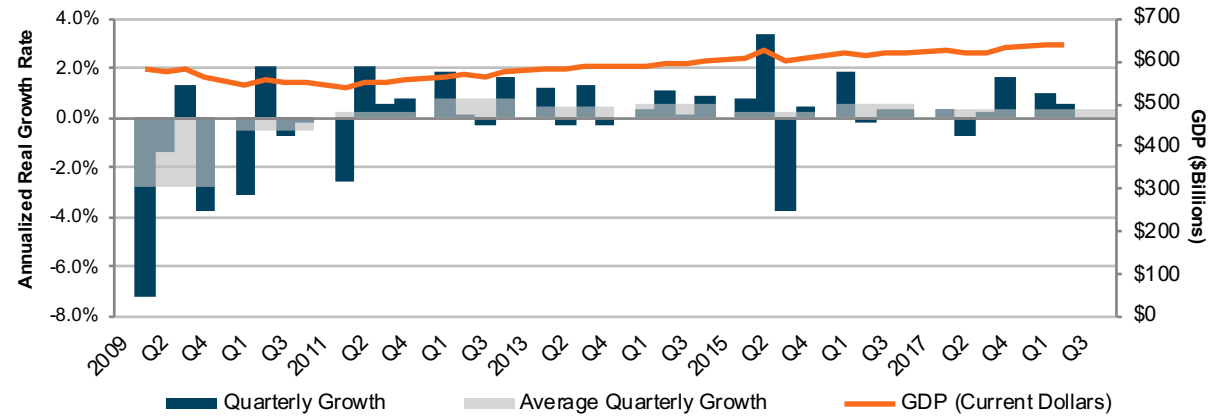
- U.S. roads, bridges, and highways require attention and may receive it with an anticipated large increase in transportation infrastructure projects.
- The labor market continues to tighten and construction labor costs continue to rise, especially in expensive coastal cities.
- GDP growth and corporate profitability bolstered nonresidential construction growth; residential construction was choppy over the previous two quarters, but starts ticked up in the third quarter.

Construction Overview

Construction & National GDP

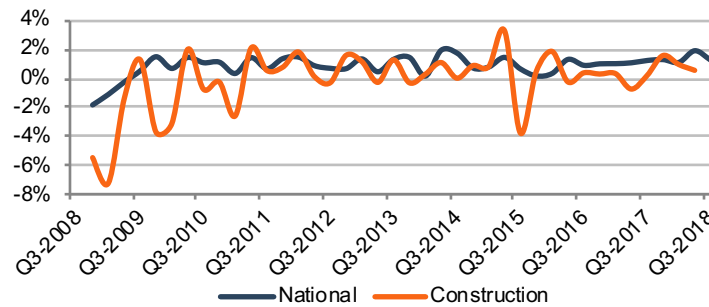
GDP rose 5.5% over the past year through the third quarter of 2018—which was the highest year-over-year rate over the examined period. Since 2008, construction has averaged 3.5% of national GDP, and it accounted for 3.1% of GDP over 2Q18 (third quarter construction GDP data is currently unavailable). Construction has steadily recovered since the 2008 financial crisis, experiencing growth consistent with that of the national GDP. Fluctuations in construction GDP have stabilized, with most quarterly growth rates in the plus or minus 0-2 percent range since 2012. Year-over-year construction GDP has increased 3.5%. Plans for increased infrastructure spending, inventory constraints in the existing home market, and improved corporate profitability should allow for continued industry growth.

Construction Gross Domestic Product



Source: Bureau of Economic Analysis

% Change in GDP



Source: tradingeconomics.com | U.S. Bureau of Economic Analysis

Construction GDP

Period	% Change
Q-o-Q	0.6%
Y-o-Y	3.5%

National GDP

Period	% Change
Q-o-Q	1.2%
Y-o-Y	5.5%

* Construction data through Q3 2018

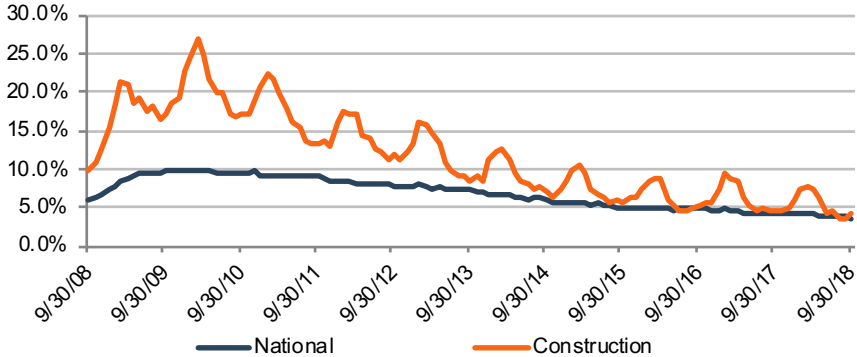
Construction Overview

Construction & National Unemployment

The Federal Reserve believes a healthy economy typically has an unemployment rate between 4.5% and 6.0%. The current level of 3.7% falls below this range, indicative of a tight labor market. The unemployment rate in September fell to the lowest rate of the ten-year period.

The unemployment rate in the construction industry is typically more volatile because it is a cyclical and seasonal industry. The major contributing factor to the seasonal nature of the industry is the weather. Production of materials and projects generally decrease during the colder, winter months. Construction unemployment is currently at 4.1%, below the level of 4.7% at the same time last year. The construction unemployment rate fell to a period low of 3.4% in July and August 2018. A lack of skilled laborers has become an industry-wide issue and has contributed to wage growth and increased costs for builders.

Unemployment Rate



Source: U.S. Bureau of Labor

Note: In the above graph, the national unemployment rate is seasonally adjusted, but the construction unemployment rate is not in order to show seasonality and recent trends.

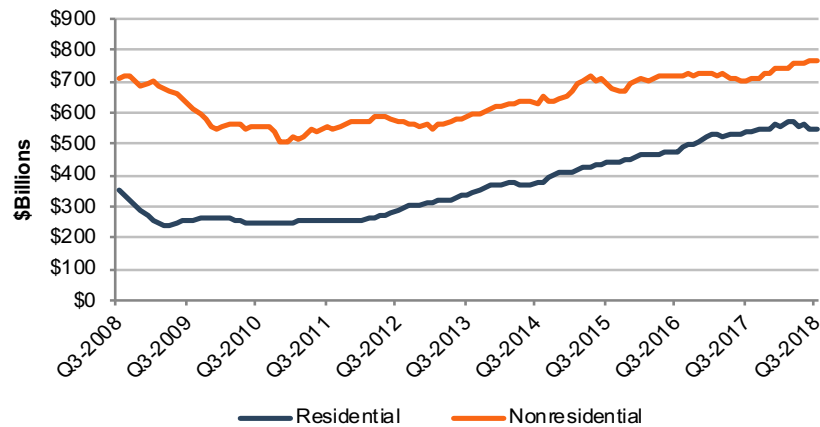
Construction Overview

Value of Construction Put-in-Place

The value of construction put-in-place is the total value of construction work done in the U.S. for a particular period. The U.S. Census Bureau tracks this data and reports the total monthly. This value includes, but is not limited to, the building materials costs, labor costs, profit, engineering costs, interest, and taxes.

Year-over-year put-in-place construction has increased by 2.2% for residential and by 8.3% for nonresidential. Nonresidential construction grew by 0.9% quarter-over-quarter through June 2018. The increase in non-residential construction comes in the midst of delays for the President's \$1 trillion infrastructure plan due to financing issues and other political priorities. Progress in these plans would create significant public work projects and could continue to accelerate nonresidential growth. Growth in residential construction has been choppy in comparison to nonresidential construction and decreased 1.9% over the previous quarter.

Value of Construction Put-in-Place



Source: U.S. Census Bureau

Residential	
Period	% Change
Q-o-Q	-1.9%
Y-o-Y	2.2%

Nonresidential	
Period	% Change
Q-o-Q	0.9%
Y-o-Y	8.3%

Sector Focus

Roads, Buildings, and Highways

Since his election, President Trump has paid lip service to investing more heavily in U.S. infrastructure. The American Society of Civil Engineers (ASCE) estimates that roughly one third of U.S. roads are in poor or mediocre condition, and that one in four bridges in the U.S. are structurally deficient or functionally obsolete. Trump has attempted to jump start projects that would include roads, bridges, and airports in dire need of attention with an initiative in the amount of \$1-1.5 trillion. Enthusiasm for a plan dissipated earlier this year amidst concerns over funding, other legislative priorities, and then focus on midterm elections. Now that Democrats have won a majority in the U.S. House of Representatives, an infrastructure funding plan appears more likely.

Local and state government funding is also helpful for completing road, bridge, or highway construction projects. However, generating this funding is often difficult. California plans to finance its \$52 billion transportation infrastructure plan by increasing gas taxes which hadn't been in 20 years. A ballot measure in California to repeal the proposed tax increase failed in the midterm elections.

With funding playing such a critical role in the industry, companies focus on future bids and winning contracts. Backlogs stimulate future revenue, and the pipeline is frequently used as an indicator of future revenue. The companies in our peer group reported some backlog divergence in their third quarter results. Granite Construction's total backlog decreased 24% year-over-year as revenue increased 10% from 3Q17. Management indicated that three projects in CA, UT, and FL totaling more than \$825 million are expected to enter the backlog in late 2018 and early 2019. Sterling Construction experienced an increase in their backlog of 18% compared to year-end 2017. Tutor Perini experienced a slight decrease in revenue (\$1.1 billion vs. \$1.2 billion) primarily due to delays on the High-Speed California Rail project, but their backlog was up 14% over the past year.

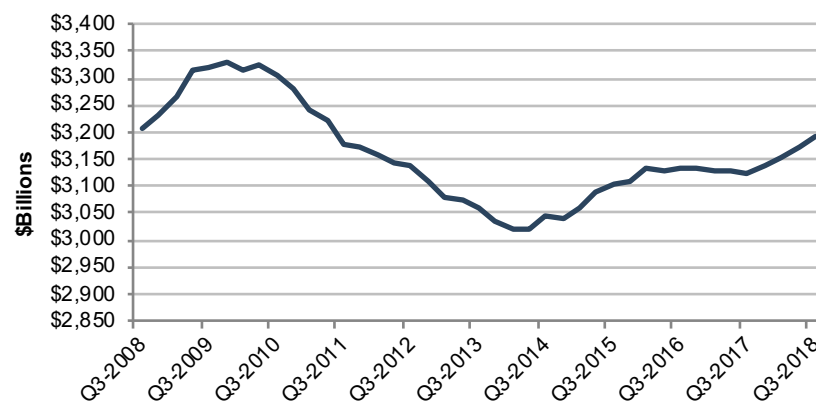
Increased cost pressures continue throughout the construction industry. While higher materials and energy costs do not vary significantly by region, labor costs can vary markedly by region and city. A tight labor market has increased the competition for employees in the building materials industry and driven up wage costs. Labor shortages are affecting contractors' capacity for work and may be limiting potential levels of activity. According to data from [BuildZoom](#), the most expensive cities for construction are predominantly located in expensive coastal cities (New York, San Francisco, Boston, Philadelphia, and Los Angeles) where labor costs have outpaced the rise in materials costs. The least expensive cities for construction are located in the south including Austin, Jacksonville, Little Rock, and Knoxville. Concerns over increased building materials prices may dampen enthusiasm for publicly funded work as the cement producer price index hit a ten year-high in June 2018 and recently imposed tariffs on Chinese imports will increase the cost of imported materials.

Roads, Bridges, & Highways

Government Funding for Highways and Government Consumption and Investment

Building materials are a crucial input to construction projects. Without funding, however, construction projects cannot be completed. Much of this funding comes from public resources, so the industry is typically concerned with the level of government spending on construction activity. Government consumption expenditures and gross investments reached high levels during the recession to boost the economy and declined significantly in the years following. After stagnating for much of 2016 and 2017, GCI has grown consistently for the past three quarters and reached the highest level since 2011. The growth in GCI comes despite the absence of the touted infrastructure investment bill under the new administration.

Government Consumption and Investment



Government Consumption & Investment

Period	% Change
Q-o-Q	0.6%
Y-o-Y	2.3%

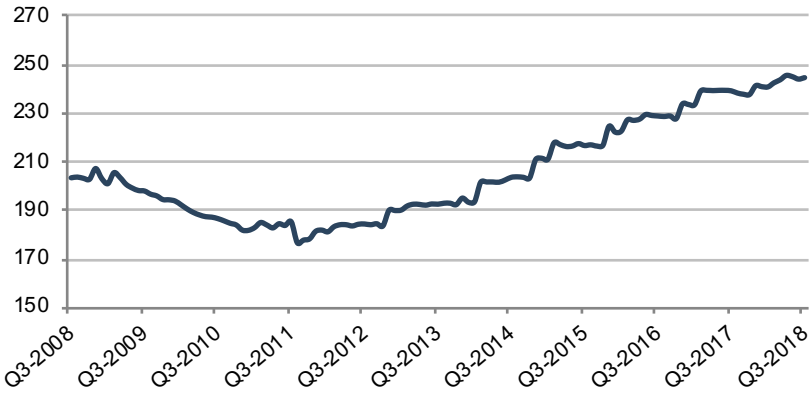
Source: St. Louis Fed

Roads, Bridges, & Highways

Price of Cement

Road contractors submit bids to local and state governments, and construction jobs are awarded to the lowest bidder. Higher input costs, like cement, decrease both the volume of projects the government is willing to start and the profit margins for contractors. Delivery is the most significant cost factor and proximity to a supplier plays a large role in price. Because the product is sold in large, heavy quantities, it is a regional product. The cement producer price index tracks the average change in price received by cement producers. Prices have been increasing due to increased demand within the construction industry resulting from increased activity in both the residential and nonresidential sectors. Continued increases in downstream demand may exceed current domestic production capacity and lead to further price increases as barriers to entry for new supply remain high.

Cement Producer Price Index



Cement Producer Price Index	
Period	% Change
Q-o-Q	-0.4%
Y-o-Y	2.3%

Source: St. Louis Fed | U.S. Bureau of Labor Statistics

Roads, Bridges, & Highways

Yield on 10-Year Treasury

The yield on 10-Year Treasury Bonds can indirectly affect the road contracting industry. Higher interest rates make construction projects more expensive to undertake, but they may also signify increased optimism about economic growth. As seen in the chart below, the 10-year yield has experienced a downward trend for much of the past 10 years as the Fed attempted to aid the economic recovery by encouraging an increase in investment. The 10-year yield has increased by 80 basis points over the past year due to a shift in the Fed's stance on interest rates, expectations of stronger economic growth, and higher inflation.

One interest rate measure to watch is the spread between 10-year and 2-year Treasury yields. A spread approaching zero or even crossing into negative territory has historically preceded a recession and potentially signals that the Fed has tightened rates too much. The spread declined to 0.24% in September 2018, which is the lowest monthly spread in the past 10 years as the growth in 2-year yields, which the Fed has more influence over, has outpaced the growth in 10-year yields.

Yield on 10-Year Treasury



Source: St. Louis Fed

Yield on 10-Year Treasury	
Period	Change
Q-o-Q	1 BPS
Y-o-Y	80 BPS

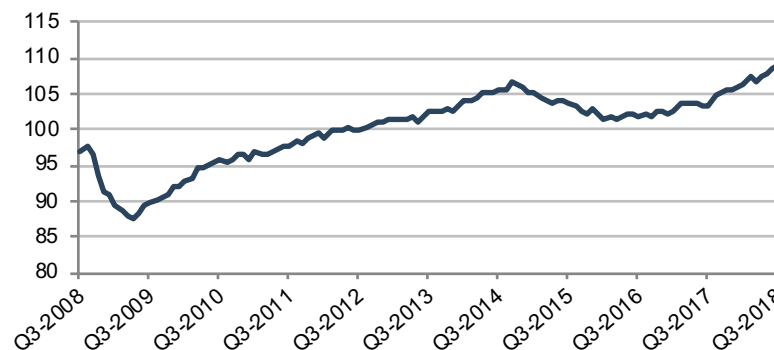
Roads, Bridges, & Highways

Industrial Production Index and Value of Utilities Construction

The Industrial Production Index (IPI) is an indicator of economic activity that measures real production output of the manufacturing, mining, and utilities industries. It acts as a barometer for the level of demand for industrial products and manufacturing activity. Building materials such as sand and gravel are important inputs of industrial production. After oscillating for a couple of years, IPI steadily increased for most of 2017 and 2018.

Cement and ready-mix concrete are used in most construction projects involving the utilities subsector such as transportation, energy, gas, water, and sewage. There will always be a need for such infrastructure, so building materials companies can rely on this revenue stream even though the growth rate of new projects fluctuates. The value of utilities construction has increased 10.2% over the past year.

Industrial Production Index

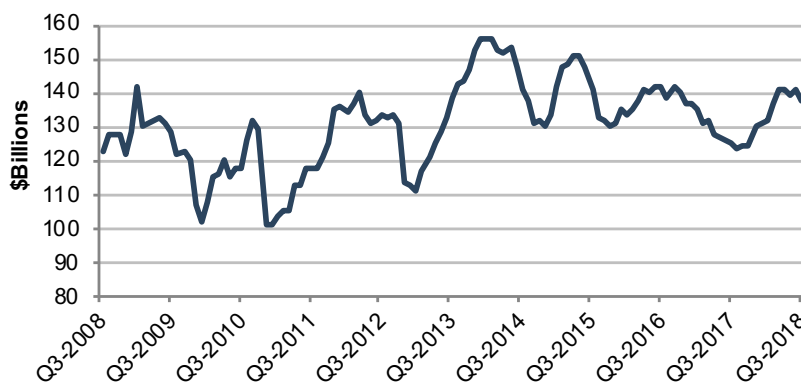


Source: St. Louis Fed

Industrial Production Index

Period	% Change
Q-o-Q	1.4%
Y-o-Y	5.6%

Value of Utilities Construction



Source: U.S. Census Bureau

Value of Utilities Construction

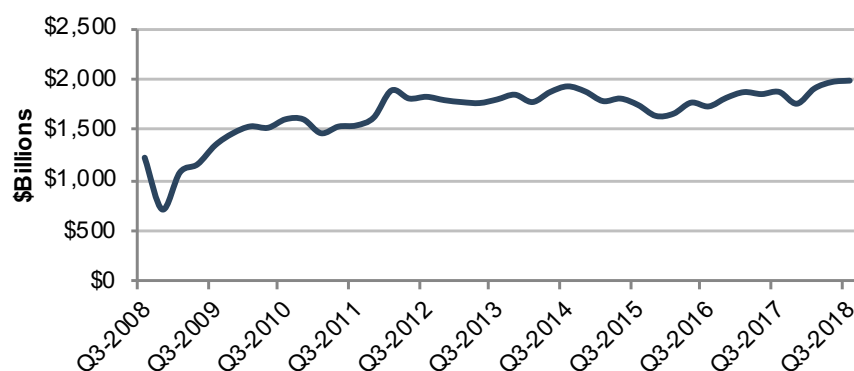
Period	% Change
Q-o-Q	-2.2%
Y-o-Y	10.2%

Sector Round-up

Nonresidential Construction

Corporate profit is essential for companies not only to survive but also to grow and expand. When corporate profit increases, companies are more willing and able to open new branches and divisions. These additions lead to more commercial construction. As seen in the chart below, corporate profit has increased over the past year to the highest level of the past ten years. In addition to favorable macroeconomic trends discussed in other sections, the U.S. Tax Cuts and Jobs Act of 2017 lowered the corporate tax rate from 35% to 21%. The dip in the fourth quarter of 2017 is partially due to one-time deferred tax asset write-downs incurred by companies owing to the new tax rate. A lower tax burden going forward should encourage increased investment.

Corporate Profit



Corporate Profit	
Period	% Change
Q-o-Q	0.7%
Y-o-Y	5.9%

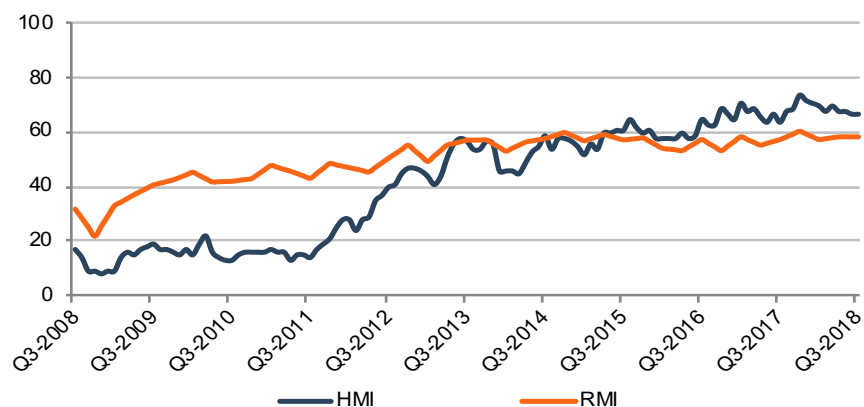
Source: St. Louis Fed

Sector Round-up

Residential Construction

The National Association of Home Builders conducts two separate surveys, the Housing Market Index (HMI) and the Remodeling Market Index (RMI), to measure confidence in the home building industry. Respondents rate their activity on a scale from 1-100 with 50 being average. The HMI is produced monthly and asks respondents to rate market conditions both at present and looking forward six months. The monthly index has remained above 50 since July 2014 and reached a 10 year high of 74 in December 2017. The RMI is produced quarterly and asks respondents to rate their work volume as either higher or lower than the previous quarter. The quarterly index has fluctuated between 50 and 60 since the second quarter of 2013.

NAHB HMI and RMI



NAHB HMI	
Period	% Change
Q-o-Q	-1.5%
Y-o-Y	4.7%

NAHB RMI	
Period	% Change
Q-o-Q	0.0%
Y-o-Y	1.8%

Source: National Association of Home Builders

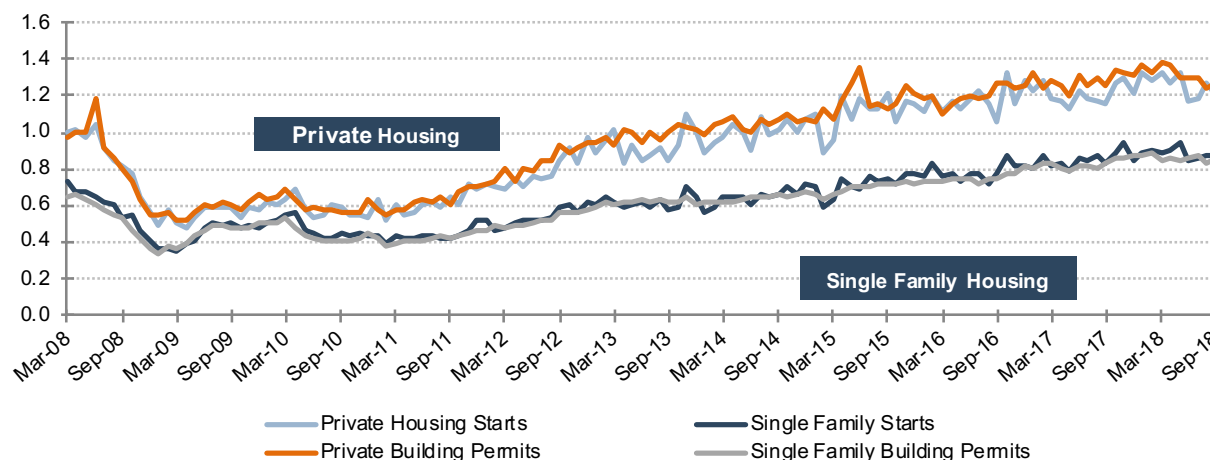
Note: RMI is measured quarterly and approximated for a monthly basis using a straight-line approach

Sector Round-up

Residential Construction (continued)

Building permits and housing starts are two important indicators for the home building industry. Both reflect demand, consumer confidence, and the feasibility of financing construction projects. Building permits can be issued and then shelved by builders; therefore, housing starts are a better focused measure of current activity within the industry. After declining nearly 75% during from 1Q06 to 1Q09 as the housing bubble unwound, housing permits and starts have steadily recovered but are unlikely to reach pre-recession highs. After strong growth in the first quarter of 2018 and low existing inventory, housing starts had a disappointing second quarter as single family starts stagnated. Both private and single family starts increased in the third quarter.

Seasonally Adjusted Annualized Rates of New Housing Starts and Building Permits



Source: U.S. Census Bureau
 Note: Permits at a given date are generally a leading indicator of future starts.
 Beginning with January 2004, building permit data reflects the change to the 20,000 place series.

Private Housing Starts		Single Family Starts		Private Building Permits		Single Family Building Permits	
Period	% Change	Period	% Change	Period	% Change	Period	% Change
Q-o-Q	2.0%	Q-o-Q	2.4%	Q-o-Q	-1.7%	Q-o-Q	0.1%
Y-o-Y	3.7%	Y-o-Y	4.8%	Y-o-Y	1.3%	Y-o-Y	2.8%

Mergers and Acquisitions

In June 2018, **Granite Construction** completed its acquisition of **Layne Christensen Company**, a global water management, construction, and drilling company. Total consideration for the deal was approximately \$536 million in Granite common shares, 12% of outstanding Granite shares at the closing date. The Layne Christensen acquisition coincided with Granite's announcement of a new reportable segment – the water and mineral services operating group.

To bolster capability in the water and mineral sectors, **Granite** also acquired **LiquiForce** in April 2018 for an undisclosed purchase price. LiquiForce serves public and private sector water and wastewater customers by providing underground contracting services. The addition of Layne Christensen should provide for cost-cutting synergies at the corporate level as well as opportunities for cross selling services at the point of sale.

Bellwether Stocks & Industry Participants

	Ticker	Price at 9/30/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings	
Residential											
	Beazer Homes USA, Inc.	NYSE: BZH	10.50	-44.0%	2,107	1,528	78.5%	4.8%	15.00	7.06	NM
	D.R. Horton, Inc.	NYSE: DHI	42.18	5.6%	16,068	18,008	16.8%	13.0%	8.60	7.10	10.88
	KB Home	NYSE: KBH	23.91	-0.9%	4,602	3,805	49.6%	8.5%	9.78	6.65	13.31
	Lennar Corporation	NYSE: LEN	46.69	-9.8%	17,898	25,491	41.3%	10.0%	14.28	8.21	11.14
	LGI Homes, Inc.	NasdaqGS: LGIH	47.44	-2.3%	1,484	1,579	36.9%	13.6%	7.83	6.42	7.08
	M.D.C. Holdings, Inc.	NYSE: MDC	29.58	-3.8%	2,907	2,374	39.6%	9.4%	8.73	6.33	9.22
	NVR, Inc.	NYSE: NVR	2,470.80	-13.5%	7,006	9,141	6.3%	14.1%	9.25	8.52	13.12
	PulteGroup, Inc.	NYSE: PHM	24.77	-9.4%	9,980	9,926	31.7%	15.4%	6.45	6.15	8.34
	Taylor Morrison Home Corporation	NYSE: TMHC	18.04	-18.2%	4,069	3,135	42.0%	9.7%	7.94	6.61	8.56
	Meritage Homes Corporation	NYSE: MTH	39.90	-10.1%	3,466	2,764	44.7%	8.5%	9.38	7.45	8.61
	TRI Pointe Group, Inc.	NYSE: TPH	12.40	-10.2%	3,259	3,099	44.6%	12.9%	7.38	7.24	7.63
	Median			-10%	4,069	3,135	41.3%	10.0%	8.73	7.06	8.91

All figures reported in millions, except per share data

Source: Capital IQ

Bellwether Stocks & Industry Participants

	Ticker	Price at 9/30/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings	
Building Materials											
	Eagle Materials Inc.	NYSE: EXP	85.24	-20.1%	1,419	4,710	13.4%	29.8%	11.14	8.97	14.70
	Martin Marietta Materials, Inc.	NYSE: MLM	181.95	-11.8%	3,934	14,662	21.9%	27.5%	13.56	11.30	15.25
	Summit Materials, Inc.	NYSE: SUM	18.18	-42.4%	2,100	3,821	47.4%	19.1%	9.52	7.82	21.00
	U.S. Concrete, Inc.	NasdaqCM: USCR	45.85	-39.9%	1,478	1,521	48.7%	11.1%	9.27	6.50	30.11
	Vulcan Materials Company	NYSE: VMC	111.20	-7.0%	4,272	17,790	16.8%	24.4%	17.08	13.97	20.42
	CEMEX, S.A.B. de C.V.	BMV: CEMEX CPO	0.70	-22.8%	14,627	22,765	49.0%	18.0%	8.64	8.26	22.45
	CRH plc	ISE: CRG	32.74	-14.2%	29,534	37,061	30.1%	12.4%	10.16	8.72	12.86
	HeidelbergCement AG	DB: HEI	78.40	-23.6%	20,507	28,707	46.0%	15.4%	9.09	7.35	12.00
	LafargeHolcim Ltd	SWX: LHN	49.64	-15.0%	26,655	48,884	39.2%	4.8%	38.06	7.73	NM
	Median			-20%	4,272	17,790	39.2%	18.0%	10.16	8.26	17.84
Roads, Bridges, and Highways											
	Granite Construction Incorporated	NYSE: GVA	45.70	-21%	3,227	2,154	17.2%	6.9%	9.61	6.65	27.83
	Sterling Construction Company, Inc.	NasdaqGS: STRL	14.32	-6.0%	1,036	415	17.4%	4.4%	9.02	6.79	17.13
	Tutor Perini Corporation	NYSE: TPC	18.80	-33.8%	4,464	1,601	46.0%	4.6%	7.79	4.73	8.16
	Median			-21%	3,227	1,601	17.4%	4.6%	9.02	6.65	17.13

All figures reported in millions, except per share data

Source: Capital IQ

Note: CX, CRG, HEI, and LHN report in foreign currency. Margin and multiples unaffected and shown for analysis.

Bellwether Stocks & Industry Participants

	Ticker	Price at 9/30/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings	
Nonresidential											
	AECOM	NYSE: ACM	32.66	-11%	20,156	8,512	40.9%	3.8%	11.14	8.41	38.08
	Dycom Industries, Inc.	NYSE: DY	84.60	-1%	2,787	3,366	22.3%	8.4%	14.35	8.73	25.68
	EMCOR Group, Inc.	NYSE: EME	75.11	8.3%	7,914	4,367	6.4%	6.1%	9.06	8.94	16.92
	Fluor Corporation	NYSE: FLR	58.10	38%	19,393	8,184	17.4%	3.9%	10.81	9.18	34.71
	Jacobs Engineering Group Inc.	NYSE: JEC	76.50	31.3%	14,985	12,464	16.5%	5.8%	14.23	9.95	64.69
	MasTec, Inc.	NYSE: MTZ	44.65	-4%	6,595	5,116	33.5%	9.2%	8.47	7.13	9.17
	Quanta Services, Inc.	NYSE: PWR	33.38	-10.7%	10,538	5,722	16.4%	7.1%	7.66	6.15	14.76
	Median - Nonresidential			-1%	10,538	5,722	17.4%	6.1%	10.81	8.73	25.68

All figures reported in millions, except per share data

Source: Capital IQ

Mercer Capital

Construction &
Building Materials
Industry Services

Mercer Capital provides valuation and transaction advisory services to the construction and building materials industries.

Industry Segments

Mercer Capital serves construction industry segments from commercial and civil to residential. We also serve the building materials sector from aluminum and steel to brick, glass, and lumber.

Mercer Capital Experience

- Family and management succession planning
- Buy-side and sell-side transaction advisory assistance
- Conflict resolution and litigation support
- Trust and estate planning
- Buy-sell agreement valuation, design, and funding advisory

Contact a Mercer Capital professional to discuss your needs in confidence.

Contact Us

Timothy R. Lee, ASA

901.322.9740
leet@mercercapital.com

Nicholas J. Heinz, ASA

901.685.2120
heinzn@mercercapital.com

Brian F. Adams

901.322.9706
adamsb@mercercapital.com

MERCER CAPITAL

Memphis

5100 Poplar Avenue, Suite 2600
Memphis, Tennessee 38137
901.685.2120

www.mercercapital.com

Dallas

12201 Merit Drive, Suite 480
Dallas, Texas 75251
214.468.8400

Nashville

102 Woodmont Blvd., Suite 231
Nashville, Tennessee 37205
615.345.0350