

SPONSORED BY



2019 Electrical Market Forecast & Analysis

The Data & Industry Insight You
Need to Chart Your Course in
the 2019 Electrical Market

**Electrical
Wholesaling**

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

EXECUTIVE SUMMARY

2019 ELECTRICAL MARKET FORECAST & ANALYSIS

The Data & Industry Insight You Need to Chart Your Course in the 2019 Electrical Market

Electrical Wholesaling magazine is respected throughout the electrical market for the sales forecasts and executive-level industry analysis it has provided over the past 40 years. EW's annual Market Planning Guide, National Factbook, Electrical Pyramid and listing of the Top 200 Largest Electrical Distributors offer C-suite executives with the insight they need to manage and grow their businesses.

This information isn't available anywhere else in the electrical wholesaling industry. With the support of Champion Fiberglass, for the first time ever *Electrical Wholesaling* is aggregating the best of its sales forecast and market analysis into a digital e-book. It contains:

- EW's 2019 national sales forecasts for sales through electrical distributors
- 2019 regional electrical sales forecasts
- Tips on how to use *Electrical Wholesaling's* sales-per-employee multipliers to develop your own local and state forecasts.
- Insight into the key economic metrics that drive sales in the electrical wholesaling industry.
- Analysis of the industry trends that will have the most impact on the electrical market this year.

We believe this E-book to be a valuable asset for your sales, marketing and management teams as you map out your growth strategies for 2019, and the editors of *Electrical Wholesaling* are delighted to be working with Champion Fiberglass to bring it to you. ●



**Electrical
Wholesaling**

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK



2019: WILL THE ROAD AHEAD TAKE A TURN?

Industry execs seem reasonably bullish about their business prospects despite a mixed bag of economic indicators.

One of the best parts of my job is the opportunity I get to travel around the electrical circuit to talk with *Electrical Wholesaling* readers and advertisers about their business prospects, industry scuttlebutt and emerging trends.

Over the past eight weeks, I have visited with folks at the NAED Western and South Central Regional Conferences; the NEMRA (National Electrical Manufacturers Representatives Association) Conference and the annual executive summit for the National Association of Wholesaler-Distributors (NAW). I found folks refreshingly optimistic about their business fortunes this year, even after the turmoil over tariffs, the government shutdown, and the stock market's plunge just before the Christmas holidays.

I guess I shouldn't have been too surprised because *Electrical Wholesaling's* readers first voiced their 2019 optimism in the 2019 Market Planning Guide with a +6.1% forecast in sales through electrical distributors this year.

I don't mean to play the role of the pessimistic donkey Eeyore from Winnie the Pooh, but before we pop the champagne corks in celebration of a banner year, it's important

not to overlook the fact that right now there's a seriously mixed bag of economic indicators that makes it harder than usual to get a grip on the industry's economic forecast. Here are three of the more glaring mixed signals:

Electrical Wholesaling vs. DISC forecasts. While *EW's 2019 Market Planning Guide* calls for a +6.1% forecast that's solidly in the middle of the industry's historical range of +4% to +8% annual growth, the reliable DISC Report published by Herm Isenstein that historically tracks within a point or so of *EW's* annual forecast was recently revised downward and now calls for industry growth of less than 2% this year.

A fuzzy snapshot of the construction segment. Dodge Data & Analytics expects total construction for this year to be flat at best. But other construction metrics are singing a happier tune. At 924,900 employees through December, electrical contractor employment has hit some rarified heights it has not seen since 2007. And the Architecture Billings Index published monthly by the American Institute of Architects (AIA) is bullish and said in its most recent report, "Indicators of work in the pipeline, including inquiries into new projects and the value of new design contracts, also strengthened in January."

NEMA's EBCI Index. *EW's* editors like the Electroindustry Business Conditions (EBCI) survey published by NEMA (National Electrical Manufacturers Association) because it offers a quick read each month of what electrical manufacturers see in the electrical economy. And while the most recent data shows that the EBCI's current index is solidly in growth territory at 53.3 points (anything over 50 points indicates a growth environment), the EBCI's future conditions index measuring conditions six months out dropped to 36.7 points, which NEMA said was the "lowest level since near the end of the last recession."

Score points for news from the Fed and reports from Wall Street, because they both are definitely on the positive side of the ledger. The Federal Reserve's decision in early January to hold the line on interest rates is sure to help mortgage rates and the housing market this year, and it definitely has already helped the stock market.

And as earning reports roll in, several of the larger publicly held electrical manufacturers and distributors of electrical supplies are forecasting steady growth in 2019. Hubbell told investment analysts it expects growth of +4% to +6% this year; WESCO is looking at growth of +3% to +6%; Rexel sees a more moderate growth range of +2% to +4%; and Grainger's outlook calls for growth of 4% to 8.5% in 2019.

After sifting through all of the most recent metrics measuring electrical growth and factoring in my conversations with industry executives in early 2019, color me cautiously optimistic about 2019. ●

Electrical
Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK



2019 MARKET PLANNING GUIDE

The economic indicators are pointing toward one more year of good-but-not great growth in 2019. 2020 may be the start of a different story.



But other news stories are having a very real impact on this industry, as seen in EW's September cover story on the impact of the tariffs on construction material pricing. Another economic issue getting a lot of play right now is the slump in home sales because of rising interest rates and the hesitancy or financial inability on the part of Millennials in their prime buying years to purchase their first homes. This story hits closer to home, because residential product sales account for an estimated 15% to 20% of the total market. When homebuilding declines it has a domino effect on the construction of other businesses and services that rely on homeowners, like stores, gas stations, restaurants, medical offices and other light-commercial projects. This niche is big business for many distributors, reps and manufacturers.

declines it has a domino effect on the construction of other businesses and services that rely on homeowners, like stores, gas stations, restaurants, medical offices and other light-commercial projects. This niche is big business for many distributors, reps and manufacturers.

WHERE RUBBER MEETS THE ROAD

Some conflicting economic signals and forecasts are making it more difficult to peg 2019's business conditions in the electrical market. The 340-plus distributor respondents to EW's survey for the 2019 Market Planning Guide expect industry sales to increase +6.1% next year to \$114.77 billion after a +5.1% increase in 2018. Our gut feel at EW is that an increase of just over 6% in this economy is about a point high. Our readers have done a great job of providing realistic forecasts over the years, but this year's number seems a smidge high to us, so use them with due consideration.

EW's 2019 forecast is +2.6% higher than the 2019 DISC Forecast for +3.5% growth provided by the electrical industry's leading economist, Herm Isenstein. Check out Herm's article in this issue for more details about his forecast for next year. The annual sales outlooks EW and DISC provide generally track more closely than what they look like for 2019. It will be interesting to see where the "real number" ends up.

One important economic indicator that continues to scream out "Full Speed Ahead," is electrical contractor employment, which has been averaging more than 900,000 over the past year, well over the 800,000-level that is the rule-of-thumb indicator of a healthy construction market. That's an important number for EW readers, because electrical contractors typically account for an estimated 50% of electrical distributors' sales, and each employee at an electrical contracting firm can generate \$66,313 in annual sales, according to EW's estimates.

The construction scene. Because electrical distributors get a giant chunk of the overall sales from servicing electrical contractors and other end users or buying influences in the nonresidential construction, EW's editors look for the forecasts from construction

If you are trying to map out your 2019 forecast right now, it's easy to get distracted by the noise in the general press that doesn't always have a heck of a lot to do with how the electrical industry operates.

For instance, at press-time headlines have been screaming about how declines in the stock market are battering 401Ks, even though Wall Street veterans have been expecting a moderate correction for some time and say a shakeout will drive unhealthy speculation from the market. And although the 3Q 2018 data for U.S. GDP says the national growth rate is sitting at a very healthy 3.55% (down from 3.82% in 2Q 2018), it's expected to drop to 2.64% in 4Q 2018, according to the Federal Reserve Bank of St. Louis. It may continue to decline as the impact of President Trump's tax wears off.

Electrical
Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK



industry economists to get their sense of where the market is headed. Two of the most reliable construction forecasters over the years have been Robert Murray, chief economist, Dodge Data and Analytics, and Kermit Baker, chief economist for the American Institute of Architects (AIA), Washington, DC, and publisher of AIA's Consensus Construction Forecast. Like the 2019 forecasts published by DISC and EW, the Dodge and Consensus Construction Forecasts have some daylight between them. AIA's forecast, an average of the forecasts of economists from Dodge, ConstructConnect, FMI, IHS Global Insight, Associated Builders & Contractors, Wells Fargo and Moody's Analytics, calls for +4% growth in total nonresidential construction, while Murray sees no growth in this important niche next year. Another interesting fact with

"2018 MIGHT HAVE LOOKED TO BE THE YEAR THAT THE INDUSTRY WOULD ENTER ANOTHER RECESSION. HOWEVER, WHEN POLLED AT THE BEGINNING OF THIS YEAR, THE AIA CONSENSUS CONSTRUCTION FORECAST PANEL INSTEAD SAW AN ACCELERATION IN ACTIVITY, PROJECTING +4% GROWTH IN 2018 AND A NEARLY EQUAL +3.9% IN 2019."

— Kermit Baker, chief economist, AIA

the AIA Consensus Forecast is that the seven economists presented forecasts ranging from Dodge's call for a flat market all the way up to FMI's expectations of +6.3% growth.

Back in July, Kermit Baker said in the release accompanying AIA's most recent consensus construction forecast, "Given that we're halfway through the seventh year of continuous growth for this notoriously cyclical industry, 2018 might have looked to be the year that the industry would enter another recession. However, when polled at the beginning of this year, the AIA Consensus Construction Forecast Panel instead saw an acceleration in activity, projecting +4% growth in 2018 and a nearly equal +3.9% in 2019.

"At the halfway point of the year, this panel is even more optimistic. Their forecasts have been marked up to +4.7% growth in spending for this year and an additional +4% in 2019. If these projections materialize, by the end of next year the industry will have seen nine years of consecutive growth, and total spending on nonresidential buildings will be +5% greater (ignoring inflationary adjustments) than the last market peak of 2008."

At the 2019 Dodge Construction Outlook in National Harbor, MD, Murray was not at all pessimistic about the fortunes of the construction market even though he is forecasting a no-growth scenario for total construction next year. His take is that the market is

"rounding the peak" of the current construction cycle, and said, "When the downturn ultimately comes, it won't be a replay of 2008... Fundamentals continue to be sound."

"Over the past three years, the expansion for the U.S. construction industry has shown deceleration in its rate of growth, a pattern that typically takes place as an expansion matures," he said in a Dodge press release. "After advancing 11% to 14% each year from 2012 through 2015, total construction starts climbed 7% in both 2016 and 2017, and a +3% increase is estimated for 2018.

"There are, of course, mounting headwinds affecting construction, namely rising interest rates and higher material costs, but for now these have been balanced by the stronger growth for the U.S. economy, some easing of bank lending standards, still healthy market fundamentals for commercial real estate, and greater state financing for school construction and enhanced federal funding for public works."

When giving his 2019 forecast at the 2019 Dodge Outlook for the overall economy, Cris deRitis, senior director, Economics, & head of Consumer Research for Moody's Analytics, said he sees a soft landing followed by a "garden variety" relatively short recession of about a year, possibly starting in 2Q 2020.

Hot markets. These national-level forecasts set the stage for the overall expectations at the 35,000-foot level for the U.S. economy, but you need to drill down to the local markets to see what's really happening on the street level. It's always a different story from region-to-region and market-to-market, but this year perhaps more than any other in recent memory, the differences between local trading areas seem particularly huge. For instance, the overall national expectations for the housing market are for some softening — unless you live in Florida; South Carolina's biggest metros; or in cities like Phoenix, Colorado's Front Range, Salt Lake City, Las Vegas, Reno, Dallas, Houston, Austin and San Antonio. Single-family construction is tracking at a double-digit rate over 2017 in these areas. Many of these markets are seeing a huge influx of new residents, while rural regions of the country like upstate New York, rural Pennsylvania and some high-tax areas like Connecticut are losing population.

And while the commercial construction scene has been healthy in dozens of metros across the United States, as you will see in the capsule regional summaries on the following pages, cities like Boston, New York, Charlotte, Washington, DC, Miami, Austin, Dallas, San Francisco, San Diego, San Jose and Seattle are racing far past other markets that don't have as strong of a technology base or aren't attracting residents because of a warmer climate or other desirable lifestyle amenities. These cities also seem to have a bigger share of some of the fastest-growing project types, including data centers, rail/mass transit, Amazon warehouses, airports and sports facilities.

**Electrical
Wholesaling**

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

SPONSORED BY



Electrical
Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

LARGEST PROJECTS UNDERWAY IN THE HOTTEST CONSTRUCTION SEGMENTS

Contract Value (\$ Millions)	Project	Location	Project Type	Source
6,800	Vancouver International Airport expansion	Vancouver, BC	Airport	www.constructiondive.com
5,600	Long Island Railroad - Multiple renovation projects	Long Island, NY	Rail	The Construction Index
4,000	Delta terminal at \$4 billion LaGuardia Airport renovation	New York, NY	Airport	www.ny.curbed.com
3,000	FAA Airport Improvement program, multiple airports	Nationwide, US	Airport	insideindianabusiness.com
3,000	Salt Lake City Airport renovation	Salt Lake City, UT	Airport	Salt Lake City Tribune
2,500	Destination CLT airport redevelopment program	Charlotte, NC	Airport	Charlotte Observer
2,100	Orlando International Airport South Terminal expansion	Orlando, FL	Airport	Orlando Sentinel
1,800	Denver International Airport renovation	Denver, CO	Airport	www.9news.com
1,500	Amtrak/NJ Transit Portal North Bridge Project	New Jersey, NJ	Rail	www.northjersey.com
1,400	Westside Purple Line Extension	Los Angeles, CA	Rail	www.construction.com
1,100	Green Line Extension	Somerville, MA	Rail	www.construction.com
1,000	Facebook Los Lunas data center expansion	Los Lunas, NM	Data center	www.abqjournal.com
1,000	Facebook data center- Expansion	Papillion, NE	Data Center	www.construction.com
750	Facebook Data Center (Project Cricket)	Huntsville AL	Warehouse/Logistics	Dodge Data & Analytics
600	Google Data Center (Clarksville TN)	Clarksville TN	Warehouse/Logistics	Dodge Data & Analytics
600	Data center	McClellan, CA	Data center	Dodge Data & Analytics
600	Google data center	Pryor, OK	Data center	www.construction.com
600	Google Data Center - Bridgeport (Project Mustang)	Stevenson AL	Warehouse/Logistics	Dodge Data & Analytics
477	San Francisco International Airport	San Francisco, CA	Airport	Dodge Data & Analytics
420	Seattle-Tacoma International Airport expansion	Seattle, WA	Airport	Dodge Data & Analytics
374	North Concourse terminal at Reagan National Airport	Arlington, VA	Airport	www.construction.com
350	Facebook Data Center Phase 1	New Albany, OH	Warehouse/Logistics	Dodge Data & Analytics
288	Sentinel Data Center (Phase 1)	Sterling VA	Warehouse/Logistics	Dodge Data & Analytics
280	Rail project at Phoenix Sky Harbor International Airport	Phoenix, AZ	Airport	www.construction.com
200	Data center	Ashburn, VA	Data center	www.construction.com
200	Warehouse complex	Edgerton, KS	Warehouse/Logistics	www.construction.com
181	Project Rose Fulfillment Ctr. (Amazon Warehouse)	Spokane, WA	Warehouse/Logistics	Dodge Data & Analytics
175	Amazon Fulfillment Center	Euclid, OH	Warehouse/Logistics	Dodge Data & Analytics
163	Atlanta's Hartsfield-Jackson International Airport modernization	Atlanta, GA	Airport	Dodge Data & Analytics
154	Station improvement project on the Long Island Railroad	New York, NY	Rail	www.construction.com
150	Amazon Fulfillment Distribution Center	Bessemer, AL	Warehouse/Logistics	Dodge Data & Analytics
150	Amazon distribution center	Birmingham, AL	Warehouse/Logistics	www.construction.com
150	Amazon Matrix warehouse fulfillment center	Burlington, NJ	Warehouse/Logistics	Dodge Data & Analytics
150	Project Hall Office/Warehouse facility	Tracy, CA	Warehouse/Logistics	Dodge Data & Analytics
150	Amazon Fulfillment Center Project Dylan	Tulsa, OK	Warehouse/Logistics	Dodge Data & Analytics
145	Data center	Mesa, AZ	Data center	www.construction.com
130	Amazon fulfillment center	Rialto, CA	Warehouse/Logistics	www.construction.com
125	United Parcel Service distribution centers	Salt Lake City, UT	Warehouse/Logistics	Dodge Data & Analytics
120	United Parcel Service distribution centers	Atlanta, GA	Warehouse/Logistics	Dodge Data & Analytics
111	Walmart distribution center	Bentonville, AR	Warehouse/Logistics	Dodge Data & Analytics
107	Warehouse complex	Fremont, CA	Warehouse/Logistics	www.construction.com
100	Port of Centralia Grocery Distribution Center	Centralia, WA	Warehouse/Logistics	Dodge Data & Analytics
100	Fontana Logistics Center	Fontana, CA	Warehouse/Logistics	Dodge Data & Analytics
100	FBI data center	Pocatello, ID	Data center	datacenterknowledge.com
NA	Green Line extension	Boston, MA	Rail	www.patch.com
NA	Charlotte Gateway Station	Charlotte, NC	Rail	Charlotte Business Journal
NA	Purple Line mass transit extension	Los Angeles, CA	Rail	www.la.curbed.com

HOW TO USE THE MARKET PLANNING GUIDE

The market planning data in this issue is divided into nine regions of the United States. For each region, you'll find sales forecasts for this year and next year, along with the three prior years' sales. In addition to the sales forecasts, prepared by EW's research department, you'll also find an economic snapshot of the region and employment statistics for the typical distributors' two largest customer groups — electrical contractors and manufacturing employees.

Methodology. Our forecasts are based upon responses to EW's annual Market Planning Guide (MPG) survey. Each year, the magazine asks electrical distributors for their previous year's final sales results, sales predictions for the current year, and predictions for the following year. It also asks respondents how sales for the first six months of the current year compared with the first six months of the previous year.

We mailed 5,744 (both by mail and via e-mail) and received more than 340 usable responses for a 6.1% response rate. Respondents reported a mean sales-per-employee number of \$640,285 for 2017, up from \$541,000 in 2016. Regional sales-per-employee numbers are provided on page 16. Be sure to check how your company's productivity compares with the national and regional averages when it comes to sales-per-employee.

A note on our national sales base number. The base sales number for our national sales forecast comes from the Census of Wholesale Trade that the Commerce Department sends out every five years. Data from the most recent survey in 2012 was finally available in 2015 for the category that most closely defines our electrical market — "NAICS: 423610 - Electrical apparatus and equipment, wiring supplies, and related equipment merchant wholesalers" (specifically "Merchant wholesalers, except manufacturers' sales branches and offices").

The U.S. Commerce Dept. has a very broad definition of an electrical distributor, and its most recent data shows 13,789 branch locations run by electrical distributors. EW's editors don't believe that number is accurate because it's more than double what EW's editors have been able to verify for what most industry execs would consider to be distributors of electrical supplies.

With such a huge branch count, the Census Dept. estimate for total industry sales isn't realistic either, and we worked with Herm Isenstein, president, DISC Corp., Orange, Conn., the electrical market's leading economist, to develop a base sales estimate for 2012 of \$86.5 billion. Electrical Wholesaling's sales estimates will use this base national sales number until the next Census of Wholesale Survey trade is published, most likely in 2020.

EW's editors will "bring forward" that number for an annual national sales forecast each year using the same survey methodology that Andrea Herbert, Electrical Wholesaling's late chief editor, first developed in the 1970s for the Market Planning Guide.



DEVELOPING SALES ESTIMATES

When developing any market forecast, gathering some basic data on the size and makeup of the market is the first step. Let's take a look at some of the ways you can crunch the numbers we've provided to tailor them to your business.

One of the most common uses of this resource is for developing a business plan, whether it be for internal use as your guide for next year or for a presentation to an investor or banker. You will need something that states the size of the local market, and these sales figures are a documented source you can use "as is."

This data will also be helpful in establishing a sales forecast for your company and your region, comparing nearby or far-flung markets with an eye to opening or closing a branch, and evaluating promising areas of new business. One question distributors should ask themselves — and suppliers will be asking — is: "Are our sales into the market at the level they should be?" Look at the estimate of the overall sales in your market in comparison with your company's sales.

Employment in major customer markets. In addition to sales forecasts, employment numbers make up a large part of the regional profiles. The number of people employed by a company or in an industry tends to rise and fall with the volume of business it's doing. Employment figures, therefore, act as a gauge to business prospects and conditions in end-user markets.

- Employee counts can help you compare the relative sizes of various end-user groups in your area.
- You can also compare the make-up of one market area to another, and consider new customer markets or ones that you could be serving better.
- If you track the employment figures for each market over time, you'll see broad economic trends unfolding in your market.
- You can also use these employment figures to make your own multipliers or you can use the national multipliers we've already calculated.

Multipliers. Each multiplier is a dollar figure that represents the average amount of electrical products distributors sell to each particular type of customer, on a per-employee basis or other "economic factor." (See Electrical Wholesaling's National Multipliers on slide 5). When used with the employment figures in the regional profiles, the multipliers help establish the amount of business electrical distributors could do with major customer groups in your area, and in total.

For instance, to find the number of electrical contractor employees in Addison, Ill., a city not detailed in the East North Central regional profile, you could contact the local Chamber of Commerce, a nearby union chapter, the state university, or the local library to track it down.

These multipliers come in handy if you want to approximate the amount of sales available from a particular account. For example, if a local manufacturer employs 300 people, by applying the multiplier of \$789 you would expect the facility to purchase about \$236,700 worth of electrical MRO products this year.

Using multipliers results in a dollar figure for market size that tells the level of business distributors in the area could do if every potential customer there bought a typical amount of product from them. It tends to be a larger number than actual distributor sales.

You can also use Electrical Wholesaling's multipliers to track sales through different types of customers over time. Let's do that for total U.S. sales to electrical contractors. Using Electrical Wholesaling's national multiplier of \$66,313 in sales for each electrical contractor employee and contractor employment through August of 939,767, that's roughly \$62.32 billion in sales.

Summary. All things considered, EW's editors see a green light for growth in the electrical wholesaling industry next year. It might not be the +6.1% growth that our optimistic survey respondents are forecasting for 2019, but it should be decent growth, if a bit slower than last year. There's some cause for concern as we head around the next bend into 2020, but depending on your region of the country and mix of business, 2019 should be a decent if not great year.

A GREAT RESOURCE FOR YOUR MARKET PLANNING

In addition to the analysis and data that we will continue to provide in *Electrical Wholesaling's* annual Market Planning Guide and at www.ewweb.com, be sure to check out a terrific resource for electrical market data available online 24/7 to subscribers to *Electrical Marketing* newsletter (www.electricalmarketing.com). We have a great special rate of \$95 for a one-year subscription. Subscribers get access to a unique package of online electrical market data not available anywhere else in the industry. In addition to keeping you current on industry news with its regular twice-a-month issues, *Electrical Marketing* subscribers get a wealth of regularly updated electrical market data that includes:

State & Metropolitan Statistical Area (MSA) Electrical Sales Potentials (Updated quarterly). *Electrical Marketing's* estimates for total electrical sales, as well as estimates specific to the electrical contractor and industrial markets — the two end-use electrical markets that account for more than 75% of all sales through full-line electrical distributors.

County-Level Sales Potentials (Updated twice per year). Allows you to drill down to the core electrical sales potential in the electrical contractor and industrial markets in more than 900 counties.

State-Level Electrical Product Sales Potential by Product Group (Updated annually). *EM's* estimates for state-level electrical sales potential are based on product mix data from more than 100 of the largest electrical distributors.

Local Electrical Market Indicators (Updated quarterly). Keep tabs on building permits, gross metropolitan product, population growth and employment trends in core market segments.

Local Construction Projects (Updated quarterly). A database of the largest construction projects in local markets across the U.S., with links to additional project information in news reports.

Quarterly U.S. Electrical Market Update. Available only to *Electrical Marketing* subscribers, these downloadable slides offer subscribers and their management teams quick updates on key market indicators & developing trends in the U.S. electrical market. Presentations available in a PDF format. Sponsorships for webinar versions of these forecasts are available.

Interested? You can start your annual subscription to *Electrical Marketing* by going to www.electricalmarketing.com and tapping on the "Subscribe" button, or by contacting Sonja Trent at 913 967-1641 / sonja.trent@informa.com.

Electrical
Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

SPONSORED BY



Electrical
Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

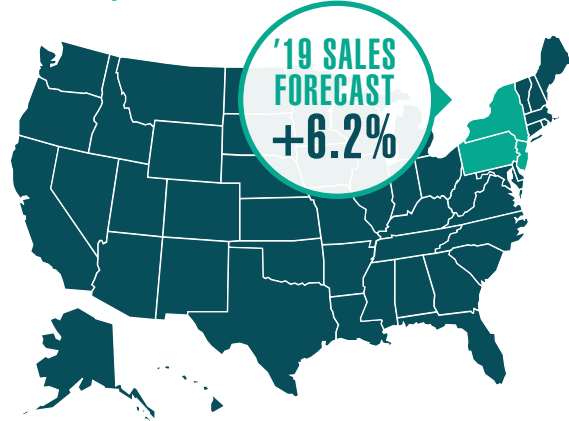
PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

MIDDLE ATLANTIC:

New Jersey, New York,
Pennsylvania

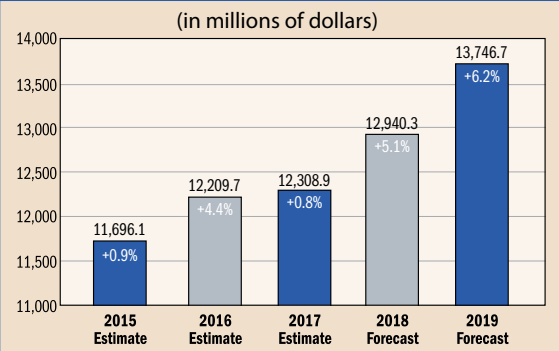


With the Big Apple in the midst of a historic construction crazy, it's easy to overlook some interesting projects in this region's two other large cities – Philadelphia and Pittsburg. The Steel City has a \$1.1 billion airport renovation and more than \$2 billion in hospital work on the drawing boards, while Philadelphia is planning the \$3.5 Schuylkill Yards mega-development and has a billion-dollar expansion

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
Middle Atlantic	2.93	3.57	4.03	2.37	3.23
New Jersey	3.2	2.2	3.8	2.2	2.7
New York	2.2	4.6	4.8	2.9	3.1
Pennsylvania	3.4	3.9	3.5	2	3.9

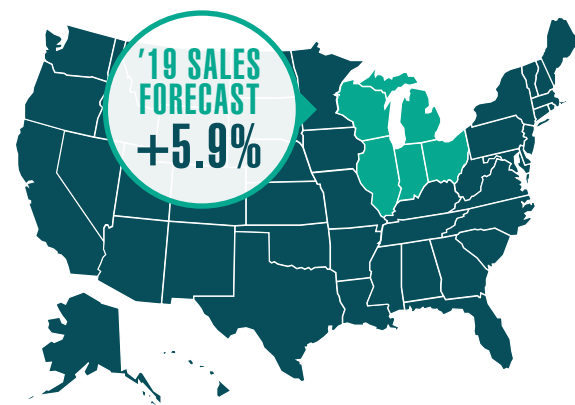
REGIONAL SALES TREND



of the University hospital underway. On Manhattan's West Side, the \$1.8 billion Spiral Office Town recently broke ground. The state of New York just announced plans for a \$16 billion retrofit of JFK Airport, and there's a \$1.4 billion renovation of Newark Airport's Terminal 1 underway now, too. Along with all this commercial construction is an enormous amount of multi-family building. The city has seen an 11% increase in multi-family projects through September to just under \$13 billion, according to Dodge Data & Analytics. That's almost quadruple the amount of multi-family work in Washington, DC, the #2 metro when ranked by multi-family housing activity.

EAST NORTH CENTRAL:

Illinois, Indiana, Michigan, Ohio,
Wisconsin

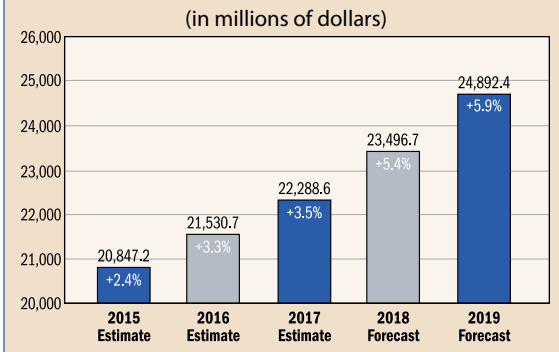


There's an intriguing mix of construction activity underway and being planned in a region long dominated by Chicago. The Windy City does have some impressive projects underway with the \$665

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
East North Central	2.9	4.3	3.7	3.0	3.5
Illinois	1.5	4.1	3.6	2.4	2.9
Indiana	3.7	4.8	2.3	3.5	4
Michigan	3.1	3.6	5.6	3.5	3.7
Ohio	2.6	5.4	2.7	2.1	4
Wisconsin	3.4	3.4	4.3	3.4	3.1

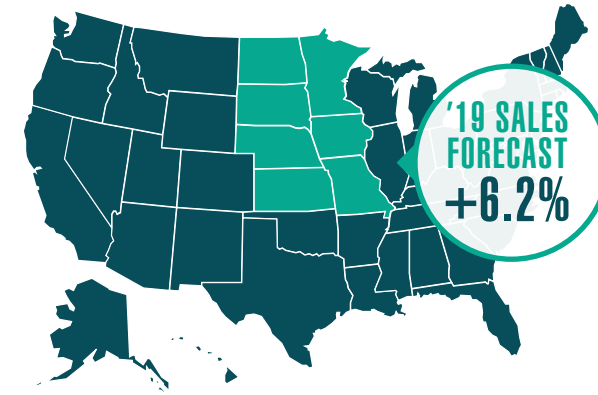
REGIONAL SALES TREND



million North Wacker Drive skyscraper and \$1 billion redevelopment of Cook County Hospital. It also has several billion-dollar projects being planned, including the \$2.5 billion North Branch project and the retrofit of Union Station. Elsewhere in the Upper Midwest, there's the University of Wisconsin's \$1.9 billion Capital Construction Program scheduled for 2019; the enormous Foxconn semiconductor plan south of Milwaukee; Milwaukee's \$137 million BMO Bank tower now underway and the recently announced Komatsu headquarters and factory; and the \$2 billion Planet Oasis Ohio Amusement Park scheduled to break ground in Sunbury, OH. Downtown Detroit has big plans for a major renaissance and the University of Indiana has a \$334 million hospital and academic building underway.

WEST NORTH CENTRAL:

Iowa, Kansas, Minnesota,
Missouri, Nebraska, North Dakota,
South Dakota

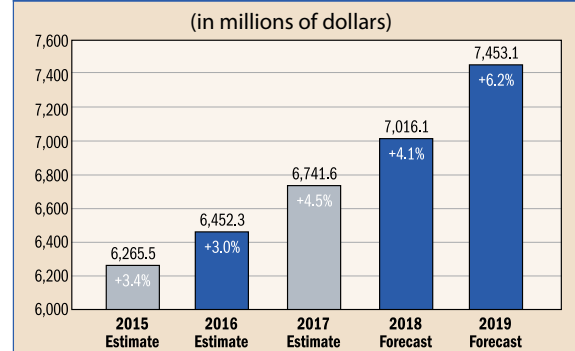


This region offers a unique mix of construction opportunities. Wind farms are big business in Iowa and Kansas right now, with at least six projects underway and several more on the drawing boards. The region's largest cities all have some large projects, too. Several light-rail projects

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
West North Central	3.5	4.5	2.1	1.6	2.8
Iowa	2.6	5.6	5.3	3.2	2.1
Kansas	1.8	3.4	2.2	2.1	1.9
Minnesota	3.8	4.5	2.7	3.8	3.7
Missouri	3.6	2.4	3.3	1.8	2.6
Nebraska	4.7	5.1	3.5	2.4	2.4
North Dakota	4.7	8.3	-5.5	-5.2	4.1
South Dakota	3.5	2.4	3.5	3	2.6

REGIONAL SALES TREND



SPONSORED BY



Electrical
Wholesaling

PAGE 2

EXECUTIVE
SUMMARY

PAGES 3

2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10

2019 MARKET
PLANNING GUIDE

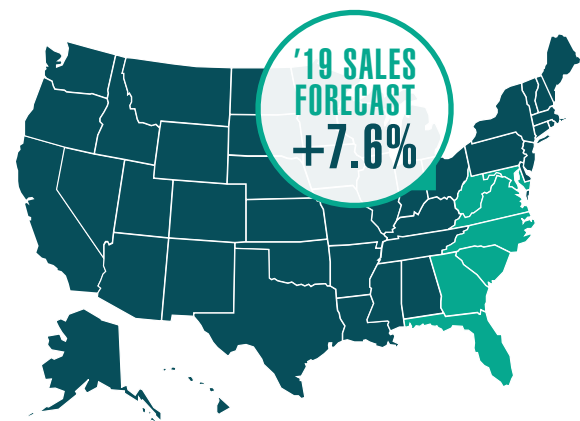
PAGES 11-14

NATIONAL
FACTBOOK

are under consideration in Minneapolis, and across the Mississippi River the folk in St. Paul are planning a large-scale riverfront redevelopment project and are waiting for a \$150 million soccer stadium to break ground. The Omaha, NE-Council Bluffs, IA, area has become a hotbed for data centers and Facebook has another big facility underway there. Omaha Public Schools are recently awarded a \$410 million contract. Kansas City, MO, has a \$220 million Cerner project and \$210 million Children's Mercy hospital expansion underway and is waiting for final approval for its \$1 billion airport project.

SOUTH ATLANTIC:

Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia



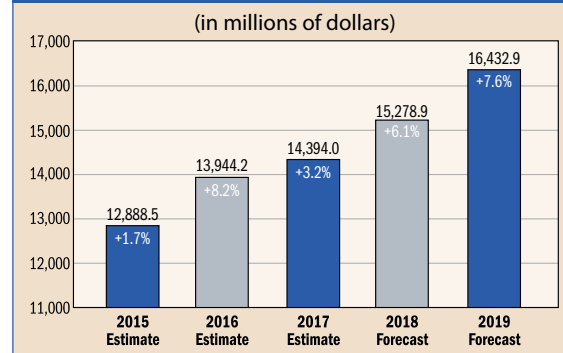
When the economy is solid, this region is home to some of the fastest-growing metros in the entire country, and 2019 looks to be another year of good growth for market areas like Washington, DC;



STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
South Atlantic	2.6	4.5	4.5	3.2	4.0
Delaware	0.8	8.5	5.4	1.5	3.7
District of Columbia	2	4	4.5	3.4	4.1
Florida	4	5	6.8	4.4	4
Georgia	3.5	5.5	5.5	5.3	4.1
Maryland	2.1	3.4	4	4.3	3.4
North Carolina	3.8	4.5	5.6	3.2	3.8
South Carolina	4	5.3	6.1	4	3.9
Virginia	1.8	2.2	4.4	2.4	3.6
West Virginia	1.6	2.3	-1.6	0	5.8

REGIONAL SALES TREND



Raleigh, and Charlotte, NC; Atlanta, GA; Ft. Myers-Cape Coral, Miami, Orlando and Tampa, FL. *EW's* editors counted more than 40 construction projects valued at \$100 million or more in this region either underway or being planned. Some of the largest include the \$2.5 billion redevelopment project at Charlotte's airport; the Miami World Center development; and a \$500 million mixed-use project in downtown Tampa that's just in the start of several billion dollars' worth of construction there.

EAST SOUTH CENTRAL:

Alabama, Kentucky, Mississippi, Tennessee

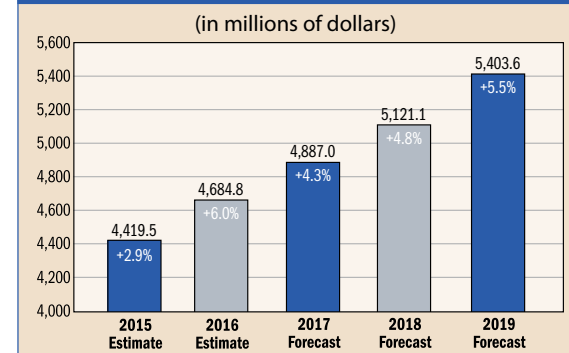


The mid-South has more projects underway or planned than at any time in recent memory. While perennial national growth all-starts like Nashville, TN, continue their surge in residential and commercial development there are some new industrial projects of note now underway throughout the region. A \$6.5 billion uranium processing facility is underway

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
East South Central	2.6	2.3	3.4	3.0	3.4
Alabama	2.4	1.9	3	2.2	3.3
Kentucky	2.3	2.6	2.7	2.5	3.6
Mississippi	2.1	1	1.6	2.7	2.5
Tennessee	3.5	3.7	6.2	4.7	4.0

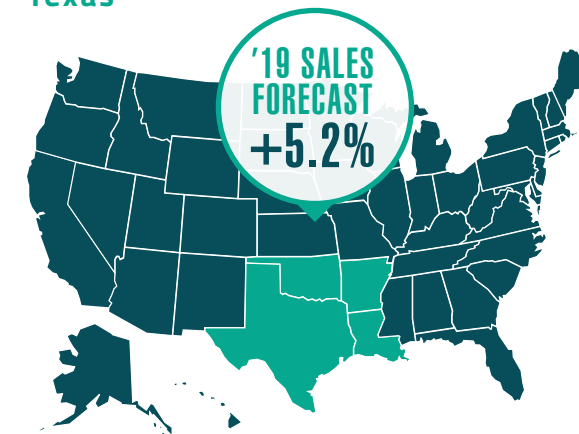
REGIONAL SALES TREND



in Oak Ridge, TN, and Braidy Industries recently broke ground on a \$1.5 billion aluminum rolling mill in Ashland, KY, and Nucor is planning a \$650 million expansion of its steel plants in Ghent, KY. Two data centers are either planned or underway, too – a \$600 million Google data center in Jackson County, AL, and a \$650 million data center in Huntsville, AL, by Starbelt. There's also \$1.1 billion in construction underway on the University of Tennessee campus in Knoxville; plans for a \$275 soccer stadium in Nashville; and Hyundai's planned \$388 million auto project in Montgomery, AL.

WEST SOUTH CENTRAL:

Arkansas, Louisiana, Oklahoma, Texas



Texas always dominates this region. The state has a huge impact the nation's oil & gas industry, with its oil, gas and petrochemical processing hub in Houston and the midland-Odessa region. But the Lonestar State is also home

SPONSORED BY



**Electrical
Wholesaling**

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

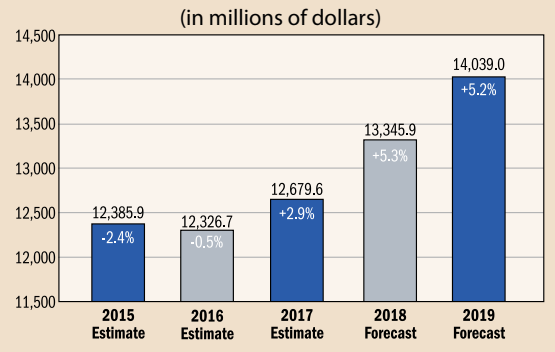
PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
West South Central	3.9	4.7	-1.1	-1.2	4.2
Arkansas	4.8	3.1	1	1.8	3
Louisiana	-2.8	3.9	-0.7	-1.8	3.6
Oklahoma	6.7	6.8	-4.5	-4.3	4.2
Texas	6.9	5	-0.1	-0.6	5.9

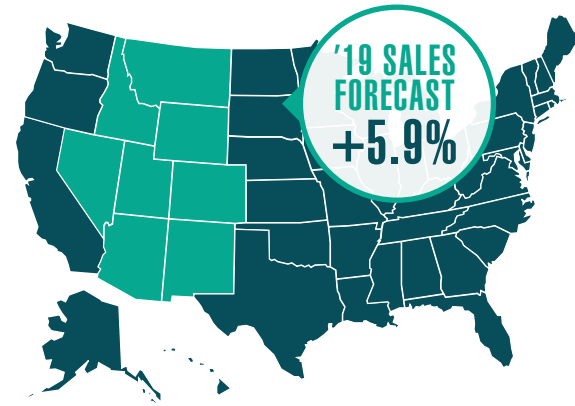
REGIONAL SALES TREND



to more residential construction than anywhere else, with its four largest metros – Austin, Dallas, Houston, and San Antonio – together accounting for 62,000 building permits through July. The only negative we could find in the Texas construction scene right now is that the Dallas and Houston metros had high office vacancy rates. Along with several billion-dollar petrochemical plants along the Gulf, Louisiana has a Four Seasons hotel nearing ground-breaking in New Orleans. Oklahoma has a nice mix of projects in the pipeline with a \$600 million Google data center in Pryor, OK; a \$180 million paper factory recently breaking ground in Inola, OK; and a \$300 million Omni Hotel and convention center and \$142 million Mercy Oklahoma Heart Hospital in Oklahoma City, OK.

MOUNTAIN:

Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

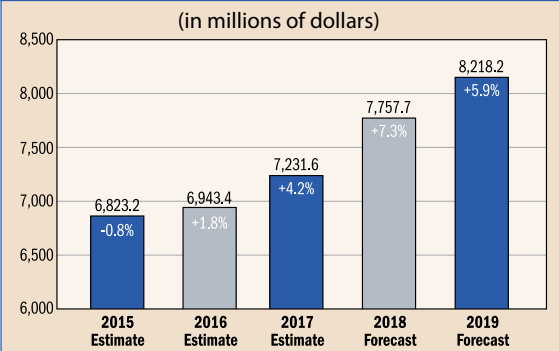


This region has a tremendous amount of building permits that homebuilders have pulled through July. As a region, the year-to-date rate of growth is in the double-digits – twice that of most

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
Mountain	2.9	4.2	2.5	2.2	5.0
Arizona	2.2	3.9	4.4	3.8	5.1
Colorado	5.1	6.5	3.3	2.6	5.9
Idaho	4.7	4	3.7	4.5	4.8
Montana	2.1	4.3	2.4	0.6	3.5
Nevada	2.2	3.8	6.8	4.3	5.5
New Mexico	0.8	4.1	-1.7	0.3	4.1
Utah	4.1	5.9	6	5.3	5.2
Wyoming	1.9	1.3	-4.9	-3.9	6.2

REGIONAL SALES TREND



other regions of the U.S. Twelve metros with at least 1,000 building permits so far this year are showing double-digit year-to-date growth over 2017, and together they account for 9% of all single-family U.S. building permits. These metros are Phoenix, Tucson, Colorado Springs, Denver, and Greeley, CO, Boise, Albuquerque, Las Vegas, Reno, and Ogden, Provo and Salt Lake, UT. But the action is not all in the residential market. Denver and Phoenix have big airport jobs underway; Las Vegas is expanding these different convention centers; and a billion-dollar natural gas processing facility is underway in Pierce, CO.

PACIFIC:

Alaska, California, Hawaii, Oregon, Washington

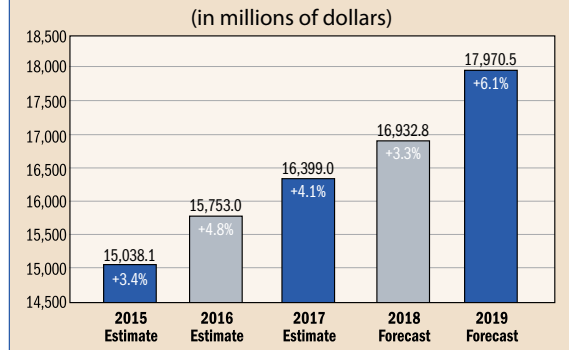


At least 26 projects valued at \$100 million more underway and at least two dozen more of that size in the planning or approval stage. The mega-projects underway valued at more than \$1 billion

STATE GDP RATE OF CHANGE: 2012-2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
United States	3.3	4.4	4	2.8	4.1
Pacific	1.9	2.9	3.1	3.0	4.7
Alaska	-1.8	-2.7	-9.9	-3.6	4.4
California	4.3	6.1	6.4	4.4	4.9
Hawaii	2.9	3.2	6.3	3.7	3.8
Oregon	-0.2	2.8	6.8	5.1	4
Washington	4.3	5.3	6.1	5.2	6.2

REGIONAL SALES TREND



include the Westfield Valley Fair shopping mall in San Jose, CA; the \$2 billion redevelopment of San Francisco's Pier 70; a billion-dollar construction project at the University of Washington; the \$1.5 Riverside district redevelopment job in Vancouver, WA; and the Los Angeles' \$1.4 billion mass-transit project. Another big project underway is the \$764 million expansion of the Washington State Convention Center in Seattle, WA. As the home to tech hubs in Seattle, Portland, San Francisco, San Jose and San Diego, this region seems to have a constant flow of construction to service expansion in the computer, semiconductor, social media and biotech industries, and this region would appear to be well positioned for new and the retrofit construction to service this niche for years to come. ●



NATIONAL FACTBOOK

The economic indicators that measure the electrical market's economic fortunes are more of a mixed bag than in the past few years, but 2019 should provide enough growth to keep most folks happy.



While no one is talking about a dramatic downturn in 2019, *EW's* editors have spotted several economic indicators flashing yellow for caution as we move into the new year. It seems that for every positive forecast or economic indicator, there's an equally prominent concern.

Our Market Planning Guide's 2019 National Forecast came in at a healthy +6.1%, and the folks with whom we spoke at the recent NAED Eastern thought that number was entirely possible. But Herm Isenstein, president of DISC Corp., Orange, CT, has penciled in a more conservative +3.5% forecast for next year. In most years there isn't that much of a variance between the EW and DISC forecasts.

The Consensus Construction Forecast published in July by the American Institute of Architecture (AIA), for 2019 nonresidential construction called for steady +4% growth, and Dodge Data and Analytics, one of the seven construction forecast outfits included in the Consensus Construction Forecast, was calling for +3.2% growth next year. But by late October, Bob Murray, VP and chief economist, said the current construction cycle is "rounding the peak" and that he expected 0% growth for non-residential construction in 2019.

The National Association of Home Builders (NAHB) says single-family housing will grow +3.8% in 2019. But housing affordability is an issue in many markets, driven by the hikes in interest rates and the hockey-stick growth in housing prices in many metros.

To be sure, none of these forecasts paints a totally bleak economic picture for next year, and no one expects anything near a recession until 2020 at the very earliest. Along with concerns mentioned above, folks are worrying about tariffs; the ballooning federal debt; the rising costs of basic construction materials like lumber, steel, copper and fuel oil; lack of federal focus on infrastructure; and the uncertain state of many global markets.

However, as you will see in the following pages there are also some reasons for optimism. Electrical contractor employment continues to maintain a historically high pace over the 900,000-employee level — an important consideration because about 50% of all electrical products are sold to this core customer group. Another positive sign for the construction market is the AIA's Architecture Billings Index (ABI), which measures the level of inquiry and billing activity at architecture firms and is a dependable leading indicator. It's in solid growth territory.

In the industrial market, despite concerns about tariffs, manufacturing employment is solid and the closely watched Purchasing Managers Index published monthly by the Institute for Supply Management, appears to be firmly entrenched in growth territory.

While a little healthy paranoia about some of the more negative market indicators may be in order, overall, electrical distributors, reps and manufacturers should be able to squeeze out another year of steady if not exciting growth in 2019.

Electrical Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

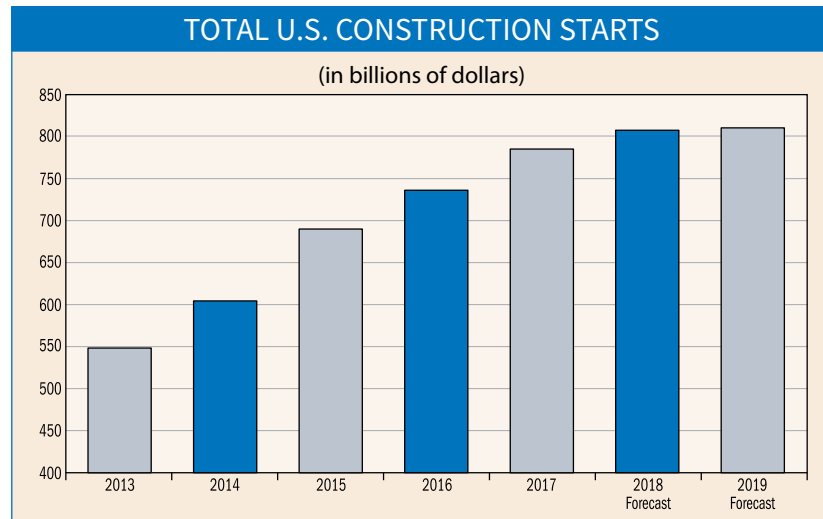
SPONSORED BY



TOTAL U.S. CONSTRUCTION STARTS

Dodge Data & Analytics

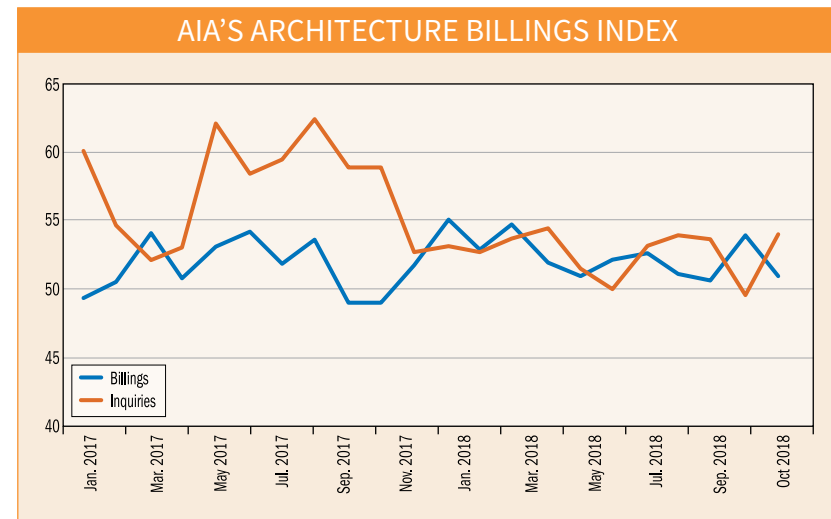
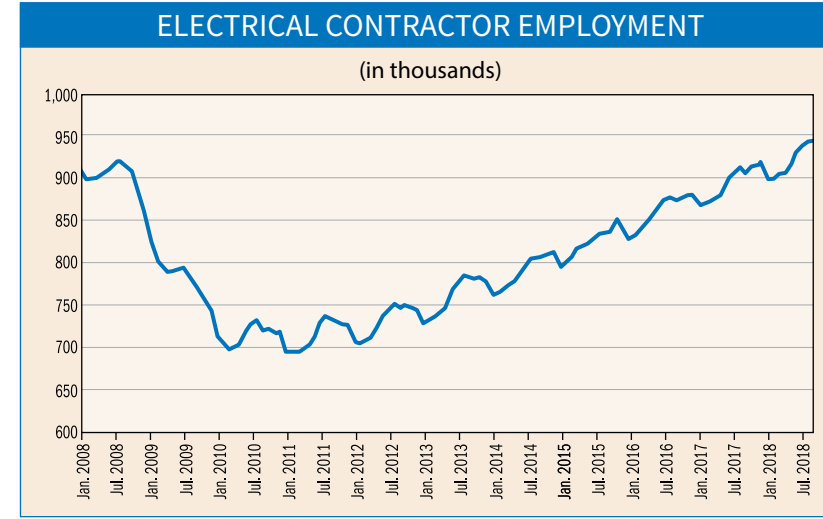
The construction market is slowing down after several years of solid growth. After seeing a meager +3% increase in 2018, Dodge Data & Analytics is forecasting no growth for 2019. Robert Murray, Dodge's V.P. of economic affairs and chief economist, says declines in the Commercial Buildings (-3%) and Multi-Family Housing (-6%) segments and no 2019 growth in the Single-Family Housing segment will tamp down growth in the overall construction market next year. Dodge says Institutional Construction will buck the trend, with +3% growth.



ELECTRICAL CONTRACTOR EMPLOYMENT

U.S. Bureau of Labor Statistics

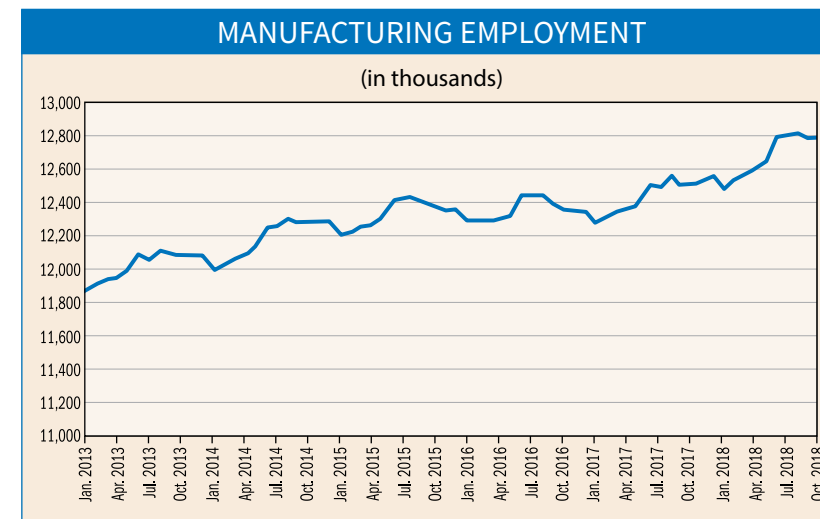
This is another one of the more bullish indicators that *EW's* editors track. Electrical contractor employment has spent 15 of the last 16 months over the historically high level of 900,000, and the hiring trend has accelerated over the second half of 2018. With contractors often accounting for 50% or more of a distributor's business, any shift in this indicator can dramatically affect sales. Each contractor employee accounts for \$66,313 in sales potential, so it's an important indicator to watch in your local market.



ARCHITECTURE BILLING INDEX (ABI)
American Institute of Architects (AIA)

With both inquiries and billings at architectural firms hovering above the 50-point line indicating growth, the ABI looks solid going into 2019 and is one of the more bullish construction indicators.

It provides one of the best leading indicators in the construction market because it measures business at architectural firms when projects are still on the drawing boards. AIA says this index reflects the approximate nine- to twelve-month lead time between architectural billings and construction spending.



MANUFACTURING EMPLOYMENT
U.S. Bureau of Labor Statistics (BLS)

After a sluggish 2017, manufacturing employment picked up speed in 2018, and its three-month moving average has been running at +2% year-over-year since May 2018. It's an important

number to watch both nationally and in your local markets, because each employee at a factory can represent on average \$789 in MRO business, \$825 in OEM business, and \$108 in factory automation sales, according to *Electrical Wholesaling's* 2019 Market Planning Guide.

Electrical Wholesaling

PAGE 2
EXECUTIVE SUMMARY

PAGES 3
2019: WILL THE ROAD AHEAD TAKE A TURN?

PAGES 4-10
2019 MARKET PLANNING GUIDE

PAGES 11-14
NATIONAL FACTBOOK

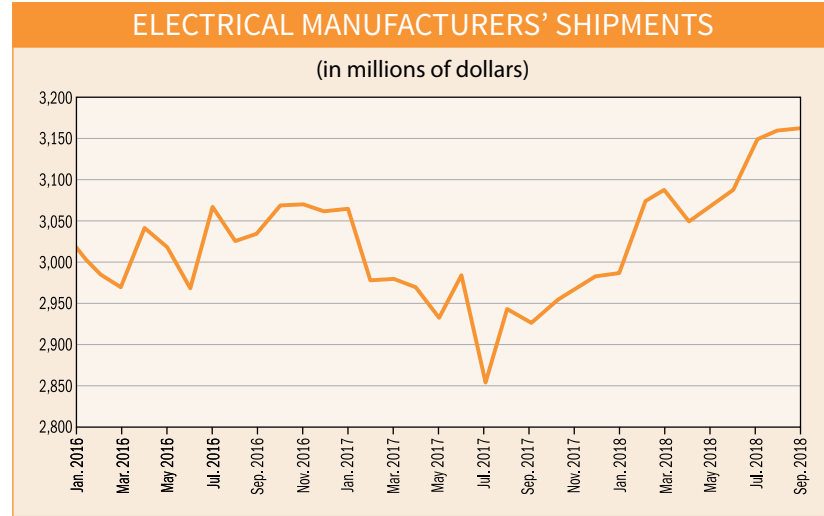
SPONSORED BY



**ELECTRICAL
MANUFACTURERS'
SHIPMENTS**

**U.S. Department of
Commerce**

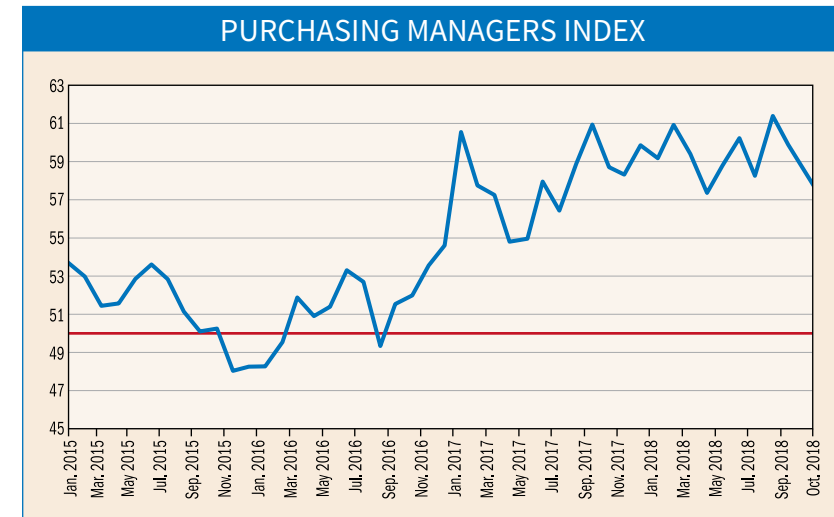
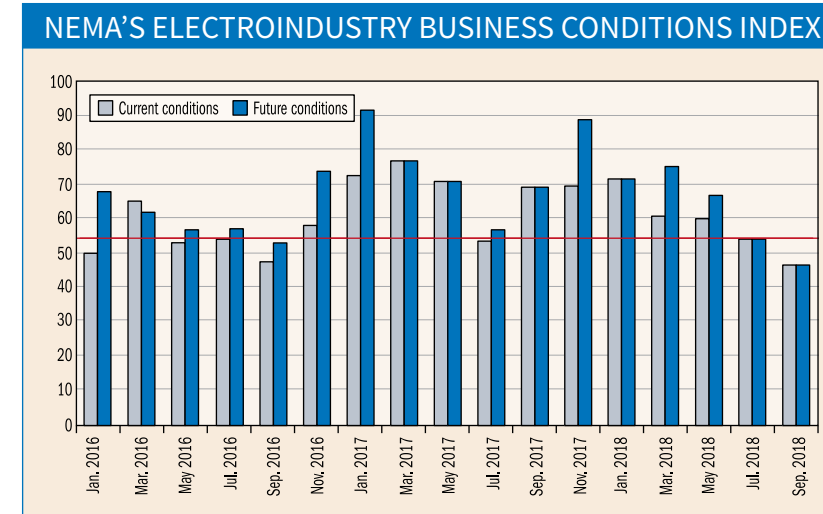
After monthly declines in 35 of 36 months since March 2015, the threemonth moving average for electrical manufacturers' shipments turned positive in March and has logged some solid year-over-year increases. The long period of declines in shipments puzzled EW's editors, because so many other indicators were positive during this run. With concerns over the impact of tariffs on many electrical products, this will be an important indicator to watch over the next few months.



**ELECTROINDUSTRY
BUSINESS
CONDITIONS
INDEX (EBCI)**

**National Electrical
Manufacturers
Association (NEMA)**

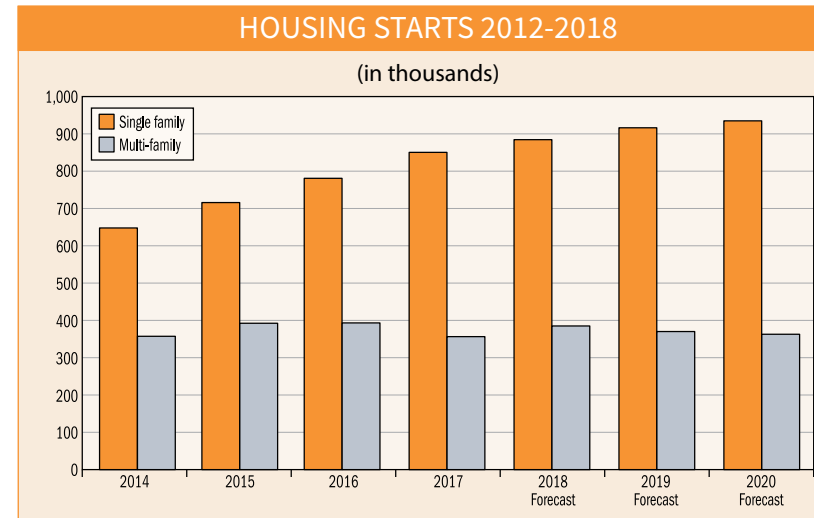
As a monthly survey of senior executive members of the National Electrical Manufacturers Association, the EBCI is a good read on what electrical manufacturers think about current and future market conditions in the electrical business. Any reading above 50 points toward a growth environment, but the EBCI started to slip into contraction territory in late summer after a very strong run over the past two years. Tariffs are a concern for EBCI respondents.



**PURCHASING
MANAGERS
INDEX (PMI)
Institute for Supply
Management**

The PMI isn't picking up on any concerns in the industrial purchasing community for business in 2019 and this indicator has remained in growth territory for more than

two years. Any reading at 50 points or over indicates a growth environment, and this indicator hasn't spent more than a month below 50 points since 1Q 2016. However, some purchasing managers mentioned concerns over tariffs, inflation and the related higher cost for base components and raw materials.



**2018-2019 HOUSING
FORECAST
National Association
of Home Builders
(NAHB)**

Although NAHB is forecasting a +3.8% increase for single-family housing next year and a +1.7% increase in 2020, it sees a decline of -3.7% and -0.6% for multi-family starts,

respectively. Of more concern are some key drivers in the housing market, including a decline in affordability, rising interest rates, and an increase in the inventory of homes for sale. While the residential market typically accounts for 15% to 20% of electrical sales, it has a major impact on many parts of the all-important commercial building segment.

**Electrical
Wholesaling**

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK

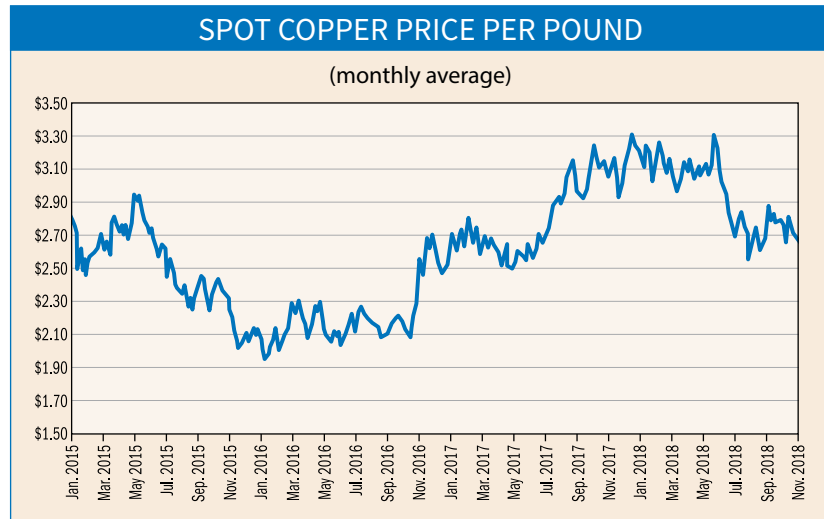
SPONSORED BY



COPPER PRICES

www.macrotrends.net

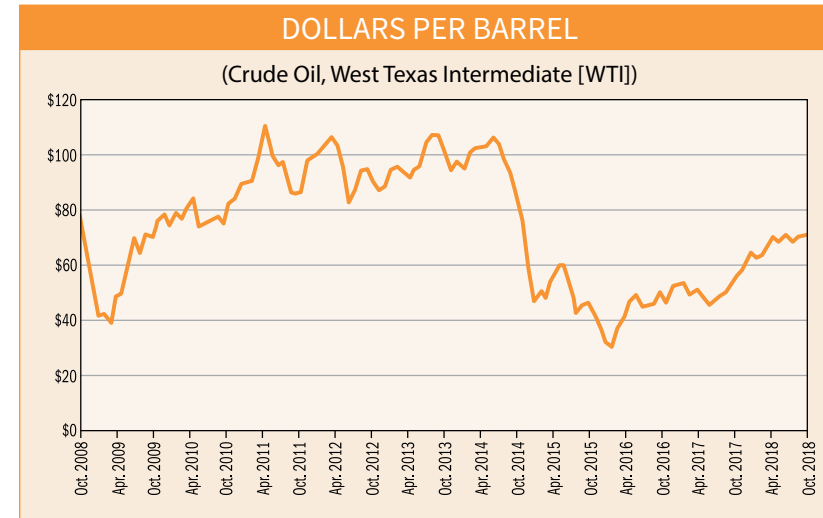
After sitting above \$3 per pound from Aug. 2017 until early June 2018, copper prices were down -16% at press-time. The wild swings in copper prices and other base metals over the past year has confounded experts in the metals market, and few are willing to hazard any guesses on where they might be headed in 2019. Noted metals analyst John Gross, publisher of *The Copper Journal* and a frequent contributor to www.ewweb.com, believes the bumpy ride with copper prices will continue in the coming months.



DOLLARS PER BARREL

(West Texas Intermediate Crude)

Federal Reserve of St. Louis Oil price increased steadily during 2018, and in mid-November were just over \$70 per barrel. That's a long ways from the dip below \$30 a barrel in late 2015/

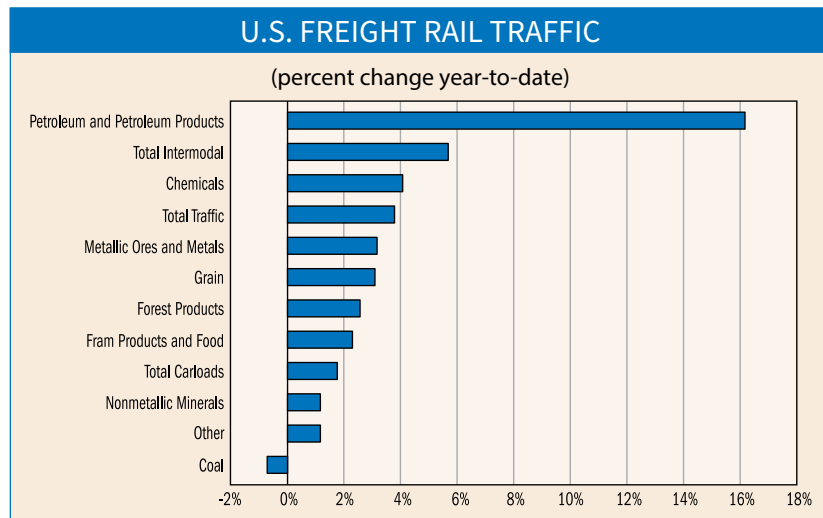


early 2016, and what now seems like the astronomical prices of \$90 to \$100 per barrel days from 2011-2014, or that dramatic spike to \$140 in 2Q 2008. The federal government's Energy Information Administration (EIA) EIA expects West Texas Intermediate (WTI) crude oil prices to average \$64.85 next year.

RAIL FREIGHT CARLOADS

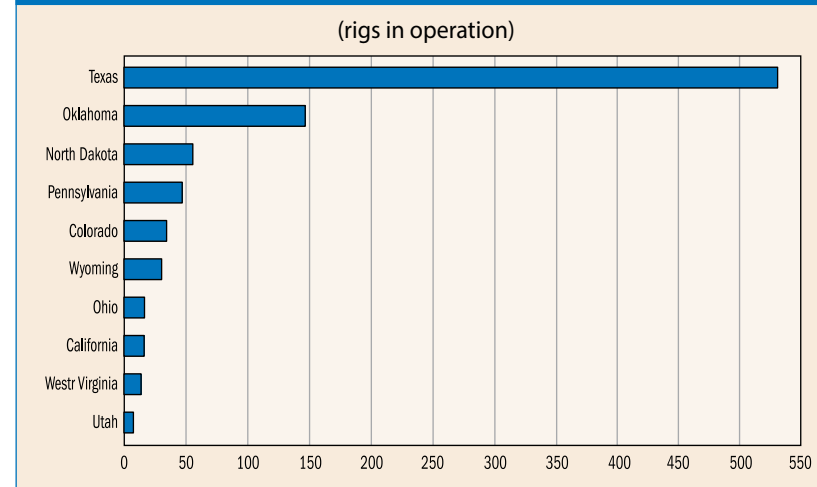
American Association of Railroads (AAR)

While the year-to-date increase in the amount of freight the nation's railroads are hauling was only +1.8% through the second week of November, according to data from the American Association of Railroads (www.aar.org),



some categories are doing far better, including Petroleum & Petroleum Products, which are up +16.6%. Economists like to look at how much freight U.S. railroads are carrying because it's a good indicator of what's being produced at factories, farms, lumber mills, oil fields and other core industries.

BAKER-HUGHES OIL RIG COUNT



BAKER-HUGHES RIG COUNT

Baker-Hughes/GE

When it comes to oil field production, West Texas' Permian (493 rigs) and Eagle Ford Basins (79 rigs) are leading the way and individually have more rigs operating than any state except for Oklahoma. On a state-by-state basis,

according to the Baker-Hughes Rig Count, Texas had 533 of the 1,000-plus U.S. rigs in operation at press-time, and Oklahoma was a distant second with 146 rigs. North Dakota (55 rigs); Pennsylvania (46 rigs); and Colorado (34 rigs) make up the rest of the Top 5. ●

Electrical Wholesaling

PAGE 2
EXECUTIVE SUMMARY

PAGES 3
2019: WILL THE ROAD AHEAD TAKE A TURN?

PAGES 4-10
2019 MARKET PLANNING GUIDE

PAGES 11-14
NATIONAL FACTBOOK



NOT JUST TOUGH. CHAMPION FIBERGLASS CONDUIT TOUGH.

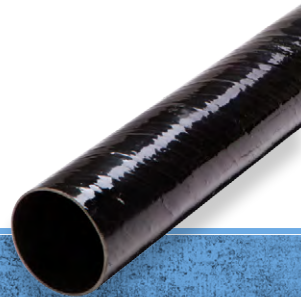
**Got a challenging cabling environment?
There's a Champion Fiberglass electrical conduit for that.**

You can expect more from Champion Fiberglass (RTRC) electrical conduit. For 30 years, we've been challenging ourselves to design and deliver products that will stand up to the harshest environments. Get a Champion on your side – and conduit products that can:

COMBAT CORROSION.

Champion Duct® RTRC Conduit

- Easy installation
- Excellent impact resistance
- Superior corrosion resistance



FIGHT FIRE.

Champion Flame Shield® Fiberglass Phenolic Conduit

- Zero-smoke, zero-halogen solution
- Two-hour fire rated (up to 1850°F)



STOP BULLETS.

Champion Haz Duct® XW Type Conduit

- Designed to handle hazardous environments
- Class I, Division 2 rated



How does Champion Fiberglass perform in tough environments?

Visit championfiberglass.com/compare to make your own comparison.



**CHAMPION FIBERGLASS CONDUIT.
LEADING WITH INNOVATION.**

Visit www.championfiberglass.com.

RESOURCES

- Champion Fiberglass Website, <https://championfiberglass.com/>
- FAQs, <https://championfiberglass.com/resources/faqs/>
- Conduit Calculator, Compare material and installation costs using this rigid conduit calculator tool, <https://championfiberglass.com/resources/conduit-calculator/>
- Data Sheets & Specifications, <https://championfiberglass.com/resources/data-sheets-and-specifications/>
- Resources, overview of resources section, <https://championfiberglass.com/resources/>

ABOUT CHAMPION FIBERGLASS

Champion Fiberglass is the electroindustry's answer to heavy, costly conduit. Engineers across industries and applications are increasingly specifying this innovative, cost-efficient epoxy fiberglass conduit. Champion Fiberglass (RTRC) offers all the strength and durability represented by other in-market solutions while also featuring a lower material cost and a lighter weight, contributing to considerable savings. The Champion Fiberglass facility is the most advanced conduit manufacturing facility in the United States, delivering a range of leading-edge products that consistently contribute to project savings.



Electrical Wholesaling

PAGE 2
EXECUTIVE
SUMMARY

PAGES 3
2019: WILL THE
ROAD AHEAD TAKE
A TURN?

PAGES 4-10
2019 MARKET
PLANNING GUIDE

PAGES 11-14
NATIONAL
FACTBOOK