

**Q3**  
2018

USG CORPORATION + U.S. CHAMBER OF COMMERCE

# Commercial Construction Index

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**DODGE** DATA & ANALYTICS

## THE USG CORPORATION + U.S. CHAMBER OF COMMERCE COMMERCIAL CONSTRUCTION INDEX



**Thomas J. Donohue**  
President and CEO  
U.S. Chamber of  
Commerce

Each quarter, USG Corporation and the U.S. Chamber of Commerce survey contractors from across the country to glean insights from the trends they believe are shaping the future of commercial construction. Findings from the Q3 Commercial Construction Index (CCI) show contractors are optimistic about the current and future outlook of the industry and believe the U.S. construction pipeline is healthy.

In fact, the Q3 composite score rose two points quarter-over-quarter on the strength of the largest backlog levels since the survey's inception. However, we know contractors continue to feel pinched by a tight labor market and are challenged with finding enough workers. While 56 percent say they expect to hire more workers in the next six months, the third quarter marks the sixth straight quarter that contractors report concern over the availability and skill level of workers.

This quarter, we heard that the scarce talent pool is affecting more than schedule performance and jobsite efficiency — 80 percent of contractors agree that the skilled labor shortage also impacts jobsite safety.



**Jennifer F. Scanlon**  
President and CEO  
USG Corporation

To further explore the issue of safety, we asked contractors about their biggest safety concerns and the strategies they implement to foster a safe work environment. In addition to the skilled labor shortage, contractors say safety risks are compounded by shortened construction schedules, an aging workforce and substance abuse. The most effective strategies that contractors believe address safety concerns due to workforce shortages include an improved safety culture and more leadership training.

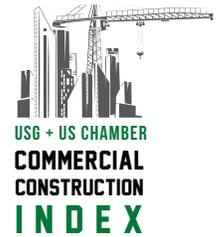
As the heart of the American economy, commercial construction underpins important infrastructure for the schools, hospitals and businesses in our communities. Contractors emerged optimistic from the first half of the year, but we know there are real business and workforce challenges. With record-high backlog levels and enduring labor challenges, now, more than ever, safety should be a priority.

The Commercial Construction Index provides valuable insights into how we can work together to solve for some of the industry's greatest challenges. We heard in previous quarters that jobsite productivity, offsite construction methods, sustainable building and now strong safety programs, have the potential to transform the way we work. In an industry that contributes more than \$700 billion to the U.S. economy, we all play a role in ensuring the health and advancement of commercial construction.

Sincerely,



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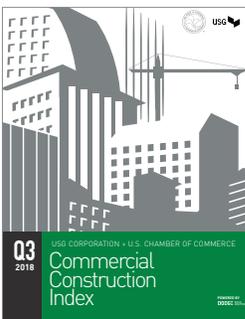
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The USG Corporation + U.S. Chamber of Commerce Commercial Construction Index (CCI) is a quarterly economic index designed to gauge the outlook for and resulting confidence in the commercial construction industry. Recognizing a need to highlight the important contributions of this sector to the nation's economy, USG Corporation and the U.S. Chamber of Commerce partnered to produce this first-of-its-kind index. Each quarter, contractors across the country are surveyed in order to better understand their levels of confidence in the industry and top-of-mind concerns.

## CONTRACTORS REPORT HIGHEST LEVELS OF BACKLOG SINCE Q2 2017 AND REMAIN OPTIMISTIC ABOUT THE CONSTRUCTION MARKET; HOWEVER, CONCERNS OVER WORKFORCE AND MATERIALS PRICES PERSIST.

### OVERVIEW

Contractors in the U.S. commercial construction industry report overall optimism about the construction market in Q3 2018. This comes despite contractors' ongoing challenges with skilled workforce availability and tariff-related concerns. The score increase (at right) is likely driven by positive changes in backlog figures since Q2 2018.

### KEY DRIVERS OF CONFIDENCE

The drivers used to calculate the USG Corporation and U.S. Chamber of Commerce Commercial Construction Index [CCI] include backlog levels, new business outlook and revenue expectations. In Q3 2018, the ratio of current to average ideal backlog sits at its strongest level since Q2 2017 (81), a significant factor behind the two-point bump in the composite Q3 CCI score. In addition, optimism about new business (74) is nearly the same as in Q2.

Despite high volumes of current and expected work, contractors' revenue expectations for the next year are slightly down. This may be due to concerns around issues like workforce availability and material prices. *See Drivers of Confidence on pages 4–6.*

### QUARTERLY SPOTLIGHT

This quarter's spotlight focuses on jobsite safety, a perennially critical factor in the industry. The skilled labor shortage has been consistently identified as a major issue facing the industry, but is now reported by 80% of contractors to be impacting safety. Over half of contractors consider a lack of skilled workers the number one factor increasing jobsite safety risks, even more than issues like shorter



construction schedules or substance abuse. According to contractors, the most effective strategies to address safety concerns include emphasizing a project-specific safety climate and reinforcing what the industry defines as a firm's safety culture, informing all practices at the organizational level.

The report also sheds light on the degree to which contractors possess safety concerns due to substance use, particularly opioids. Although 71% of contractors are concerned about opioid use, only half of those surveyed have a strategy to deal with this challenge. *See Quarterly Spotlight on pages 7–11.*

### MARKET TRENDS

Contractors in Q3 2018 are more concerned about the impact of material price fluctuations on their businesses than in Q2 2018, although specific concerns about steel have moderated slightly since last quarter. While worker availability and skill levels remain a major challenge, all other key market trends, including spending on equipment, are still positive. *See Market Trends on pages 12–17.*

## KEY DRIVERS OF CONTRACTOR CONFIDENCE

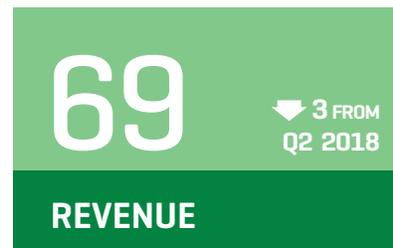
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The ratio between actual [10.3 months] and stated ideal [12.7 months] backlog is 81, the highest since the Index began tracking this data in Q2 2017.



Contractors still have high confidence in the market's ability to provide new business opportunities in the next 12 months, within one point of last quarter.



Most contractors believe they will see revenue growth in the next 12 months, but fewer report an increase in this quarter compared with Q2.

## ADDITIONAL MARKET TRENDS

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### HIRING

More than half [56%] of contractors want to employ more workers in the next six months, but are challenged by labor availability and cost. *See page 12 for more details.*



### SKILL LEVEL

More than half [55%] of contractors are now highly concerned about the skill levels of the workforce, a notable increase from Q2 [50%]. *See page 14 for more details.*



### FINANCING

Two-thirds [67%] believe owner access to financing will get easier or remain the same in the next six months, a drop of three points from Q2. *See page 15 for more details.*



### TOOLS & EQUIPMENT

More than half [55%] of contractors expect to spend more on tools and equipment, demonstrating confidence in the growth of their businesses. *See page 16 for more details.*

Backlog levels exceed 10 months for the first time since the start of the Commercial Construction Index in Q2 2017.

**CHANGE OVER LAST QUARTER**

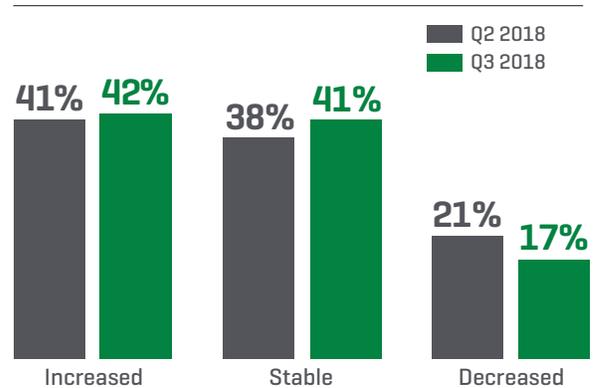
Most contractors [83%] report stable or increased backlogs, a 4% jump over that combined metric in Q2. This shows that contractors expect strong construction activity through the remainder of 2018 into early 2019.

**CURRENT BACKLOG**

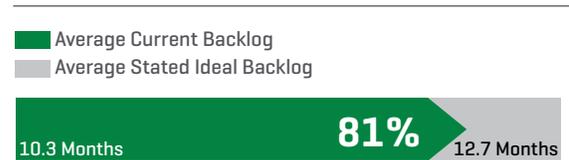
The average backlog of 10.3 months reported this quarter is the highest since the CCI began tracking this figure in Q1 2017. The result is also notably 81% of the average ideal backlog of 12.7 months. The mix of small, medium and large contractors surveyed has remained constant across the quarters studied, demonstrating that firms of all sizes are experiencing a robust market.

**AMOUNT OF BACKLOG REPORTED** In Q3 2018, a higher percentage of contractors [28%] report a backlog of more than one year compared with Q2 [20%], while fewer report a smaller backlog of six to 12 months. This suggests that project owners continue to spend and are confident that the economy will support their investments.

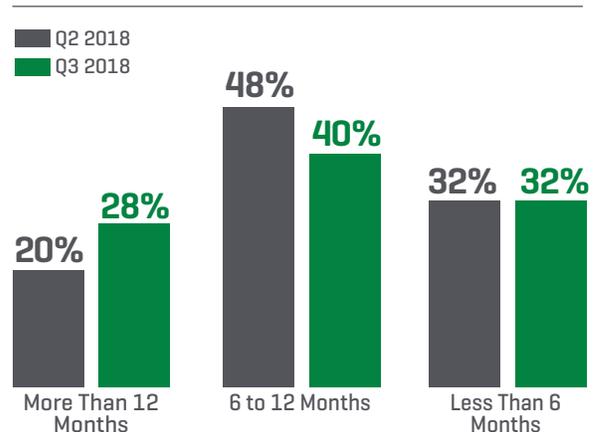
Change in Backlog in Last Three Months

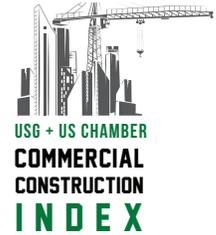


Current vs. Ideal Backlog



Amount of Backlog Reported





**Almost all contractors surveyed are confident that the market will provide new business opportunities in the next 12 months.**

**NEXT 12 MONTHS**

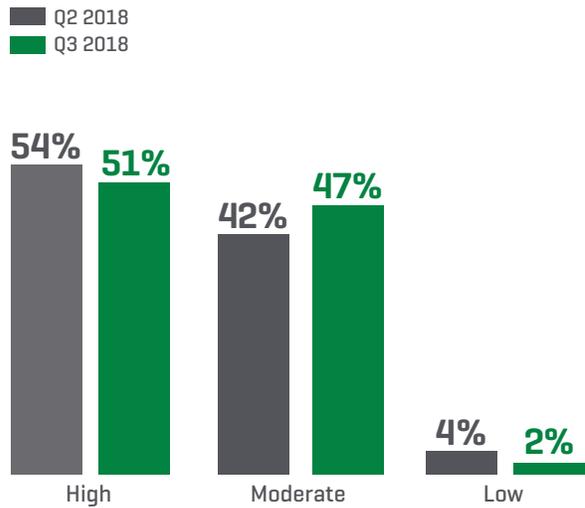
Nearly all contractors [98%] report either high or moderate confidence in new business opportunities over the next 12 months. However, the number who report high confidence has declined throughout 2018. Contractors are seemingly curbing their enthusiasm, but still express overall optimism in the near-term market.

**NEXT 24 MONTHS**

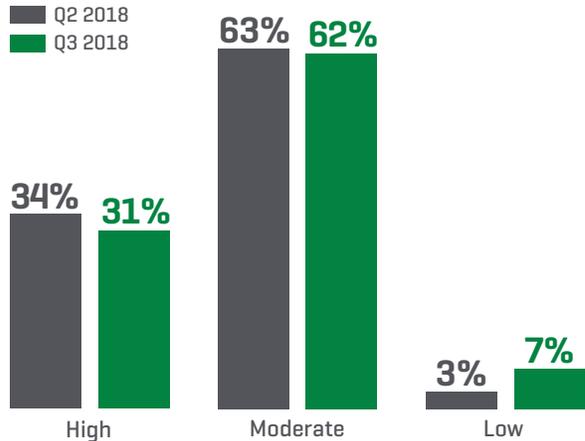
Most contractors [93%] report at least moderate optimism about market potential in the 24-month outlook. However, there is a slight decline in those with high and moderate confidence, and a 4% gain in those who express low confidence. Even though the overall contractor outlook is still optimistic, these findings may suggest growing unease at the possibility of a downturn in the future.

*Degree of Confidence Among Contractors That the Market Will Provide Sufficient New Business Opportunities*

**Next 12 Months**



**Next 24 Months**



**VOICE OF THE CONTRACTOR**  
 Greatest concern: "Continued high volume of projects and revenue remaining the same. The economy has to slow down eventually, even in CA."  
 —CCI Survey Respondent

Note: Percentages are based on ratings using a 10-point scale, where the three points at the bottom [1-3] indicate a low level of confidence and the three points at the top [8-10] indicate a high level of confidence.

Nearly half of all contractors forecast revenue increases in the next year, with large firms expressing particularly strong confidence.

### REVENUE EXPECTATIONS

The percentage of contractors who expect to see revenue increases in the next year is down quarter-over-quarter, while those who expect revenues to remain the same [50%] jumped 6 percentage points.

**VARIANCE BY COMPANY SIZE** Over two-thirds [70%] of companies with revenues over \$100 million expect an increase in revenue.

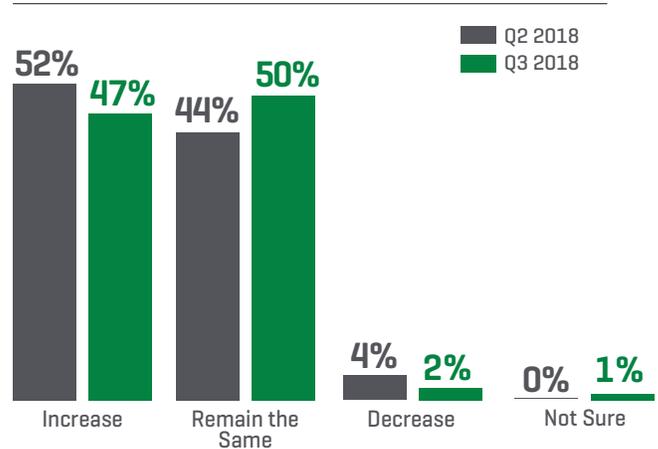
**PERCENTAGE INCREASE OVER THE NEXT 12 MONTHS** Nearly one-third [31%] of contractors expect revenue increases of 7% or more, a finding consistent with the past two quarters.

### PROFIT MARGIN EXPECTATIONS

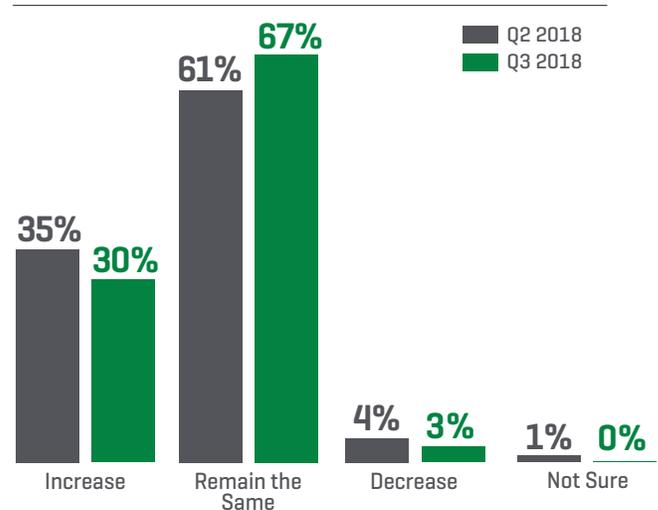
Most contractors [97%] expect profit margins to increase or remain the same in the next year, which is consistent with past quarters, although fewer contractors this quarter expect an increase.

While the opposing direction of backlogs and profit expectations may seem contradictory, the shift in this finding is likely influenced by concerns about the cost of skilled labor and about material costs due to tariffs.

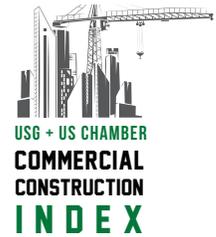
Expected Revenue Changes in the Next 12 Months



Expected Changes in Profit in the Next 12 Months



Note: Percentages for revenue and profit margins are based on ratings using a 10-point scale, where the three points at the bottom [1-3] indicate a decrease, three points in the middle indicate it has stayed about the same and four points at the top [7-10] indicate an increase.



The top two safety concerns for contractors include workforce skill levels and shorter construction schedules.

**TOP SAFETY RISK FACTORS**

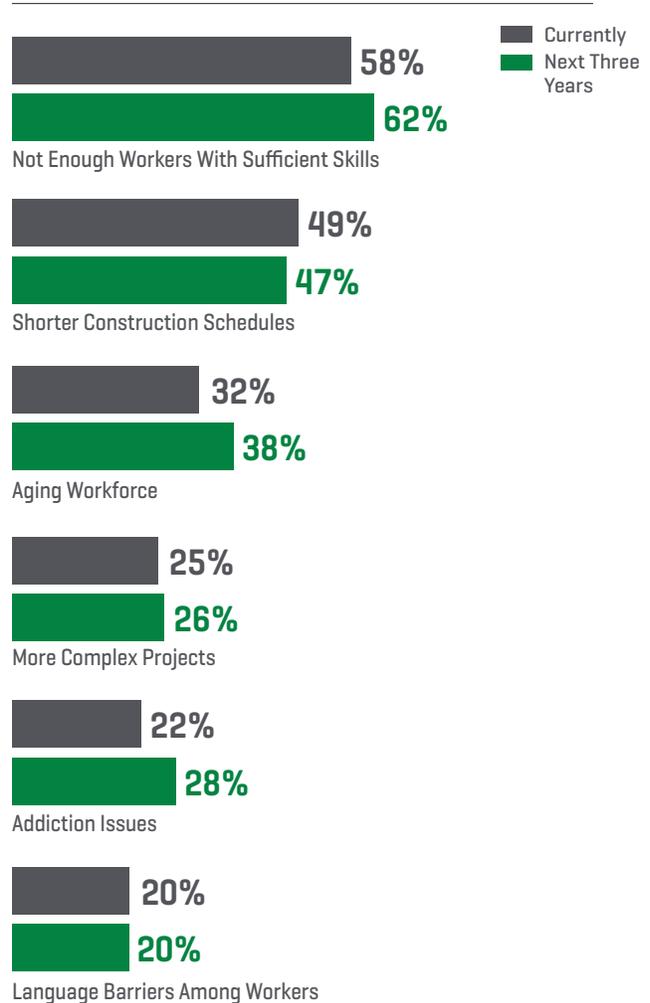
Construction projects are increasingly complex and technical, which makes adequate skills essential to a safe work environment. Not surprisingly, contractors report the number one factor increasing safety risk on the jobsite is a lack of workers with sufficient skills.

Shorter construction schedules compound the labor problem. Nearly half of respondents cite tight schedules as a safety risk. Aggressive scheduling may cause contractors to use workers with less experience or training, and can push employees to work longer hours. These factors could subsequently compromise safety processes.

**VARIANCE BY TYPE OF COMPANY** More than two-thirds of general contractors [68%] select a lack of workers with sufficient skills as a top-three safety risk factor, compared with less than half [45%] of trade contractors.

**VARIANCE BY REGION** Contractors in the West [67%] most frequently select the lack of workers with sufficient skills as a major safety risk factor. Around one-third of contractors in the Northeast [34%] and West [31%] find language barriers to be a leading safety risk. Contractors in the West [25%] are the least likely to consider shorter construction schedules a serious risk compared with builders in other regions.

*Top Factors Increasing Safety Risks (Currently and in the Next Three Years)*



Nearly three-quarters of contractors are concerned about opioid use among workers, but only half have a strategy to address it.

**CONCERNS ABOUT IMPACT OF OPIOID, MARIJUANA OR ALCOHOL USE ON SAFETY**

Most contractors are at least moderately concerned about the impact of substance abuse on jobsite safety, with the greatest concerns about opioid use.

**VARIANCE BY TYPE OF COMPANY** Trade contractors report lower levels of concern about all three substances than general contractors, with over half (57% and 52%, respectively) reporting no/low concern about marijuana and alcohol, and more than one-third (38%) about opioids.

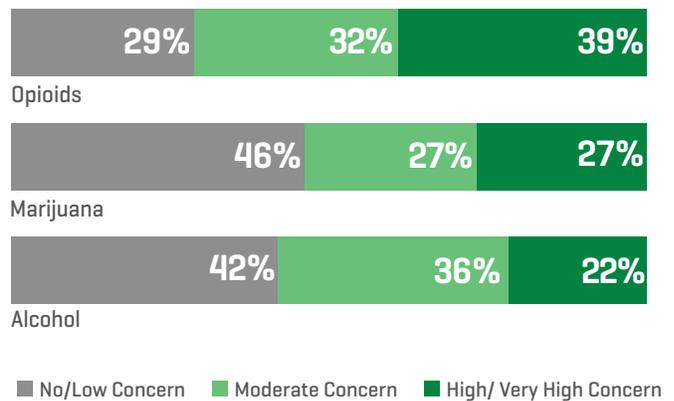
**VARIANCE BY REGION** Contractors in the West (35%) report the highest levels of concern with risks posed by marijuana, compared with only 17% in the Midwest.

**STRATEGY TO REDUCE SAFETY RISKS**

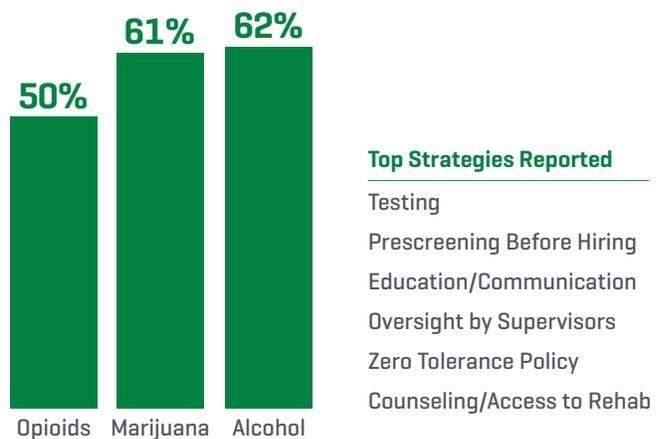
Among contractors who report at least a moderate level of concern over jobsite substance use, less than two-thirds have a strategy in place to deal with the risks posed by use of marijuana (61%) and alcohol (62%), and only half have a strategy for dealing with opioid use.

**VARIANCE BY SIZE** More than 80% of large contractors have risk reduction strategies for opioids (86%), marijuana (87%) and alcohol (81%).

*Level of Concern About Jobsite Safety Impacts Due to Worker Use of Opioids, Marijuana or Alcohol*



*Contractors With Strategies to Reduce Jobsite Safety Risks Due to Opioids, Marijuana or Alcohol*





**Four out of five contractors [80%] are at least moderately concerned about the safety risks created by workforce shortages.**

**WORKFORCE SHORTAGES IMPACT WORKER AND JOBSITE SAFETY**

More than one-quarter of contractors [26%] are highly concerned about safety risks on jobsites due to workforce shortages, and over half [54%] are moderately concerned.

**VARIANCE BY FIRM TYPE** Trade contractors are less concerned about safety risks due to workforce shortages than general contractors [GCs], with 72% expressing at least moderate concern, compared with 86% for trades.

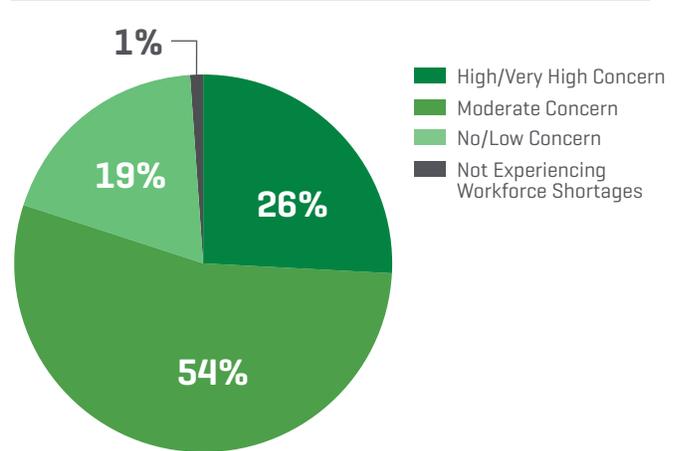
**STRATEGIES TO REDUCE SAFETY RISKS DUE TO WORKFORCE SHORTAGES**

Improved safety climate on the jobsite and improved firm culture are the top two reported strategies to reduce risks due to workforce shortages. Improving safety climate is a particularly common strategy for GCs [used by 70%].

**VARIANCE BY REGION** Almost two-thirds of contractors in the Northeast [65%] and more than half in the West [55%] rely on more leadership training for supervisors to reduce safety risks due to workforce shortages.

**VARIANCE BY SIZE** Almost half [47%] of contractors from large companies use safety-enhancing technologies, compared with just over one-quarter [27%] of small contractors.

*Level of Concern About Jobsite Safety Risks Due to Workforce Shortages*



*Top Strategies Used by Contractors to Reduce Safety Risks Due to Workforce Shortages*



Effectively improving jobsite safety requires training at all levels.

**MOST IMPACTFUL METHODS FOR A STRONGER SAFETY CULTURE**

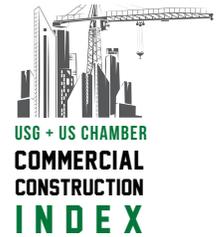
Contractors were presented with a list of practices associated with a strong safety culture and asked to select those with the highest impact on safety outcomes. Training at all levels was selected by 67% of respondents. More than half (53%) of contractors also believe that ensuring accountability at all levels has a high impact.

There is broad agreement about the positive impact of five of the remaining practices, with most landing in the 40 percentile range. Encouraging owner/client involvement is an emerging tactic, with just 24% citing a high impact.

**VARIANCE BY FIRM TYPE** More GCs consider empowering and involving employees (58%) and demonstrating management commitment (55%) to have a high impact on safety outcomes, compared with trade contractors (35% and 34%, respectively.) This suggests GCs are more focused on safety as a company-wide initiative than trade contractors.

*Best Practices Contractors Believe to Have the Greatest Impact on Improving Safety Culture*





**Most contractors say safety programs offer some competitive advantage and cite insurance, liability and new business as top benefits.**

**COMPETITIVE ADVANTAGE DUE TO SAFETY PROGRAMS**

Four out of five [80%] contractors experience some competitive advantage from the safety programs they have instituted. The majority, though, fall in the small and moderate advantage range.

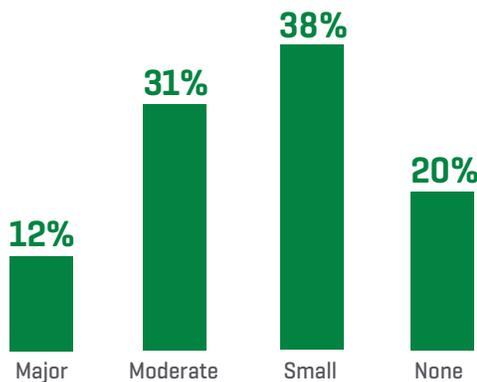
**VARIANCE BY SIZE** Far more large contractors [65%] believe safety programs give them a major or moderate advantage, compared with just 25% of small contractors. This is likely because large firms typically have the resources to create more robust safety programs.

**FACTORS THAT CONTRIBUTE TO THE COMPETITIVE ADVANTAGE**

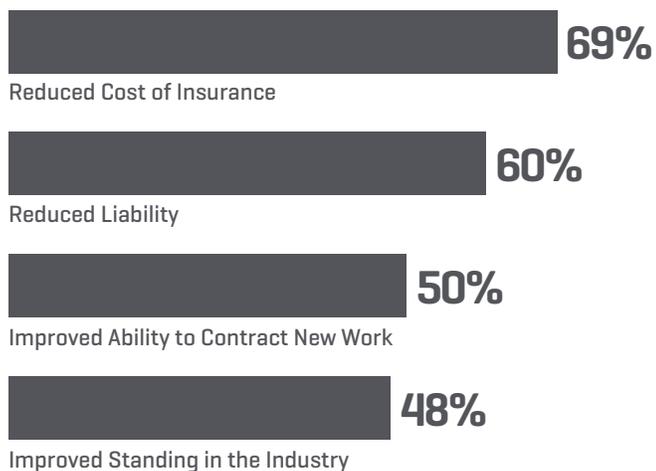
Factors directly affecting risk and financial performance such as reduced insurance costs and reduced liability are the top ways safety programs are contributing to a competitive advantage for contractors.

**VARIANCE BY REGION** Far more contractors in the West [64%] select improved ability to contract new work as a way that safety improves their competitive advantage, compared with 49% in the Midwest, 42% in the Northeast and 40% in the South.

*Degree of Competitive Advantage Contractors Experience Due to Safety Programs*



*Top Factors Contributing to the Competitive Advantage Provided by Safety Programs*



**Contractors cite continued difficulties finding skilled workers this quarter, consistent with results reported over the past year.**

**HIRING EXPECTATIONS**

As in Q1 and Q2, 2018, more than half of contractors report they plan to hire workers over the next six months. This level of activity is consistently reported by GCs and trades, across all four regions and firms of all sizes.

**FINDING SKILLED WORKERS**

The percentage of contractors who report difficulty finding skilled workers has been above 50% for six straight quarters. In addition, after four quarters with 9% of contractors who reported that it is relatively easy to find skilled workers, that percentage dropped to 6% in Q3, underscoring a growing concern over workforce availability.

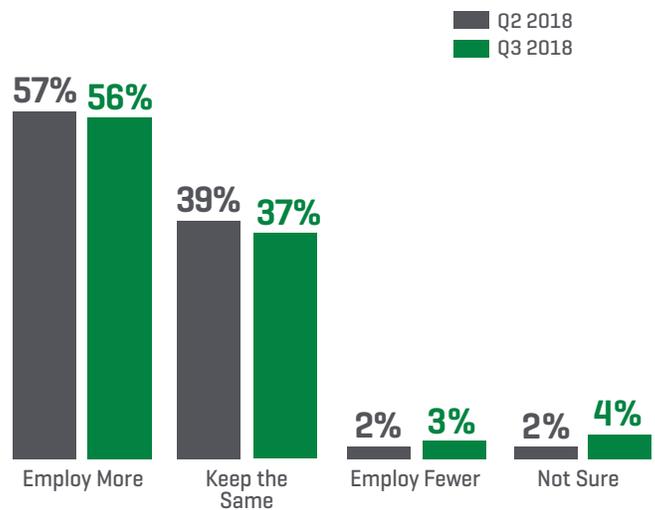
**VARIANCE BY TYPE OF COMPANY** Trade

contractors find it more difficult to find skilled workers than GCs, with 63% of trades reporting a high level of difficulty compared with 52% of GCs.

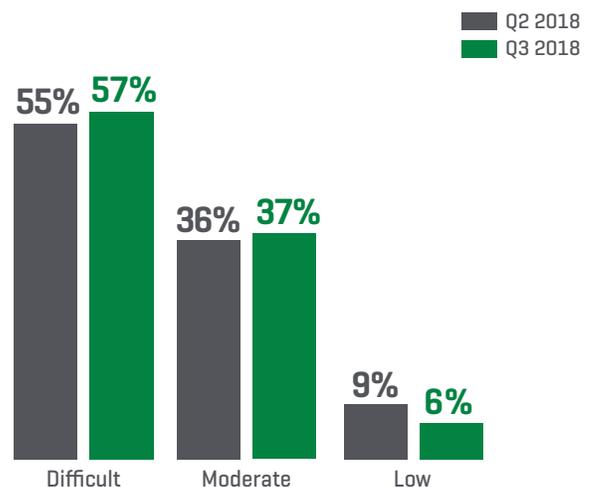
**VARIANCE BY REGION** Nearly two-thirds [60%] or more of contractors working primarily in the South, Midwest and West report high levels of difficulty in finding skilled workers, compared with only 28% in the Northeast.

Note: Percentages for difficulty levels are based on ratings using a 10-point scale, where the three points at the bottom [1-3] indicate a high level of difficulty and the three points at the top [8-10] indicate a low level of difficulty.

*Contractor Hiring Plans Over the Next Six Months*



*Difficulty Finding Skilled Workers*





Contractors report growing shortages among workers who handle interior finishes/millwork, while concrete and electrical trades remain in short supply.

**TRADES LABOR AVAILABILITY**

Contractors once again report the greatest shortages in the concrete and electrical trades. In addition, contractors express increased concern in Q3 over the shortage of workers who specialize in interior finishes/millwork, masonry and walls/ceilings, and less concern about those doing plaster/drywall and steel erection than in Q2.

**THE COST OF SKILLED LABOR**

Most contractors (89%) are at least moderately concerned about the cost of skilled labor, similar to the previous quarters in 2018 and most of 2017. Persistent difficulties in finding skilled workers will likely continue to increase concerns about the cost of labor.

**VOICE OF THE CONTRACTOR**

*"[My single most important concern about my business in the next 12 months is] the ability to hire skilled workers who can complete our jobs within the labor costs we have estimated."*

—CCI Survey Respondent

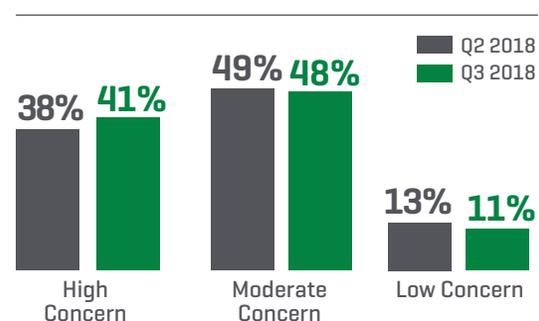
**Top Categories of Skilled Labor With Greatest Shortages**

[According to General Contractors Reporting Difficulty Finding Skilled Labor]

Skilled Labor Shortage Ranking		Current Ranking	Previous Ranking
		Q3 2018	Q2 2018
Concrete	=	1	1
Electrical	=	2	2
Interior Finishes/Millwork	▲	3 tie	4 tie
Masonry	▲	3 tie	4 tie
Plaster and Drywall	▼	4	3 tie
Steel Erection	▼	5 tie	3 tie
Plumbing	=	5 tie	5
HVAC	=	6 tie	6 tie
Roofing	=	6 tie	6 tie
Sheet Metal	=	7 tie	7
Mechanical	=	7 tie	7
Wall and Ceiling	▲	7 tie	9

- ▲ Shortage Increased Since Last Period
- = Shortage Remained the Same Since Last Period
- ▼ Shortage Reduced Since Last Period

**Degree of Contractor Concern About Cost of Skilled Labor**



Note: Percentages for degree of concern contractors have about the cost of skilled labor are based on ratings using a 10-point scale, where the three points at the bottom [1-3] indicate a high level of concern and the three points at the top [8-10] indicate a low level of concern.

Contractor concern about skill levels surge this quarter, with 41% expecting the problem to worsen in the next six months.

**ADEQUATE SKILL LEVELS**

More than half (55%) of contractors report a high degree of concern about workers' skill levels, a 5% increase quarter-over-quarter. This marks a change from the previous two quarters in 2018, in which the level of concern over worker skill levels had moderated slightly.

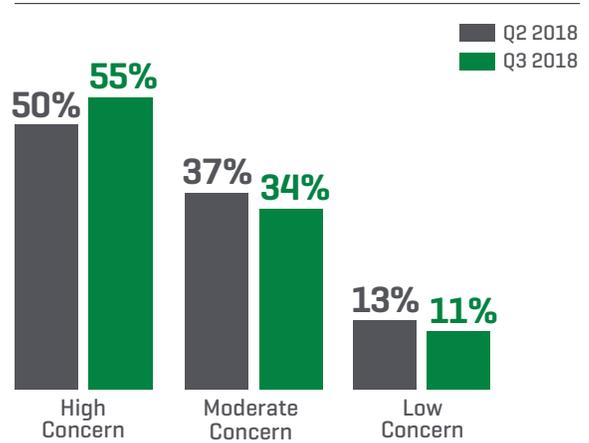
**SKILL LEVELS IN SIX MONTHS**

Among the contractors who express concern about worker skill levels, more than one-third (38%) believe the problem has worsened in the last six months, and 98% believe it will stay the same or continue to worsen in the next six months.

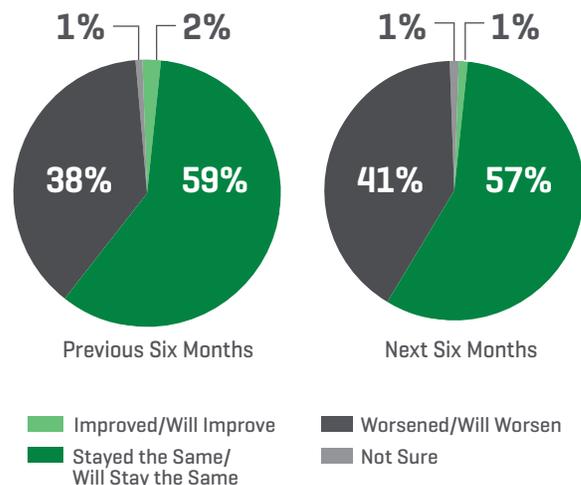
**VOICE OF THE CONTRACTOR**  
 "[My single most important concern about my business in the next 12 months is] managing labor. Getting guys with the right skills to complete the tasks."  
 —CCI Survey Respondent

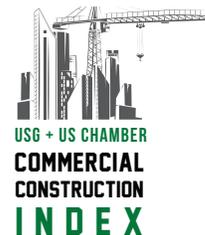
Note: Percentages for degree of contractor concern about workers having adequate skill levels are based on ratings using a 10-point scale, where the three points at the bottom [1-3] indicate a high level of concern and the three points at the top [8-10] indicate a low level of concern.

Degree of Contractor Concern About Adequate Worker Skill Levels



Problems Finding Skilled Workers Among Those Concerned About Skill Level





## Contractors see consistency in the availability of working capital and construction financing for project owners.

### CONTRACTOR WORKING CAPITAL

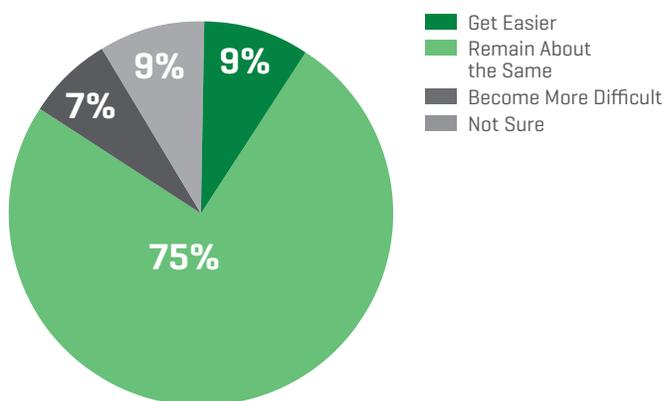
Most contractors [84%] this quarter believe access to working capital financing will remain the same or get easier, consistent with findings seen throughout the past six quarters. Access to working capital financing is essential for contractors to invest in personnel, tools and equipment, and take full advantage of growing markets.

### CONSTRUCTION FINANCING

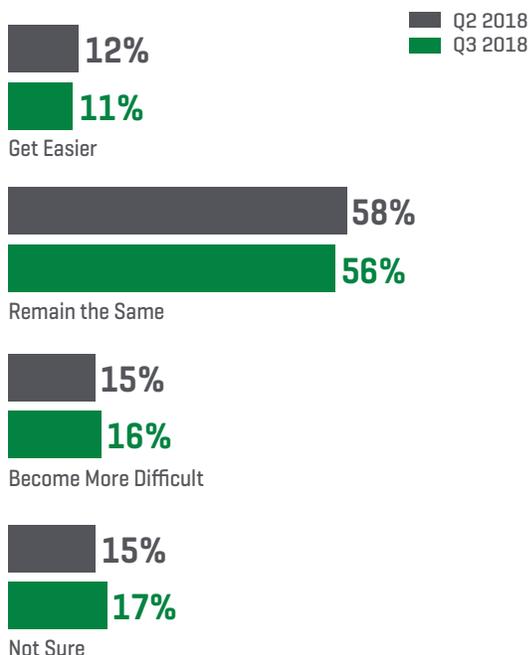
More than two-thirds of contractors [67%] believe that owner access to financing will get easier or remain the same over the next six months.

However, the findings in Q2 2018 saw an increase from 6% to 15% in those who believed financing became more difficult, and that increased level is still evident this quarter. While this figure suggests a sustained concern among contractors, the percentage who report this difficulty is relatively small compared with those who report confidence in owners' abilities to finance their projects.

*Expected Change in Access to Working Capital Financing in the Next Six Months*



*Expected Change in Building Owner Access to Financing in the Next Six Months*



While contractor spending on tools and equipment reflects optimism in the market, concerns remain over building materials' cost fluctuations.

**IMPACT OF MATERIAL COST FLUCTUATIONS**

More than half of contractors [55%] report that they expect to spend more on tools and equipment in the next six months. This finding is within a 4 percentage point range of results reported over the last year, suggesting an ongoing, persistent optimism in the volume of work that contractors will be performing.

**TOOL AND EQUIPMENT PRICES**

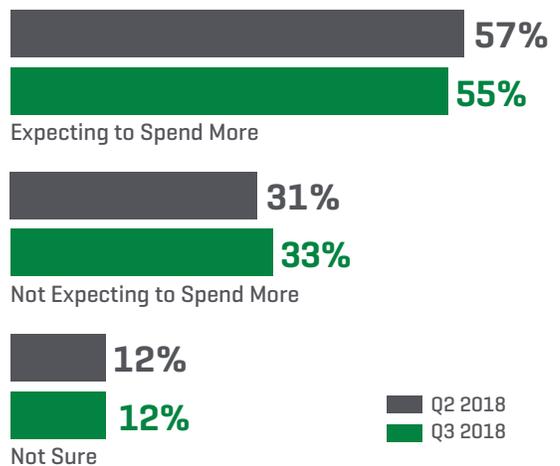
The level of concern about fluctuations in material costs shot up in Q2 2018, and it continues to grow in Q3, with 44% of contractors now expecting a high impact from these changes. Other data suggest that this is largely due to concerns about tariffs [see page 17].

**VARIANCE BY REGION** More contractors in the West [56%] and South [55%] expect high impacts from cost fluctuations than those in the Northeast [34%] or Midwest [27%].

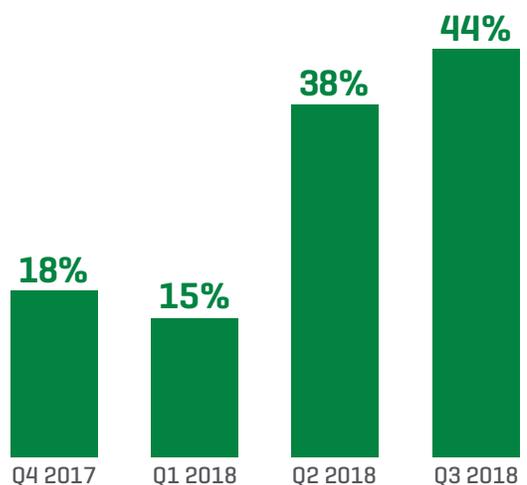
**VOICE OF THE CONTRACTOR**  
 "[My greatest concern is] shortages and material cost increases due to tariffs."  
 —CCI Survey Respondent

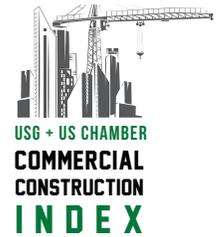
Note: Percentages for Expected Material Shortages' Impact on Contractors are based on ratings using a 10-point scale, where the three points at the bottom indicate a high impact and the three points at the top indicate a low impact.

*Contractors' Expected Spending Levels on Tools and Equipment in the Next Six Months*



*Contractors Who Expect Materials' Cost Fluctuations to Have a High Impact on Their Business*





The number of contractors concerned about the cost of steel far exceeds findings from previous quarters before tariffs were announced.

**CONCERN ABOUT STEEL PRICES**

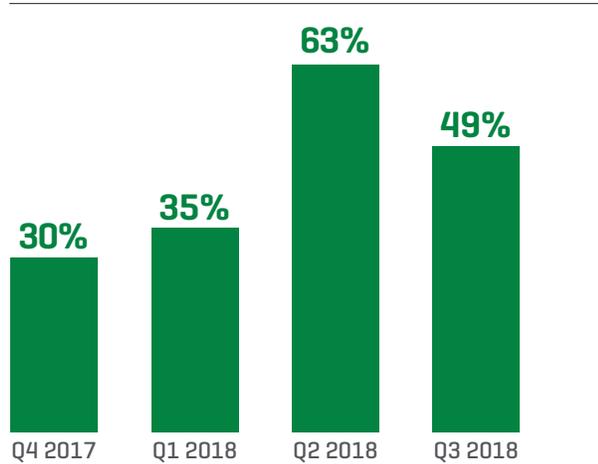
In the current quarter, nearly half [49%] of contractors report being concerned about cost fluctuations for steel. This is particularly true for GCs, with 71% reporting their concern about steel cost fluctuations. While both figures are lower compared with Q2 2018, they still vastly exceed concern levels reported before the tariffs were announced.

**BUSINESS IMPACTS OF TARIFFS**

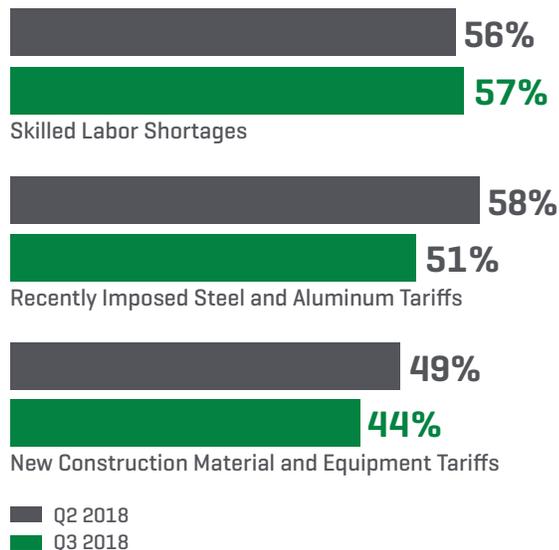
While concerns about tariffs have moderated slightly since Q2 when they were first proposed, 51% of contractors still expect the steel and aluminum tariffs to have a high degree of impact on their businesses, and 44% believe that new construction material and equipment tariffs will cause problems.

**VOICE OF THE CONTRACTOR**  
*"The most important concern is material and labor pricing. Specifically, how will geopolitical trade policies impact material costs?"*  
 —CCI Survey Respondent

*Contractors Very Concerned About Cost Fluctuations in Steel*



*Contractors Expecting a High Degree of Business Impact From Each Factor in the Next Three Years*



## 5 METHODOLOGY

Dodge Data & Analytics (DD&A) in partnership with USG Corporation and the U.S. Chamber of Commerce conducts the Commercial Construction Index survey on a quarterly basis with the DD&A Contractor Panel. The majority of data represented in this report is from the Q3 2018 survey conducted online from July 11 to 20, 2018.

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### DD&A CONTRACTOR PANEL

In order to enable reliable market research in the construction industry, DD&A maintains a panel of more than 2,700 decision makers that includes general contractors, construction managers, design-builders and trade contractors. This panel allows DD&A to provide findings that are representative of the entire U.S. construction industry by geography, and by size and type of company.

### SECOND QUARTER SURVEY DEMOGRAPHICS

205 contractors who perform projects in the commercial and institutional sectors (including multifamily residential) responded to the survey.

**TYPE OF COMPANY** 57% of respondents are prime contractors (including general contractors, construction managers, design-builders and remodelers), and 43% are trade contractors.

**JOB FUNCTION** Most are in leadership roles or engaged in projects.

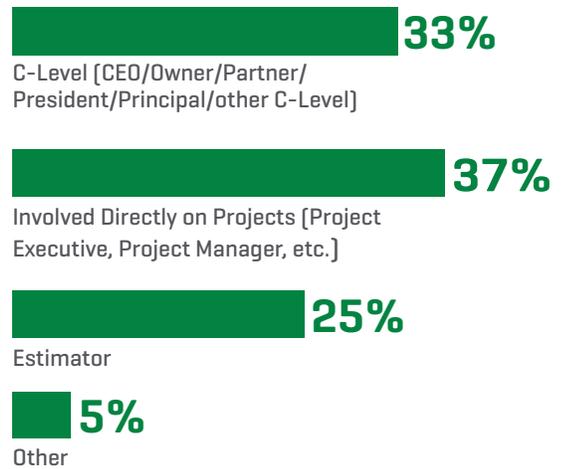
**SIZE OF COMPANY** The percentage of small and midsize contractors is higher than that of large companies.

**LOCATION** 16% of the respondents are located in the Northeast, 30% in the South, 30% in the Midwest and 25% in the West.

The analysis includes comparisons to previous surveys conducted online with the DD&A Contractor panel since January 2017.

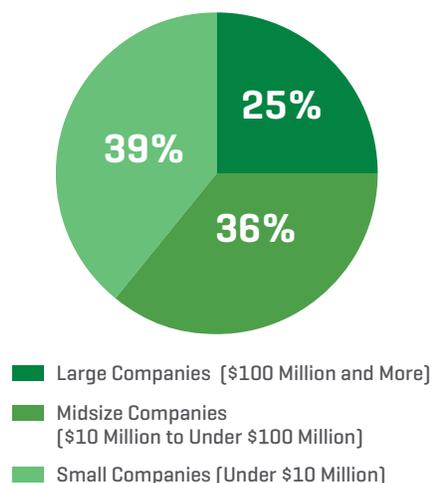
### Job Functions of Respondents

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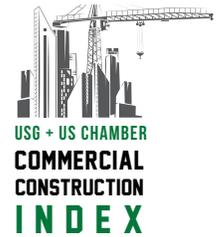


### Size of Company [by Annual Revenue]

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## 5 METHODOLOGY



### COMMERCIAL CONSTRUCTION INDEX

The Commercial Construction Index is an indicator of the health of the contractor segment of the U.S. building industry. It is comprised of three specific components reflecting aspects of the commercial contractors' situation.

**THE FIRST COMPONENT** calculates each respondent's ratio of current backlog to ideal backlog. It takes the mean of the ratio across all survey respondents.

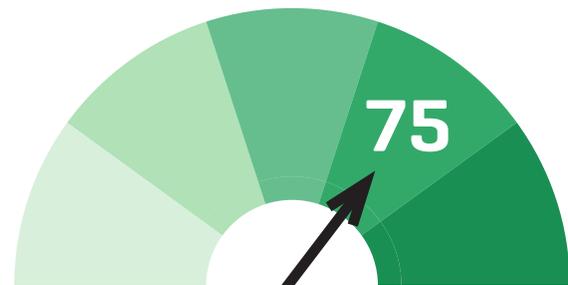
**THE SECOND COMPONENT** is the mean of all responses, on a scale of 1-10, to the question "How confident are you that the U.S. market will provide your company with sufficient new business opportunities?"

**THE THIRD COMPONENT** compiles contractors' ranges of expected revenue growth/decline and transposes those to a 10-point scale, then takes the mean of responses on that scale.

Each measure is drawn from the quarterly survey responses, and they are weighted evenly by one-third (33.3%) to create the composite index.

### DEFINING COMMERCIAL CONSTRUCTION

For purposes of the CCI we define commercial construction as the following types of buildings: Office, Retail, Hospitality, Education, Healthcare, Multifamily Residential (mid-and high-rise), Government, Warehouses, Airport Terminals and other Transportation Buildings.



The Commercial Construction Index is 75 for the third quarter of 2018.

- Significant Slowdown
- Down Market
- Neutral Market
- Healthy Market
- Boom Market

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**USG Corporation** is an industry-leading manufacturer of building products and innovative solutions. Headquartered in Chicago, USG serves construction markets around the world through its Gypsum, Performance Materials, Ceilings and USG Boral Divisions. Its wall, ceiling, flooring, sheathing and roofing products provide the solutions that enable customers to build the outstanding spaces where people live, work and play. Its USG Boral Building Products joint venture is a leading plasterboard and ceilings producer across Asia, Australasia and the Middle East. For additional information, visit [www.usg.com](http://www.usg.com).

**The U.S. Chamber of Commerce** is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors and regions, as well as state and local chambers and industry associations. Its International Affairs division includes more than 70 regional and policy experts and 25 country- and region-specific business councils and initiatives. The U.S. Chamber also works closely with 117 American Chambers of Commerce abroad.

**Dodge Data & Analytics** is North America's leading provider of analytics and software-based workflow integration solutions for the construction industry. Building product manufacturers, architects, engineers, contractors and service providers leverage Dodge to identify and pursue unseen growth opportunities and execute on those opportunities for enhanced business performance. Whether it's on a local, regional or national level, Dodge makes the hidden obvious, empowering its clients to better understand their markets, uncover key relationships, size growth opportunities and pursue those opportunities with success. The company's construction project information is the most comprehensive and verified in the industry. Dodge is leveraging its 100-year-old legacy of continuous innovation to help the industry meet the building challenges of the future. To learn more, visit [www.construction.com](http://www.construction.com).

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