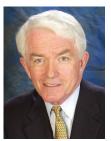


Q1 2018 USG CORPORATION + U.S. CHAMBER OF COMMERCE

# Commercial Construction Index

POWERED BY
DODGE DATA S
ANALYTICS

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



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





Jennifer F. Scanlon President and CEO USG Corporation

The results of the Q1 2018 Commercial Construction Index suggest ample opportunity for contractors in the year ahead. Contractors report growing confidence about new business opportunities, revenue forecasts, and profit margins in the coming year, despite continued pressure around the availability of skilled workers.

In Q1, we heard that the ongoing challenges around labor, coupled with the continued trend of rising material costs, have made offsite construction methods like prefabrication/modularization an increasingly attractive solution for builders. More than 80 percent of contractors identified offsite construction as a key approach for improved

jobsite efficiency, labor productivity and schedule performance. We also found that contractors expect demand for prefabrication and modularization to grow over the next three years.

This comes on the heels of the Q4 2017 report, which found only one in 10 contractors consider jobsites to be very efficient. Contractors don't just want skilled workers to address the labor shortage—they want to embrace new building technologies and innovative products to respond to time and labor constraints.

The data we collect each quarter provides insight into the emerging trends and challenges that we can all address to ensure prosperity in the commercial construction industry. As the pace of innovation in construction accelerates, we know faster, safer and more efficient building practices will emerge—driving productivity and U.S. economic growth in the future.

Sincerely,

Thomas J. Donohue

Faredue\_

Jennifer F. Scanlon

enign F Scanlon

# **TABLE OF CONTENTS**



- **EXECUTIVE SUMMARY**
- **DRIVERS OF CONFIDENCE** 
  - Backlog
  - **New Business**
  - Revenue/Profit Margins

# **QUARTERLY SPOTLIGHT**

Prefabrication/Modularization

## **MARKET TRENDS**

- Workforce 12
- 15 Access to Financing
- 16 Materials & Equipment
- Regional Insights 17

## 5 METHODOLOGY



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-ofmind concerns.

# 1 EXECUTIVE SUMMARY

OPTIMISM SURROUNDING NEW BUSINESS AND PROFIT MARGINS REMAINS STRONG FOR 2018, WHILE BUILDERS LOOK TO PREFABRICATION TO IMPROVE JOBSITE EFFICIENCY, LABOR PRODUCTIVITY AND PROJECT SCHEDULES.

#### **OVERVIEW**

Contractors in the U.S. commercial construction industry remain optimistic about the current state and forward-looking health of the sector. While minor changes are evident in the three indicators used to compute the USG Corporation + U.S. Chamber of Commerce Commercial Construction Index [CCI]—backlog levels, new business and revenue expectations—the Q1 2018 index score is unchanged from last quarter and consistent with the positive levels reported throughout 2017.

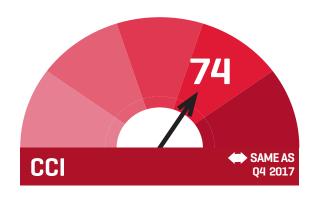
#### **KEY DRIVERS OF CONFIDENCE**

In Q1 2018, 80% of contractors report steady or increasing backlogs. The ratio between average current backlog compared with the reported ideal level of backlog remains consistent with 2017 results at 73, demonstrating market stability.

Optimism about new business prospects has increased slightly, and revenue forecasts also gained one point. See Drivers of Confidence on pages 4–6.

#### **QUARTERLY SPOTLIGHT**

This quarter's spotlight focuses on the use of prefabricated and modular building components. These alternative construction methods are gaining renewed interest among contractors as a means to confront challenges related to skilled labor, jobsite safety and schedule performance, while technologies like building information modeling [BIM] support increased use.



The findings demonstrate that about half of contractors use these approaches, and two-thirds of general contractors (67%) expect to see increased use in the next three years. The reported use of prefabricated and modular components is significantly more common in the Northeast and Midwest regions than in the South.

Contractors list labor productivity and improved jobsite efficiency as the top benefits of prefabrication/modularization. Most users also see reduced schedules, improved quality and lower construction costs as drivers of increased adoption of prefabricated/modular approaches. See Quarterly Spotlight on pages 7–11.

#### **MARKET TRENDS**

Contractors plan to increase spending on tools and equipment, and are confident about adequate financing. They also want to increase hiring, but continue to be concerned about the availability, skill and cost of labor. See Market Trends on pages 12–17.



#### KEY DRIVERS OF CONTRACTOR CONFIDENCE



The ratio between actual and stated ideal backlog is 73, with the current reported average of 8.9 months consistent with average 2017 levels, reflecting stability.



Contractors have high confidence in the market's ability to provide new business for the next 12 months, up one point from the level reported in Q4.



Most contractors believe that they will see revenue growth in the next year, a slight increase from Q4 2017.

#### ADDITIONAL MARKET TRENDS

# 58%

#### HIRING

More than half (58%) of contractors want to employ more workers in the next six months, but are challenged by availability and cost. See page 12 for more details.

# 80%

#### **FINANCING**

Most contractors (80%) believe owner access to financing will get easier or remain the same in the next six months, the highest level reported in the last year. See page 15 for more details.

# 90%

#### **SKILL LEVEL**

Nearly all contractors (90%) are at least moderately concerned about the skill levels of the workforce, consistent with Q4 and Q3 2017. See page 14 for more details.

# 59%

#### **TOOLS & EQUIPMENT**

The percentage of contractors who expect to spend more on tools and equipment is 59%, a slight increase over 55% in the previous quarter. See page 16 for more details.

Findings show a pattern of continued strength over the last 12 months, with the majority of contractors reporting increased or stable backlogs.

#### **CHANGE OVER LAST QUARTER**

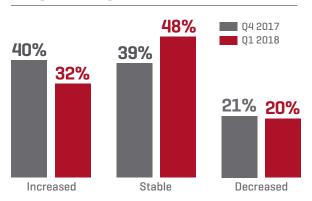
Most contractors [80%] report a stable or increased backlog. While the number of respondents reporting an increase dropped quarter-over-quarter, variation in this number is small and consistent with previous fluctuations, suggesting a stable market. In fact, the percentage reporting an increased backlog this quarter is the same as the percentage indicating an increase in Q1 2017.

#### **CURRENT BACKLOG**

The average backlog of 8.9 months reported by contractors this quarter is 73% of their average ideal backlog of 12.2 months. Overall, the ratio suggests a strong market with room for growth.

AMOUNT OF BACKLOG REPORTED The percentage of contractors reporting a high backlog (18 or more months) declined in Q1 by 6 percentage points. The drop appears to be part of a reasonable pattern of fluctuation considering the reported levels of Q2 and Q3 2017 were 17%. This is supported by the fact that the percentage of contractors this quarter who have a positive feeling about their backlog (42%) exceeds that from Q4 2017 (40%).

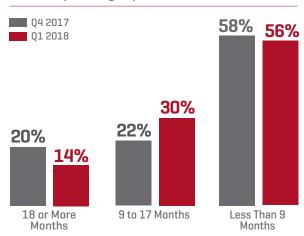
#### Change in Backlog in the Last Three Months



#### Current vs. Ideal Backlog



#### Amount of Backlog Reported



# **DRIVERS OF CONFIDENCE** NEW BUSINESS



Confidence in the demand for commercial construction over the next 12 months jumps 11 percent quarter-over-quarter.

#### **NEXT 12 MONTHS**

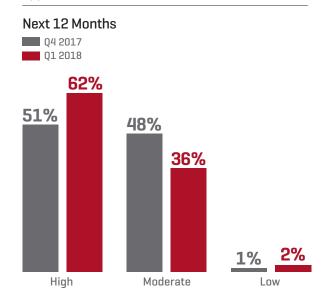
Nearly two-thirds (62%) of contractors report a high level of confidence that the market will provide sufficient business opportunities.

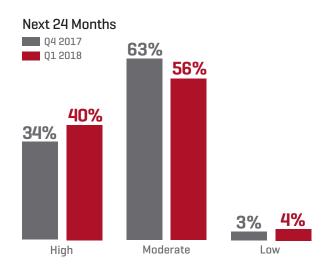
**CHANGE OVER LAST QUARTER** This quarter's results show a significant shift from moderate to high confidence between Q4 2017 and Q1 2018. While shifts between the two were common throughout 2017, the Q1 2018 finding for high confidence is greater than any measurement reported in 2017.

#### **NEXT 24 MONTHS**

The upward shift from moderate to high confidence for the next 12 months also carried over to longer-term confidence about business in the next 24 months. However, it is notable that 40% also reported high confidence over this period in Q1 2017, suggesting that this is a slight adjustment rather than a true shift in confidence levels.

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





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.

# DRIVERS OF CONFIDENCE REVENUE/PROFIT MARGINS

The industry's financial outlook climbs as over half (54%) of contractors expect to see revenue increases in the next year.

#### **REVENUE EXPECTATIONS**

A higher percentage of contractors (54%) in Q1 expect to see their revenues increase than those who expected increases in Q4 (47%), Q3 (41%) or Q2 (40%). These findings suggest that contractors' revenue expectations are likely contributing to ongoing confidence in the market.

#### PERCENTAGE INCREASE IN REVENUE OVER THE

**NEXT 12 MONTHS** The percentage of contractors who expect revenue to increase 7% or more is consistent in Q1 2018 [29%] with Q4 2017 [30%].

#### PROFIT MARGIN EXPECTATIONS

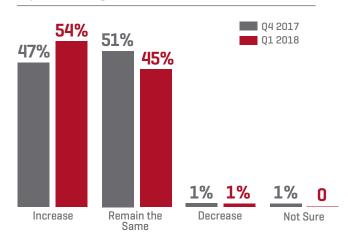
The percentage expecting an increase in profit margins in Q1 2018 (39%) is also higher than the previous three quarters in 2017, suggesting another cause for the relatively high level of confidence reported in the market.

VOICE OF THE CONTRACTOR "[The biggest opportunity for my business in the next 12 months is] increased profit margins due to overall level of work available."

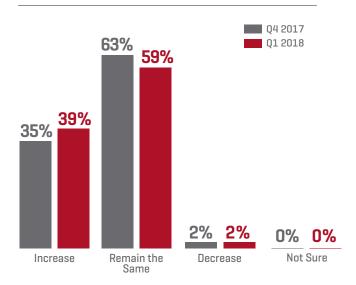
-CCI Survey Respondent

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.

#### Expected Changes in Revenue in the Next 12 Months



#### Expected Changes in Profit in the Next 12 Months



### **QUARTERLY SPOTLIGHT** PREFABRICATION



Half of all contractors using prefabricated and modular approaches expect to increase their use in the next three years.

#### **USE OF PREFABRICATED/MODULAR COMPONENTS**

More general contractors (GCs) (62%) use prefabricated/modular components compared with trade contractors (30%). Not every trade (e.q., painting, demolition and asbestos abatement) has the opportunity to leverage offsite construction, while GCs are more likely to be aware of its use because they supervise all the trades on their projects.

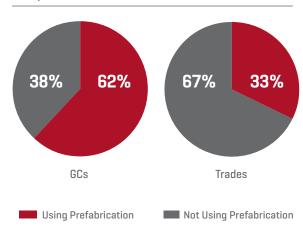
**VARIANCE BY REGION** A greater percentage of contractors in the Northeast (69%) and Midwest (65%) use these components than do those in the West [48%] and South [24%]. See page 17 for more regional data.

**VARIANCE BY SIZE** Most respondents [80%] from companies with annual revenues of \$100 million or more use these components, compared with 27% of those from companies with revenues less than \$10 million.

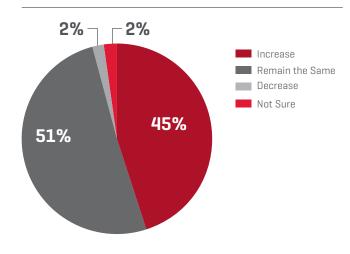
#### **CHANGE IN LEVEL OF USE OF** PREFABRICATED/MODULARIZED **COMPONENTS**

Nearly half (45%) of contractors currently using prefabrication/modularization have seen increased use in the last three years, while 51% say that implementation has remained the same. The recent growth in the use of these approaches is likely driven by their benefits, such as increased jobsite efficiency. See page 10 for more information.

#### Companies Using Prefabricated/Modular Components



#### Change in Use of Prefabricated/Modular Components in the Last Three Years



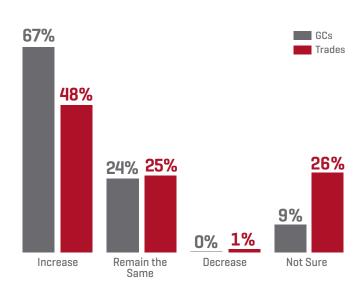
Most contractors expect the existing demand for offsite construction to surge in the next three years.

# DEMAND OUTLOOK FOR PREFABRICATION/MODULARIZATION

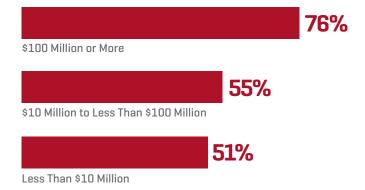
Two-thirds of GCs (67%) currently using prefabrication/modularization expect demand to increase in the next three years, and close to half (48%) of trades using these approaches concur. The percentage expecting future growth is higher than the percentage that experienced growth in demand for these components in the last three years (see page 7), which suggests the industry believes that prefabricated/modular approaches are gaining traction.

VARIANCE BY SIZE Over three-quarters [76%] of respondents from companies with annual revenues of \$100 million or more expect to see increased demand, far more than midsize [55%] and small companies [51%].

#### Expected Change in Market Demand Over Next Three Years (Among Existing Users)



Expected Increase in Demand for Prefabricated/Modular Components in Next Three Years (by Firm Size)



## **QUARTERLY SPOTLIGHT** PREFABRICATION



Contractors find the most demand for prefabrication/modularization in hotel, healthcare and manufacturing projects.

#### SECTORS WITH A HIGH DEMAND FOR PREFABRICATION/MODULARIZATION

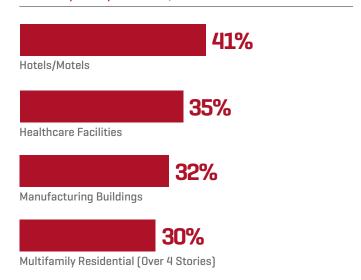
Prefabricated/modular building components offer the best advantage when used for building types with identical repeated spaces like hotels, healthcare facilities and multifamily residential buildings. Contractors reinforced this sentiment in Q1 2018, reporting demand for prefabrication among these project types.

VARIANCE BY REGION Over half [55%] of contractors in the West report a high demand for prefabrication for healthcare facilities, far more than the percentage reporting high demand in the Northeast [15%], South [7%] or Midwest (28%). This is the only building sector in which a significantly higher use of prefabrication/modularization was noted by region.

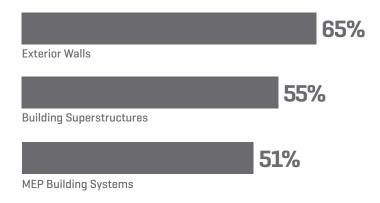
#### TOP USES OF PREFABRICATION/ **MODULARIZATION**

GCs report using prefabricated/modular exterior walls, building superstructures, and mechanical, electrical and plumbing (MEP) building systems most frequently. Only the GC responses are represented for this question because trade contractor responses are influenced by the mix of trades involved, and therefore provide a less accurate portrait of overall use in the industry.

Top Building Sectors for Which Contractors Report a High Demand for Prefabrication/Modularization



#### Top Three Uses of Prefabrication/Modularization by GCs



Increased jobsite efficiency and improved labor productivity are the most frequently reported benefits of prefabrication/modularization.

# TOP BENEFITS OF PREFABRICATION/MODULARIZATION

Of the potential benefits of prefabrication/modularization listed in this quarter's survey, eight are experienced by 70% of contractors or more at a moderate, high or very high level due to the use of prefabrication/modularization, demonstrating the value of these approaches to improve projects.

Nearly nine out of ten contractors report that they experience increased efficiency onsite and improved labor productivity. Given the consistent level of concern contractors report about labor shortages, these two factors may be a strong driver of the increased adoption of prefabricated/modular approaches.

Project benefits that influence client satisfaction, such as reduced schedule, improved quality and lower construction cost, are also frequently cited benefits from the use of prefabrication/modularization.

Contractors also note the advantages to project performance, such as reduced risk and improved safety. Others identify increased sustainability as a result of less waste.

#### Benefits of Prefabrication/Modularization



Increased Efficiency Onsite



Reduced Risk



Improved Labor Productivity



Improved Quality



Reduced Schedule



Improved Safety



Reduced Waste



Lower Construction Cost



Cost savings, increased labor productivity and competitive advantage are among the biggest incentives for adopting prefabricated/modular approaches.

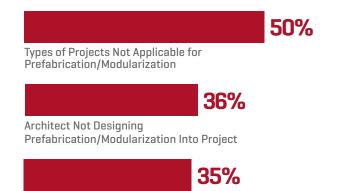
# REASONS CONTRACTORS ARE NOT USING PREFABRICATION/MODULARIZATION

The most common reason reported by contractors for not using prefabrication/ modularization is the perception that these approaches are not applicable to their current projects. In addition, about one-third say these approaches have not been designed into the project or are not requested by the owner. Less than 10% select reasons like lack of familiarity with the process, quality concerns, increased costs or risks involved.

# TOP FACTORS THAT WOULD ENCOURAGE USE OF PREFABRICATION/ MODULARIZATION

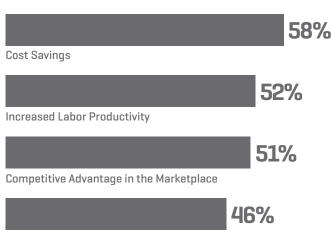
More than half of contractors who currently do not use prefabrication/modularization report that cost savings (58%) and increased labor productivity (52%) would encourage the use of prefabrication/modularization. These benefits are already widely experienced among contractors building with prefabrication (see page 10), suggesting the potential already exists for wider adoption of these approaches as awareness of the benefits increases.





Owners Not Asking for Prefabrication/ Modularization

# Top Factors That Would Encourage Use of Prefabrication/Modularization



Reduced Schedule

Access to labor remains a challenge, with over 50% of contractors reporting difficulty finding skilled workers.

#### HIRING EXPECTATIONS

Over half (58%) of contractors report that they expect to employ more workers in the next six months, and most of the remaining contractors expect to keep workforce levels the same. This finding is consistent with the previous two quarters, but the percentage expecting to employ more workers is well below the hiring expectation from one year ago (64% in Q1 2017).

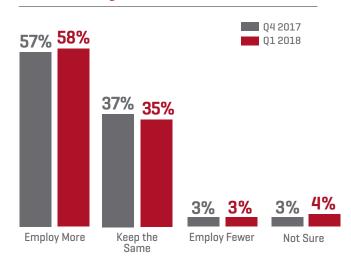
#### FINDING SKILLED WORKERS

The high percentage of contractors reporting difficulty finding skilled workers is unchanged from Q4 2017 to Q1 2018, and was consistent throughout 2017.

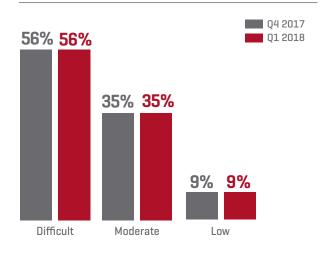
**VARIANCE BY SIZE** Almost two-thirds [65%] of small contractors (revenues less than \$10 million) have difficulty finding skilled workers, compared with less than half (41%) of large contractors (revenues of \$100 million or more), a finding consistent with Q4 2017. This demonstrates the persistent challenge small firms are facing in the labor market.

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



# 4 MARKET TRENDS WORKFORCE



Contractors report growing labor shortages in masonry and interior finishes workers.

#### TRADES LABOR AVAILABILITY

Continuing the trend seen throughout 2017, contractors report shortages of concrete, masonry, interior finishes and electrical workers. Plaster/drywall, HVAC and plumbing workers have also been consistently difficult to secure. Although the ranking of most trades stayed relatively consistent, this quarter, steel erection ranks lower than it did in Q4 2017.

#### CONCERN OVER THE COST OF SKILLED LABOR

Most contractors (87%) are at least moderately concerned about the cost of skilled labor. While the number of respondents reporting high concern is up compared with Q4, for the most part, this degree of concern has remained consistent with levels reported throughout 2017.

#### **VOICE OF THE CONTRACTOR**

"[My single most important concern about my business in the next 12 months is the] increases in labor and material costs to the point that development slows."

-CCI Survey Respondent

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.

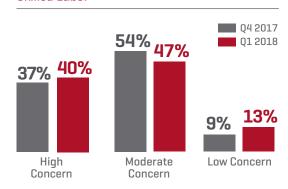
#### Top Categories of Skilled Labor With Greatest Shortages

(According to General Contractors Reporting Difficulty Finding Skilled Labor)

Skilled Labor		Current Ranking	Previous Ranking
Shortage Ranking		Q12018	Q4 2017
Concrete	=	1	1
Masonry	<b>A</b>	2 tie	3 tie
Interior Finishes/ Millwork	•	2 tie	4
Electrical	▼	3 tie	2
Plaster and Drywall	_	3 tie	4 tie
HVAC	<b>A</b>	4	5 tie
Plumbing	=	5	5 tie
Steel Erection	•	6	3 tie
Wall/Ceiling	<b>A</b>	7 tie	8
Sheet Metal	•	7 tie	6 tie
Roofing	•	7 tie	6 tie

- ▲ 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



Nearly half of contractors believe workers' skill levels will worsen in the next six months.

#### **ADEQUATE SKILL LEVELS**

Most contractors (90%) are at least moderately concerned about finding workers with adequate skill levels, and over half (52%) are highly concerned. While there is a slight shift toward moderate concern quarter-over-quarter, the current findings are the same as those sourced in Q1 2017, which demonstrates that the level of concern about this issue has remained steady for the last year.

#### **HIRING ENVIRONMENT**

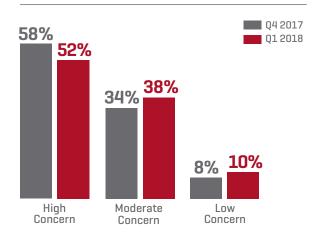
Among the contractors expressing concern about worker skill levels, 35% believe the problem has worsened in the last six months, and almost half (44%) believe it will worsen in the next six months.

VOICE OF THE CONTRACTOR
"[My single most important concern
about my business in the next 12
months is] qualified and experienced
tradespeople leaving the industry
due to retirements. We continue to
lose years of experience without the
ability to backfill with equal skill."

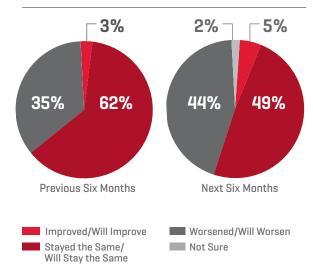
-CCI Survey Respondent

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





## Most contractors are optimistic about access to working capital and owner access to financing.

#### CONTRACTOR WORKING CAPITAL

This quarter, most contractors (84%) believe access to working capital financing will remain the same or get easier, echoing 2017 findings. Access to working capital financing is essential for contractors to take full advantage of growing markets.

#### CONSTRUCTION FINANCING

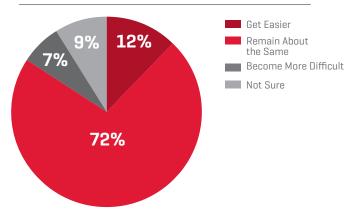
Contractors are more optimistic about owner access to financing in the next six months than they were in Q4 2017, with an eight percentage point increase in those who think owner access to financing will be easier. This expectation is likely contributing to contractors' overall confidence in the market.

When asked about the greatest opportunity impacting their businesses this quarter, contractors reported general positivity about owners' appetite for and ability to finance projects.

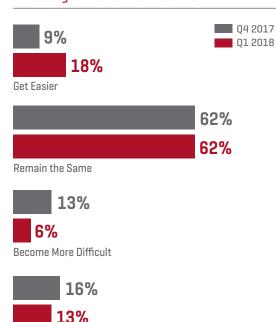
**VOICE OF THE CONTRACTOR** "The economy is improving, and the tax breaks should motivate the players to invest more money in their companies."

-CCI Survey Respondent

#### 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



Not Sure

#### 4

# Contractors plan to invest more in tools and equipment to prepare for strong market demand.

#### **TOOL AND EQUIPMENT PRICES**

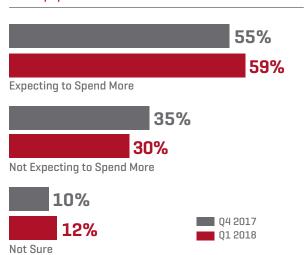
This is the third consecutive quarter in which a higher percentage of contractors report that they expect to spend more on tools and equipment in the next six months. In addition, there is a significant increase in those expecting to spend more in the Q1 2018 study (59%) than in the Q1 2017 study (47%). These findings suggest that as contractors invest more in their businesses, they see increasing revenues and margins (see page 6) and continue to expect a strong market for projects (see page 5).

#### **IMPACT OF MATERIALS SHORTAGES**

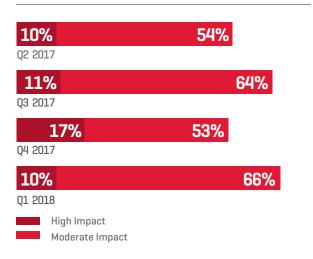
Over three-quarters of contractors [76%] expect material shortages to have at least a moderate level of impact on their businesses. While lower than in Q4 2017, the number of respondents reporting a high level of concern is consistent with the levels reported in Q2 and Q3 2017. However, the combined percentage of those expecting moderate to high impacts exceeded the last three quarters, perhaps influenced by ongoing concerns about the impact of disaster recovery on the availability of materials.

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 [1-3] indicate a high impact and the three points at the top [8-10] indicate a low impact.

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



# Expected Material Shortages' Impact on Contractors [Moderate and High]



# 4 MARKET TRENDS REGIONAL INSIGHTS



Fewer contractors in the Northeast expect to increase the size of their workforce in the next six months compared with other regions.

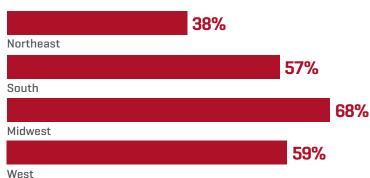
#### REGIONAL HIRING ENVIRONMENT

Only 38% of contractors working in the Northeast expect to employ more workers in the next six months, significantly fewer than those in the Midwest (68%), and directionally less than those in the South (57%) or West (59%).

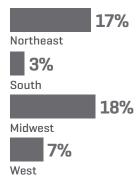
#### PERCEPTIONS ABOUT OWNER/ DEVELOPER FINANCING

Significantly more contractors in the Northeast (17%) and Midwest (18%) believe that owner/developer project financing became easier than those in the South (3%). The West also reported a tighter financing environment (7%). Funds being directed toward natural disaster recovery in the South and West may alter the perception of new project financing. Regional perceptions of the financing environment require monitoring over time to evaluate any consistent trends.





Contractors Perceiving That Owner/Developer Project Financing Became Easier in the Previous Six Months



# 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 Q1 2018 survey conducted online from January 3 to 11, 2018.

#### **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.

#### FIRST QUARTER SURVEY DEMOGRAPHICS

203 contractors who do 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** 14% of the respondents are located in the Northeast, 33% in the South, 30% in the Midwest and 23% 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

C-Level (CEO/Owner/Partner/ President/Principal/other C-Level)

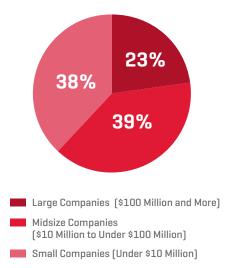
36%

Involved Directly on Projects (Project Executive, Project Manager, etc.)

26% Estimator

**5**%

#### Size of Company (by Annual Revenue)



# 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 74 for the first quarter of 2018.

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

**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.usq.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.

This report is intended for general informational purposes only. It is not intended to support an investment decision with respect to USG Corporation, nor is it intended to be used for marketing purposes to any existing or prospective investor of USG. This report is not a forecast of future results for USG and actual results of USG may differ materially from those of the commercial construction industry.



USG Corporation 550 W. Adams Street Chicago, IL 60661 www.usg.com

U.S. Chamber of Commerce 1615 H Street NW Washington, DC 20062 www.uschamber.com

For more information, please visit www.commercialconstructionindex.com.