USG CORPORATION + U.S. CHAMBER OF COMMERCE

Commercial Construction Index

Q2 2020
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.
**COVID-19 CRISIS CAUSES MAJOR DROP IN INDEX.**

**OVERVIEW**
The impact of COVID-19 has caused the first major drop in the index since its launch in 2017, lowering 18 points to 56. This is the largest quarterly decline in index history.

**KEY DRIVERS OF CONFIDENCE**
Confidence in the construction market and revenue expectations both plunged deeply, with each decreasing by 26 points. Backlog, however, was much steadier, only falling from 76 to 73 between Q1 and Q2. See Drivers of Confidence on pages 4–6.

**QUARTERLY SPOTLIGHT**
This quarter’s spotlight examines the impact of the COVID-19 response, and its implications for contractors.

While 73% of contractors expect there will still be COVID-19-related project delays in the fall, the percentage of their projects impacted by those delays is expected to lessen throughout the year: from the 40% reported in April to 35% anticipated in July and just 23% predicted by October.

The top two concerns reported by contractors due to COVID-19 are workers’ health and safety and a reduced number of projects. However, unlike many U.S. industries, only about one-third (34%) of contractors report their companies have laid off, furloughed or reduced the salaries of their workers, suggesting that construction is still providing a boost to the U.S. economy. Nearly all contractors (91%) are changing how they do work to accommodate social distancing requirements, and over one-third (39%) are asking owners to accommodate these changes by extending their work schedules.

Finally, this pandemic has reinforced the importance of relationships as a driver of business, with most contractors considering their relationships with their clients [owners or GCs] and workers to be an effective risk management strategy. See Quarterly Spotlight on pages 7–11.

**MARKET TRENDS**
This quarter also saw the first major reduction in contractors experiencing difficulty finding skilled workers since 2017. However, those percentages are still high, with 46% saying it is very difficult to find workers and 43% reporting that it is moderately difficult.

Contractors are less certain about the impacts on financing. Fewer expect access to financing to remain the same, as more expect either greater ease or difficulty in accessing capital. Notably, the findings on material shortages and cost fluctuations do not show any major changes from those in previous quarters. See Market Trends on pages 12–17.
KEY DRIVERS OF CONTRACTOR CONFIDENCE.

73

BACKLOG

The ratio of average current and ideal backlogs has dropped three points to 73. Impact to backlog from the current crisis may lag for several months as projects are delayed.

50

NEW BUSINESS

Contractors’ confidence in the ability of the market to provide new business in the next 12 months has dropped dramatically to 50, demonstrating concern about the pipeline of work.

44

REVENUE

Revenue numbers also dropped considerably as many contractors see projects deferred, canceled or temporarily shut down.

ADDITIONAL MARKET TRENDS.

32%

HIRING

While only 32% report the expectation to employ more people in the next six months, even less (15%) expect to employ fewer people. See page 12 for more details.

48%

SKILL LEVEL

The current crisis has not abated concerns about the skill levels of workers, with 48% still reporting a high degree of concern. See page 16 for more details.

49%

FINANCING

Contractors are split on the availability of financing for owners: Nearly half (49%) expect it to remain the same or increase, 38% expect it to become more difficult, and the remainder are unsure. See page 15 for more details.

55%

PRODUCT SHORTAGES

Over half (55%) of contractors are currently experiencing product shortages, a percentage roughly consistent with previous quarters, which have typically hovered around 50%. See page 17 for more details.
Backlog declines for contractors, but ratio of current to ideal backlog remains relatively strong.

FEWER SEE BACKLOG INCREASES
Far fewer contractors (20%) report that backlog has increased in the past three months, compared with 39% in the previous quarter. Far more report their backlog has decreased in that time frame (44%).

CURRENT BACKLOG
Despite the fact that more contractors report their backlog decreased and fewer report that it increased, the ratio of current to ideal backlog only dropped by three points. Though below levels seen in the past year, current backlog levels are consistent with those reported in the first half of 2018.

AMOUNT OF BACKLOG REPORTED
There is a slight shift toward backlogs that are less than six months in the current findings, but overall the findings are not dramatically different than in previous quarters. However, backlog is a lagging indicator of market conditions, and it may be many months before a reduced pipeline causes an actual decline, so this will be an interesting indicator to watch over the next six months.
Confidence in the market decreases notably for the next 12 months, but is more optimistic in the 24-month outlook.

**NEXT 12 MONTHS**
Very few contractors (16%) report high levels of confidence in the ability of the market to provide sufficient new business opportunities in the next 12 months, and those with low expectations increased dramatically from previous quarters. However, the majority (59%) of contractors still fall in the moderate range. This suggests that most are expecting activity to continue at a level that will at least support their businesses.

**NEXT 24 MONTHS**
Surprisingly, more contractors are highly optimistic about the market’s ability to provide sufficient new business opportunities in two years than in the last quarter. This may suggest an expectation of pent-up demand in some sectors as the economy recovers.

**VARIATION BY COMPANY SIZE** Large companies have a more optimistic outlook than smaller companies, with 29% of large companies reporting high confidence levels for the next 12 months and 56% for the next 24 months.

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**Degree of Confidence Among Contractors in Sufficient New Business Opportunities**

<table>
<thead>
<tr>
<th>Next 12 Months</th>
<th>Q4 2019</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>47%</td>
<td>54%</td>
<td>59%</td>
</tr>
<tr>
<td>Moderate</td>
<td>49%</td>
<td>45%</td>
<td>25%</td>
</tr>
<tr>
<td>Low</td>
<td>4%</td>
<td>1%</td>
<td>9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Next 24 Months</th>
<th>Q4 2019</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>65%</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>Moderate</td>
<td>33%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td>Low</td>
<td>9%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

*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.*
More contractors expect revenue decreases than increases in the next year, but the majority believe revenue will remain the same.

**REVENUE EXPECTATIONS**
Compared with the last two quarters, revenue expectations for the next year are far more pessimistic, with a spike from 2% to 21% in those expecting their revenues to decrease and an even steeper 30-point adjustment downward in those expecting revenues to increase. However, it is notable that the highest percentage of contractors (60%) expect their revenues to remain about the same.

**PROFIT MARGIN EXPECTATIONS**
Profit margin expectations mirror revenue expectations, with far more expecting a decrease than in previous quarters, far fewer expecting an increase and the majority expecting their profit margins to stay about the same.

**VARIATION BY SIZE**
Large companies [annual revenues of $100M or more] express the most stable profit outlook, with only 2% expecting to see either an increase or a decrease in their profit margins.

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.
Nearly all contractors have been impacted by project delays due to COVID-19, but the share of delayed projects is expected to decline.

**MOST PROJECTS FACE DELAYS DUE TO COVID-19**

Nearly all contractors (87%) are experiencing project delays currently and expect delays to continue into the summer. Most (73%) also expect delays to continue into the fall.

However, fewer projects are expected to be delayed as the year progresses. In April, contractors reported an average share of 40% of their projects were delayed, and over one-third (35%) of them reported that the majority of their projects (75% or more) were delayed. Within three months, the percentage expecting the majority of projects to be delayed shrinks to 16%, and the average share of delayed projects drops to 35%. In six months, only 8% expect the majority of their projects to be delayed, and the average share of projects on which delays are expected drops notably to 23%.

**VARIATION BY REGION**

Currently, a higher percentage of contractors in the Northeast are expecting delays on the majority of their projects than in other regions. The Northeast region includes many large jurisdictions [i.e., New York, Pennsylvania, Boston] with government mandates that shut down most construction projects.
WORKER HEALTH AND FEWER PROJECTS ARE TOP CONCERNS

Contractors were provided a series of challenges that COVID-19 may present to their businesses and asked to select the top three. The chart at right indicates the top concerns contractors have as a result of the current crisis.

The biggest concern by far is worker health and safety, with 75% of contractors indicating this as their top concern. The larger the company is, the more likely they are to select this issue, ranging from 66% of small firms (revenue less than $10M) to 88% of large firms (revenue $100M or more).

Fewer projects is also a top concern for nearly half (48%) of all contractors, with small companies (58%) most frequently selecting this, compared with midsize (46%) and large (32%) companies.

One-third of contractors expect an increase in worker shortages will be a top impact, further exacerbating an ongoing labor shortage challenge.

VARIATION BY TYPE OF FIRM Forty-one percent of general contractors (GCs) say the availability of building products/materials will be a top challenge, compared with only 12% of trade contractors.

Most Severe Consequences From COVID-19 on Contractors’ Businesses

<table>
<thead>
<tr>
<th>Selected in Top Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Worker Health and Safety Concerns</td>
</tr>
<tr>
<td>Fewer Projects</td>
</tr>
<tr>
<td>Increase in Workforce Shortages</td>
</tr>
<tr>
<td>Less Availability of Building Products/Materials</td>
</tr>
<tr>
<td>More Legal and/or Financial Liability</td>
</tr>
<tr>
<td>Shortened Hours of Business Operations</td>
</tr>
<tr>
<td>Reduced Financing for Contractors</td>
</tr>
<tr>
<td>No Impact Expected</td>
</tr>
</tbody>
</table>
COVID-19 forces nearly all contractors to change business operations.

CHANGES MADE IN RESPONSE TO COVID-19

Nearly all (98%) contractors have made changes to how they operate their businesses in response to COVID-19.

The majority (92%) have already changed work procedures to increase social distancing. However, very few (8%) have adopted more automation to enhance social distancing, with large companies (15%) and GCs (13%) more likely to do so than small companies (4%) and trade contractors (3%).

GCs are also more frequently asking owners for adjustments to work/delivery schedules, with over half (53%) reporting this, compared with just 29% of trade contractors.

About one-third of contractors (34%) report they have adjusted employee salaries, furloughed or laid off employees, with midsize (40%) and large (41%) companies more frequently doing so than small companies (23%).

A portion (10%) mentioned other types of changes, including remote working; supplying hand washing stations and extra PPE; and keeping workers on payroll regardless of the amount of work to preserve their workforce.
Building relationships is the most commonly used and most effective means of reducing risk.

Steps Taken to Reduce Risk from Business Disruptions

While no one in the construction industry was planning for a global pandemic, many contractors have taken steps to reduce their exposure to risks they cannot necessarily predict, due to the challenges they have faced in the past.

Contractors were asked two questions about their means of reducing risk: which steps they took in the last three years, and the degree to which they consider those steps effective.

The findings clearly demonstrate that building relationships with clients and with their workforce is a strategy that is frequently employed. These relationships are also widely considered to be the most effective means of reducing the impacts of unexpected risks.

There are a few other factors, though, that are underutilized based on the percentage who consider them effective. These include developing cross-functional teams, increasing backlog, improving contract language and diversifying. Large firms are not only more likely to take many of these steps than small firms, but more large firms who do so also report that cross-functional teams and diversifying types of work are effective strategies.
Some changes made in response to COVID-19 are expected to stay.

**HOW CONTRACTORS’ BUSINESSES WILL CHANGE IN THE FUTURE**

Contractors were asked an open response question to how they think their work will change in the future due to what they are experiencing now. The top five most frequently cited comments appear at right.

The largest group believe they will permanently adjust some of their safety procedures and work processes.

Many also think that staff choosing to work remotely will become more accepted in the industry than it was before the crisis.

Several reported they are going to pay more attention to contract language in order to ensure that they are not liable for delays or other impacts due to future events beyond their control.

The increased attention to sanitation is not expected to go away after the pandemic is over, with contractors increasing efforts to sanitize sites and offices.

Several also expect to use remote meetings and collaboration tools more frequently, whether that is with their own staff, clients or the project team.
Hiring Expectations Decline

The percentage of contractors expecting to employ more people over the next six months dropped precipitously between Q1 and Q2 2020. However, given the dire state of unemployment overall in the U.S. when this survey was conducted, these findings also reveal that the commercial construction sector is an important employer during this time. Nearly half (48%) of contractors believe their workforce will stay the same, and close to one-third (32%) say they will employ more. Only 15% expect to actually reduce their staffing.

Variance by Type and Region

More GCs (21%) expect to reduce employment than do trade contractors (9%). Very few contractors in the Northeast (13%) expect to employ more people, especially when compared with the Midwest (43%).

Finding Skilled Workers

Most (89%) contractors still report moderate to high levels of difficulty in finding skilled workers. However, the percentage of those reporting difficulty has continued to decline over the last two quarters, signaling improvement. More trade contractors (56%) find it very difficult than GCs (36%).

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.
Impacts of skilled labor shortages are muted in Q2.

**LABOR SHORTAGES SEEN AS LESS IMPACTFUL**
Fewer contractors in Q2 report that skilled labor shortages are creating challenges to meet schedule requirements, causing them to put in higher project bids or leading them to turn down work opportunities. This is likely due to the heavy impacts of dealing with the COVID-19 outbreak.

**VARIANCE BY TYPE AND REGION**
Far more trade contractors (47%) are turning down opportunities for work due to a shortage of skilled workers than are GCs (19%). In addition, more contractors from the Midwest (40%) turn down work opportunities due to skilled labor shortages than those from the Northeast (8%).

**COST OF SKILLED LABOR STEADY**
Concerns about the cost of skilled labor have not been impacted by the current crisis, with the Q2 findings in line with those from previous quarters.

### Consequences of Skilled Labor Shortages

<table>
<thead>
<tr>
<th>Impact</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenged to Meet Schedule Requirements</td>
<td>72%</td>
<td>59%</td>
</tr>
<tr>
<td>Putting in Higher Bids for Projects</td>
<td>69%</td>
<td>54%</td>
</tr>
<tr>
<td>Turning Down Opportunities for Work</td>
<td>42%</td>
<td>32%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Level of Concern</th>
<th>Q4 2019</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Concern</td>
<td>33%</td>
<td>38%</td>
<td>35%</td>
</tr>
<tr>
<td>Moderate Concern</td>
<td>54%</td>
<td>48%</td>
<td>53%</td>
</tr>
<tr>
<td>Low Concern</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
</tr>
</tbody>
</table>

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.
CONCERN ABOUT ADEQUATE SKILL LEVELS REMAIN CONSTANT
Contractors remain concerned about workers having adequate skill levels, with nearly half (49%) reporting high concern about worker skill levels, the same as in previous quarters. This finding probably contributes to the challenge reported in finding skilled workers, despite higher unemployment overall in the U.S.

VARIANCE BY REGION Only 17% of contractors in the Northeast report a high level of concern over this issue, far fewer than those in the Midwest (48%), South (55%) and West (59%).

CHANGE IN SKILL LEVELS
Among those contractors concerned about worker skill level, 16% believe this issue will improve in the next six months, while only 5% believe it improved in the last six months. This may be influenced by expectations of fewer projects advancing overall, which could increase worker availability.

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.

Current crisis has little impact on concerns over workers’ skills.
Opinions differ about the availability of working capital financing in the next six months.

CONTRACTOR WORKING CAPITAL
Contractors are expecting change in the availability of working capital financing over the next six months. Less than half (43%) expect their access to working capital financing will remain the same, a significant drop of 35 points from Q1 (78%). However, those expecting it to get easier (18%) and those expecting it to become more difficult (30%) both increase by a wide margin, revealing that there is little certainty in the industry about the impact of the current crisis on financing availability.

CONSTRUCTION FINANCING
Over one-third (39%) of contractors expect building owner access to financing to remain the same over the next six months. However, there is a much broader consensus among those expecting change that it will become more difficult (38%) for owners to obtain the financing they need, an increase of 25 points since last quarter.

VOICE OF THE CONTRACTOR
[The single most important concern about my business is] financial capital to fund finishing of projects.
—CCI Survey Respondent

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

<table>
<thead>
<tr>
<th>Expected Change</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get Easier</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Remain the Same</td>
<td>13%</td>
<td>30%</td>
</tr>
<tr>
<td>Become More Difficult</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Expected Change</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get Easier</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Remain the Same</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Become More Difficult</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
SPENDING ON TOOLS AND EQUIPMENT DECREASES
The majority of contractors (59%) report they will not increase spending on tools and equipment in the next six months, more than twice as many as those who say they will (28%). This finding clearly reflects their uncertainty about the market in that time frame and an attempt to be more conservative about expenditures.

VARIANCE BY COMPANY TYPE More GCs (68%) than trade contractors (48%) report they will not be spending more money on tools and equipment in the next six months.

IMPACT OF MATERIAL COST FLUCTUATIONS DECLINES
The percentage of contractors expecting low/no impact on their businesses from material cost fluctuations continues to grow, from 19% in Q2 2019 to 39% in the current quarter. It is important to note that this finding is part of a preexisting pattern and does not appear to be the direct result of the COVID-19 crisis.

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.
Despite COVID-19, fewer contractors are experiencing product shortages.

FEWER EXPERIENCING PRODUCT SHORTAGES

Over half (55%) of contractors report they are not experiencing any product shortages, slightly up from Q1, and generally consistent with the findings of previous quarters. While it is possible that the COVID-19 crisis may impact the availability of some building products [see the quote from a contractor below], currently no impact is evident in the findings.

IMPACT OF PRODUCT SHORTAGES

Of contractors experiencing product shortages, the majority (69%) report only a moderate impact on their projects. This is statistically unchanged since last quarter.

VOICE OF THE CONTRACTOR

[Biggest challenge to my business is the] material supply chain.

—CCI Survey Respondent
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 Q2 2020 survey conducted online from April 4 to 27, 2020.

**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**

215 contractors who do projects in the commercial and institutional sectors in the U.S. (including multifamily residential) responded to the survey.

**TYPE OF COMPANY**

More than half (54%) of respondents are prime contractors (including general contractors, construction managers, design-builders and remodelers), and 46% 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, 31% in the South, 31% in the Midwest and 24% in the West.

The analysis includes comparisons to previous surveys conducted online with the DD&A Contractor panel since January 2017.
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.
**USG Corporation** is an industry-leading manufacturer of building products and innovative solutions. Headquartered in Chicago, USG serves construction markets around the world with wall, ceiling, flooring, sheathing and roofing products that enable customers to build the outstanding spaces where people live, work and play. For additional information, visit 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.

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