



CONTRACTORS REMAIN CONFIDENT ABOUT DEMAND, WORRIED ABOUT LABOR SUPPLY: THE 2019 CONSTRUCTION HIRING AND BUSINESS OUTLOOK

The Associated General Contractors of America (AGC) is the leading association for the construction industry. Over 27,000 firms, including more than 7,000 of America's leading general contractors, nearly 9,000 specialty-contracting firms and almost 11,000 service providers and suppliers are associated with AGC through a nationwide network of chapters. Visit the AGC Web site at www.agc.org.

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SUMMARY

Construction executives appear to remain confident about their market prospects for 2019, although they are simultaneously concerned about finding qualified workers to execute projects. Both the optimism about workloads and the worry about worker availability cut across all regions, project categories and types of contractors.

These results stand out in a survey of more than 1,300 contractors that the Associated General Contractors of America (AGC) and Sage released on January 2. Questionnaires were sent to AGC members on November 7, the day after the 2018 elections, and results were received as recently as December 17, 2018.

Contractor optimism extends to all 13 project types included in the survey, with more contractors expecting markets to grow than decline in 2019 for each segment. To cope with the added workload, more than three-fourth of respondents say they expect their firm to increase headcount in 2019.

However, 78 percent of respondents say they are having a hard time filling positions. More than two-thirds expect it will continue to be hard or become harder to hire personnel in the coming 12 months. Far more respondents listed worker shortages as the number-one concern for their firm than any other worry.

Staffing challenges are affecting project costs and completion times. One-third of respondents said costs were higher than expected, and a slightly higher share of firms is now putting higher prices into new bids or contracts. A third of firms experienced longer-than-anticipated completion times, and about one-fifth of firms are now quoting longer completion times in bids and contracts.

Firms are using a variety of strategies to cope with the growing demand and tight labor supply. Nearly 60 percent raised base pay rates, while many also increased or introduced incentives, bonuses and benefit contributions. Between one-fourth and one-

third of firms are using methods to reduce onsite worktime, such as building information modeling (BIM) and offsite fabrication, or using labor-saving equipment, including drones, robots and laser- or GPS-guided machinery. A majority of firms plan to invest more in training and development in 2019, while nearly half expect to increase investment in information technology (IT).

Contractors are increasingly comfortable with IT, including file-sharing sites, online project collaboration software, moving data to the cloud, and various uses of mobile software technology. However, there are several IT challenges that were mentioned by at least one-fourth of respondents, especially the time needed to implement and train on new technology.

On the whole, contractors expect 2019 to be a year of widespread opportunities despite the workforce and IT challenges. Contractors in all four regions of the country expect the dollar volume of projects they compete for to be at least equal to the 2018 level, and generally higher, in every project segment. Nearly identical percentages of firms—77 or 78 percent in every region—expect to add headcount in 2019. Similarly, in each part of the country, a majority of firms plan to increase investment in training and development, while nearly half intend to step up investment in IT—signs of confidence that the construction market will continue to expand.

CONTRACTORS EXPECT GROWTH IN ALL SECTORS

On balance, contractors expect the available dollar volume of projects they compete for to grow in 2019. The percentage of respondents who expect a market segment to expand exceeds the percentage who expect it to contract for all 13 categories of projects included in the survey.

This year's survey showed an unusually high degree of uniformity about the outlook for different project types. For every segment, between 23 and 32 percent of respondents expect the dollar volume of projects they compete for to increase, while for all but one segment, between 11 and 16 percent of respondents foresee less work available in 2019. The difference between the positive and negative responses—the net

reading—was clustered between 10 and 17 percent, except for multifamily residential, where the net reading was only 5 percent. Market perceptions are more uniform than in the 2018 hiring and outlook survey, in which net positive readings ranged from 8 to 22 percent.

Public building construction scored the highest net positive reading, 17 percent. Three segments were nearly as high, at 16 percent net positive: highway, kindergartento-12th grade (K-12) school, and hospital construction. Projects for federal government agencies and retail/warehouse/lodging both scored a net positive reading of 15 percent. Two segments had a 14 percent net positive reading: water and sewer projects and transportation facilities such as airports, transit, rail and port work. Four categories had slightly less positive net readings: private office construction, 13 percent; manufacturing construction, 12 percent; higher education, 11 percent; and power construction, 10 percent.

Even multifamily residential construction, with a 5 percent net positive reading, was rated as a growth category by 26 percent of respondents—close to the average for all firms. However, 21 percent of firms expect the multifamily market to shrink in 2019. This diversity of views may indicate that multifamily construction has outpaced demand for now in some locations but remains a hot market elsewhere, particularly where single-family construction has diminished.

The results are also largely similar by region. The highest net positive reading for any segment among the four regions is 27 percent, for transportation projects in the Northeast. At the other end of the spectrum in the Northeast, the net positive reading is 4 for multifamily construction.

Respondents in the West are also particularly upbeat about transportation construction, with a net positive reading of 26 percent. That region also had the only 0 net reading, as contractors were equally divided between positive and negative views regarding the prospects for multifamily construction.

In the Midwest, hospital construction has the most positive outlook, with a net positive reading of 22 percent. The least positive net reading is for multifamily, at 2 percent.

In the South, respondents showed the most optimism about retail/warehouse/lodging construction, with a net positive reading of 20 percent. In contrast to other regions, the least optimistic outlook in the South is for transportation projects—a net positive reading of 1 percent.

MOST CONSTRUCTION FIRMS PLAN TO ADD STAFF IN 2019

Nearly four out of five construction firms (79 percent) plan to increase headcount in 2019, up from 75 percent of respondents in 2018 and 73 percent in 2017. Just under half of firms (49 percent) report their expansion plans will only increase the size of their firm by 10 percent or less. About one-fifth (22 percent) of respondents report that they plan to increase headcount by 11 to 25 percent, while seven percent of respondents plan to increase employment by more than 25 percent. Only 2 percent of respondents plan to decrease their headcount, indicating that construction employment will increase substantially in the next year.

All sizes of firms report plans to add employees, with the most bullish expansion plans being reported by the largest companies. Among responding firms with more than \$500 million in revenue, 87 percent say they plan to increase headcount in 2019. Among midsize firms with \$50.1 million to \$500 million in revenue, 83 percent intend to add employees. Of the firms with \$50 million or less in revenue, 75 percent expect to have more workers in 2019.

OVER THREE-FOURTHS OF FIRMS ARE STRUGGLING WITH WORKFORCE SHORTAGES

Despite firms' plans to expand headcount, 78 percent report that they are having a hard time filling salaried and hourly craft positions. That share was down slightly from 83 percent in 2018. In addition, 42 percent of firms expect that it will continue to be hard

to hire in the next 12 months and 26 percent expect that it will become harder to hire in the next 12 months.

Worker shortages are the foremost concern of contractors this year. When asked to identify which of 16 issues is the biggest concern to their firm, 30 percent of respondents chose worker shortages. That greatly overshadowed "increased competition for projects," selected by 10 percent of respondents.

Whether they listed safety or something else as their number-one concern, contractors do worry about challenges regarding the safety and health of their workers. The most frequently mentioned challenge—listed by 43 percent of respondents—is inexperienced skilled labor/workforce shortage. In addition, 16 percent of firms report they see poor subcontractor safety and health performance as a challenge. And 14 percent cite a lack of cooperation from government agencies or regulators as a challenge.

One-third of respondents (33 percent) report that staffing challenges drove costs higher than anticipated. In reaction, 37 percent of firms are putting higher prices into new bids or contractors. Similarly, 34 percent report projects have taken longer than they anticipated, and 18 percent say their have put longer completion times into bids or contracts.

FIRMS ARE RAISING PAY AND INVESTING IN TRAINING

In order to address the workforce shortage, firms continue to raise pay and provide bonuses and benefits. Fifty-nine percent of firms report they increased base pay rates. Twenty-nine percent provided incentives and/or bonuses. Twenty-one percent of firms increased contributions or improved employee benefits to cope with workforce shortages.

In addition to increasing compensation packages, many firms are also investing more in training programs for current and new workers. Sixty-three percent of firms report they plan to increase investments in training and development in 2019, up from 52 percent who planned to increase their training investments at the beginning of last year. Large

firms are especially likely to do so: 71 percent of the companies with more than \$500 million in revenue say they plan to increase investment in training, compared with 66 percent of midsize firms and 59 percent of firms with \$500 million or less in revenue.

CONTRACTORS CONTINUE TO EMBRACE INNOVATION

Firms are adopting a variety of approaches to replace workers or allow for use of workers with less training than before. Nearly a third of respondents (32 percent) report their firms are using methods to reduce onsite worktime, including lean construction, BIM or other virtual construction techniques, or offsite fabrication. Twenty-eight percent of firms are investing in labor-saving equipment, including drones, robots, 3-D printers, and laser- or GPS-guided equipment. And 18 percent of respondents report adding specialists, such as architects, BIM or lean construction personnel, drone or other equipment operators, or data or IT personnel. Two-fifths (41 percent) of firms utilize lean construction principles on their projects and/or in their operation, while one-fifth (20 percent) of respondents expect an increase in the number of their firm's operations that involve BIM.

Many firms also report they follow collaborative project delivery methods. Forty-four percent report they work on design-build projects while 26 percent work on design-assist projects. A majority of firms (51 percent) report they use file-sharing sites such as Dropbox to collaborate with partners, 36 percent report they use online project collaboration software, and 22 percent report using BIM.

Nineteen percent of respondents report using BIM for clash detection, while 17 percent use it for constructability input into the design process. In addition, 14 percent use BIM to visually communicate project scope to clients and 13 percent use it for design of 3-D models. BIM is also used for 3-D model-based takeoff for cost estimating (12 percent of respondents), scheduling and workforce planning (11 percent) and safety (7 percent)—such as identifying safety issues, safety by design, or safety training.

INFORMATON TECHNOLOGY INVESTMENT IS INCREASING AND EVOLVING

Forty-two percent of respondents report their firms will increase IT investment in 2019. Respondents were asked to state whether their investment would increase or decrease in 14 categories of software. The largest share of firms – 30 percent each – plan to increase their investment in project management software and document management software. About a quarter of firms will increase investment in estimating software (26 percent) and scheduling software (24 percent). Very few firms—generally around 1 percent—expect to decrease investment in any type of software.

Firms appear to be increasingly comfortable with moving data to the cloud. This year, 31 percent of respondents said they are very comfortable with such a step, compared with 24 percent last year. Another 44 percent say they are moderately comfortable with moving their data to the cloud, nearly identical to the 45 percent who reported that last year.

When asked which cloud service model they currently use, 23 percent indicate a hybrid cloud, in which their software and data remain on a private network but can be securely accessed with a web browser. Twenty percent are using cloud hosting to outsource servers and networking components. And 10 percent say they use software-as-a-service applications that are fully cloud-based.

The need for mobile capabilities on the job site continues to drive the largest usage of cloud-based technology. The top ways contractors plan to use mobile software are for daily field reports (44 percent of respondents), accessing customer and job information from the field (40 percent), employee time tracking and approval (40 percent), and the sharing of drawings, photos, and documents (38 percent). Each of these percentages is higher than a year ago. Only 3 percent of respondents report that they have no plan to use mobile technology software, a decrease from 5 percent in last year's survey.

TIME AND TRADITION ARE THE BIGGEST CHALLENGES TO ADOPTING NEW INFORMATION TECHNOLOGY

Even as a growing number of firms embrace information technology, many admit that their biggest technology challenges are centered around time and tradition. Twenty-six percent of firms report their biggest IT challenge is that they lack the time needed to implement and train on new systems. In addition, 24 percent each report their biggest IT challenge is employee resistance to technology or communication between field and office, while 23 percent cited connectivity to remote job sites.

CONCLUSION

Despite the headwinds of political partisanship and ongoing trade disputes, contractors are optimistic about demand for construction services. Overall economic conditions appear robust, with private sector demand for many types of projects expected to expand next year, thanks in large part to tax and regulatory reforms that are making it easier for many firms to invest in new construction projects. At the same time, many state and local governments have increased their investment in public-sector projects. And contractors remain hopeful that Democrats and Republicans will be able to enact new, and much-needed, federal infrastructure investments in 2019.

Yet, even as they anticipate growing investments in all types of construction projects, contractors are increasingly concerned about their ability to find qualified workers to hire, train and employ. The growing labor shortages are prompting many construction firms to become more efficient by adopting new technologies and new techniques that allow them to build more with less. Labor shortages are also pushing employers to boost pay and benefits for workers and prompting firms to increase investments in in-house training programs. At the same time, shortages are also contributing to higher construction costs and slower completion schedules for many projects.

Yet it is also important to note that the Outlook is based on responses that were provided before the recent partial federal government shutdown highlighted the increasingly partisan nature of federal politics. The responses were also provided at a time when President Trump had announced a halt to pending tariffs on a range of Chinese goods as negotiators seek to address many legitimate trade concerns. If the federal government can't implement additional needed regulatory reforms and enact needed new infrastructure funds, many contractors' more optimistic expectations, especially regarding the volume of public-sector projects, will not be met. And if American and Chinese officials cannot resolve current trade disputes, many contractors will be squeezed by growing costs for materials at a time when an expanded trade war will likely undermine private-sector demand for new construction.

The message for federal officials from this year's Outlook is quite clear:et aside partisan difference and enact new infrastructure measures; resolve trade disputes, particularly with China; boost funding for career and technical education and embrace comprehensive immigration reform. If Washington leaders make considerable progress in these areas, it is likely that contractors' expectations for the year will come true. However, if Congress and the Trump administration spend more time tearing each other apart instead of coming together for the good of the country, then 2019 may not be as good a year for the construction industry as many contractors predict.

The Associated General Contractors of America and its 27,000 member firms are committed to making sure Washington and its leaders act to support continued economic growth for 2019. That is why we will continue to lead a broad coalition of business, labor and government groups in advocating for new infrastructure investments. We will continue to support efforts to reform costly and unnecessary regulatory burdens. We will continue to advocate for new federal investments in career and technical education. We will resume our years-long support for comprehensive immigration reform. And we will continue to offer ways, including educational programming, to help our member firms embrace and adopt new labor-saving technology and techniques.

Our goal is clear, to ensure that the construction industry continues to expand in 2019 amid growing demand for new projects and an infusion of new and qualified workers. If that happens, the entire economy stands to benefit.

ABOUT THE SURVEY

AGC conducted the survey that serves as the basis for the 2019 Construction Hiring and Business Forecast during November, beginning after the elections, and December 2018. A total of 1,312 firms from the District of Columbia and forty-nine states completed the survey. (Varying numbers responded to each question.) Participating firms represent a broad cross-section of sizes. Fifty-eight percent report performing \$50 million or less worth of work in 2018. Thirty-three percent performed between \$50.1 million and \$500 million worth of work and nine percent performed over \$500 million worth of work. Thirty-three percent of firms report they employ union workers most or all of the time, while the remainder are either exclusively open shop or only occasionally employ union labor. Firms and their employees were not compensated or in any other way reimbursed for completing the survey.

The regions covered in the survey included the following states:

Northeast

Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

South

Alabama, Arkansas, Delaware, District of Columbia, Georgia, Florida, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Midwest

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

West

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, Wyoming