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STRONG DEMAND FOR WORK AMID STRONGER DEMAND FOR WORKERS: THE 2020 CONSTRUCTION HIRING AND BUSINESS OUTLOOK

The Associated General Contractors of America works to ensure the continued success of the commercial construction industry by advocating for federal, state and local measures that support the industry; providing opportunities for firms to learn about ways to become more accomplished; and connecting them with the resources and individuals they need to be successful businesses and corporate citizens. 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 belong to the association through its nationwide network of chapters. Visit the AGC Web site at www.agc.org.

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SUMMARY

Contractors are very optimistic about demand for construction in 2020 despite numerous signs the overall economy may be slowing. At the same time, many construction executives are troubled by labor shortages and the impacts those shortages are having on their operations, training & safety programs and bottom lines. Both the optimism about workloads and the worry about worker availability cut across all regions, project categories and types of contractors.

These findings are based on a survey of nearly 1,000 contractors that the Associated General Contractors of America (AGC) and Sage released on December 18. Questionnaires were sent to AGC members on November 6 and results were received as recently as December 9, 2019.

Contractor optimism extends to all 13 project types included in the survey, with more contractors expecting markets to grow than decline in 2020 for each segment. To cope with the added workload, three-fourth of respondents say they expect their firm to increase headcount in 2020.

However, 81 percent of respondents say they are having a hard time filling positions. Almost two-thirds expect it will continue to be hard or become harder to hire personnel in the coming 12 months. Six of the eight top concerns among contractors relate to worker shortages, training and quality.

Staffing challenges are affecting project costs and completion times. Nearly half of respondents said costs were higher than expected, and almost as high a share of firms is now putting higher prices into new bids or contracts. Two out of five firms experienced longer-than-anticipated completion times, and more than 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. Over half of responding firms raised base pay rates more than in 2018, while many also increased or introduced incentives, bonuses and benefit contributions. In addition, firms took a variety of steps in the last year to invest in training and the development of skilled labor to attract qualified workers. More than two-fifths of firms

revamped initiatives to recruit labor. One in three firms increased money allocated to technical education and nearly as many restructured or changed programming for current craft professional recruits. Nevertheless, more than half of respondents see inexperienced workers and workforce shortages as a major challenge to the safety and health of their workforce.

Many firms are seeking to cope with labor shortages by adopting new, labor-saving technologies. For example, 32 percent of firms report adopting technologies like drones, robots, 3-D printers and laser- and GPS-guided equipment to become more efficient. In addition, more than a quarter of firms (28 percent) have adopted labor-saving methods like lean construction and Building Information Modeling (BIM).

Nearly half the firms expect to increase their investment in information technology (IT) in 2020, with the largest share planning to increase investments in project management software. Respondents cited a wide variety of ways their companies plan to use mobile software technology. And to collaborate with project partners, more than two-thirds of firms use file-sharing sites nearly half use online project collaboration software, and about one-quarter use BIM. However, there are several IT challenges that were mentioned by at least one-third of respondents, especially the time needed to implement and train on new technology.

Contractors in all four regions of the country overwhelmingly expect to hire more workers and, on balance, expect an increase in the dollar value of projects they compete for, compared to 2019. But there are some regional differences. For instance, contractors in the South are more optimistic than the national average regarding the value of projects in every segment, while the Northeast has the highest percentage of firms that expect to add workers in 2020.

CONTRACTORS EXPECT STRONG DEMAND FOR ALL MARKET SECTORS IN 2020

On balance, contractors expect an increase in 2020 in the available dollar value of projects for which they compete. 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.

As in the 2019 survey (conducted in November-December 2018), this year's survey shows a very high degree of uniformity about the outlook for different project types. For every segment, between 27 and 36 percent of respondents expect an increase from 2019 in the dollar value of projects they compete for, while between 11 and 21 percent of respondents foresee less work available in 2020. The difference between the positive and negative responses—the net reading—ranges from 8 to 25 percent, with most segments clustered between 10 and 20 percent. Overall, the level of optimism was somewhat higher than in the 2019 hiring and outlook survey, in which net positive readings ranged from 5 to 17 percent.

Respondents were most optimistic, on balance, regarding water and sewer construction, with a net positive reading of 25 percent. In addition, respondents were notably optimistic about the outlook for four other categories, all of which had net positive readings of 20 percent: kindergarten-to-12th grade (K-12) school; hospital; bridge/highway; and other transportation (e.g., transit, rail, airport) construction. More than twice as many respondents expect a growing rather than a shrinking market for three additional segments. There was a net positive reading of 17 percent for power projects and construction for federal agencies (such as the General Services Administration, U.S. Army Corps of Engineers, Naval Facilities and Engineering Command, and the Department of Veterans Affairs). Respondents were nearly as optimistic about higher education projects, with a net positive reading of 16 percent. For all of these segments, respondents were more upbeat about market prospects than in last year's survey.

Respondents had more mixed, but still largely positive, views about the outlook for four other market types. There were net positive readings of 11 percent each for manufacturing and multifamily residential construction and 10 percent each for public buildings and the retail/warehouse/lodging category. Among these categories, respondent's outlook brightened compared to last year for multifamily construction but dimmed for the nonresidential segments. The smallest net positive reading—8 percent—

was for private office projects, although even in that niche, more than one-quarter of respondents who compete in the category foresee growing opportunities in 2020.

The results are also largely similar by region—with one notable difference. Respondents from the Northeast have a net negative outlook for seven of the 13 project categories, although they have a slightly more positive expectation than the national average for higher education and power construction.

Respondents in the South have the most upbeat outlook, with net positive readings that exceed national averages for all 13 categories. Like their counterparts nationally, respondents in the South are especially bullish on water/sewer construction.

Respondents in the West rate K-12 schools as the most favorable market in 2020. They are slightly less optimistic than respondents nationally, but have a positive view, on balance, for all 13 types of projects.

In the Midwest, as well, respondents are slightly less optimistic than their counterparts nationally. They have a neutral reading (0 percent) for public building construction and slightly negative (-3 percent) for retail/warehouse/lodging construction.

MOST CONSTRUCTION FIRMS WILL ADD STAFF IN 2020

Three out of four construction firms (75 percent) plan to increase headcount in 2020. Expectations were similarly expansive in the last three surveys: 77 percent of respondents in the previous survey expected to add employees in 2019, as did 75 percent in 2018 and 72 percent in 2017. Just over half (52 percent) of firms report their expansion plans will only increase the size of their firm by 10 percent or less. About one-fifth (19 percent) of respondents report that they plan to increase headcount by 11 to 25 percent, while five percent of respondents plan to increase employment by more than 25 percent. Only 5 percent of respondents plan to decrease their headcount; the remainder (19 percent) anticipate no change.

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, nearly one-third (30 percent) say they plan to increase headcount

in 2020 by more than 10 percent. Among midsize and small firms, just over one-fifth (22 percent in each case) intend to increase their headcount that sharply.

WORKFORCE SHORTAGES ARE THE TOP WORRY FOR MOST FIRMS

Despite firms' plans to expand headcount, 81 percent report that they are having a hard time filling salaried and hourly craft positions. That share is similar to the 78 percent rate in the previous survey and 83 percent two years ago. In addition, 43 percent of firms expect that in the next 12 months it will continue to be hard to hire and 22 percent expect that it will become harder to hire.

Worker shortages and worker quality are the foremost concern of contractors this year. When asked to identify which of 17 issues are the biggest concerns to their firm, 75 percent of respondents listed worker quality and 72 percent picked worker shortages. Rising direct labor costs (pay, benefits, employer taxes) were mentioned by 57 percent. Other frequently listed concerns include subcontractor availability or quality (44 percent of respondents) and safety (30 percent).

Whether or not they mentioned safety as one of their biggest concerns, contractors do worry about challenges regarding the safety and health of their workers. The most frequently mentioned challenge—listed as a major challenge by 57 percent of respondents—is inexperienced skilled labor/workforce shortage. In addition, 23 percent of firms report they see poor subcontractor safety and health performance as a major challenge. And 22 percent list safety hazards created by third parties, such as motorist crashes in highway work zones. Eighteen percent cite a lack of cooperation from government agencies or regulators as a major challenge.

Close to half of respondents (44 percent) report that staffing challenges drove costs higher than anticipated. In reaction, 41 percent of firms are putting higher prices into new bids or contractors. Similarly, 40 percent report projects have taken longer than they anticipated, and 23 percent say they have put longer completion times into bids or contracts. All of these percentages are higher than in the 2019 survey—another sign the worker and skills deficit is becoming still more severe.

FIRMS ARE PAYING MORE & BOOSTING TRAINING TO COPE WITH LABOR SHORTAGES

In order to address the workforce shortage, firms continue to raise pay and provide bonuses and benefits. Over half (54 percent) of firms report they increased base pay rates more in 2019 than in 2018. Twenty-three percent provided incentives and/or bonuses. Fourteen percent of firms increased contributions or improved employee benefits to cope with workforce shortages. Only one-fifth (19 percent) of firms report taking none of these steps.

In addition to increasing compensation packages, many firms are investing more in training programs for current and new workers. Roughly two-fifths (42 percent) of firms report they revamped initiatives to recruit labor in the last year. Large firms are especially likely to do so: 62 percent of the companies with more than \$500 million in revenue say they plan to increase investment in training, compared with 55 percent of midsize firms and 35 percent of firms with \$50 million or less in revenue.

CONTRACTORS ARE USING TECHNOLOGY TO COMPENSATE FOR LABOR SHORTAGES

Firms are adopting a variety of approaches to replace workers or allow for use of workers with less experience or training than before. Nearly a third of respondents (32 percent) report their firms are investing in labor-saving equipment, including drones, robots, 3-D printers, and laser- or GPS-guided equipment. Twenty-eight percent of respondents are using methods to reduce onsite worktime, including lean construction, building information modeling (BIM) or other virtual construction techniques, or offsite fabrication. And 17 percent of respondents report adding specialists, such as architects, BIM or lean construction personnel, drone or other equipment operators, or data or IT personnel. Roughly one-fifth (17 percent) of respondents expect an increase in the number of their firm's projects that involve BIM.

Here, again, size matters. Roughly two-thirds of the largest firms have adopted or increased use of labor-saving equipment (64 percent) or methods to reduce onsite

worktime (70 percent). Only around one-fifth of the smallest firms have done so (22 percent for labor-saving equipment and 17 percent for methods to reduce onsite worktime).

There has been a marked rise in the share of firms that engage in collaborative project delivery methods. More than two-thirds of firms (70 percent) report they use file-sharing sites such as Dropbox to collaborate with partners—a substantial jump from the 51 percent who reported this in the previous survey. In addition, 47 percent report they use online project collaboration software, up from 36 percent a year ago. Over one-quarter (27 percent) of firms report using BIM, an increase from 22 percent last year.

Roughly two out of five (39 percent) of respondents' firms use BIM. Of these, one-quarter (25 percent) report using BIM for clash detection (compared with 19 percent in the previous survey), while 21 percent use it for constructability input into the design process (up from 17 percent a year ago). In addition, 19 percent use construction means and methods, and 18 percent use BIM to visually communicate project scope to clients (up from 14 percent). BIM is also used for design of 3-D models (16 percent of respondents' firms), 3-D model-based takeoff for cost estimating (15 percent), scheduling and workforce planning (13 percent) and safety (7 percent)—such as identifying safety issues, safety by design, or safety training.

BIM usage differs greatly by firm size. Nearly three-quarters (72 percent) of the largest firms use it, compared to only 13 percent of the smallest firms. BIM requires a level of investment in personnel, training and equipment or software that may not make economic sense for small firms, especially ones that work mainly on less complex projects.

INFORMATON TECHNOLOGY INVESTMENTS WILL GROW IN 2020

Nearly half (46 percent) of respondents report their firms will increase IT investment in 2020. Respondents were asked to state whether their investment would increase or decrease in 15 categories of software. The largest share of firms – 30 percent – plan to increase their investment in project management software. About a quarter of firms will increase investment in document management software (25 percent) and fleet

tracking/management software (23 percent). Very few firms—generally around 1 percent—expect to decrease investment in any type of software.

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 (68 percent of respondents), employee time tracking and approval (61 percent), accessing customer and job information from the field (55 percent), and the sharing of drawings, photos, and documents (55 percent). Each of these percentages is substantially higher than a year ago.

TIME AND TRADITION ARE BIGGEST THREAT TO IT ADOPTION

Even as a growing number of firms embrace information technology, many admit that their biggest technology challenges are centered around time and tradition. Forty-three percent of firms report that they lack the time needed to implement and train on new systems. In addition, 38 percent report employee resistance to technology, 36 percent cite communication between field and office, while 35 percent cite connectivity to remote job sites as being among their biggest IT challenges.

CONCLUSION

Most contractors expect demand to remain strong, and in many cases strengthen, in 2020 despite signs that the overall economy may slow or stall. In particular, they expect demand for most types of public and institutional construction to expand. A decade of economic expansion has left many public and institutional owners in good fiscal shape and is leading to robust demand for construction of new, and renovation of existing, facilities.

And while the outlook for many types of private-sector projects, including private-office and multifamily residential buildings, is less optimistic, more contractors expect demand in those segment to grow than shrink. Construction executives appear to believe that a host of pro-growth measures, including tax cuts and federal regulatory reforms, will offset the potential impact of restrictive immigration policies, trade disputes, threatened tariffs and a slowing global economy.

While contractors are optimistic about their ability to find work, they continue to worry about their ability to find qualified workers. The commercial construction industry's top concerns are primarily related to workforce issues, including the lack of available, well-prepared and/or experienced workers to hire. Contractors report these shortages are impacting their construction schedules, the way they compete for new work, and their bottom lines. They are also changing the way firms recruit, compensate and train new craft professionals. And workforce shortages are driving new investments in labor-saving technologies and techniques that have the potential to substantially transform the way many construction projects are planned and built.

The federal policy implications for this year's construction outlook are clear: Washington officials must continue to promote pro-growth economic policies like regulatory reform and investing in infrastructure. Congress can, and should, act quickly in 2020 to promote economic growth by passing measures to make needed investments in airports, waterways, highways and transit systems. At the same time, the Trump administration should continue its work reviewing and reforming many needless regulatory burdens.

Yet Washington officials must also take steps to prepare and place more people into high-paying construction careers. Congress and the administration must work together to double funding for career and technical education over the next five years. This would make it easier for school districts across the country to set up construction-focused education programs that provide basic construction skills and, more important, signal to students and families that construction ought to be among career choices young adults consider. Congress should also pass the JOBS Act, which makes it easier for students in short-term post-secondary construction education programs to qualify for federal Pell Grants. And administration officials should look at federal guidelines for evaluating high schools to make sure they are being properly recognized for placing graduates into careers like construction instead of just into colleges.

Washington officials also need to recognize the need to allow more people to lawfully enter the country to address workforce shortages while the domestic pipeline for preparing and recruiting workers is being restored. This means that Congress should

pass legislation establishing a temporary work visa program specifically focused on construction. The administration and Congress should also move forward on long-overdue comprehensive immigration reform. And it should take steps to provide legal certainty to the tens of thousands of construction workers lawfully in the country through either the Temporary Protected Status program, or via the so-called “Dreamers” program. At the same time, the Administration and Congress need to take additional steps to secure the nation’s borders. Allowing people to unlawfully work in this country sets them up to be exploited by unscrupulous firms who are able to under-bid more responsible firms.

A thriving, successful and diverse construction industry is the essential foundation for America’s continued economic prosperity, security and well-being. That is why the Associated General Contractors of America and its 27,000 member firms are committed to taking every possible step to educate federal officials about our key policy priorities. Investing in infrastructure and extending the work of regulatory reforms are essential to sustaining economic growth. At the same time, making needed investments and enacting measures that demonstrate the tremendous value of high-paying construction careers, along with reforming the immigration system, will ensure that contractors can keep pace with the kind of strong demand for their services most firms anticipate.

Our goal is to make sure contractors’ optimistic outlook becomes reality in 2020.

ABOUT THE SURVEY

AGC conducted the survey that serves as the basis for the 2020 Construction Hiring and Business Forecast during November and December 2019. A total of 956 firms from forty-eight states completed the survey. (Varying numbers responded to each question.) Participating firms represent a broad cross-section of sizes. Sixty-two percent report performing \$50 million or less worth of work in 2019. Thirty-two percent performed between \$50.1 million and \$500 million worth of work and six percent performed over \$500 million worth of work. Thirty-one 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