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HIGH HOPES FOR PUBLIC FUNDING AMID WORKFORCE AND SUPPLY CHAIN CHALLENGES: THE 2023 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 6,500 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 optimistic about the construction outlook for 2023, yet they are expecting very different market conditions for the coming year than what they experienced in 2022. Contractors are less optimistic about many private-sector segments than they were a year ago, while their expectations for the public sector market have remained relatively bullish. The bottom line is that contractors have high hopes for public funding in 2023 even as they expect to cope with continued supply chain challenges and workforce shortages.

The changing outlook reflects the fact that higher interest rates and evolving work and shopping patterns are impacting office, retail, hospitality, and multifamily residential demand. The prospect of an economy that is slowing and perhaps heading into recession has dimmed the short-term outlook for warehouses, data centers, and manufacturing plants. At the same time, many contractors hope to finally see the benefits of a flurry of new federal investments in infrastructure and construction. This includes funding from the Bipartisan Infrastructure Law, the CHIPS Act and the so-called Inflation Reduction Act. In addition, many state and local governments have boosted their construction budgets as they have benefitted from a strong economy and a COVID-related influx of federal funds.

Even as market demand evolves, contractors will continue to be confronted by many of the challenges they faced in 2022. This includes the impacts of supply chain problems that have inflated the cost of many construction materials and delayed deliveries of those products. Complicating things, these supply chain challenges have been erratic and unpredictable. One week one material is in short supply, while the next week it is a different product. This makes it hard for contractors to make reliable cost estimates and anticipate production schedules.

Contractors also expect to continue to struggle to find enough workers to keep pace with demand in 2023. Washington's failure to pass immigration reform, combined with a significant funding gap between collegiate education and career and technical education tracks, means there are very few new workers entering the construction labor

pool domestically or from other countries. At the same time, demographics continue to work against the industry, as the size of the U.S. workforce continues to shrink relative to the overall population.

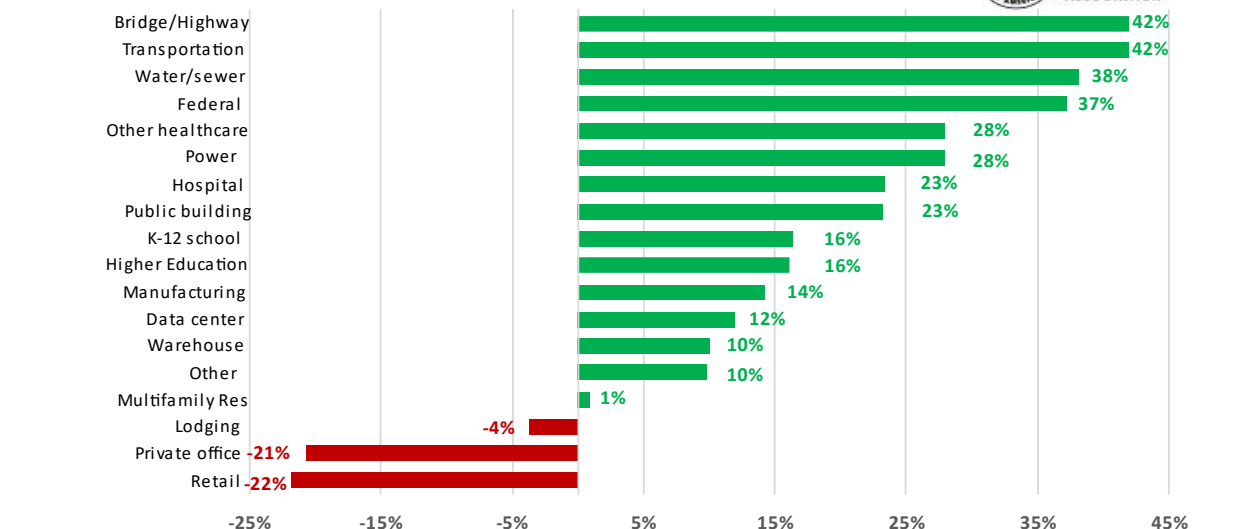
Contractors are taking steps to address these challenges. Firms are boosting pay and benefits to entice more workers and retain current staff. They are also investing in technology and techniques to make their operations more efficient and less vulnerable to supply chain challenges and labor shortages. In other words, they are finding a way to continue building despite the many challenges they face in 2023.

CONTRACTORS EXPECT DEMAND FOR CONSTRUCTION TO PICK UP FOR NEARLY ALL MARKET SEGMENTS

Contractors remain upbeat about the available dollar value of projects to bid on in 2023 despite signs of slowdown in other parts of the economy. The net reading—the percentage of respondents who expect the available dollar value of projects to expand compared to the percentage who expect it to shrink—is positive for 14 of the 17 categories of construction included in the survey.

AGC Outlook Survey: Net* % who expect 2023 value of projects to be higher/lower than 2022

* Net = % expecting higher value - % expecting lower value than in 2022



10 | Source: AGC 2023 Outlook Survey; 1,032 total respondents

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Respondents are most optimistic about infrastructure categories. Specifically, there were net positive readings of 42 percent for both highway and bridge construction and transportation projects such as transit, rail and airports. Contractors are almost as upbeat about sewer and water construction, with a net reading of 38 percent, and work for federal government agencies such as the General Services Administration, Department of Veterans Affairs, U.S. Army Corps of Engineers, and the Naval Facilities and Engineering Command. The net reading for federal projects is 37 percent.

The highest expectations among predominantly private-sector categories, with net readings of 28 percent each, are for power projects and non-hospital healthcare facilities, such as clinics, testing facilities and medical labs. There is also a generally positive outlook for hospital projects and public buildings, with net readings of 23 percent each.

Contractors on balance were optimistic, as well, about the education sector. The net reading for both kindergarten-to-12th-grade schools and higher education construction is 16 percent.

Three other segments have readings that are positive, on net, by double-digit percentages. However, contractors are much less optimistic about these project types than they were a year earlier. The net reading for manufacturing construction is 14 percent, compared to 27 percent in the 2022 survey. The net is 12 percent for data centers, down from 31 percent a year ago, and 10 percent for warehouses, down from 41 percent.

In addition, there are four market segments for which respondents are almost evenly divided between favorable and unfavorable outlooks or have negative expectations on balance. There is a net positive reading of 1 percent for multifamily residential construction. Expectations are bearish for lodging, with a net negative reading of -4 percent; private office, -21 percent; and retail construction, -22 percent.

Despite the largely positive net readings, respondents are less confident about growth prospects than they were a year ago. For all but three project types, the net reading is less positive (or more negative) than in the 2022 survey. The steepest downturn in expectations occurred with multifamily and warehouse construction, both of which

recorded declines of 31 percentage points from the net readings in the 2022 survey. The outlook for lodging construction slipped from modestly positive a year ago to negative. Respondents have become slightly more optimistic about just one construction segment—public buildings—for which the net reading rose from 20 a year ago to 23.

THE BIPARTISAN INFRASTRUCTURE LAW WILL MAKE A DIFFERENCE BUT HASN'T SO FAR

Despite the fact many contractors are optimistic about growing demand for infrastructure projects in 2023, few contractors report having been awarded projects so far. This is despite the fact the federal Bipartisan Infrastructure law was enacted in November 2021. Indeed, only 5 percent of respondents say they have worked on new projects funded by the law, while 6 percent have won bids but have not started work. Five percent say they have bid on projects but have not won any awards yet, whereas 21 percent plan to bid on projects but say nothing suitable has been offered yet.

The fact so few firms have benefited from the infrastructure measure may be the result of the significant regulatory obstacles the administration has imposed that are creating confusion among state and local officials. In particular, the administration has fumbled the implementation of new Buy America regulations, leading to widespread confusion about which building materials are covered by the new measure and which are not. As a result, many state and local officials may be waiting for additional clarity before moving forward as they anticipate challenges in receiving Buy America waivers from federal officials.

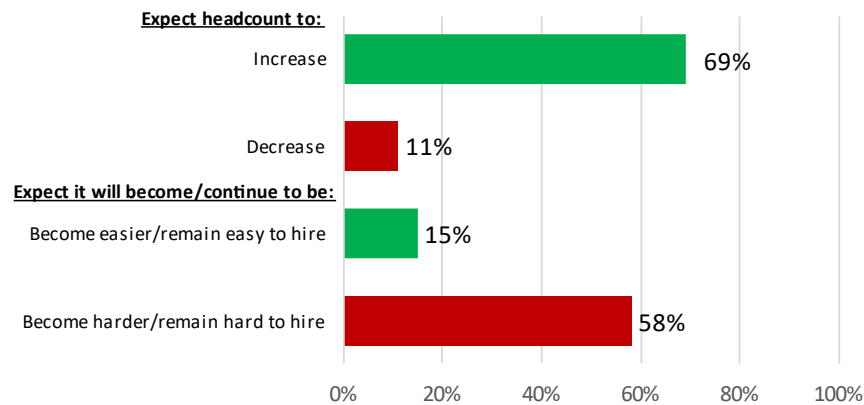
HIRING EXPECTATIONS ARE HIGH BUT SO ARE THE OBSTACLES

Most firms anticipate adding workers in 2023 to accommodate the higher demand for projects. More than two-thirds (69 percent) of the respondents expect to add to their headcount, compared to only 11 percent who expect a decrease. While just under half (46 percent) of firms expect to increase their headcount by 10 percent or less, nearly one-quarter anticipate larger increases. Eighteen percent of respondents say their headcount will grow by 11 to 25 percent, and 5 percent of respondents anticipate an increase in headcount of more than 25 percent.

AGC Outlook Survey: Firms' expectations regarding their headcount and hiring over next 12 months



% of respondents who:



11 | Source: AGC 2023 Outlook Survey; 1,032 total respondents

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However, respondents expect difficulty adding workers. An overwhelming 80 percent report they are having a hard time filling some or all salaried or hourly craft positions, compared to only 8 percent who say they are having no difficulty. (The rest have no openings.) In addition, the majority (58 percent) of respondents says either hiring will continue to be hard (41 percent) or will become harder (17 percent). Only 15 percent say it will become easier or remain easy to hire, while 27 percent expect no change.

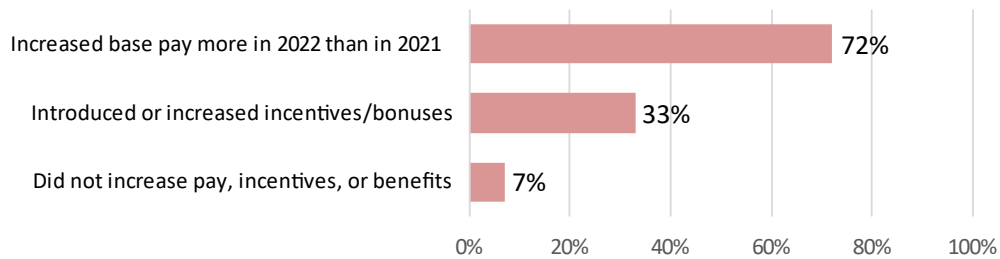
Union and open-shop firms have similar expectations about expanding their headcount and the difficulty in doing so. Roughly two-thirds of respondents from both types of firms expect to add workers in 2023: 64 percent of union firms and 69 percent of open-shop firms. Both types of firms report difficulty filling positions: only 7 percent of open-shop respondents and 11 percent of union respondents report no difficulty filling any salaried or hourly craft positions.

A large majority of firms took steps in 2022 to attract and retain workers. Nearly three-quarters (72 percent) increased base pay rates more than in 2021, compared to 62 percent that boosted pay more in 2021 than in 2020. Additionally, one-third (33 percent) of firms provided incentives or bonuses. And more than one-fourth (26 percent) of the firms increased their portion of benefit contributions and/or improved employee benefits.

Only 7 percent of firms provided no increases in pay, incentives, or benefits in 2022, down from 12 percent that made no changes the year before.

AGC Outlook Survey: 2022 Compensation Changes

% of firms that:



3 | Source: AGC 2023 Outlook Survey; 1,032 total respondents

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In general, there was little variation by region among contractors' responses, but firms in the South were somewhat more likely than in other region to have used steeper pay increases to attract and retain workers. More than three-fourths (76 percent) of firms based in the South increased base pay rates in 2022 more than in 2021, compared to 73 percent of firms in the West, 72 percent in the Midwest, and 65 percent in the Northeast.

SUPPLY-CHAIN WOES AND RISING COSTS CONTINUE TO PLAGUE CONTRACTORS

Nearly three years after the onset of the coronavirus pandemic, supply-chain bottlenecks continue to bedevil contractors. Only 9 percent of firms report they have not had any significant supply chain problems in 2022. To cope with these problems, more than two-thirds (70 percent) of respondents have reacted by accelerating purchases after winning contracts. A majority (56 percent) turned to alternative suppliers. Almost half (49 percent) have specified alternative materials or products, while close to one-quarter (22 percent) have stockpiled items before winning contracts.

Most contractors have experienced project delays or cancellations. Only a third (33 percent) report no projects have been postponed or canceled. A substantial share of respondents reports a project was postponed in 2022: 39 percent report a postponed project was rescheduled, while 36 percent had a project postponed or canceled last year that has not been rescheduled. (Respondents could select multiple answers.) Thirteen percent of firms have already experienced a canceled or postponed project that was scheduled to begin in the first half of 2023.

The main reason for cancellations and postponements was rising costs—for construction, financing, insurance, etc.—which was cited by nearly half (48 percent) of contractors. Another 12 percent said the main reason was that the owner had reduced funding available, while 8 percent said the main reason a project was canceled or postponed was because of a delay in the likely completion date. Only 5 percent cited reduced demand for the completed project as the main reason for a cancellation or postponement.

TOP CONCERNS INCLUDE RECESSION, MATERIAL COSTS, WORKER SUPPLY, AND INTEREST RATES

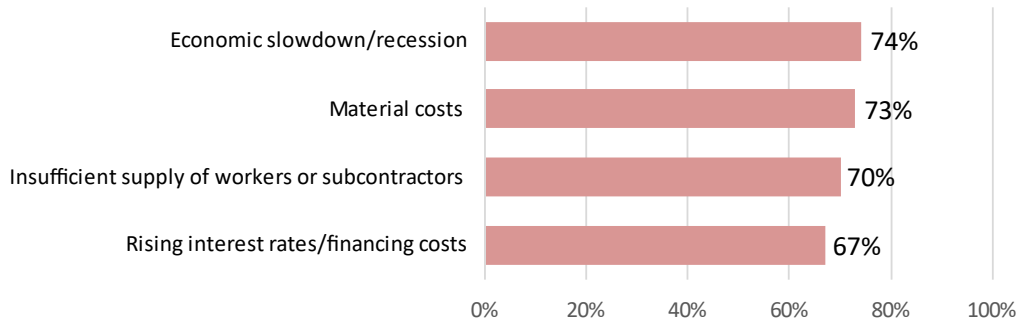
Contractors expressed a variety of concerns about the market in 2023. Two of the four most frequently mentioned concerns reflect broad economic trends, while two are specific to construction.

The possibility of an economic slowdown or recession is the most frequently cited concern, listed by 74 percent of respondents. In addition, two-thirds (67 percent) marked rising interest rates/financing costs as a top concern. (Respondents could list multiple “biggest concerns.”)

Among industry-specific concerns, nearly three-fourths (73 percent) listed material costs as one of their biggest concerns. Yet this percentage was down considerably from the 2022 survey, when material costs was cited by 86 percent of respondents and was the most cited concern. Insufficient supply of workers or subcontractors was a top concern of 70 percent of respondents, down slightly from 73 percent in the 2022 survey.

AGC Outlook Survey: Firms' Major Concerns for 2023

% of respondents who listed as a major concern:



4 | Source: AGC 2023 Outlook Survey; 1,032 total respondents

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Project delays due to availability/supply chain issues remain a widespread concern, cited by 63 percent of firms. But these issues are not as prevalent as a year ago, when they were listed by 79 percent of firms.

Sixty-three percent of respondents also mentioned rising direct labor costs (pay, benefits, employer taxes) as a major concern. That was picked by a slighter smaller share (58 percent) of respondents in the 2022 survey. One other item was selected as a major concern by a majority of firms: worker quality, listed by 53 percent in the 2023 survey and a nearly identical 52 percent in the 2022 survey.

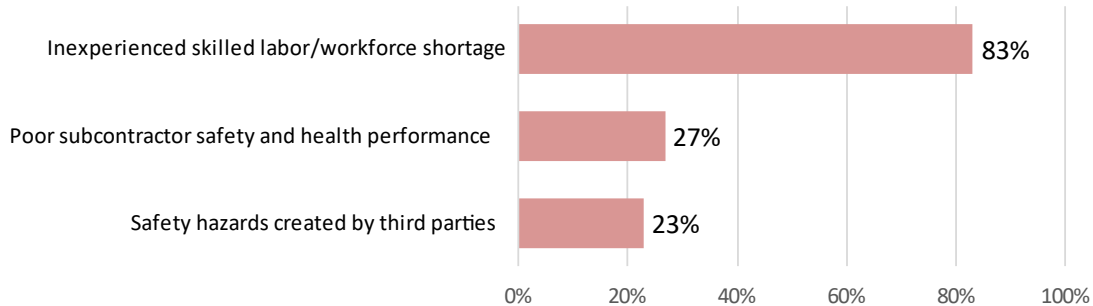
Considerably fewer firms than last year listed regulations as a top concern. Federal regulations were mentioned by 21 percent of respondents, down from 41 percent a year ago. State and local regulations were listed by 19 percent in the current survey, compared to 28 percent of respondents a year earlier.

Consistent with the list of top concerns were respondents' views regarding the safety and health of their firms' workers. Inexperienced skilled labor or workforce shortages was cited as a challenge by 83 percent of firms—the same share as in the 2022 survey. In contrast, only 12 percent in the current survey list lack of cooperation from government agencies or regulators as a safety and health challenge, down from 29

percent a year ago. Roughly one-fourth of firms cite poor subcontractor safety and health performance (27 percent) or safety hazards created by third parties, such as motorist crashes into work zones (23 percent), as challenges.

AGC Outlook Survey: Safety and Health Challenges

% of respondents who list as challenges:



CONTRACTORS PLAN TO INVEST IN EQUIPMENT AND INFORMATION TECHNOLOGY

Perhaps in tandem with the widespread expectation of more infrastructure projects, a majority (59 percent) of respondents anticipate purchasing or leasing new work vehicles or equipment in 2023. Only about a quarter (26 percent) report they will not do so, while 15 percent are uncertain.

Midsized firms appear the most likely to invest in vehicles or equipment. More than two-thirds (69 percent) of firms with revenue between \$50.1 million and \$500 million report they plan to invest in 2023. In contrast, 55 percent each of smaller and larger firms report plans to invest in new work vehicles or equipment.

Nearly all firms plan to increase or keep level their investment in information technology (IT). As was the case with the past two surveys, between a quarter and a third of firms plan to increase their investments in assorted technologies in 2023, while the

remaining firms almost universally expect no change investment levels. As before, only 1-2 percent of respondents expect to decrease investment in any of the 15 technologies included in the survey.

The most likely candidate for increased IT spending is document management software, which 31 percent of respondents plan to increase spending on. Project management software comes in a close second, cited by 30 percent of firms. Roughly one-fourth of firms plan to increase investments in accounting software, estimating software, tool and asset management or tracking, or human resources.

Firms use cloud-hosted IT in various ways. The most prevalent use is in project management, cited by 57 percent of firms. Nearly half (47 percent) list field operations. Accounting is cited by 43 percent and time tracking by 42 percent. However, only 16 percent list tool management, while 21 percent say they do not use the cloud. These percentages closely match those in the 2022 survey.

Also similar to the past years' surveys, more than half (61 percent) of firms report having a formal IT plan to support their business objectives. Another 8 percent say they plan to adopt one in 2023.

The uses to which firms plan to put mobile software technology are almost identical to those in the 2022 survey. Approximately two out of three firms (68 percent) plan to use the technology for daily field reports, and 61 percent say they will use it for employee time tracking and approval. Majorities also listed sharing of drawings, photos, and documents (58 percent) or access to customer and job information from the field (56 percent). However, usage expectations declined for one of the 19 uses listed in the survey: 25 percent of respondents expect to use mobile software technology for GPS tracking, such as fleet tracking, down from 33 percent a year ago.

Firms list the biggest IT challenges at the same rates as a year ago. Forty percent of contractors say it's difficult to find the time to implement and train on new technology, close to the 2022 survey's 41 percent. Thirty-eight percent of firms cite employee resistance to technology, while 37 percent mention keeping company data secure from hackers, and 35 percent point to connectivity to remote job sites. Two challenges were

mentioned more often than in the 2022 survey, however. Nearly a third (32 percent) of firms cited “integration between software used inside our company” (up from 27 percent a year ago) and 27 percent listed “keeping software current” (up from 22 percent).

CONCLUSION

Contractors remain optimistic overall about the construction industry’s prospects in 2023. But fewer contractors than a year ago expect continued growth, especially in private markets, even as public-sector funding appears poised to tick up. This rotation among project types should help the industry keep growing despite a possible economic downturn. But a lot must go right for this market transition to be a positive one for the industry.

First, federal officials need to deliver on the promise of these substantial new investments in infrastructure and construction. To do that, they will need to address much of the regulatory and permitting uncertainty that muted the hoped-for benefits of the Bipartisan Infrastructure law in 2022. For example, the Biden administration will need to resolve the significant uncertainties that exist around the Buy America provisions within the Bipartisan Infrastructure law. To date, the administration has not settled on a uniform interpretation of those requirements. As a result, different federal agencies are likely to have inconsistent interpretations of which materials are covered. This regulatory uncertainty will make it harder for state and local officials to move forward with vital infrastructure projects, since so many of the components needed could potentially be tripped up by the Buy America requirements. Providing government-wide clarity and an expedited and reasonable waiver review process will help unleash the potential of the new infrastructure investments.

The administration must also address many of the labor and tax provisions that were included in the so-called Inflation Reduction Act. For example, the law offers significant tax breaks for many types of energy efficient construction projects, but only if a percentage of the workforce performing the work is involved in a registered apprenticeship program. But even in heavily unionized construction markets, apprenticeship capacity is limited and already being strained by a range of microchip and

electric vehicle construction projects. The administration must make it easier for construction firms, community and technical colleges and other institutions to establish and be registered as apprenticeship programs before the full potential of these new construction investments can be met.

The Biden administration also needs to act on the permitting reform measures that were included in the 2021 Bipartisan Infrastructure Law. To date, administration officials have pretended those provisions do not exist, and have refused to issue guidance that could significantly accelerate the timeline for federal reviews, without diminishing approval standards. The President should make permitting reform a priority in 2023 to help accelerate the potential benefits of the infrastructure investments he continues to promise.

And Congress should work with the administration to pass immigration reforms and boost investments in career and technical education programs. Establishing a temporary work visa program for individuals with construction skills will provide short-term relief for labor shortages that are keeping many firms from bidding on projects. At the same time, Congress should boost funding for career and technical education and training programs to expose more current and future workers to construction skills. This will help encourage more people to pursue high-paying construction careers.

As this year's outlook makes clear, however, contractors are not waiting for Washington officials to act when it comes to overcoming the challenges they face in 2023. Firms are raising pay, boosting benefits, and increasing their training budgets to be better able to attract and retain new, and more diverse, talent. They are investing in new technology and new techniques to be more efficient so they can build more with fewer people. And they are finding ways to overcome supply chain challenges by being more conservative in their bidding and scheduling practices and more willing to suggest alternative materials.

AGC of America is supporting the industry as it works to overcome the challenges it faces. This includes our ongoing targeted digital advertising campaign to help identify and recruit new workers into the industry. This campaign, which is called Construction is Essential, enables us to partner with our chapters across the country to help drive

significant numbers of candidates to local construction workforce recruiting campaigns. Many of these campaigns rely on the template workforce recruiting websites we created and make available for all AGC chapters to use.

Our Culture of Care program is also helping firms better attract and retain talent, particularly diverse talent. Culture of Care is a comprehensive program designed to help firms create a more welcoming and inclusive work environment. To date over 800 firms are participating in the program, and we continue to urge other members to sign up for the program by visiting BuildCulture.org.

A large part of retaining a strong workforce is making sure they are healthy and safe. That is why we continue to offer a wide range of safety training and resources for our members. And we will continue to focus on the mental health and well-being of the industry's workforce. Late last year we released a series of video public service announcements focused on the topic. We will continue to share resources with the entire industry on ways to address the mental and physical well-being of the men and women who build America.

And we will continue to be vigorous advocates for the industry in Washington and with public officials across the country. This includes pushing back against a wide range of needless and counterproductive regulatory measures and fighting for measures that will ensure the construction industry's continued success.

The bottom line is we will do everything in our power to make sure that 2023 is a successful one for the industry, our members and the tens of thousands of men and women that they employ.

ABOUT THE SURVEY

AGC conducted the survey that serves as the basis for the 2023 Construction Hiring and Business Outlook during November and December 2022. A total of 1,032 firms from 49 states and the District of Columbia completed the survey. (Varying numbers responded to each question.)

Participating firms represent a broad cross-section of revenue and employment sizes. Fifty-eight percent report performing \$50 million or less worth of work in 2022. Thirty-four percent performed between \$50.1 million and \$500 million worth of work and 8 percent performed over \$500 million worth of work. Fifteen percent of firms have fewer than 20 employees, while 42 percent have between 20 and 99 employees. Firms with 100 to 499 employees account for 31 percent of respondents and firms with 500 or more employees comprise 11 percent of the total.

Twenty-nine percent of firms report they employ union workers most or all of the time, while 60 percent are either exclusively open-shop or only occasionally employ union labor. The remaining 11 percent do not self-perform or directly hire craft personnel.

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, Florida, Georgia, 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, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming