2021 Workforce Survey Analysis

SUMMARY

Each year, the Associated General Contractors of America partners with Autodesk to evaluate the state of the construction labor market. Our annual Workforce Survey is designed to measure the scope of construction workforce shortages, explore some of the possible causes for those shortages, and examine the impacts of those shortages on the industry and the broader economy. More recently, the annual survey has provided valuable insights into how the coronavirus pandemic is impacting the construction industry and the availability of workers to hire.

Construction firms are experiencing pre-pandemic levels of worker shortages for a variety of post-pandemic reasons. Because of the pandemic, many construction firms are dealing with the impacts of delayed or canceled projects, suffering from construction materials shortages, delivery delays and lagging demand, particularly from the private sector. In other words, market conditions are nowhere near as robust as they were prior to the onset of the pandemic.

At the same time, the pandemic and political responses to it are limiting the size of the workforce, leading to labor shortages that are as severe as they were in 2019, when demand for construction was more robust. Many are reluctant to enter the workforce because they are worried about the risk of the coronavirus. At the same time, many others have opted to take advantage of a range of pandemic-related unemployment supplements and have removed themselves from the workforce.

Prior to the pandemic, contractors worried either about finding enough work to keep their workers busy or about finding enough workers to keep pace with busy demand. But now, largely because of the pandemic, many contractors worry about finding enough work even as they struggle to find enough workers.

Many of the challenges affecting contractors are being driven by the pandemic and policy responses to it, instead of typical market conditions. Once the pandemic wanes and federal unemployment supplements expire, the volume of projects is likely to rebound, and the labor pool will expand.

Construction materials shortages should abate as manufacturers and shippers are able to staff up and return to full capacity. Private sector demand will rebound as market uncertainties related to the pandemic and the resurgent Delta variant abate. And more workers will enter, or re-enter, the construction labor pool as COVID concerns diminish and unemployment supplements finally expire.

In the meantime, public officials can address both construction demand and labor supply. Bipartisan efforts currently underway to boost federal investments in a broad range of infrastructure will help boost demand for many types of construction services. And much-needed

new investments in career and technical education programs will help encourage and prepare more people to pursue high-paying careers in construction.

Public officials, notably at the federal level, must also avoid taking steps that will undermine construction demand or exacerbate workforce shortage. They must end tariffs on key construction materials that are contributing to price spikes and shortages of essential project components. Officials should also avoid imposing labor and regulatory policies that limit the construction workforce. This includes avoiding measures that exclude workers who choose not to join a union or imposing local hire mandates that discriminate against workers for choosing to live in other communities.

The good news is many of the challenges the industry faces are likely to be temporary and are connected to a pandemic whose significant health impacts are now largely avoidable because of the widespread availability of effective vaccines. With the support of federal officials, demand for construction will return to pre-pandemic levels, while more workers become available to pursue rewarding careers in the construction industry.

SURVEY ANALYSIS

Nearly nine out of 10 firms (88 percent) are experiencing project delays, for a number of reasons. Three-quarters (75 percent) cite delays due to longer lead times or shortages of materials, while 57 percent report delivery delays. Shortages of workers (their own or subcontractors') are listed by 61 percent of firms. Delays due to government (lack of approvals, inspectors, etc.) or an owner's directive to halt or redesign a project are each cited by 30 percent.

An overwhelming 93 percent of firms say rising materials costs have affected their projects. More than one-third (37 percent) of firms report they have tried to pass on some or all additional costs but have not succeeded so far. In addition, 29 percent have changed suppliers or specifications, while 9 percent have canceled orders.

The pandemic, materials costs, and delays have had multiple impacts on upcoming or expected projects. More than half (51 percent) of respondents report projects were canceled, postponed, or scaled back due to increasing costs. Another 26 percent report such impacts due to lengthening or uncertain completion times, while 22 percent attribute such impacts to changes in demand/need. On the positive side, 28 percent report more projects to bid on or that projects have been expanded in scope.

Many firms expect full recovery to be delayed or uncertain. Fewer than half (46 percent) of firms report that their volume of business matches or exceeds the level of a year earlier. More than one-fourth (28 percent) of respondents expect it will take more than six months, if ever, for their firm's revenue to match or exceed year-earlier levels, while 9 percent expect that to happen within six months. One out of six respondents (17 percent) is unsure when to expect a return to previous levels.

Nevertheless, most firms expect to add new employees in the next 12 months. Nearly three-fourths (74 percent) of firms expect to add new employees (73 percent), recall furloughed/terminated employees (4 percent), or both. Only 6 percent expect to terminate employees to reduce headcount (3 percent) and/or furlough employees temporarily (3 percent).

Contractors are more eager than a year ago to hire workers. Nine out of 10 firms (90 percent) that employ hourly craft workers had at least one unfilled craft position, while more than six out of 10 firms (62 percent) had openings for salaried professionals. Both percentages were up from last year's survey, when there were openings at 76 percent of firms for hourly craft workers and 42 percent for salaried professionals.

Contractors report as much difficulty filling positions as they experienced before the pandemic. Nearly nine of ten respondents (89 percent) that are seeking to fill hourly craft positions report having a hard time doing so. Among firms seeking salaried professionals, almost as high a share (86 percent) report having difficulty filling those openings. These percentages are close to the shares reported in the August 2019 survey (89 percent for craft workers and 83 percent for salaried workers).

Firms are struggling to fill nearly every type of position, especially hourly craft openings. For all 21 types of craft positions included in the survey, more than 70 percent of the firms that are seeking to fill a position report difficulty doing so. The hardest positions to fill include pipelayers, cited by 91 percent of firms that sought such workers, followed by 88 percent of the firms that had openings for bricklayers, concrete workers, installers other than drywall, or truck drivers. Among 11 salaried professional positions included in the survey, project manager/supervisor positions were the hardest to find: 79 percent of firms that have openings report difficulty filling those slots. In addition, 74 percent of firms seeking estimating personnel report those positions are hard to fill. Only information technology and software/database personnel were relatively easy to find: fewer than 40 percent of firms seeking to fill positions in those fields say they are having difficulty.

Two reasons stand out as explanations for difficulty filling positions. Nearly three-fourths of firms (72 percent) say available candidates are not qualified to work in the industry due to lack of skills, failure to pass a drug test, etc. More than half of respondents (58 percent) report unemployment insurance supplements are keeping workers away. Small minorities of respondents say potential employees report: difficulty acquiring reliable transportation to and from a jobsite (15 percent of firms), needing flexible work schedules/option for remote work (e.g., to stay home to care for a loved one) (15 percent of firms), or being worried about coronavirus exposure (6 percent of firms).

The lack of qualified candidates affects union and open-shop firms almost equally. Seventy percent of firms that use union craft workers exclusively and 74 percent of open-shop firms report a lack of qualified candidates.

Firms have implemented or increased use of various approaches to fill out their workforces. More than one-third (37 percent) of firms have engaged with career-building programs (e.g., high school, college, career and technical education). Nearly one-third have added online strategies (e.g., Instagram Live) to connect better with younger applicants or used a craft staffing firm. Roughly a quarter of firms have used an executive and non-craft worker search firm or professional employer organization (26 percent), engaged with a government workforce development or unemployment agency (26 percent), or implemented software to distribute job postings and manage applicants (24 percent). Slightly smaller shares turned to sub- or specialty contractors (22 percent) or unions (21 percent). Only 3 percent applied for employment-based visas (e.g., H-1B, H-2B).

Nearly two-thirds (64 percent) of firms have made changes in hiring, training or scheduling in the past 12 months. Almost one-third (31 percent) initiated or increased spending on training and professional development. Around one-quarter lowered hiring standards (e.g., education, training, employment, arrest record, drug use or testing policy) (26 percent), increased use of learning programs with strong online/video component (e.g., held classes using Zoom, Teams, etc.) (24 percent), or resorted to overtime (23 percent). One out of six firms (17 percent) used augmented/mixed/virtual reality training devices.

Close to three-quarters (73 percent) of firms have increased base pay rates in the past 12 months. Pay increases were more common than a year ago, when only 38 percent of respondents reporting raising base pay rates. About one-third (34 percent) of firms provided incentives/bonuses in the past 12 months, double the 17 percent of firms that did so in the 2020 survey. Almost one-fifth (19 percent) of firms increased their portion of benefit contributions and/or improved employee benefits in the past 12 months.

Firms have had mixed success in recalling furloughed employees. One out of four firms tried to recall furloughed employees. Forty percent of those firms report that all furloughed employees reported when recalled. The remaining firms cited a variety of objections to returning. Forty-four percent say some recalled employees cited a preference for unemployment benefits, while 25 percent cited coronavirus concerns or family responsibilities, and 30 percent cited other reasons or the respondent didn't know their reasons.

While the pandemic has led to project delays and cancellations nationwide, contractor expectations of recovery do vary by region. Forty percent of respondents in the Northeast expect it will take more than six months for their firm's volume of business to return to normal, compared to only 12 percent of respondents in the Midwest, 22 percent in the West, and 34 percent in the South.

There are also some differences by project type and revenue size. For instance, 100 percent of building contractors and 97 percent of firms that work on federal government projects report at least some projects were canceled, postponed, or scaled back, compared to 61 percent of utility infrastructure contractors and 56 percent of highway and transportation contractors. Two-thirds of the firms with revenues that exceeded $500 million increased their headcount in the past 12 months, compared to just over half (53 percent) of midsized firms—those with revenues of $50.1 million to $500 million—and slightly more than one-third (36 percent) of firms with revenues of $50 million or less.

There are also differences in the technologies that firms have employed recently to alleviate labor shortages they have experienced. Building on a trend we saw in last year's report, firms continue to adopt technology to enhance worker productivity and alleviate labor shortages. Fifty-seven percent of respondents report the rate of technology adoption at their firms has increased over the last 12 months, and nearly 60 percent said they anticipate the rate of technology adoption at their firms to increase within the next 12 months. Nearly half (45 percent) of firms report adopting project management technology over the last 12 months. More than a quarter reported adopting technologies for estimating (29 percent), bidding (28 percent), document management (28 percent), workforce management (27 percent), or site safety (26 percent).

CONCLUSIONS

Despite extremely challenging market conditions for the construction industry, workforce shortages are severe and having a significant impact on construction firms. These impacts, including longer construction schedules, are affecting the broader economy and have the potential to undermine the economic recovery.

Construction firms, however, are taking a range of steps to address these workforce shortages. This includes raising pay, investing more in training, and taking a more active role in workforce development. Even as they work to address labor shortages, firms are also changing the way they operate – including by adopting new technologies – to be able to perform work more efficiently and mitigate the impacts of labor shortages.

Public officials need to take steps as well to address the industry's current challenges. This includes boosting demand for construction to offset current market uncertainties. The best way to do that is by enacting the bipartisan infrastructure bill that has already passed in the Senate. Meanwhile, Congress and the Biden administration must work together to increase investments in career and technical education and other workforce development measures.

The federal government currently spends only one dollar on career training for every six dollars it puts into college prep. This funding gap for career training is one of the main reasons so many contractors have a low opinion of the current pipeline for preparing new craft construction professionals. Boosting federal investments in career and technical education will help attract, and prepare, more people for high-paying careers in construction.

Federal officials must avoid unwise policies that worsen shortages of materials or workers. Tariffs on key construction materials are a significant reason for price increases and shortages of key components. Ending these needless tariffs will help with the materials issues that are impacting so many construction sites.

Federal officials must also avoid imposing labor and regulatory measures that exclude workers. The Biden administration, for example, must avoid imposing government-mandated project labor agreements for federal projects that effectively limit who can participate in public infrastructure work.

Likewise, federal officials must drop efforts to pass the dangerous PRO Act, which would impose a host of measures designed to discriminate against workers who choose not to join a union. And state and local officials should avoid restrictive measures, such as local hire requirements, that exclude workers based on geography while absolving local officials from the need to invest in workforce development measures.

The labor and market challenges construction firms are facing today are significant, but they are not insurmountable. Contractors are doing their part to address the situation. Federal officials can help support workforce development for the construction industry, just as it supports many other professions that require college degrees. They can help with construction careers by boosting investments in infrastructure and workforce development. They can avoid counterproductive measures. And they can send a clear signal that construction careers are desirable and financially rewarding.

The Associated General Contractors is supporting members' efforts to address labor shortages. We have launched a targeted digital advertising campaign, "Construction is Essential," to help recruit more people into the industry. We are providing resources to members to help them establish or improve construction training programs. And our “Culture of Care” program is designed to help firms retain newly hired workers.

At the same time, we are working to encourage federal officials to do their part. We are fully engaged in urging House officials to quickly pass the bipartisan infrastructure bill. And we lead the effort on Capitol Hill to boost funding for career and technical education programs and other measures designed to expose more Americans to career opportunities in construction. We are also engaged in efforts to dissuade federal officials from imposing counterproductive measures.

Today contractors are having a hard time finding work and workers. Our goal is to for contractors to have plenty of work, and plenty of qualified workers to keep pace with that demand. Doing so will require overcoming an awful pandemic and bad policies. But we are optimistic that the nation can do both.

BACKGROUND

AGC conducted the survey of its members in July and August 2021. A total of 2,136 individuals from a broad range of firm types and sizes completed the survey. Among responding firms that identified their market segments, 67 percent are involved in building construction, 33 percent are involved in highway and transportation construction, 30 percent perform federal construction projects and 29 percent work on utility infrastructure projects. Among firms that identified their revenue size, 70 percent perform $50 million a year or less worth of work, 25 percent perform between $50.1 million and $500 million, and 4 percent perform over $500 million worth of work each year. Respondents were not paid or otherwise compensated for their responses. Fifty-five percent of firms always operate as open-shop contractors and 6 percent primarily operate that way, while 24 percent always operate as union contractors and 5 percent do so primarily; the remaining 10 percent do not self-perform or directly hire craft personnel.