2024 Workforce Survey Analysis

SUMMARY

The Associated General Contractors of America and Arcoro conduct an annual survey of construction firms to measure the state of the industry's labor market. This survey, the 2024 Workforce Shortage Survey, is designed to measure the severity of construction workforce shortages and the impacts those shortages have on construction firms and projects. It is also designed to measure what construction firms are doing in response to those shortages to cope and help bring more people into the industry.

What this year's survey makes clear is that our nation's failure to invest in construction workforce education and training programs is having a real, measurable impact on the country's ability to build infrastructure and other construction projects. These impacts include higher costs, longer construction schedules and a significant number of delayed and/or canceled projects.

Overwhelming shares of contractors are both seeking more workers and having difficulty filling those openings. Ninety-four percent of respondents report having openings for craft workers and 85 percent have openings for salaried workers. Ninety-four percent of firms with craft worker openings report those positions are hard to fill; similarly, 92 percent of firms with openings for salaried workers report they are hard to find.

One reason it is so difficult for firms to find people is because federal officials have failed to properly invest in construction workforce training and education. A recent report the association released in partnership with the Progressive Policy Institute found that federal officials invest four times as much each year encouraging students to earn four-year degrees as they do supporting workforce development programs for fields like construction.

Contractors' survey responses highlight the impacts of these investment shortfalls. Sixty-two percent of firms report that available candidates are not qualified to work in the industry because they lack essential skills or do not have an appropriate certificate or license for the position.

At the same time, the survey results show how difficult it is for construction firms to take advantage of the very few visa programs available to the industry. Only 7 percent of firms use the H-2B visa program or other temporary work visa programs to secure either salaried or hourly craft employees.

The workforce shortages being created by federal education, training, and immigration policies are undermining the country's ability to build infrastructure and construction programs. A majority—54 percent—of respondents reports experiencing project delays due to shortages of their own or subcontractors' workers. And 80 percent of firms report experiencing at least one project that has been canceled, scaled back, or postponed.

The construction industry is, however, taking a range of steps to address these shortages. Over half—61 percent—of firms raised base pay for hourly craft workers more than they did a year earlier. And 42 percent initiated or increased spending on training and professional development in the past 12 months.

The industry is also looking to technological solutions to help overcome workforce shortages. One out of four firms has increased its use of learning programs with a strong online or video component such as holding classes using Teams or Zoom.

Contractors have mixed expectations regarding the impact of technologies such as robotics and artificial intelligence (AI) on construction jobs. A majority believes these technologies will positively impact construction jobs, either by automating manual, error-prone tasks (29 percent of respondents) or by improving the quality of those jobs and making workers safer and more productive (28 percent). But a third of respondents expects no effect on construction jobs and 10 percent believe the impact on the construction job market will be negative, by eliminating jobs.

In short, there is a lot that firms are doing to address construction workforce shortages. But so far, as the results of this year's survey make clear, their efforts are not enough to overcome the onslaught of federal funds being spent encouraging students to pursue four-year degrees instead of lucrative careers in construction.

SURVEY ANALYSIS

It has become even more difficult than a year ago to find workers to fill open positions. Ninety-four percent of respondents report having open positions for craft workers, an increase from the 2023 survey, in which 85 percent reported having openings. Similarly, 79 percent have openings for salaried positions, compared to 69 percent a year ago. Among the firms with openings, 94 percent report it is hard to fill craft positions and 92 percent report difficulty in filling salaried openings.

Nearly all craft positions are hard to fill. The survey asked about difficulty in filling 18 specific crafts. For every craft, more than 60 percent of respondents whose firms employ that craft report it is difficult to fill. The most widely reported difficulty was for mechanics and cement masons; in both cases 83 percent of firms that employ those occupations say they are hard to find. Close behind were plumbers (which were reported as difficult positions to fill by 80 percent of firms); carpenters, electricians, and pipefitters/welders (79 percent each).

Salaried positions also are hard to fill. For 10 of the 18 salaried positions covered in the survey at least half of firms that had openings report difficulty filling them. The most-mentioned hard-to-fill salaried position is superintendents, listed by 83 percent of the firms that are seeking those workers. Project managers/supervisors are listed by 81 percent of firms and estimating personnel by 78 percent. Even the least-mentioned salaried position, AI personnel/specialist, is rated hard to fill by 30 percent of firms.

The candidates are mostly there, they just aren't qualified to work. Sixty-two percent of respondents report that available candidates are not qualified to work in the industry for reasons such as a lack of skills. Half report that some new hires fail to show up or quit shortly after starting. Forty-three percent report that potential employees lack required credentials, such as a driver's license, work permit, or clean background check. Thirty-seven percent list candidates' failure to pass a drug test as a disqualifying factor—an increase from the 33 percent who listed this reason in the 2023 survey. Twenty-three percent report potential employees cite difficulty acquiring reliable transportation to and from a jobsite. And 22 percent state that some candidates report needing flexible work schedules or an option for remote work, for instance to stay home to care for a loved one, making it hard to employ them in careers that require workers to be on site.

Firms haven't given up on trying to find workers. Fifty-seven percent of firms report they added online strategies, such as using social media or targeted digital advertising, to connect better with younger applicants. About half (51 percent) engaged with a career-building program, at high schools, colleges, or career and technical education programs. Twenty-eight percent of firms used an executive search firm or professional employer organization. Twenty-three percent each report used a craft staffing firm or engaged with a government workforce development or unemployment agency. One out of five firms added or increased use of sub- or specialty contractors (20 percent) or implemented software to distribute job postings and manage applications (20 percent). Just 7 percent applied for employment-based visas, such as H-1B or H-2B. The share using each of these approaches is similar among open-shop and union contractors, as was the case in the 2023 survey.

Workers are benefiting financially. Sixty-one percent of respondents report their firms increased base pay rates or their portion of benefit contributions for hourly craft workers more in the past 12 months than a year ago. Forty-five percent of firms did so for salaried employees.

Contractors are rethinking how they operate to cope with and overcome labor shortages. The most widespread change, noted by 42 percent of respondents, was to initiate or increase spending on training and professional development, although this share varies by firm size. Fifty-four percent of the largest firms, those with annual revenue of more than $500 million, report doing this, compared with 34 percent of the firms with $50 million or less in revenue. Twenty-six percent of all respondents cite increased use of learning programs with strong online or video components, for instance holding classes using Zoom, Teams, etc. Twelve percent report using augmented, mixed, or virtual reality training devices. And 10 percent raised hiring standards. These percentages are similar to those in the 2023 survey. However, only 19 percent of firms—down from 29 percent a year ago—report having lowered their hiring standards, such as for education, training, employment, or arrest record. In addition, fewer firms report paying overtime: 14 percent, compared to 20 percent last year and 25 percent in the 2022 survey.

Firms are using a variety of techniques to improve employees' skills. Nearly half (45 percent) of respondents report their firms have implemented or strengthened performance review/management. Roughly one-third have partnered with a third party for training courses (34 percent) or implemented career pathing for employees (32 percent). And about a quarter have implemented a new learning program (27 percent) or technology to deliver and track training (25 percent).

Despite labor shortages, most firms expect to expand in the next 12 months. Seventy-three percent of firms, up from 69 percent a year ago, expect to add employees in the next 12 months, while 19 percent expect no net change. Only 8 percent expect to reduce headcount. If realized, such expansion would be more widespread than in the past 12 months. In that period, roughly half (51 percent) of firms added employees, while 30 percent reduced headcount and 19 percent had no change. Unlike last year, when optimism was nearly uniform nationwide, there is more regional variation this year. Firms in the Northeast express the most optimism (83 percent expect to expand headcount in the next 12 months), followed by firms in the South (76 percent of firms), West (70 percent), and Midwest (69 percent).

Shortages of workers and certain essential equipment are still causing headaches for many firms. Although materials shortages and delivery delays are much less common than in 2020 to 2022, a majority (54 percent) of firms reports project delays due to shortages of workers—their own or subcontractors'. In addition, longer lead times or shortages have delayed some projects for about half (51 percent) of firms. Specifically, 41 percent cite long lead times for electrical equipment such as transformers and switchgear as a source of project delays. Long lead times for mechanical equipment such as heating, ventilating, and air conditioning gear is another source of delay, noted by 28 percent of respondents. About one-third list delays due to government (35 percent), such as lack of approvals or inspectors, or delays due to an owner's directive to halt or redesign a project (31 percent). One source of delay that has improved is transportation or delivery delays, cited by 21 percent, compared to 36 percent a year ago and 64 percent in 2022.

Projects are still being canceled, postponed, or scaled back for a variety of reasons. Half of respondents cite increasing costs as a reason, while 40 percent report financing was unavailable or too expensive. One out of five notes changes in demand or need as reasons for project cancellations, deferrals, and scope reductions. These shares are similar to those in the 2023 survey. But only 17 percent, down from 22 percent last year, list lengthening or uncertain completion times—another sign that availability of materials has improved.

Opinions are split and evolving as to the impact AI and robotics will have on construction jobs in the next five years. Fewer respondents than a year ago expect positive *or* negative impacts, while more respondents expect no impact. Twenty-nine percent, down from 33 percent last year, state that AI and robotics will positively impact construction costs by automating manual, error-prone tasks. And 28 percent, down from 31 percent in the 2023 survey, say AI and robotics will improve the quality of construction jobs and make workers safer and more productive. Ten percent say AI and robotics will negatively impact the construction job market by eliminating jobs, down from 13 percent a year ago. One-third (33 percent) expects no effect on construction jobs, up from 23 percent who held that view a year ago.

CONCLUSIONS

As this year's Workforce Survey makes clear, our nation's current workforce policies are having a significant impact on many construction projects. It costs more, takes longer and is less certain if a project will start on time because our nation hasn't encouraged students to pursue careers in construction or allowed people to lawfully enter the country to work in construction.

Construction firms are taking a range of steps, from raising pay to investing in training, to building new workforce development partnerships, to cope with labor shortages. So too are AGC of America and its network of 89 chapters working to address workforce shortages. We have partnered with AGC chapters to run more than a dozen targeted digital advertising campaigns designed to reach and recruit new workers. We have created and shared recruiting resources, including a template recruiting website for our chapters.

Our Culture of Care program that we make available to the entire industry is designed to help firms retain workers by teaching them how to create more welcoming and inclusive jobsites. And we regularly host virtual and in-person gatherings to share workforce development success stories and encourage their replication.

Our chapters, meanwhile, run a host of training and recruitment programs. They have partnered with local school districts to create new construction academies. They have created pre-apprenticeship and registered apprenticeship programs. They have built and supported networks of career and technical education teachers. And they host dozens of construction career fairs each year, among many other workforce efforts.

Impressive as those efforts are, they are not enough to counter the massive federal funding imbalance when it comes to workforce development. The most likely path to addressing construction workforce shortages is for the federal government to adopt better workforce policies.

Congress and the White House need to significantly boost funding for construction-focused education and training programs. They have two opportunities available to do just that this year alone. They can increase the amount of money in the Workforce Innovation and Opportunity Act allotted to training, as a House-passed version already does, when they reauthorize the program this year. They can also increase the amount of money dedicated to in-school construction education programs when they set appropriations levels for the Perkins Vocational and Technical Education Act.

Boosting funding for construction education and training will absolutely help. But it will take time for those new funds to rebuild the domestic pipeline for preparing future construction professionals. That is why Washington officials also need to enact programs that will allow more people to lawfully enter the country to work in construction. This will offer firms a way to keep pace with current demand for construction while the domestic workforce pipeline is being rebuilt.

We appreciate that getting Washington to act, even to address obvious problems like workforce shortages, is never easy. But AGC of America is committed to doing whatever it takes to educate the nation's elected and appointed officials about the need to act. The bottom line is the federal government needs workforce policies that support, instead of undermining, our national infrastructure and economic development priorities.

Considering all this industry and our association are doing to prepare, recruit and retain new workers, we are confident that better federal workforce policies will make a meaningful and lasting difference for the better when it comes the construction workforce.

BACKGROUND

AGC conducted the survey of its members in July and August 2024. A total of 1,496 individuals from a broad range of firm types and sizes completed the survey. Among responding firms that identified their market segments, 66 percent are involved in building construction, 34 percent perform federal construction projects, 33 percent are involved in highway and transportation construction, and 32 percent work on utility infrastructure projects. Among firms that identified their revenue size, 56 percent performed $50 million or less worth of work in the preceding 12 months, 35 percent performed between $50.1 million and $500 million, and 8 percent performed over $500 million worth of work. Fifty-nine percent of firms always or primarily operate as open-shop contractors, while 27 percent or primarily always operate as union contractors; the remaining 14 percent do not self-perform or directly hire craft personnel. Respondents were not paid or otherwise compensated for their responses.