Worker Shortage Survey Analysis

INTRODUCTION

During the past five years, the Associated General Contractors (AGC) of America has led the charge in raising awareness about, and pushing to address, the growing shortages of qualified construction workers available to hire. In 2013 we released our first workforce development plan. It identified a series of steps that we urged federal, state and local officials to act on to help rebuild the once-robust pipeline for recruiting and preparing construction workers.

Since we introduced that workforce plan, we have achieved several key victories, including getting Congress and the president to enact a new federal career and technical education bill that boosts funding and increases flexibility to make it easier for education officials to set up construction-focused high school programs. We have also helped secure needed reforms to federal job training programs via the 2016 Workforce Innovation & Opportunities Act and have been instrumental in getting the Trump administration focused on the need to enhance apprenticeship training opportunities.

In addition to our success at the federal level, we have worked closely with our network of chapters to successfully persuade many state and local officials to boost funding for career and technical education programs and to enhance construction recruiting efforts. Since we have accomplished so many of our initial workforce development objections, AGC of America is also releasing a completely updated version of its workforce development plan. This new plan identifies additional steps federal officials should take to support construction workforce development. It also includes steps this association is taking to help recruit more people into high-paying construction careers. And we outline a series of successful workforce development initiatives created by member firms and our chapters to help inspire even more initiatives of their kind.

Despite five years of success, we need this new workforce development plan because labor shortages remain so significant and so widespread. That is clear, based on the results of this year's Autodesk-AGC Construction Workforce Shortage Survey. This survey shows that an overwhelming majority of construction firms are having a hard time finding qualified workers – particularly hourly craft professionals – to hire. These shortages are prompting many firms to raise wages, improve benefits and expand bonuses and other incentives. Labor shortages are also leading many firms to change the way they operate to become more efficient and less reliant on labor.

While those changes may ultimately be beneficial, the other impact of construction workforce shortages, as this survey finds, is that it now takes longer and costs more to build many types of projects. Workforce shortages that make construction projects more costly and slower to build run the risk of undermining broader economic growth by making private- and public-sector development projects – including infrastructure – more expensive and time-consuming.

SURVEY ANALYSIS

Most firms plan to expand their headcount but are having a hard time finding qualified workers – particularly craft workers – to hire. Ninety-three percent of responding firms report they plan to hire new hourly craft personnel within the coming year, with more than three-quarters of respondents say they plan to expand their headcounts and 16 percent saying they plan to hire for replacement. Only 7 percent do not expect to hire. And 75 percent of firms say they plan to hire salaried field personnel as well. Sixty-one percent of firms also plan to hire new hourly office personnel and 72 percent plan to hire salaried office personnel. Yet even as most firms plan to hire workers, 80 percent report they are having a hard time filling craft positions and 56 percent are having a hard time filling salaried positions.

Workforce Shortages Are a Problem for Firms of All Sizes. Close to four out of five firms of all sizes report they are having a hard time finding qualified craft workers to hire: 79 percent of firms that performed $50 million or less of work last year; 83 percent of firms that performed between $50.1 million and $500 million of work; and 82 percent of firms that performed more than $500 million of work.

Pipelayers, sheet metal workers, carpenters, concrete workers and pipefitters/welders are particularly hard to find. Respondents were asked if their firms are having more difficulty than a year ago filling any of 20 specific hourly craft positions or 10 salaried positions. The five toughest craft positions to fill are pipelayers, sheet metal workers, carpenters, concrete workers and pipefitters/welders. The five toughest-to-fill salaried jobs are project managers/supervisors, engineers, estimating personnel, quality control personnel and BIM personnel. Notably, for all but one of the craft personnel positions, a majority of respondents said the positions were harder to fill than a year ago.

Most contractors expect labor conditions will remain tight or get worse as they worry about the pipeline for preparing new workers. Eighty-one percent of firms report that it will continue to be hard, or get even harder, to find hourly craft personnel over the coming 12 months. Meanwhile, 66 percent of firms report that it will continue to be hard, or get even harder, to find salaried field and office personnel during the coming year. One possible reason for their worries about the labor market is that many contractors are skeptical of the quality of the pipeline for recruiting and preparing new craft personnel. Specifically, 47 percent of firms say the local pipeline for prepared craft personnel who are well trained and skilled is poor.

Most firms are paying more to attract and recruit workers. Sixty-two percent of construction firms report they have increased base pay rates for craft workers because of the difficulty in filling positions, 24 percent have improved employee benefits for craft workers and one-in-four report they are providing incentives and bonuses to attract craft workers. In addition, 56 percent of firms report they have increased pay to attract salaried employees, while 34 percent are providing bonuses and 24 percent are providing improved employee benefits to attract salaried workers.

Firms are also adjusting their operations to be able to do more with fewer workers. Forty-six percent of firms report they have initiated or increased in-house training because of workforce shortages, while 33 percent report they have hired interns, 30 percent report they are paying more overtime and 26 percent have changed their hiring standards. Meanwhile, 48 percent report getting involved with career-building programs at the high school and college levels. Thirty-two percent of firms report they are using staffing firms to locate craft workers and 28 percent report they are relying more heavily on sub- and specialty contractors.

At the same time, 25 percent of firms report they are adopting methods to reduce on-site worktime, including relying on Lean Construction techniques, using virtual construction tools like Building Information Modeling and doing more off-site prefabrication. An equal percentage of firms report they are using more labor-saving equipment, including drones, robots and 3-D printers. The largest firms were especially likely to adopt these labor-saving approaches: 58 percent reported using methods to reduce on-site worktime, while 49 percent said they used more labor-saving equipment on the worksite.

Workforce shortages are impacting construction schedules and increasing the cost of many construction projects. Forty-seven percent of firms report that workforce shortages have prompted them to put higher prices into their bids for new projects. Meanwhile, 44 percent of firms report that already-underway projects cost more than originally anticipated because of workforce shortages. At the same time, 46 percent of firms report that workforce shortages are causing projects to take longer than originally anticipated. And 27 percent report they have put longer completion times into their bids for new work.

All four regions of the country are experiencing similarly severe craft worker shortages, in contrast to last year. In this year’s survey, 81 percent of contractors in the West and South report they are having a hard time filling hourly craft positions, almost identical to the 80 percent rate in the Midwest and the 77 percent rate in the Northeast. All of these percentages are higher than in the 2017 survey, when rates varied from 77 percent in the West to 63 percent in the Northeast. This year, 59 percent of contractors in the Northeast are having a hard time filling salaried positions (up from 43 percent last year); as are 59 percent in the West (up from 41 percent), 57 percent in the Midwest (up from 38 percent) and 51 percent in the South (up from 38 percent).

Workforce shortages are impacting union and open-shop construction firms alike. More than three-quarters (76 percent) of firms that exclusively use union craft labor report difficulty filling hourly craft positions, compared to 88 percent of firms that use only non-union labor. Union-only firms reported greater difficulty filling salaried positions: 60 percent, compared to 53 percent for non-union firms.

CONCLUSIONS

Construction workforce shortages have become so widespread they are impacting virtually every aspect of the construction industry. Construction firms are changing the way they recruit, train, schedule, charge and staff as they struggle to cope with labor shortages that make it increasingly difficult for them to keep pace with demand. In one sense the changes workforce shortages are prompting could prove positive as workers earn more and firms become more efficient with their operations. Yet it is also clear that workforce shortages pose a real and substantial risk to the broader economy.

It will take the combined effort of public officials, the AGC and its network of chapters, and member firms across the country to address chronic construction workforce shortages. The new workforce development plan this association is releasing is designed to provide a guide for all those groups to follow as we work to attract more young-adults into high-paying construction careers.

We appreciate that it will take time to overcome decades of cultural shifts that have placed greater emphasis on sending students to college and placing them in office positions than on skills-based careers like construction. The fact that it will take time to address chronic workforce shortages is another reason why the federal government should enact common-sense immigration reform. This will provide a short-term solution to workforce shortages that protects economic growth while giving schools, associations and member firms time needed to put in place meaningful recruitment and training programs.

The bottom line is the best way to encourage continued economic growth, make it easier for public officials to rebuild our aging infrastructure and place more young adults into high-paying careers in construction is to address workforce shortages. That is why AGC and its 27,000 member firms will continue to push for the kind of measures and initiatives outlined in our new workforce development plan.

BACKGROUND

AGC conducted the survey of its members in late June, July and early August 2018. Over 2,500 individuals, from a broad range of firm types and sizes completed the survey. Among responding firms, 65 percent are involved in building construction, 29 percent are involved in highway and transportation construction, 22 percent perform federal construction projects and 20 work on utility infrastructure projects. Twenty-nine percent of responding firms perform $10 million a year or less worth of work, 32 percent perform between $10.1 million and $50 million, 15 percent perform between $50.1 million and $100 million and 23 percent perform over $100 million worth of work each year. Respondents were not paid or otherwise compensated for their responses.