



Worker Shortage Survey Analysis

SUMMARY

After withstanding a significant downturn at the end of the last decade, the construction industry has been steadily adding jobs in many parts of the country for much of the current decade. As a result, many firms now report that their greatest single challenge is finding qualified workers to hire. In particular, a majority of construction firms that belong to the Associated General Contractors of America report they are having difficulty finding qualified professionals to work in hourly craft positions – the bulk of the construction workforce that includes positions such as carpenters, electricians, laborers and painters. Because labor shortages are so significant to the industry, the association again surveyed its members during the summer of 2017 to get the most current information about labor conditions and the steps construction firms are taking to cope with these shortages.

With over 1,600 respondents to the survey, it is clear from this year's results that the industry's workforce challenge remains significant, particularly when it comes to recruiting hourly craft professionals. In addition, certain other construction professionals, such as project managers and supervisors, estimating personnel and engineers, are difficult to recruit and hire. And most firms believe labor shortages will remain difficult, or get even worse, during the next twelve months.

One possible reason for the current construction labor shortages is that most firms report that the pipeline for recruiting and preparing new craft workers is less than ideal. Three-quarters of construction firms that responded to this survey rated that pipeline as poor or fair, while only 16 percent said the craft worker pipeline was good or excellent.

One of the significant impacts of construction workforce shortages is that they are changing the way many firms operate. Firms are taking a variety of aggressive steps to recruit veterans, women and minorities into the industry. They are also increasing pay and benefits, adding overtime hours and expanding their in-house training programs. A number of firms are also embracing new techniques and new technologies – such as drones and robots – to make their operations more efficient.

Workforce shortages are significant because of their potential to impact the broader economy. Over the short term, as construction firms struggle to find enough qualified workers, they will be forced to be more selective in the number of projects they seek to perform, lest they find themselves unable to meet contractual obligations because of labor shortfalls. And as firms pay more to recruit, retain and train workers, the amount they charge for performing construction work may increase. And over the long term, the labor market could experience significant changes as firms find new ways to perform more construction services using fewer people.

SURVEY ANALYSIS

Most firms are having trouble finding enough hourly craft construction professionals to hire. Seventy percent of responding firms report they are having a hard time filling hourly craft positions, which represent the bulk of the construction workforce. A number of firms also report difficulty finding other types of construction professionals, with 38 percent having a hard time filling salaried field positions, 35 percent of firms having a hard time filling salaried office positions and 16 percent having a hard time filling hourly office positions. These results track with the percentages of firms that plan to hire additional staff. Sixty-nine percent plan to hire new hourly craft workers to expand their headcount, compared to 51 percent who plan to expand their salaried field headcount, 43 percent their salaried office personnel and 33 percent their hourly office personnel.

Carpenters, bricklayers, electricians, concrete workers and plumbers are particularly hard to find. Respondents were asked if their firms are having a hard time filling any of 21 specific hourly craft positions or 10 salaried positions. The five toughest craft positions to fill are carpenters, bricklayers, electricians, concrete workers and plumbers. The five toughest-to-fill salaried jobs are project managers/supervisors, estimating personnel, engineers, BIM personnel and quality control personnel.

It will remain hard, or get even harder, to find qualified workers as most firms have a low opinion of the pipeline for recruiting and preparing new craft workers. Sixty-seven 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, 50 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 labor market pessimism is that most firms have a low opinion of the current pipeline for recruiting and preparing new craft workers. Seventy-four percent of responding firms rated the new craft worker pipeline as poor or fair while only 16 percent said it was good or excellent.

Most firms are taking extra steps to recruit veterans, women and minorities into the construction industry. As labor markets remain tight, most firms report they are making a special effort to recruit and/or retain veterans (79 percent); women (70 percent) and African Americans (64 percent). Among the steps firms are taking to recruit these groups is reaching out to community and industry groups (57 percent); reaching out to local colleges, universities and vocational schools (57 percent) and hosting targeted job fairs (48 percent). And many firms are offering customized learning and development programs (43 percent); mentorship programs (41 percent) and defined career progression programs (37 percent) to retain these groups.

Many firms are also increasing pay, providing bonuses or adding benefits to recruit and retain workers. Half of construction firms report they have increased base pay rates for craft workers because of the difficulty in filling positions, 20 percent have improved employee benefits for craft workers and 24 percent report they are providing incentives and bonuses to attract craft workers. In addition, 43 percent of firms report they have increased pay to attract

salaried employees, while 30 percent are providing bonuses and 20 percent are providing improved employee benefits to attract salaried workers.

Firms are adjusting their operations to be able to do more with fewer workers. Many firms report they are doing more training and changing the way they operate to cope with workforce shortages. Forty-seven percent of firms report they are increasing overtime hours while 46 percent are doing more in-house training and 41 percent of firms are increasing their use of subcontractors. Twenty-seven percent report getting involved with career-building programs at the high school and college levels. A smaller, but still significant, portion of firms report they are increasing their use of labor-saving equipment (22 percent), offsite prefabrication (11 percent) and virtual construction methods such as BIM (7 percent). Meanwhile, 22 percent are working with craft labor suppliers and 19 percent are working with staffing firms to fill non-craft positions.

All four regions of the country are experiencing craft worker shortages, with the most severe shortages in the West, and somewhat less severe in the Northeast. Seventy-five percent of contractors in the West report they are having a hard time filling hourly craft positions, the highest rate for any region. The region is followed by the Midwest, where 72 percent of contractors are having a hard time filling craft positions, followed by 70 percent in the South and 63 percent in the Northeast. Conversely, contractors in the Northeast are having the hardest time filling salaried positions, with 43 percent reporting a hard time filling salaried field jobs, followed by 41 percent in the West and 38 percent in the Midwest and South.

CONCLUSIONS

Construction workforce shortages remain a significant problem for most firms. In particular, many firms are struggling to find qualified hourly construction craft professionals to hire. As older workers retire in ever larger numbers, firms are finding that there are not enough new workers entering the market to replace retiring workers and fill new positions being created as demand continues to grow.

Tight labor market conditions are not new. This year's results are strikingly similar to last year's workforce shortage survey results. The survey results indicate that the supply of qualified workers, the perceived quality of the recruiting pipeline and the steps firms are taking to cope with labor shortages are all very similar to last year. Persistent labor shortages are prompting many firms to expend more time and resources trying to recruit new workers. In particular, they are working to attract more veterans, women and minorities into the construction industry. At the same time, they are raising wages, increasing benefits and expanding training programs to help recruit and retain workers.

Many firms are taking extra steps to recruit and train workers because they have such a low opinion of the pipeline for preparing new hourly construction craft professionals. It should hardly be surprising that, after years of government disinvestment in career and technical education programs, few firms view these programs favorably. This disinvestment means that relatively few new workers have the skills needed to operate safely on most construction sites. It also means

that few high school students are even exposed to the fact that construction is a potential, high-paying, career option to consider.

If the kind of workforce shortages the industry is experiencing persist, there will be significant short-term and long-term implications for the broader U.S. economy. In the short-term, fewer firms will be able to bid on construction projects if they are concerned that they will not have enough workers to meet their contractual obligations. If that happens, the cost of construction will likely increase. At the same time, it may take longer for firms to complete projects as they cope with workforce shortages within their firms and subcontractor firms as well. Higher construction costs and slower schedules may serve as a brake on broader economic growth.

The long-term economic implications may prove even more significant. That is because one of two things will happen in response to chronic construction workforce shortages. The first is that firms will find ways to do more with fewer workers. New technology like drones, robotics, GPS-guided equipment and Building Information Modeling, and new techniques like Lean Construction provide firms with a significant opportunity to become more productive without adding headcount. There could be a significant displacement in the number of people employed in construction should firms have no option but to address workforce shortages by finding ways to do more work without workers.

However, if federal, state and local officials act on the measures outlined in the association's [workforce development plan](#), then there could be a new infusion of workers into the construction industry. This infusion would put more people into high-paying construction jobs, relieve the labor pressures many firms are currently experiencing. The increase in construction employment would help boost overall economic growth as new workers invest their earnings throughout their communities.

The bottom line is construction firms will figure out a way to cope with labor shortages. If federal, state and local officials enact measures to expand construction-focused career and technical education opportunities, and make it easier for all firms to establish construction training programs, then the solution will come from an influx on new, highly-paid workers. But if elected officials fail to make the necessary investments and reforms needed to develop the next generation of craft workers, then the industry is likely to use labor-saving technology and techniques to meet demand, leading to fewer construction jobs in the future.

BACKGROUND

The Associated General Contractors of America conducted the survey of its members in July through early August 2017. Over 1,600 individuals from a broad range of firm types and sizes, completed the survey. Among responding firms, 52 percent build private office buildings, 50 percent work on public buildings, 49 percent work on retail, warehouse and lodging structures, 38 percent build manufacturing facilities, 31 percent perform highway work and 29 percent build multi-family housing. Twenty-seven percent of responding firms perform \$10 million a year or less worth of work, 23 percent perform between \$10.1 million and \$30 million and 51 percent perform more than \$30 million worth of work. Respondents were not paid or otherwise compensated for their responses, but were eligible to win a cooler for participating in the survey.