



Worker Shortage Survey Analysis

SUMMARY

With the construction industry in most of the country now several years into a recovery, many firms have gone from worrying about not having enough work to not having enough workers. In particular, many 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. In an effort to better measure the extent and location of construction worker shortages, the Associated General Contractors of America surveyed its members during the summer of 2016 about current labor conditions.

With nearly 1,500 respondents to the survey, it is clear from this year's results that the industry's workforce challenge is primarily a craft worker shortage. In addition, certain other construction professionals, such as salaried field workers like construction supervisors and in-office staff who handle functions like estimating and building information modeling (BIM), are not easy to find. But it is extremely difficult for an overwhelming majority of firms to find qualified craft workers to keep pace with demand. And with nearly two-thirds of responding firms reporting they plan to hire hourly craft workers to expand their headcount, demand is clearly growing. In other words, these workforce shortages are not going to go away in the near future.

These worker shortages are occurring at a time when many construction firms have a low opinion of the pipeline for recruiting and preparing new craft workers. Three-quarters of construction firms that responded to this survey rated that pipeline as poor or fair, while only 14 percent said the craft worker pipeline was good or excellent. As a result of these shortages, many firms report making changes in the way they compensate their employees and in the ways they operate. Firms are looking for ways to do more with fewer craft workers by increasing workers' hours, embracing labor-saving technology and finding new ways to improve the efficiency of the construction process.

One other potential impact of labor shortages is that they might affect the safety of the construction workforce. A small, but significant, percentage of firms reported they have already experienced increases in safety incidents because of the lack of qualified workers. The association has worked to avoid this potential outcome by providing firms with recommendations to better prepare, train and monitor new employees.

It is clear from these survey results that construction workforce shortages, particularly among the hourly craft workers who make up the majority of the industry's personnel, will not go away until there is a better system in place for recruiting, preparing and retaining qualified new workers.

SURVEY ANALYSIS

The workforce challenges in construction are most severe with regard to craft labor. Sixty-nine percent of responding firms report they are having a hard time filling hourly craft positions, which represent the bulk of the construction workforce. There are also selected shortages reported for other types of construction professionals, with 38 percent having a hard time filling salaried field positions, 33 percent of firms having a hard time filling salaried office positions and 15 percent having a hard time filling hourly office positions. These results track with the percentages of firms that plan to hire additional staff. Sixty-five percent plan to hire new hourly craft workers to expand their headcount, compared to 49 percent who plan to expand their salaried field headcount, 42 percent their salaried office personnel and 34 percent their hourly office personnel.

Carpenters, electricians, roofers, plumbers and concrete workers are particularly hard to find. Respondents were asked if their firms are having a hard time filling any of 22 specific hourly craft positions or 11 salaried positions. The five toughest craft positions to fill are carpenters, electricians, roofers, plumbers and concrete workers. The five toughest-to-fill salaried jobs are project managers/supervisors, estimating personnel, engineers, BIM personnel and quality control personnel.

Most firms expect it will remain hard, or get even harder, to find qualified workers and have a low opinion of the training pipeline for craft workers. Seventy-five 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. Similarly, 61 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. Yet even as firms worry about future labor market conditions, they gave low marks to the current pipeline for recruiting and preparing new craft workers. Three-quarters of responding firms rated the new craft worker pipeline as poor or fair while only 14 percent said it was good or excellent.

Many firms are responding to worker shortages by increasing pay, providing bonuses or adding benefits. Nearly half (48 percent) of construction firms report they have increased base pay rates for craft workers because of the difficulty in filling positions, 22 percent have improved employee benefits for craft workers and 20 percent report they are providing incentives and bonuses to attract craft workers. Even though the shortages do not appear as severe for salaried positions, 43 percent of firms report they have increased pay to attract these types of employees, while 27 percent are providing bonuses and 21 percent are providing improved employee benefits to attract salaried workers.

Firms are doing more training, offering more overtime and relying more heavily on subcontractors because of workforce shortages. Many firms report they are doing more training and changing the way they operate to cope with workforce shortages. Forty-eight percent of firms report they are doing more in-house training while 47 percent report they are increasing the number of overtime hours and 39 percent of firms are increasing their use of subcontractors. Thirty-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 (21 percent), offsite prefabrication (13 percent) and virtual construction methods such as BIM (7 percent). Meanwhile, 24 percent are working

with craft labor suppliers and 23 percent are working with staffing firms to fill non-craft positions.

Workforce shortages are having a small but significant impact on construction safety.

Twelve percent of firms said the impact of staffing challenges on their safety and health programs has resulted in an increase in the number of reportable injuries and illnesses at construction worksites. Ten percent report that staffing challenges on their safety and health programs have resulted in an increase in the number of jobsite hazards identified in inspection reports and 9 percent cite an increased number of worker compensation claims. Interestingly, some firms report reduced problems: 7 percent report a decreased number of reportable injuries and illnesses, 3 percent a decreased number of jobsite hazards and 4 percent a decreased number of worker compensation claims. Though the share of firms reporting greater safety or health issues is relatively small, it is important to minimize their incidence. The association is aggressively addressing the potential safety impacts of workforce shortages by urging all members to take a number of [steps](#) that will better prepare and train new workers to operate safely.

All four regions of the country are experiencing craft worker shortages, with the most severe shortages in the Midwest, and somewhat less severe in the Northeast. Seventy-seven percent of contractors in the Midwest report they are having a hard time filling hourly craft positions, the highest rate for any region. The region is followed by the South, where 74 percent of contractors are having a hard time filling craft positions, followed by 71 percent in the West and 57 percent in the Northeast. Conversely, contractors in the Northeast are having the hardest time filling salaried positions, with 46 percent reporting a hard time filling salaried field jobs, followed by 41 percent in the South, 40 percent in the West and 37 percent in the Midwest.

CONCLUSIONS

The bottom line is that many construction firms across the country are facing a significant workforce shortage, especially within the largest segment of the workforce: hourly craft workers. These shortages are forcing firms to change the way they operate. They are learning to do more with fewer employees. They are increasing pay and benefits to better attract new employees. And they are becoming more efficient in the way they operate by embracing labor saving technologies and techniques.

Yet these new efficiencies can only go so far for an industry that remains heavily labor intensive. And with many contractors giving low marks to the quality of craft worker recruitment and training programs, workforce shortages will remain a serious problem for many firms for the foreseeable future. These shortages have the potential to undermine broader economic growth by forcing contractors to slow schedules or choose not to bid on projects. These will inflate the cost of new projects and could curtail needed economic development projects.

These shortages also threaten to undermine the decades of improvements to workplace safety the industry has achieved as firms are forced to bring on workers with less training than they would typically hire. That is why the Associated General Contractors of America has been working with its member firms to help them adapt and adjust their safety programs to ensure these relatively inexperienced workers do not put themselves or their co-workers in harm's way.

It is important to note, however, that there is not a single labor market. In certain parts of the country – West Virginia, Kansas and North Dakota are recent examples – demand for construction is shrinking. In these markets, many contractors are more worried about finding work than they are finding workers. Certain market segments within construction are also more susceptible to labor shortages than others. Due to chronic underfunding of infrastructure investments, highway and other infrastructure contractors have not experienced as much growth in demand for construction as have other segments. As a result these firms may be less likely to be stressed by growing demand for their services.

Yet for many construction firms, workforce shortages are very real and extremely significant. The problem will not go away without broader changes to the nation's approach to education and workforce preparation. As the association has detailed in its [Workforce Development Plan](#), there are a range of steps federal, state and local officials should take to make it easier for school systems, local associations and construction firms to set up construction recruiting and training programs. These measures include reforming and increasing funding for the Carl D. Perkins Career and Technical Education Act, enacting comprehensive immigration reform, making it easier to set up charter schools and career academies that teach basic construction skills and allowing high school students to participate, free of charge, in community and technical college construction skills programs.

The broader challenge behind growing workforce shortages is that many potential workers, and their families, are likely to view construction as a profession of last resort instead of the high-paying, high-satisfaction careers they are. Establishing more career and technical education programs within our school systems and making it easier for students and young adults to explore career opportunities in construction will go a long way in changing these cultural perceptions. After all, it is time to stop signaling to children that the only path to success in life lies through college education.

BACKGROUND

The Associated General Contractors of America conducted the survey of its members in June through August 2016. Over 1,450 individuals from a broad range of firm types and sizes, completed the survey. Among responding firms, 31 percent perform highway work, 50 percent work on public buildings, 48 percent work on retail, warehouse and lodging structures, 54 percent build private office buildings, 38 percent build manufacturing facilities and 29 percent build multi-family housing. Thirty-one percent of responding firms perform \$10 million a year or less worth of work, 22 percent perform between \$10.1 million and \$30 million and 47 percent perform more than \$30 million worth of work. Respondents were not paid or otherwise compensated for their responses.