

# Elevating the Construction Industry

## Recruitment and Retention of Skilled Craft Professionals

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Half a million.

That's how many more construction workers were needed in the United States at the beginning of 2023. Even if construction spending growth slows in the next year, there will still be a worker shortfall that numbers in the hundreds of thousands.

([Associated Builders and Contractors](#))

### **The construction worker shortage is a national problem that's getting worse.**

This worker shortage is occurring during a time when other facets of the construction industry appear to be thriving. The post-COVID-19 pandemic increase in investment in commercial and industrial construction projects combined with the recent passage of a [trillion-dollar infrastructure bill](#) has resulted in a spike in demand for practically every category of construction work. ([CLMA](#))

But when the demand for manpower outstrips the supply, pumping money into projects just makes the situation worse. The government's infrastructure bill funneled a lot of money to major construction projects — \$550 billion to be exact. It also applied [Davis-Bacon labor protections](#) to all federally funded or assisted projects, meaning that construction workers on these jobs are guaranteed certain wage determination rates. The problem is that there simply aren't enough highly trained craft professionals around to do the work. This leaves contractors and construction associations in a constant state of scramble as they try to hire employees who have the right credentials.

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## Challenges Facing Today's Construction Industry

Predictably, the current and coming shortage of trained, proven construction workers is hitting smaller contracting companies harder than larger ones. Smaller contractors typically can't afford to offer their employees as much job stability or as many benefits as larger organizations. They often don't have formal training curricula for their workers either, meaning that new hires have to be taught on the job, which takes the time and energy of more experienced workers who could be using their skills to move a project forward.

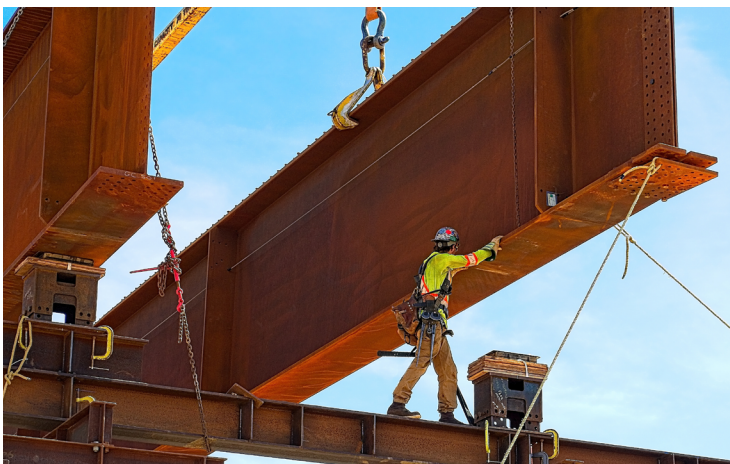
This complicated situation seems to be demanding a shift in priority and perspective from inside the construction industry, as well as from the outside, from society as a whole. This white paper examines the challenges facing today's construction industry and explores an array of possible solutions.

### An aging workforce

Nearly 25% of the construction workforce is more than 55 years old ([U.S. Bureau of Labor Statistics](#)). While the current median age of people in the construction industry is only 41, retirements and problems with recruiting younger workers are expected to contribute to a steady increase in this metric.

There are benefits to having an older workforce. More experienced workers can provide valuable insight when it comes to training and mentoring younger workers. With a physical job like construction, however, the aches, pains, and susceptibility to injury that comes with age can have a significant impact on a person's ability to perform on the job.

For the construction industry to grow and thrive, a better balance between youth and experience must be achieved. It's a tall order, especially considering that many young people aren't applying for jobs in construction craft work.



## Construction industry stigma

A major force that's driving younger people away from construction is the social stigma that surrounds choosing to go into a trade over going to a four-year college.

Throughout the second half of the 20th century, the belief that going to college and getting a four-year degree is the best way to guarantee one's future financial stability steadily became more prevalent. It is a misconception that continues today and has contributed to a subsequent decline in the number of people seeking employment in the skilled trades.

As a society, we have gradually devalued work that is not only highly valuable, but also deeply skilled and essential. Electricians, mechanics, auto body repair technicians, construction craft workers — these are the jobs that enable all of us to enjoy the comforts of modern life.

For proof of the value of this type of work, one need look no further than the fundamental economic principle of supply and demand. As the number of skilled tradespeople has dropped and the demand for the work they do has remained steady or, in many cases, has grown, their wages have risen. A [2022 salary survey](#) conducted by the National Center for Construction Education and Research (NCCER) found that the average annual salaries for individual construction craft areas ranged from \$49,920 for a highway worker to \$85,072 for a power line worker. The highest earners overall were project supervisors and project managers, at \$90,299 and \$98,965, respectively.

Unfortunately, the stigma of trade work remains, and in many cases, it negates the objective reality of high earnings in these professions.

## Barriers to entry

Perhaps the most significant barrier to entry into a construction career is the lack of knowledge about how to get started in the industry and what a career in construction looks like, long-term.

Many people in the construction industry would say they first learned about their career through word-of-mouth. They typically have at least one other person in their family or their social group who is also in construction, so they are at least somewhat aware of the benefits of working in the industry. But with a dwindling workforce, it's clear additional methods of early recruitment are needed.

**Most people who get into the construction trades do so through word-of-mouth.**

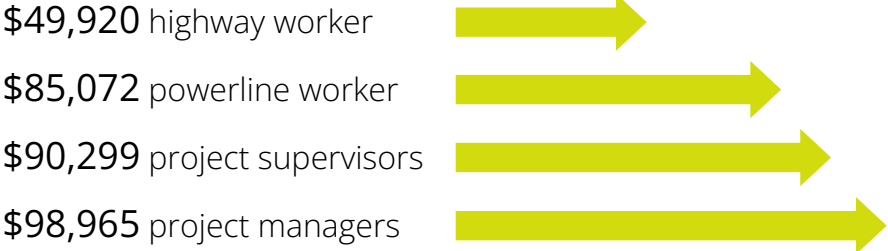
Another issue facing would-be construction professionals is finding an industry-recognized training program that can help them develop the technical and intellectual skills they need to be successful in the job. Some larger contractors who have the resources to invest in formal training programs do so, but there is often a concern that their investment will be wasted if an employee decides to leave the company.

This line of thinking highlights a larger issue, which is the tension between an individual mindset and an industry mindset. A contractor with an individual mindset sees an educational training program as a dubious investment of time and resources in an employee who can choose to leave whenever they

want. A contractor with an industry mindset, on the other hand, sees a different picture and understands that each worker they train is another knowledgeable individual who can help the construction industry grow, regardless of who their employer is.

How much do construction workers make?

**ANNUAL SALARY  
RANGES FOR  
CONSTRUCTION  
CRAFT AREAS**



## How Education Can Help

The solution to a multi-faceted problem like the construction workforce shortage in the United States can be built upon one essential cornerstone: education. The construction industry needs additional guidance and assistance to find ways to provide as well as to enhance their recruitment and retention initiatives.

Industry-recognized training programs are essential for maintaining quality and safety in construction, but formal training is not required by every employer. This is an issue because even though a worker might be technically capable of performing a particular task, that doesn't mean that the tradesperson has gone through any sort of official evaluation process to ensure the caliber of the work. What's more, without an industry education standard, lack of credentials can be problematic for experienced craft professionals switching to employers with more stringent requirements.

Credentialing, which can be achieved by going through formal education, training, and examination, is a significant distinction in construction; it unlocks many opportunities for workers. From the perspective of a contractor or owner, the credential shows that the individual has successfully demonstrated competency and hands-on skills in areas relevant to their position and job tasks.

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Touting education as a remedy for the construction industry's woes extends beyond training and credentialing. It also refers to spreading the knowledge of proven advantages to being a skilled tradesperson and combating the stigma attached to skilled trades work; encouraging elementary, middle, and high schools to offer more meaningful vocational training programs and partnerships; and utilizing technology to make construction jobs and career paths more visible and accessible.

## Strategies for Recruiting and Training the Next Generation

### **Reframe construction as a desirable career**

As a society, we need to acknowledge the importance of being a trades person in the construction industry. Construction has long been approached as a second choice or alternative for students instead of a viable pathway to a successful, lifelong career. Several industry-supported campaigns exist to address this misconception and shed light on the importance of being a trades person in the construction industry.

One initiative, Build Your Future, develops numerous free resources showcasing the viability, value, and flexibility of careers in construction. One of these resources is the construction career path, which demonstrates that a person entering the construction industry as a carpenter doesn't have to continue being a carpenter for their entire career. The initiative highlights that there are a variety of options for advancement in construction and multiple paths to get to that top position, should someone choose to pursue it.

### **Partner with schools and school systems**

In order to help young people understand the options available to them in construction craft work, it's important to show them the value and utility of such work at an early age.

Some high schools offer CTE technology programs for students who have an interest in trades work, but only reaching out to high schoolers makes the prospective candidate pool for construction trades smaller than it actually is.

In fact, encouraging students of all ages to work with their hands in elementary and middle school can be beneficial in a variety of ways. Kids naturally start building at a very young age; the only difference is that they use blocks and Legos, rather than concrete and steel. By highlighting the connections between construction and subjects like math, art, and science, educators can help students understand how the concepts they're learning in the classroom apply to real-world situations.

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## Champion workforce development

A key component of creating a stronger construction workforce for the future is to offer credentialing programs and ongoing learning opportunities to qualified craft professionals. Doing so can help solve the initial barrier to entry into the industry and stimulate long-term career growth. Additionally, the turn-key solutions developed by NCCER, a not-for-profit organization, provide access to training and certification resources.

Through NCCER, contractors and industry associations can build flexible hybrid programs tailored to their workforce or member's needs. Often these programs are developed to train new hires, build apprenticeships, identify skills gaps, and upskill craft professionals. NCCER's resources provide a solid foundation for structuring a workforce development solution that leads to portable, globally recognized credentials.

With the current construction worker shortage and low construction unemployment rate, industry trends indicate that construction company owners might have to consider hiring tradespeople with less experience, which means that they might also have to invest more in their onboarding and training programs. This circles back to the idea that a mindset shift from individual-focused to industry-focused is crucial for the future of the construction industry.

## Prioritize diversity, equity, and inclusion in the workforce

Women and minorities are severely underrepresented in the construction industry. Despite the fact that over 50% of the population in the United States is female, women represent only 3.9% of the construction trades workforce ([NCCER whitepaper on women in construction](#)). And fewer than 10% of people working in construction identified as African-American/Black or Asian, according to a 2021 report from the Bureau of Labor Statistics.

### DIVERSITY IN CONSTRUCTION

#### Opportunities for growth



Prioritizing diversity, equity, and inclusion can help shift the construction workforce supply and demand curve in a more favorable direction. Says the Association of General Contractors, "As the demographics of the U.S. become more diverse, construction firms will need to see their workforce mirror the communities in which they work. By doing so, companies stand to gain a deeper understanding of their market and more effectively reach consumers." ([AGC](#))

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- [Associated General  
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Companies that make efforts to diversify their workforce can also reap benefits in the form of increased creativity, productivity, and profitability. “Diversity brings into an organization new ideas from various backgrounds, resulting in greater innovation and creativity.” [\(ABC\)](#)

The data supports these claims. A 2020 McKinsey & Co. report, featuring a study of over 1,000 large companies from around the world, found that organizations with more diverse workforces also tended to be more productive and profitable.

## Finding solutions through digital learning

There is a strong interest within the construction industry for facilitating solution-oriented thinking to increase productivity and ensure safety on the job. From drones and LIDAR that make jobs more efficient to wearable tech that makes workers safer on the job site, out-of-the-box solutions are essential for craft professionals.

There are, however, other avenues for technology use in the construction industry that are not being explored to their full potential.

Digital learning, for example, is quite underutilized in construction, despite the fact that it increases the accessibility and standardization of training programs, and could result in a larger and more well-trained workforce. NCCER and Pearson, a leader in digital innovation in the educational publishing industry, have teamed up to make construction craft training accessible to a larger population of people by providing high-quality online learning opportunities.

Utilizing digital resources to reinforce recruitment efforts is another opportunity that the industry isn't taking full advantage of. In fact, the number of people actively applying for construction jobs online has dropped precipitously in recent years and has yet to recover. While the precise reasons for this decline aren't entirely clear, what is apparent is that the industry must take steps to more effectively utilize online job websites, social media platforms, and other digital resources to increase outreach and recruitment efforts.

## Conclusions

There is clear evidence that those in the construction industry contribute to economic growth and to the community.

Building a stronger future for the construction industry — and, as a result, our country — will require investments of time, money, and energy from multiple stakeholder groups. From construction company owners, to K-12 educators, to government officials, there are tremendous opportunities to create an excellent standard of living for craft professionals, given the proper training and credentials.

# Appendix

## Digital resources

[Digital Learning](#)

[NCCER Catalog](#)

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## About NCCER

NCCER is a not-for-profit 501(c)(3) education foundation created in 1996 as The National Center for Construction Education and Research. It was developed with the support of more than 125 construction CEOs and various association and academic leaders who united to revolutionize training for the construction industry. Sharing the common goal of developing a safe and productive workforce, these companies created a standardized training and credentialing program for the industry.

This progressive program has evolved into curricula for more than 40 craft and maintenance areas and a complete series of more than 70 assessments offered in over 6,000 NCCER-accredited training and assessment locations across the United States.

Please contact your Pearson Executive Director with your questions about curricula, instructor resources and NCCERconnect.

Please contact your NCCER Workforce Development Director with your questions about the NCCER credentialing.

## Pearson and NCCER Partnership

NCCER and Pearson are proud partners, supporting all your craft training curriculum and credentialing needs. Together, we're bringing engaging content to educators and delivering NCCERconnect online training to enhance learning with powerful visual, auditory, and interactive elements.

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[Learn more](#) about Pearson's training programs and curricula.

To find out more about NCCER and workforce development work, visit [NCCER's website](#).

