Workplace Trends

Addressing the Nation's Need for More Construction Workers & Tradespeople

Weifield Group
ELECTRICAL CONTRACTING

A Leading Multi-Regional Electrical Contractor
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INDUSTRY WHITEPAPER

A FOCUS ON FLEXIBILITY

Helping the trades attract and retain workers through the adoption of a flexible work model

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Executive Summary

It is no secret that finding labor in the construction market is increasingly difficult. A combination of factors seems to be contributing to the worker shortage in the U.S., which is impacting nearly every industry. Covid-19 is clearly one of those factors, but the labor shortage in construction was an issue even before pandemic. The challenge has gotten worse, and the industry continues to struggle to find workers. According to the U.S. Bureau of Labor Statistics, as of October 2022, there were 371,000 unfilled jobs in the construction industry.

The Facts

Unfilled Construction Jobs

371,000

AS OF OCTOBER, 2022

September 2021 - November 2021

6.8% - 8.4%

BLUE-COLLAR WORKERS CHANGED JOBS TO WHITE-COLLAR PROFESSIONS

Attracting Talent:

Four 10-Hour Days Per Week =

52 Three-Day Weekends

PER YEAR

Recruitment is one of the largest hurdles we face in the industry today. As the New York Times journalist Jason M. Bailey wrote, "With the retirement of baby boomers in full swing, the construction industry is grappling with its biggest challenge: refilling its pool of employees. But it faces significant resistance among younger workers."

According to Bloomberg, the pandemic has resulted in a shift to work at home which has spurred blue-collar Americans—who have largely been left out of that trend—to seek a career change. A new study by the Oliver Wyman Forum found that the desire for more work flexibility was a key motivation for blue-collar employees to make the transition to remote work. It also said that almost four out of five who transitioned to remote work were successful.

U.S. Census Bureau data for September to November, 2021 shows that between 6.8% and 8.4% of blue-collar workers from construction, transportation and production who changed their jobs moved to white-collar professions.

Getting younger generations and individuals from diverse backgrounds into construction is tough, not only due to the work-at-home shift but also due to plenty of long-held (but incorrect) beliefs about the industry. These misconceptions include viewing construction as unsafe and blue-collar in nature while being 'behind the times' with respect to innovation.

The truth is—the construction industry is a multi-dimensional field that offers many interesting, rewarding, and fulfilling career opportunities…without the burden of college debt. However, when looking at the core of the issue that is affecting prospective workers in the industry today—perhaps the largest source of dissatisfaction with construction involves workers' perception of how the industry's demanding schedule may affect their day-to-day lives.

As a result of the compelling data and research, Weifield Group is taking active steps toward industry-wide adoption of flexible work as a means of attracting and retaining talent.

The reason is simple -- the research shows that whoever solves the flexible work issue first will attract and retain the workers.

THE CASE FOR ACTION

If collective action were taken to move the industry to an overarching flexible schedule working model—it would easily sell itself to potential candidates. Construction firms could advertise four 10-hour shifts per week – which equates to a total of 156 days off/year with weekends and a three-day weekend, every week.

A Vision Built Upon Data

In reviewing the data that shows a signficant shift in worker recruitment and retention, it seems the question should not be —**do we** incorporate an industry-wide flexible working model….the question should be, **how do we** do this.

What's at Stake

If the industry does not evolve and make construction more attractive to contemporary workforce—especially the younger generations—**we simply will not have the option to employ them**. They will become someone else's valued resources…while construction will continue to flail in its recruitment and retention efforts. However, if the industry shifts to adopt evolving trends, we will secure a fighting chance.

It is true that there is a shortage of U.S. workers overall—but there is an even greater shortage of people willing to accept the working conditions that today's economy often demands.

One published stat in a recent constructiondive.com article states that the demanding schedule of construction work has been highlighted by industry officials as a notable barrier to entry for new workers considering the field.

"Young salaried workers often become burned out because of the demanding hours and lack of flexibility in construction," said Brian Turmail, vice president of public affairs and strategic initiatives for the Associated General Contractors of America.

THE PROOF: U.K. FLEXIBLE SCHEDULE CASE STUDY

A pilot program to test flexible work schedules on jobsites conducted by four major construction firms in the U.K. found that workers' sense of wellbeing increased, while overtime hours decreased, without negatively impacting project schedules or budgets.

Within the short timeframe of the pilots (their duration varied between 6 weeks and 3 months), the immediate goal was to begin to shift the workplace mindset around flexible working, and to evidence the positive impact that increased autonomy and control over their own working patterns can have on workers' sense of job quality and wellbeing. Run by flexible working consultancy Timewise, the pilot included the following four companies: Skanska UK, BAM Nuttall, BAM Construct and Willmott Dixon, which collectively employ 11,000 people. Various schedules, individual days off and staggered shift approaches were tested across a range of sites, including London's HS2 high-speed rail infrastructure project.

U.K. Flexible Schedule Case Study

“Our involvement in the Timewise flexible working trial aligns with our focus to support our people to be at their best, and create inclusive environments which attract a wider diversity of people into the industry,” said Adrian Savory, CEO of BAM Nuttall. “The results of the pilots have demonstrated flexibility for operational roles is possible, and has been a win, win, win — for the business, teams, and for improving individuals’ wellbeing.”

“Our new approach to flexible working is giving people a better work-life balance and is making construction an attractive career choice,” said Andrea Singh, human resources director for BAM Construct UK.

As the COVID-19 pandemic forced contractors to change how and when they work, the pilot’s results provide data to help contractors use that momentum now to continue flex models to recruit more future talent.

The U.K. study, conducted from June 2020 through February 2021 during the pandemic, tested various types of flex work schedules across different sites:

- A team-based approach to flexible working, involving a collaborative method of setting shifts that took workers’ personal preferences into account alongside the need to deliver business outputs.
- An output-based approach designed to allow workers to start earlier and leave when that day’s work was complete, rather than remaining on site for their contracted hours.
- Staggered start and finish times, alternating between teams, so that all workers got the pattern they wanted every other week.
- A flexi-day approach in which workers could accumulate additional hours in exchange for one day off each month.
- Home-working for desk-based roles was trialed across all the pilots and was accelerated by the Covid pandemic.

While none of the firms involved in the pilot reported negative impact on budgets or schedules, workers reported numerous benefits in post pilot surveys:

- Participants who felt their work hours gave them enough time to look after their own health and wellbeing rose from 48% to 84%.
- Workers who regularly worked beyond their contracted hours decreased from more than half, to just over a third (51% to 34%).
- Workers’ sense of guilt decreased. The portion of workers who said they felt guilty if they started later or finished earlier than others on site fell from 47% to 33%.
- Trust in colleagues working remotely improved. The number of workers who agreed with the phrase “if someone who is able to, works from home, I am not sure they are working as hard as they would be on site,” fell from 48% to 33%.



ADDRESSING THE OBJECTIONS

This flexible working idea is not widely embraced by all; in fact, it is somewhat of a taboo subject in the industry today. Research from ELECTRI International shows that 40% of work days are comprised of ‘productive time.’ Thus, 8-hour days yield 3.2 hours of productive time—versus 4 hours in a 10-hour day. Overall, you may be gaining a .8 hour increase in productivity for an extra two hours of pay.

However, the long hours culture that persists in construction is a significant problem, especially for men. It restricts their ability to play a more active role in family life. It is also linked to poor mental health with some dark statistics: death from suicide among construction workers is 10 times more frequent than from accidents, and 25% of construction workers have considered taking their own lives.

Adding to employee stress, many site workers face lengthy commutes as they move with projects which adds to their already long days and further detracts from their personal and family time.

In recent years, the industry has been investing heavily in programs designed to make construction a more attractive profession to enter and stay in. Numerous other industry sectors have adopted a flexible working environment as a key solution, yet, to date, construction has struggled to find ways to adapt.

A recent study by LinkedIn confirms that more job seekers (63%) said work-life balance was a top priority when considering a new role than those (60%) who said excellent compensation and benefits.



The Goals of a Flexible Work Schedule

To begin addressing the question of ‘how,’ first -- the goals of a flexible work schedule initiative need to be established, concentrating on two main areas:

1. Offering flexible work as an industry standard to frontline construction workers, giving workers more flexibility for when they work on the job site in order to enhance their work-life balance, health, and wellbeing.

2. Empowering construction employers to improve job quality and recruiting efforts through flexible work, attracting more workers and building a diverse workforce.

3. Continuing to keep the end goal in mind, never compromising on schedule, budget, and quality for projects utilizing the flexible work model.

HANDLING OBJECTIONS: REAFFIRMING TRUST AND PERFORMANCE

Historically, the primary measure of success for construction projects has been: ‘was it on time and in budget.’ This assessment often is in direct opposition to the wellbeing of workers, as there is a common perception that long hours and squeezing resources is the key to meeting targets. If there is a problem with the project, longer hours are often expected as a way to address it.

The pressure for projects to meet client deliverables has been a fundamental factor in the construction industry’s resistance to flexible working, but this U.K. pilot program showed that **the fears are unfounded…the program demonstrated that flexible working can be implemented successfully on frontline operation construction sites with no detrimental effect on the budget or program**. It also met its goals of improving wellbeing and initiating a positive shift in attitudes to flexible working.

All of this can be managed by setting proper expectations and executing a sound flexible work process—but in general, most have to actually try this type of work model a few times to see the benefits. Some obvious benefits of this model that should be communicated to owners and General Contractors on construction projects include:

- **Flexible work is good for increased production.** Certain projects have time-intensive requirements that are better absorbed with an extended workday – e.g., workers who have to take a lift for 30 minutes to get to the floor of a high rise building they are working on, can spend more time working once they reach that floor.
- **It is good for morale**. Field crews tend to really like flexible work as they enjoy a three-day weekend, each week.
- **It is more efficient.** Working one less day per week results in less gas costs to travel to and from work, less downtime for picking up and laying

• **It better satisfies client requirements.** Utilizing a model such as **'rolling 4/10's'** (where crew members all work four 10-hour days per week with overlapping crews to cover all five days of the work week) works better to accommodate client requirements. There is always a presence on the job the full five days per week, and the hours the trades are on the job are extended each day.

• **It allows for more make-up work/better training**. A rolling 4/10's model allows supervisors to utilize the fifth day for any weather-related makeup work, any desired OT by the owner/General Contractor, and key trainings as needed throughout the project.

• **It can be a powerful differentiator.** A company with the willingness and ability to execute this type of flexible environment demonstrates higher proficiency in planning, scheduling and communication -- which, if described and documented well, could be used as a strong differentiation point between companies during sales or negotiation. Owners want to work with sophisticated companies who are highly skilled at execution.

CONSIDERING SAFETY PERFORMANCE

According to OSHA, fatigue resulting from long hours of work and a shorter length of time between work shifts is an important health and safety concern for workers on extended work days. Some researchers report that in many cases the extended workday is more tiring than the eight-hour day, which is a potential safety risk. Others report that the eight-hour work schedule is tiring, particularly when many consecutive shifts must be worked with few consecutive days off. However, the advantage of properly designed extended workday schedules over eight-hour day schedules is that fewer consecutive shifts are required and longer periods off between work weeks allow for better rest. Additionally, the 'rolling 4/10's' model means fewer people on-site working adjacent to each other (less overlap of schedules), which enhances safety performance on jobs.

Spending one less day traveling to work means one less day being exposed to potential risks, both on-site and on the road, while generating financial and environmental benefits from commuter fuel savings. Working fewer days is also appealing to those workers who may live far from their job. Employers need to consult workers about their desire to have a change in the work schedule and specifically, an extended workday. When possible, present them scheduling options to meet their needs.

PRODUCTIVITY DATA WITH FLEXIBLE SCHEDULE PROJECTS

Weifield Group Contracting, a leading multi-region electrical contracting firm, has utilized both straight and rolling 4/10 models on several of our projects within our Large Construction and Industrial divisions -- including the jobs shown below:

Project	Straight or Rolling 4/10's	Completed Hours	Productivity Rate
Bennett Well Site 6 - Industrial Water Treatment	Straight 4/10's (Entire crew works the same four 10-hr. days per week)	1,340	105.97%
Binney Connection - Industrial Water Treatment	Straight 4/10's	12,729	129.75%
Dodd - Industrial Water Treatment	Straight 4/10's	1,791	147.63%
Glenwood Springs - Lowes	Straight 4/10's	7,205	100.00%
Project Rodeo Distribution Facility	Rolling 4/10's (Crew works different schedules for full 5-day coverage)	178,547	110.48%
Rock Creek - Industrial Wastewater	Straight 4/10's	1,728	152.84%
Semper High Service Pump Station - Industrial Water Treatment	Straight 4/10's	10,499	129.36%
Soda Creek Elementary	Straight 4/10's	12,389	100.00%

Overall, the resulting data shows that productivity on these jobs was at or above the predicted rates when using the flexible work model. This means the projects utilizing a flexible work schedule not only kept on par with our productivity expectations (did not have a significant downturn in productivity), but were likely a key factor in allowing us to exceed expected rates.

The Worker Perspective

Weifield began testing the flexible work model on some of our rural jobs out of necessity, as many of our workers had difficulty driving to these job sites five days/week. We quickly saw the positive impact of this model on employee morale and job productivity and we began utilizing the model on our urban and larger projects as well. A flexible work schedule has been met with overwhelming positive feedback from our workers. Comments received from Weifield Group Contracting's employees include:

Benefits Outweighing the Risk

From Dillon Flynn, Weifield Foreman:

"Workers on jobs with flexible schedules save fuel costs and have more time for their lives. The company also saves costs as workers are driving company vehicles 20% less during the week, and overtime and urgent makeup work can be scheduled on the fifth day—still allowing employees to have a regular weekend off. Additionally, there is higher production because you have to break down and set up materials and tools less frequently during the week. Most general contractors are very receptive to this—and we work together to set a schedule with a slightly shorter lunch and then a 15-minute break at around 3 p.m. which allows the crew members to recharge for the last part of the day.

Additionally, none of the jobs I've worked with this schedule had any safety concerns and they all achieved higher than average gross margins."

From Patrick Culp, Weifield Foreman:

"Where there has been general contractor opposition to the flexible work schedule has come when there is hesitancy to see an entire day where no production is occurring—and so, the entire crew working the same four-day schedule would not work. However, rolling crews, so all five days have coverage, has been well-received. On smaller jobs there will not be the budget to have two supervisors on the project, and so for the one day where the supervisor is not working—as it is his 'fifth' day off—the plan could be to use this extra day to develop our future leaders who are currently working at the journeyman level. Those journeymen who seek supervisory experience could be given the opportunity to experience a supervisory role in a controlled and fully supported setting—with the supervisor on-call for any needs that may arise. This could help the supervisor evaluate and test his training methods while accelerating supervisory training within the trade as a whole."

From Tim Fenske, Weifield Foreman:

"For a rolling 4/10's model to work, you need a strong second-in-charge/foreman with the ability to make decisions that affect the project. I think it's important that the discussion with all trades happens in the preconstruction phase where all trades are bought in before implementation. This model may work best with larger projects with significant manpower; that way, there is still a good-sized crew on site on Mondays and Fridays."

From Scott Dick, Weifield Industrial Superintendent:

"Our Industrial division has utilized the 4/10's model on a number of projects and has seen a huge return on investment with crew morale. There have been no historical issues with any of the general contractors on the projects where we've worked this model; it simply requires a high level of communication and coordination with the general contractor in order for it to work."







Implementing a Flexible Schedule Pilot Program

Construction firms wanting to embrace a flexible working model will need to consider many questions before implementing this program. The questions include: what does a daily flexible schedule look like; what general contractor or owner requirements impact the plan; how will the organization maximize fairness across the employee base with the model utilization; and what training is necessary to implement the plan successfully. See this Timewise 10-Step Action Plan for tips on how to roll out a pilot flexible schedule program successfully.

Firms interested in trying this model would need to initiate some key steps in the beginning stages:

1st PHASE
Vision

Determine a clear vision that starts at the top with senior leaders advocating the benefits of flexibility and taking a proactive approach. Obtain owner buy-in of the vision before implementation begins.

2nd PHASE
Options

Consider options for flexibility in every role (frontline workers as well as knowledge workers), taking guidance from HR teams to ensure fairness and inclusivity

3rd PHASE
Training

Equip managers with skills and capabilities to design flexible jobs that are suitable for managing both different site circumstances and flexible teams. Build in front-end intentional sequencing and scheduling of the full job so the optics demonstrate onsite action each day.

4th PHASE
Trials

Trial new approaches at a team level before embedding and scaling out successful learnings through guidance and training.

Be flexible in your approach and be prepared to make adjustments based on the specific requirements of your project or the project teams.

5th PHASE
Measurement

Measure the return on investment of flexible working in terms of project performance and productivity, at minimum ensuring it doesn't have a detrimental effect on budget and timeline.

The company conducting the UK pilot, Timewise, strongly recommends that all firms carefully trial their plans to increase flexible working on one or two sites before rolling out.

"As a developer, I would implement a flexible schedule on projects -- but I would need this to be part of an overall complete project strategy by the General Contractor. I think it is incumbent on the General Contractor to prepare and communicate an intentional strategy and the value proposition as it is a difficult thing to explain to ownership without a clear plan of the schedule deliverables and associated worker hours to ensure full coverage. On our end, with a shrinking labor pool and the resulting lower quality and productivity, we are actively discussing how to achieve better outcomes with ground-up construction. This initiative to attract and retain workers is an interesting concept to address that."

~ Doug Elenowitz, Trailbreak Partners

CASE STUDY

Flexible Work in Action at Centura Health [Colorado Springs, CO]

Meredith Wardwell, Senior Director of Design and Construction, was in charge of oversight for a new construction Integrated Project Delivery (IPD) project at a Centura Hospital in Colorado Springs, CO. This was a two-phase project encompassing six stories and including the Emergency Department, Operating Rooms, Sterile Processing Department, NICU, Intensive Care Unit, and Medical/Surgery areas of the hospital.

PROVIDING A BETTER WORK ENVIRONMENT FOR CRAFTSMEN

The hospital team decided to implement a flexible '4/10's' work schedule on the project to provide a better working environment for the craftworkers due to the extra day off, per week. This meant the entire crew would work four weekdays as a standard, with the fifth day reserved for any makeup work needed due to not achieving the deliverables during the other four days.

Because construction for the project fell in the summer into hunting season, the extra day off per week was a big motivator for many of the crew members.

"We positioned it like this to the crew—if you are able to knock out your scope of work in 4/10's – you have a three-day weekend and you hit the ground running the following week," said Meredith. "If you don't hit your milestones and everyone is waiting on you, Friday is your makeup day. They really rose to the occasion and it worked great for us."

Achieving Buy-In

The main component of the IPD contract involved all the major subcontractors being a part of the tri-party agreement terms—which meant the General Contractor (which was GE Johnson) and all partners needed to agree to the flexible schedule arrangement as well. If the partners made their schedule and budget, they received a higher percentage of their fee from Centura—so it benefited them to manage the schedule effectively.

"We told them, you have as much ownership of this as we do and we've collectively agreed to this schedule – so what do you think you can do, and how are you going to meet it. If you come in under schedule, you almost always come in under budget, which means a higher fee for you," said Meredith. "It was easy to get buy-in because they were all equal partners. When you treat everyone equally, you optimize the value of the work of each component, not the traditional pyramid with the owner at the top."

The Results

The results of the flexible work trial were clear: overall, the project came in 6% under budget and the team was able to fund wish list items based on that savings adding greater value to the project.

"Ultimately, this project provided opportunity and buy-in for all trades," said Meredith. "I think there is something deeply unique about hospital work. People can really buy into our product because we all need it at one time or another. Tradespeople are deeply passionate about their work and want to create great work – what better way to achieve that than with a hospital? That, coupled with great goals, our vision to provide them with a good environment through flexible work, and the establishment of equal visibility for each trade's work, creates a really different environment. People are seen, heard and valued for their work and contributions."

Added Meredith: "**If possible, I would implement flexible work on every project."**

CASE STUDY

Flexible Work in Action at Balfour Beatty [Charlotte, NC]

Andrew Cook, Superintendent for Balfour Beatty Construction, made the decision to move to a '4/10's' schedule on his commercial full-floor, 36,000 sq. ft. office space project. Most of his crew were on the job site by 6 a.m. anyway, and he wanted to offer them a three-day weekend while having a 'quiet' day onsite for him to evaluate the project as it was built. Working one less day per week allowed workers to save costs on gas, lunches, and parking.

THE SAME 40 HOURS IN A SHORTER WEEK

In August, 2022, Andrew Cook was assigned to supervise a new commercial office renovation in Charlotte, NC.

"I made the job-specific decision very early on to move to a 4/10's schedule," said Andrew. "Most of the team liked to start at 6 a.m. anyway– and that meant their 8-hour shift was complete at 2:30 p.m. which was really early, in the middle of the day. If they worked four 10-hour shifts, they could still come in early and be done around 4 p.m. which is the end of a typical work day. When your teams work in the city, saving one day per week's parking, food and gas costs really adds up over the course of the project."

Achieving Buy-In

As the general contractor, Cook had the authority to make the work schedule decision and was fortunate not to have to secure owner approval. However, all of the trades had to follow the plan.

"Some trades weren't used to that. You had to really just let them know, we are doing this schedule on this project and we're not here on Friday, unless we are behind, and then we can come on a Friday to help make the schedule," said Andrew. "Even if you are behind, you're then working on a Friday instead of a Saturday – which the team still considers a win."

With his arrangement, Cook still would be present on-site for the entire five-day work week.

"A few people would still come in on Friday; the owner subs were there and some other specialty subs would drop in without prior notice, so I would still be on-site to deal with that. I found this schedule beneficial to me, personally, because I had a chance to think. This quieter time gave me time to do paperwork, look at schedule, walk the job and see phases I wanted to see. I was not putting out fires and getting pulled into a lot of issues; I was able to look ahead and plan, which is hard to do with a job site full of contractors."

The Results

Some of the subcontractors would push the boundaries in the beginning and still work their eight-hour days, Monday through Thursday, and then try and show up on Friday to work the remaining hours.

"They would show up and I wouldn't let them on the site on Fridays," said Cook. "When they realized after a couple weeks that I was serious, they started working 10-hour days the rest of the week because they realized how working less hours would impact the schedule."

He added, "This schedule greatly improved team morale because everyone enjoyed the three-day weekends while still leaving Friday to work overtime if needed. It helped them to save costs, personally, and it saved us two hours each week on start-up and shutdown time, not having to do that on a fifth day. In the end, we were ahead on schedule and received our TCO one day early—which was huge."

Added Andrew: "**This schedule worked really well for me and the team; everyone was a lot happier."**

Uniting to Attract and Retain Valuable Workers in the Trades

With recruiting and retention of workers in our trade becoming extremely difficult—construction as a whole is facing a daunting challenge. Several national and global organizations have moved to the flexible work schedule model in an effort to protect the ability to survive and thrive throughout this 'Great Resignation' era, and beyond, including the Department of Transportation, Chick-Fil-A, and Sage Hospitality Group, the preferred management company for Marriott International, Hilton Hotels & Resorts, and Hyatt—as well as technology companies like Google, who implemented flexible work long before the Covid-19 era.

If construction businesses begin taking a different view toward creating a new working model, flexibility will make a huge difference in a sector that hasn't evolved much in a long time. The shift starts with thinking about outcomes rather than hours spent at work, as well as actively challenging traditional perceptions and mindsets about how work needs to be performed in the construction industry.

If the industry is willing to explore new ways of recruiting and retaining talent, collectively, we can ensure the wellbeing and performance of individuals and teams while protecting the future of our industry.

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