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ENR 2024 TOP 20 UNDER 40: MAGNIFICENT BY A MILE

Chicago set the stage for these AEC leaders to discuss construction challenges and solutions

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From diverse technical, business and skilled trade backgrounds, ENR's 2024 National Top 20 under 40 winners have emerged as leaders at their respective organizations. They say industry Collaboration is key to recruit, retain and cultivate the next generation of workers.

Now more than ever, recruiters must be honest and up front about the physical and mental demands of working in the AEC industry, says Rod Jones, a manager at Holder Construction Co., during a roundtable with the Top 20 held in Chicago during ENR's Emerging Leaders Forum in March.

"Our industry is a grind," adds Jones, who helped establish a talent pipeline from his historically Black alma mater, Morgan State University, to his firm. "It's demanding; it's very much a service industry, and with that you have to set the expectations with the workforce."

"It's an overall evolution of our industry. It's not only Gen Z, it's how we see our whole industry from A to Z, because that's how change will happen. It's a shift in the mindset."

Ioanna Magiati, Partner, AO.

Recruitment is about risks and rewards, says AO partner Ioanna Magiati, adding that there must be a “two-way investment” of expectations between managers and employees.

“You cannot just expect to get, you have to give” she says. “Invest in them, and they invest back in you.”

Investment in the next generation of talent can begin as early as kindergarten, so “by the time they’re through middle school, you’ve opened their eyes to a world,” says Balfour Beatty Construction Senior Project Manager Aislinn Nagy, who serves on her alma mater Virginia Tech’s advisory board.

These conversations and more are ushering in “an overall evolution of our industry,” says Magiati, the first woman partner in Senior Project Management AO’s 50-year history. “It’s not only Gen Z, it’s ... our whole industry from A to Z, because that’s how change will happen.”



Some of the best and brightest, ENR’s 2024 cohort of Top 20 Under 40 winners toured the Windy City, stopping at the famous Chicago Bean. Photo by Jessica Savidge

Work-Life Balance

With a greater awareness of employee burnout, AEC firms are responding with more flexible work schedules

At many of the Top 20's firms, recruitment and retention initiatives begin at the office with work-life balance. As the COVID-19 pandemic exposed the dangers of burnout, many firms have responded with more flexible working hours and embracing digital collaboration.

"I really like the idea of flexibility," says Lauren Taylor, WSP USA's vice president, district planning lead for Texas. "On a staffing level, I think having that flexibility does allow for better people working for you, happier people working for you and better teams."

Prior to the pandemic, Taylor says big teams would fly in to contribute their niche expertise. "Now I've got my planners locally but then I can reach out to best practice practitioners throughout the country that are able to come in, not physically, and really work with clients to make better projects."

More than being able to work from home full-time, Justin Lamb believes people want the option of flexibility to tailor their professional environment to what works best.

"We have people across a variety of roles that come together to execute projects, and some of it can function more efficiently individually at home," says Lamb, Fluor's project director and general manager for Research Triangle Park in North Carolina. "Most people are looking for flexibility. They want to know that they have the flexibility to adapt when they need to, and we can support that."



After industry judges selected a total of 180 winners across ENR's 10 regions, another set of judges selected this year's national Top 20. Photo by Jessica Savidge

While many companies are embracing work-from-home policies, some construction roles are less flexible, says Harkins Builders President and CEO Ben Nichols.

"Construction is interesting because you can't build a construction project from home. It's an impossible thing to do," he says. "So most of our workforce is out on project sites working hard."

Yet with careful planning, even jobsite-intensive roles can have a day at home, says Nichols.

"Whether it's an estimator that's really focusing on takeoffs that day, and if they can have a quiet silent house where they can crank out takeoffs ... I think there are opportunities to leverage that type of flexibility in a hybrid workforce."

Flexibility can mitigate jobsite stress, and at many firms flexibility begins with building trust between managers and their teams. Balfour Beatty Construction's Nagy says a consulting company helped the firm adopt a leadership model known as CARES: connection, autonomy, respect, equity and surety, which has helped managers build better relationships with their teams.

"If you have all five of those things in place with your team and you've built a relationship with them, you're connected with them and you give them the autonomy to do what they need to do," says Nagy. "And maybe some of that work shifts to being on a different timeline than you're comfortable with, but you respect what you've got going on in your life, as much as you respect that they have things going on in their life as well."

The subject of work-life balance also incorporates mental health awareness and access to resources such as "Yinz Good?," an initiative that includes videos and toolbox talks on job burnout and substance misuse. It was founded by the Constructors Association and the Master Builders' Association of Western Pennsylvania.

"Burnout" is still a new term for many firms, says Taylor, and finding a solution will take time and planning.

"As a leader—a people leader or a project leader, I really look at what I know worked better in the past, what's working well now, and how can I combine the two," she says.

Workforce Development

Amid recruitment and retention efforts, there is a shift in the perception of construction work



For many Top 20 Under 40 winners, workforce development is about meeting potential industry professionals where they are when it comes to skill level.

Holder manager Jones created a social media brand around his career in construction called Rod the Builder, which offers brief informational clips to broaden awareness of opportunities in construction management, particularly among students.

“Companies need to be intentional with their presence, and a lot of them are on Instagram, on TikTok now ... it’s just meeting people where they’re at and exposing the industry,” says Jones, who is also an adjunct professor at his alma mater.

André Barbour, diversity and inclusion director for NEI General Contracting in Randolph, Mass., says many people are never introduced to construction as a viable career path.

In response, NEI created its Workforce Opportunity Resource Center to recruit minority field workers with low- or no-cost training. “There are so many careers in construction that you don’t see that don’t involve swinging hammers or using tools, but they are all vital parts of the construction process,” says Barbour.

Overall, the construction field needs to change outdated perceptions to better attract young workers, says Sara Sadek, director of corporate quality assurance and quality control at PJ Dick in Pittsburgh.

“Really, we [need] to tweak the culture or perception of it,” she says. “Make it something exciting so that, if you’re a creative person, and you like to work with your hands, are good at three-dimensional thinking and work well on a team ... then you can make good money and have a career ahead of you that’s fulfilling and that you are proud of.”

Recruiting at high schools is “too late,” says KK Clark, project executive at Clark Construction. Agreeing with Nagy’s suggestion to start as early as kindergarten, Clark says the contractor’s recruitment “focuses on sixth, seventh and eighth graders” and “tapping into those underestimated communities” to get them into an apprenticeship program or a junior college.

Yet hiring is only one part of the equation, says Rory Mele, director of environment, health and safety for BHI, adding that companies also need an employee promotion plan.

He says companies should ask “how do I mold them into the leaders we want them to be? What kinds of programs do we have in our organization to train them and create a clear path for them?” In Utah, there is a Talent Ready program that enables young people to pursue a career in construction while earning a sustainable family wage and continuing their education debt-free, Mele explains.

Irene Turletes, HDR Engineering water resources market sector lead, says construction has a greater mission that could also appeal to entry-level workers.

Working in places such as rural Alaska, where there are few stormwater and wastewater treatment systems, gives Turletes a sense of purpose and accomplishment that is fulfilling beyond a paycheck.

“We get to do work in places that may not have functioning basic infrastructure,” she says. “If you are able to make a difference in a village of 200 people—how powerful is that? It’s incredibly motivating.”

Working Smarter



There is a correlation between labor challenges and the number of firms investing in artificial intelligence-powered tools, says John Hoodjer, vice president and group manager at JE Dunn Construction. Because of recruitment shortfalls, firms are looking to work smarter with fewer hands, he says.

“We do not have enough workforce to execute on the amount of work that we need to execute on,” says Hoodjer. “AI is going to make us more effective ... it’s going to make us more productive.”

Clark Construction’s KK Clark was also optimistic about how AI could allow firms to “focus on what really matters,” yet there are still limitations to how much the technology can automate.

Alternatively, KiSeok Jeon, STV vice president and digital advisory lead, says firms should focus not on automation but on their “data framework,” which he terms the “fundamental layers” that AI will use. With this, adds Jeon, there is only one question to ask AI tech vendors: “Can your AI be implemented with the data framework we have?”

He says the introduction of technology could also shift the way firms put value on different roles.

“I think it’s a cultural thing of how we actually see the labor force,” Jeon says. “It shouldn’t be driven by education; it should be driven by what [the work] is actually worth.”

Industry demands for faster construction and third party certifications are also compounding workforce challenges. NEI’s Barbour says he has noticed a Passive House building boom, which he described as “LEED on steroids.” He adds: “There’s a lot of risk associated with that, so there are a lot of programs these days to provide hands-on training for workers in the field.” Over the past five years, Barbour says his company has trained 40 employees in Passive House building principles.

Pre-fabrication also can be a solution for firms to work smarter amid labor challenges, says PJ Dick's Sadek. She notes that prefabrication has positive impacts on the workforce such as reducing injuries and increasing diversity, recalling a project involving pre-fabricating large panels for a university.

"They were able to fabricate everything in an enclosed environment throughout the winter and at table heights so there was less wear and tear on people's bodies," says Sadek. "There were also more women working there because it was at table height and it was more accessible to their body size."

In environments where there is not enough skilled labor available to build on site, HDR's Turletes raised the issue of whether firms could be depriving local workers of jobs.

"It's an important conversation to have," she says. "And how are we training the local workforce?"

At the end of the day, Fluor's Lamb says, the way firms innovate on a jobsite has to make sense for the project deliverable. "It has to support the fundamentals of, this is how we are executing the job," he says. The rest is value added.

The New Normal

Adapting to bigger risks, smaller budgets and the energy transition



Overall, higher construction costs fueled by limited labor pools, supply chain disruptions and crunched timelines are ushering in a period the Top 20 Under 40 calls the new normal.

“The value of people has certainly gone up,” says Victoria Jones, project delivery director at Transurban, adding that it’s even more so as firms “backfill” retiring workers. “It’s been our generation that’s had the ability to lead sooner. Gen Z is going to do it even faster,” she adds.

In effect, it’s critical for firms to build confidence in the next generation to make decisions, says the Top 20.

“One method we’re utilizing is building a succession plan early,” says STV’s Jeon, even for newer roles. “That way, when you’re learning something, you’re basically teaching somebody who’s coming right after you.”

Clark added that a faster pace also allows workers to quickly build experience. “An expert is not somebody who’s been here for 30 or 40 years. An expert in the moment is that person that has the most information and the most knowledge about that thing.”

An energy transition adds to the urgency for firms to adapt amid market challenges. In the transportation sector, the shift to electric vehicles is also shifting transportation planning, design and construction.

Maryland's Electric Vehicle Charging Station Law requires EV charging stations to include identifying signage, explains Lili Liang, deputy director of the Maryland Dept. of Transportation's State Highway Administration. "That means now we need to develop a standard design for auditors, sections of the DOT—even the private owner such as an HOA, shopping center, parking lot or spaces in a garage," she explains. "That will impact the standard or the specifications that are related to traffic engineering."

As developers prepare for the future, electrical power infrastructure is often proactively baked into project plans, explains Kasie Bowden, general superintendent, Hensel Phelps. On a UCI health project in Irvine, Calif., Bowden says the health care provider noticeably dedicated a large percentage of its parking stalls to EVs.

"They have the required number of chargers to hit the standard," says Bowden, explaining that Hensel Phelps also spent a lot of time coordinating with EV charging companies to ensure all stalls could be converted beyond the initially planned EV charging spots.

MMC Contractors Las Vegas Office President Tyler Bonwell says firms must also prepare for how all-electric might affect trade partners.

"Hopefully, standardization helps," says Bonwell. "We're a union contractor, so we have to know, when is it gas time? Or when is it charging time and how long will that take? That's going to bring a different influx of unique situations that we're going to have to work through around changing our fleet in the future. The availability of power on job sites, even in remote areas, will create a new set of challenges."

The new normal feels like a bigger, faster, cheaper mentality, says Kyle Weller, vice president and general manager at Turner Construction Co. in San Antonio, Texas. Working amid many industry challenges pulling in different directions is a struggle, he adds.

Yet the new normal is also creating new opportunities to recruit workers with diverse skill sets, says Brian Derr, associate vice president and section head for special projects at Johnson, Mirmiran & Thompson Inc. "Solar farms, wind farms: those are emerging markets" that provide "opportunities to hire different people than what we have," he notes.

JE Dunn's Hoodjer adds: "At the end of the day, we're problem solvers. Dig in, learn the facts, find the solution, move forward as a team."

