



Prologue

2022

The Workforce Recruitment and Retention Challenge

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Addressing a Talent Shortage

In 2022, CMAA convened a diverse panel of 14 program and construction management leaders to discuss workforce recruitment and retention to overcome the current and ongoing talent shortage.

The group represented a broad cross-section of the industry, including agency and at-risk service firms, owner organizations, and both senior industry professionals and more recent entrants.

CMAA organized this meeting following two similar "FutureFocus" panels held in 2012 and 2019, which broadly discussed the industry and future trends. The 2022 panel focused on workforce development because it was a dominant theme in both earlier discussions.

The FutureFocus 2019 participants observed that the profession must turn its attention to the culture of work in program and construction management, particularly work-life balance and pay equity, but also technology's role in workplace flexibility. These conclusions provided useful context when CMAA brought together a new group in 2022.

The conversation demonstrated that recruitment and retention issues are interconnected. The group concluded that if the industry creates a greater understanding of program and construction management and its impact on communities, more defined, diverse, and attractive career paths, and a more supportive, equitable, and performance-based work culture, it will have positive effects on both attracting **and** retaining talent.

KEY ASSUMPTIONS

To ensure a common framework for the 2022 discussion, the group agreed to define the program and construction management workforce as anyone employed in the construction industry who is not involved in the trades or crafts.

KEY QUESTIONS

Talent Recruitment

Who, how, and where to recruit new and untapped sources of talent into the program and construction management profession?

Talent Retention

What should organizations do to transform workplace culture and make program and construction management more inclusive?



Current Workforce Recruitment and Retention Issues

First, the group identified the current issues surrounding workforce recruitment and retention in program and construction management. The panel observed the following:

Problems Attracting Entry-level Employees

The panel recognized that many believe that construction is not a profession, is a "dirty" profession, or do not understand it. Many employees also feel that entry-level compensation is unattractive compared to other industries, such as information technology. Furthermore, the group concluded that the time-limited nature of construction projects requires program and construction management professionals to move frequently, which discourages some who seek stability or a sense of belonging.

The Industry Uses the Same Recruitment Strategies Again and Again

Program and construction management service providers and owners continue to use the same "we've always done it this way" approach to job requirements that do not meet the industry's needs, according to the participants. The panel remarked that many recruiters focus on degrees more than skills, go to only a few colleges and universities, and recruit only from the same departments. These schools are often where organizational leaders or recruiters went to school or the largest local universities. The group noted that this pool of candidates is not large enough to meet the industry's talent demand.

"When we go to a college to recruit, the students want to be compensated for their academic effort. Many college graduates don't see the field as worthy of their degree. It is not as glamorous as they expected, even though there are lots of opportunities later. We are 'upside down' on them at first."

Christine Goins, PE, CCM RK&K

"We are competing with startups and other industries that are much more attractive and don't recruit on the basis of the particular degree. Students aren't attracted to construction."

Khaled Naja, PE
Dallas/Fort Worth Airport



Problems Retaining Talent

The participants recognized that the program and construction management industry struggles to support and invest in newer workers, which hurts retention. Participants noted that the current culture emphasizes that new hires need to have a thick skin and "pay their dues" before they will receive respect and opportunities to advance. The industry's productivity mindset also discourages organizations from spending time and resources to train new employees, as there is a strong expectation that workers' time must be at least 90% billable.

The panel agreed that these factors enable other industries that have broader recruitment, higher entry-level pay, and more flexible work cultures to compete for the same pool of new talent. For example, the group believed that Silicon Valley attracts new workers with engineering degrees for higher starting salaries and more stability than program and construction management.

"The vision of a person in construction is dirty hands and dirty shoes, and there are also a lot of barriers to moving up.

One of the drivers in construction is productivity. Employees have to be 90% billable, but how do we change that mindset? Besides the culture of 'toughing it out,' you have to deal with that productivity expectation."

Doreen Bartoldus, PE, CCM Jacobs/NAWIC

"We go to college and are conditioned to be respected for our thoughts, but the industry demands mental fortitude with respect earned slowly. A lot of folks in the industry want new employees to keep their distance and wait their turn. This is difficult to overcome."

Jim Murphy, PE, CCM Turner & Townsend



New Approaches to Recruitment and Retention

Next, the participants discussed new approaches to recruitment and retention. Strategies generally fell into three main categories:

- Tell the Story of What Program and Construction Management Professionals Do
- 2 Broaden Recruitment and Career Pathways
- **3** Create an Inclusive Workplace Culture



Tell the Story of What Program and Construction Management Professionals Do

The group noted that there are opportunities to market program and construction management more effectively. The panel believed the public tends to have a negative view of construction or does not understand what it is, yet the panel also emphasized that program and construction management professionals take pride in the profession and see it as an altruistic calling that has positive impacts on society.

The participants identified a variety of ways to strengthen recruitment and retention in this area, including:

Rethink Front Line Recruiting

The panel underscored that organizations should make it an expectation that all staff participate in recruitment. This allows potential future employees to hear from program and construction management professionals about their day-to-day experience, explore project case studies, and learn about firms, the industry, and career paths. Local relationships between firms and educational institutions are excellent avenues for these recruitment activities.

Tell Engaging Stories About the Profession

Promote program and construction management as a digital, technology-driven industry (e.g., drones and software, not pencils and clipboards). Participants suggested that the industry also emphasize the leadership and management aspects of the profession. In addition, communicate the industry's impact on communities, connecting the work to broader issues such as sustainability, resiliency, social justice, and health.

Share Pride in the Program and Construction Management Profession

The panel agreed that this could include marketing campaigns demonstrating opportunity in the industry and the industry's commitment to the safety and wellbeing of its workforce. Providing staff with volunteer time is also an important way to demonstrate a commitment to corporate responsibility and foster relationships between staff and the community.

"I love to hire people who are excited about the construction industry, but I still don't think people understand what program and construction management is and what it can mean for a lifetime career."

Kelly Garrity, CCM
Whiting-Turner

"There is a societal lack of awareness of program and construction management in general, and an academic lack of awareness of it as a discipline."

The Honorable Stephen T. Ayers, CCM, FAIA National Institute of Building Sciences

Broaden Recruitment and Career Pathways

Participants recommended that the industry look beyond common sources of talent and create room for non-traditional career pathways. Recruiting and retaining talent is about more than who program and construction managers know, where they went to school, or the way they typically progress in their careers.

Recruitment Pathways

When it comes to the challenge of building new recruitment pathways, participants highlighted the importance of building relationships locally, at both the secondary and postsecondary level. Participants urged the industry to tailor these relationships and to identify the factors that will make each relationship meaningful.

Recruitment strategies include:

» Build local connections to postsecondary institutions – Instead of only recruiting from a few universities, make more local connections with a range of institutions. Broaden the talent search to smaller schools, two-year institutions, Historically Black Colleges and Universities, and other Minority-Serving Institutions in the area. The panel also noted that building more connections with academic institutions can improve the feedback loop between postsecondary education and industry, helping academic programs better meet the workforce's needs.

"The traditional pipeline is civil [engineering], architecture, and construction management, but as you grow in the industry you really need management, business, and communication skills. It would lead to better project delivery if we had folks with those skills."

Carol Holland, PE, CCM
Dewberry

"We need to start highlighting the breadth of everything we cover. When we say we're in construction, people inevitably see someone swinging a hammer in the field. We work in all phases. We might be able to attract and retain more talent if we show them the different careers. If something is not the right fit, find the one that is to retain them."

Jarvis Alridge, CCM Hill International

- Consider students with skills from other majors Talent can come from a wide range of departments, including liberal arts and sciences, technology, data science, and business. Participants advised the industry to think creatively to identify skillsets rather than degrees. For example, the group suggested gamers could be useful drone pilots. Participants urged the industry to define skill-based entry-level qualifications because many students from other disciplines have backgrounds the industry needs, including:
 - Management skills;
 - Communication skills;
 - Qualitative reasoning skills;
 - ✓ Problem-solving skills;
 - 2D and 3D thinking;
 - ✓ Technological literacy;
 - Critical thinking skills;
 - ✓ Decision-making skills; and
 - Research skills.
- Wse co-ops and internships Providing students with experience-for-credit improves the likelihood that they will stay after graduation because it introduces them to firm culture and the experience of being a program and construction management professional. The panel noted that cost is a potential challenge for these opportunities, but the industry should understand the value.

- » Recruit experienced workers from other professions Nonlinear career paths are common, especially among younger people, and previous experience can be valuable, according to the group. For instance, many employees have in-depth local knowledge, and excellent communication, problem-solving, and management skills. Participants agreed that sideways career steps require the industry to bridge the gap between the previous career and program and construction management roles, so the industry must invest time to translate workers' previous experiences. Other experienced professionals with skills relevant to the industry include:
 - City and local government officials (e.g., building inspectors);
 - Teachers;

- ✓ Law enforcement;
- Customer service;
- Fire fighters; and
- Military.
- Consider formerly incarcerated people Many ex-offenders have a desire to work in the industry and important skills, but the participants recognized that organizations would need to be more flexible to include these individuals. Ex-offenders may have unique constraints that go beyond a typical employee's workplace needs. For example, organizations that hire previously incarcerated people may need to change rules on background checks, work with parole officers, and help find housing or suitable transportation. Nevertheless, the group noted that these individuals can also fill critical gaps.

Career Pathways

The panel agreed that opening the aperture on recruitment is a great start, but the next step to retain these workers is to ensure that there are defined, diverse career paths for people that will best utilize their strengths, support their passions, and provide opportunities to advance.

"There is the old saying, 'We hire someone, put their feet to the fire, and see if they stay alive,' but we need to nurture instead."

Bryant Obando, CMIT Vanir Performance-based job descriptions that emphasize outcomes, skills, and interests can help attract and retain talent in these career paths. The group suggested some guiding principles that should influence these job requirements, including:

- Sive people flexibility to find the right program and construction management career path for them Participants described a culture where managers attempt to replicate their own career path for their employees, when instead organizations should define and communicate a variety of career paths, journeys, and benchmarks (such as certifications) that appeal to a wider range of people. Firms that implement these paths can connect them to performance plans and financial commitments. For example, participants envisioned a rotation system with 30 days in each program and construction management specialty to help employees identify their passions and talents to create a long-term career in the industry.
- » Create stability for your employees The panel underscored that how organizations deal with underutilized employees is important for career path stability. When a firm releases an employee after a project ends, another firm is likely to hire them. This trend undermines meaningful connections between employees and employers, and may also affect a program and construction management professional's ability to advance along their desired career path.

Participants suggested firms create a fund (e.g., a small percentage of every billable hour gets put aside) to retain staff between projects. This type of fund creates stability in the workplace and has several advantages, including:

- **1.** It builds the employee-employer relationship and shows staff that the organization cares about them and their career;
- **2.** It builds time to cross train employees, which creates a more adaptable workforce and helps optimize talent;
- **3.** It could increase overall flexibility within the workplace, as cross-trained staff can share workloads;
- **4.** It creates a pool of professionals who are available to go into the community and participate in recruitment activities; and
- **5.** It can support general training, research and development, or recruiting and transitioning experienced professionals into program and construction management roles.

Create an Inclusive Workplace Culture

While some participants felt the goal should be to find ways to incorporate new talent into the industry's current culture, other participants countered that the future success of the industry will require a more flexible and nurturing work culture. These participants described a need to get away from "how we've always done it." In other words, acknowledge and embrace workers' changing values.

Competing with the flexible, people-first cultures of other industries will require structural changes so that the program and construction management industry can better address issues such as work-life balance, social justice, and pay equity. According to the group, the industry's efforts in these directions could help recruit and retain potential employees who highly value these issues.

Participants offered many strategies to build a more inclusive workplace culture, including:

Focus on Work-life Balance

The panel discussed ideas such as moving to a four-day work week or rewarding employees with non-monetary benefits (e.g., dependent care, sabbaticals, and travel leave). Firms can begin by building on COVID-era remote work policies, shifting from a process focus to an outcome focus, and working with owners to build these expectations into procurement and contracting.

Foster Relationships Between Employer and Employee

According to the group, employers in the industry should strive to build cultures where all their employees feel like valued professionals and no employee feels like "just a number." Participants noted that firms can help promote this culture by connecting each employee to a permanent home office, no matter where their current project is located. This connection reduces isolation and builds attachment to the organization. Companies can also provide a C-suite mentor to all new employees to help them learn about the firm and navigate the industry.

"I started my business because I needed flexibility and that has defined our [corporate] culture from the very beginning. Not every business can do that, but that has made a big difference for us. Take COVID—we were able to adapt quickly to people working from home. That will be great for the industry to work faster and more efficiently."

Anne Cotter, CCM
Cotter Consulting

"Companies have to invest in those students right out of college, even though it takes a year or a year and a half to get that person up to speed. Companies need to educate staff on the business model, the value, and what they need to do to advance."

Robbie Thompson, PE, CCM FosterCM 3

Improve Pay Equity and Transparency

The panel noted the results of CMAA's 2022 Salary Survey, which showed pay discrepancies in the industry based on gender and ethnicity (see Figure 1 and Figure 2). Participants advised that a starting place can be transparency about financial decision making. Firms should educate employees about the business model for the organization and projects (including how and why decisions are made) and connect pay to clear performance benchmarks. They also recommended transparency on C-suite pay and benefits.

Annual Base Salary by Gender

As of October 1, 2021, what was your annual base salary (in U.S. dollars) from your primary employment in the construction industry?

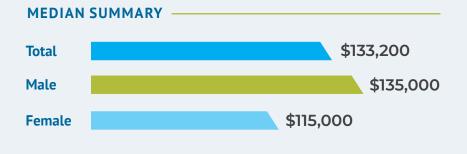


Figure 1 – Annual Base Salary by Gender, 2022 Salary Survey, CMAA. Results based on 846 respondents employed full time in the construction industry as of October 1, 2021, answering.

Annual Base Salary by Ethnicity

As of October 1, 2021, what was your annual base salary (in U.S. dollars) from your primary employment in the construction industry?

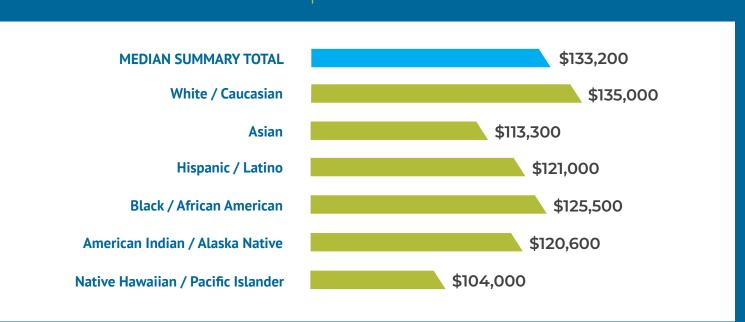


Figure 2 – Annual Base Salary by Ethnicity, 2022 Salary Survey, CMAA. Results based on 846 respondents employed full time in the construction industry as of October 1, 2021, answering.

Barriers to Improvement

The participants agreed that structural issues in the industry will challenge efforts to improve recruitment and retention. The panel pointed out that the way the industry typically writes contracts to manage risk creates barriers to becoming a more flexible, intentional, responsive employer. For example, legal requirements in certain jurisdictions, time and material contracts, strictly-defined career paths, and the risks of hiring newer employees all present obstacles.

However, the panel observed that relationships are a two-way street, and owners may be more open to increased flexibility if program and construction management professionals focus on creating value by building better and faster. The participants urged the industry, both owners and service providers, to break away from a linear mindset that focuses on existing processes and instead adopt an attitude that concentrates on favorable outcomes. In other words, to remove the obstacles, the panel recommended that the industry find efficiencies to improve price and schedule predictability, professional development, equitable pay, and workplace flexibility.

Transforming workplace culture to recruit and retain program and construction management talent supports the industry's goal to deliver projects faster and better. These tools would have both short and long-term benefits. In the short-term, this transformation would help organizations fill critical talent gaps, but in the long-term this new culture would create an overall more satisfied and engaged workforce. Organizations that adapt to this new model will reduce inefficiencies and create a well-trained, productive, and loyal workforce that is better able to deliver projects.





"At the end of the day, we are going to have a hard time ever having enough people, so we are going to have to transform."

Carol Holland, PE, CCM
Dewberry



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