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Jobs for the Future

Blueprint for the Future: Strengthening Inclusive Talent Pathways in the Built Environment

Executive Summary

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Key Findings

The workforce is bifurcated by education, earnings, and demographics in ways that limit both access and diversity. Most higher-paying roles in architecture, engineering, and design require bachelor's degrees, while roles in the trades are typically more accessible. However, there is wide variation in job quality and earnings across the built environment fields generally and within the construction sector, in particular. Efforts to diversify the workforce must further equalize access to bachelor's degrees, work-based learning, social capital building, and on-the-job advancement pathways for tradespeople. Historically underrepresented groups such as women of all racial backgrounds and workers of color remain significantly underrepresented across nearly all top occupations, with only interior and graphic design, the lowest-wage, slowest-growth fields, maintaining majority-female workforces.



Recommended action: Model a national movement among employers to offer professional advancement opportunities, particularly to workers without a college degree. Draw on examples from other sectors, such as the Chicago Healthcare Workforce Alliance, which brings together employers in a sector to reduce barriers and foster mobility.

Career awareness is arriving too late and through too few channels. Young people most commonly learn about built environment careers through social media and word of mouth rather than structured guidance. Early exposure is limited, informal, and inequitably distributed, meaning students from lower-income backgrounds, and those without family connections to the field, are far less likely to consider these careers. Reaching students as early as elementary school through hands-on, industry-connected learning is among the most impactful interventions available.



Recommended action: Support dual-enrollment programs and high school-based career and technical education (CTE) curricula to set learners on the path to career success in the built environment.

Education and training programs are not fully preparing learners for the realities of built environment careers. Postsecondary students consistently report wanting more applied, hands-on learning rather than theory-heavy coursework, and fewer than one in five surveyed report internship or co-op requirements in their programs, which may limit engagement for low-income learners in particular. Math skills and access to advanced coursework remain significant barriers at every level, from high school trades programs through engineering degrees. Meanwhile, growing industry integration across the built environment is outpacing curricular innovation at most institutions.



Recommended action: Support scholarships and funding for innovative practices to ensure students from low-income backgrounds can benefit from critical work-based learning opportunities like internships and co-ops.

Financial pressures and insufficient wraparound supports drive significant talent leakage. Cost of attendance, required equipment expenses, and the economic necessity of paid work over unpaid internships push postsecondary learners, particularly Black, Latine, and lower-income learners, away from career-relevant experiences and toward fields that offer quicker financial returns. Adult learners face compounding barriers including child care, transportation, academic gaps, and limited access to emergency support, all of which require coordinated wraparound services to overcome.



Recommended action: Invest in training stipends and wraparound supports for learners progressing through trades training programs.

Transitions from education into employment are poorly supported and inequitably structured. Half of surveyed alumni interested in built environment careers were working outside the field after graduation. Students lack consistent access to career coaching, mentoring, and networking opportunities, while the job market increasingly rewards social capital and personal connections that not all students have. The pipeline's reliance on informal networks to secure first jobs is both inequitable and unsustainable. Therefore, more intentional, structured, career transition support is needed across all built environment education programs to support employment and improve retention.



Recommended action: Support organizations and initiatives that help workers build professional social capital.

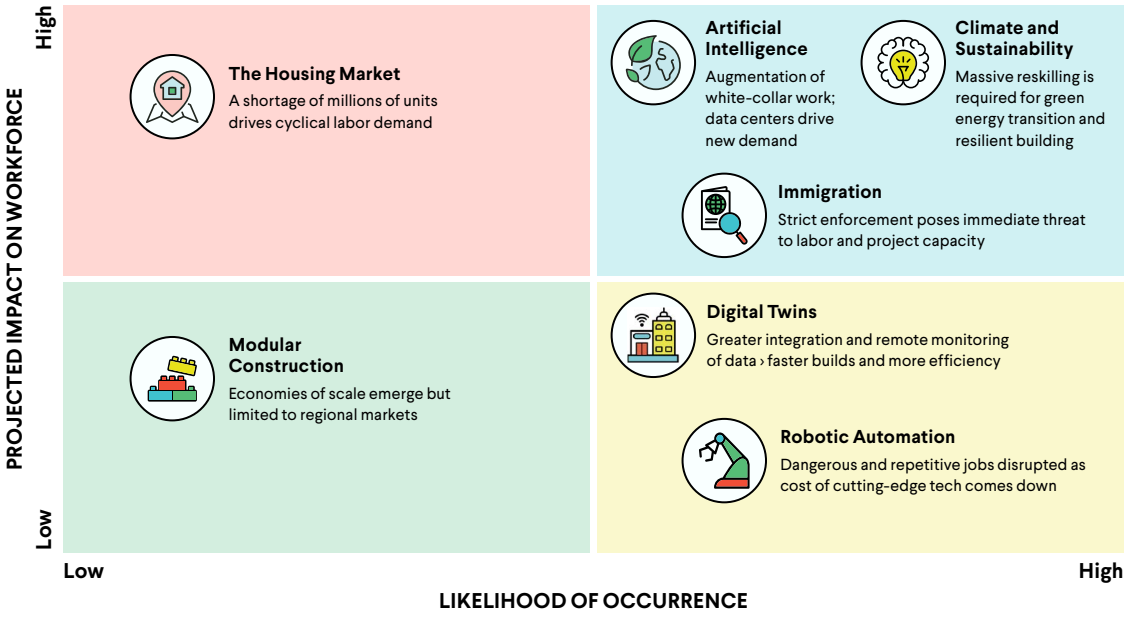
Workplace culture and employer practices are decisive factors in who stays and who leaves. Construction job sites continue to present documented challenges around harassment, racism, and unsafe conditions, particularly for historically underrepresented groups such as women of all racial backgrounds and workers of color. Architecture and design firms face their own pressures around long hours and midcareer attrition. Leading employers are responding with flexible scheduling, mentorship programs, clear advancement pathways, and anti-harassment initiatives, but these practices remain far from universal, and employer accountability structures are still underdeveloped across much of the sector.

Recommended action: Model a national movement among employers that highlights the business impact of efforts to promote belonging and safety on job sites and offer professional advancement opportunities to workers without a college degree.

Technological, environmental, and policy forces are reshaping the workforce at an accelerating pace. Artificial intelligence (AI) and robotic automation are beginning to transform both white-collar and trades roles, with the potential to bifurcate the workforce between high-skill, tech-enabled positions and lower-wage, on-site labor. Climate change is simultaneously generating new green construction roles while requiring broad reskilling of the existing workforce. Immigration enforcement is already reducing frontline construction capacity. Taken together, these forces risk producing a more unequal labor market without intentional investment in workforce preparation and transition supports.

Recommended action: Fund innovative training models that focus on the integration of emerging technologies into built environment fields.

The Strategic Landscape:
Forces Shaping the Built Environment Workforce



The funding landscape is fragmented, heavily weighted toward entry-level pipeline activity, and missing key opportunities. Corporate funders, particularly large home improvement and tool retailers, are direct supporters of skilled trades pathways. Public funding through the workforce system, CTE, and regional public-private partnerships helps to provide scale. However, midcareer upskilling, adult transitions to career training, and retention and advancement supports remain chronically underfunded. No single philanthropic investment currently unites these threads into a coherent built environment workforce strategy. However, an increased focus on skilled trades driven by AI data centers and infrastructure demands is building momentum for both collaboration and investment from both endemic and new funders.

Recommended action: Fund collaborative efforts through national and regional intermediaries that bring together key stakeholders across the built environment ecosystem.

The Built Environment Workforce Pipeline Ecosystem



Philanthropy & Investment Opportunities

Strategic philanthropic investment must connect and strengthen a fragmented ecosystem. The most impactful opportunities lie not in replicating existing youth exposure programs, but in bridging the gaps between employer demand, public systems, and career mobility, such as retention efforts for apprenticeship pathways or upskilling initiatives for incumbent workers. Future investments should be regionally grounded, require employer co-investment or meaningful engagement, embed diversity by design, and prioritize stackable credentials and wraparound supports. Coordinating across the ecosystem through intermediaries, regional convenings, and shared research infrastructure will be essential to moving from isolated, promising practices to durable, scalable workforce systems. Where possible, complement ongoing federal funding for education and training, and increase awareness of the build-and-bust funding cycle that many training providers must navigate to ensure more sustainable programs can continue to operate.

About Jobs for the Future

Jobs for the Future (JFF) drives transformation of the U.S. education and workforce systems to achieve equitable economic advancement for all. www.jff.org.

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