Women Breaking Barriers

A Guide to Recruiting, Training and Retaining Women in the Residential Construction Trades

Authored by Misty Farrell and Teilachanell Angel

November 15, 2021

Acknowledgements

While we could not cover every organization, challenge, or solution, we hope this work will serve as one step in a broader journey to (1) Deepen the understanding of the challenges facing residential construction and women in the workforce and (2) Build a foundation of best practices that will help the industry and tradeswomen to thrive. Throughout this paper we use the term woman/women inclusively and embrace all female presenting intersectional identities.

Executive Summary

Residential Construction's Talent Shortage

The residential construction industry is facing dynamic market shifts, supply-side disruption, rising costs, and a highly competitive war for talent. Compounding these factors is a decade-long talent shortage, an aging workforce (40% of which are projected to retire by 2031), and an industry perception that fails to attract young and diverse talent. [1] Although the $3.6 Trillion residential construction industry recovered from its pandemic job losses by the end of 2020, the industry returned to a pre-pandemic talent shortage of roughly 250,000-300,000 workers. [2,3,4]

Today, residential construction faces the added challenge of recruiting talent in an increasingly competitive labor market at a time when workers across the U.S. are re-evaluating their relationships to work in a movement many are calling "The Great Resignation." [5] Given its family-sustaining wages and upwardly mobile career options, the residential construction industry has a great opportunity to capture these workers in transition. To do so, it must adapt quickly to this new paradigm, improve the industry's perception, attract and train new talent.

This paper makes a case for diversifying residential construction talent pools through workforce training programs that center on women. **The gender gap in construction stands out as the widest disparity and largest untapped labor pool.** Women constitute 50.8% of the population but only 10.9% of the construction industry. [6] Disaggregated data reveals that 76% of women in construction work off-site, and 86.7% work in office positions. [7] Meanwhile, women constitute less than 3.4% of frontline skilled construction workers. [8] *Women are the opportunity residential construction needs.*

Gender Inequality

Societal narratives that divide "men's work" from "women's work" impact women both in and out of the workplace and perpetuate cycles of inequality. Such narratives contribute to occupational segregation, unequal share of care responsibilities and precipitate harmful biases, discrimination, sexual harassment, and assault. Gender norms not only manifest in harmful attitudes towards women but also are reflected in how women perceive themselves and their capabilities.

Occupational segregation accounts for 50% of the gender wage gap, while discrimination accounts for 38%. Gender disparities are widest for women from historically marginalized groups. Like many workers from underserved backgrounds, women also lack the supportive infrastructure conducive to enabling equitable workforce outcomes.

Increasing women's labor force participation in high-paying non-traditional occupations, such as construction trades, can combat occupational segregation, reduce gender wage gaps, drive economic growth, and improve outcomes for women and their families. Skilled construction trades are a debt-free path to the middle class. Increasing women's participation doesn't just bridge wage gaps; it transforms lives. [9,10]

The highly fragmented structure of the construction industry presents a challenge to delivering training at scale.[11] Overcoming the prolonged talent shortage will require a coordinated response and innovative solutions design. In this research, we conducted a dozen interviews, researched numerous studies, and reviewed over 25 workforce development programs directed towards women and/or underrepresented minorities (URM). We also spoke with over a dozen industry experts in roles from tradeswomen, program leaders, superintendents, and owners.

Sectoral Workforce Development Collective Impact

The construction industry needs broad cross-sector coordination to enact large-scale sectoral workforce development programs through collective impact partnerships. Sectoral workforce programs address the systemic barriers to education, training, and work. Collective impact is a framework by FSG, a mission-driven consulting company, in which cross-sector partners mobilize around a shared vision to affect change. FSG offers five conditions of collective impact: common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and backbone support organizations.[12] To this we add a sixth condition: proximate leaders able to identify with the experiences of those the collective intends to serve.[13]

Backbone organizations play a vital role in collective impact success. This role guides the vision, alignment, measurement, public will, policy, funding coordination, capacity building, and drives adoption of new practices to enact changes across the alliance.[14] Building Talent Foundation (BTF) is one such organization, which convenes and mobilizes stakeholders across the sector to coordinate workforce solutions.

Diversity, Equity, & Inclusion

Diversity exists when an organization reflects various dimensions of uniqueness. Within an organization, diversity allows individuals to see themselves represented, which can signal to underrepresented groups that they are welcome. This is especially important to Millennials and Gen Z workers, for whom a generational preference for diversity and inclusion in the workplace factors heavily into employment decisions.

Women often do not consider careers in non-traditional occupations, such as construction trades. This is due to a lack of exposure to these roles, which is reinforced by gender narratives and stereotypes. To boost recruiting of women, companies must take steps to increase awareness of construction occupations as viable paths for women. Our research identified the following five best practices: (1) Target (2) Debias (3) Inform (4) Represent (5) Assess, Test Track, Reiterate.

While diversity recruiting is a commendable first step, it is not enough. Strategies that attempt to increase diversity without providing access to supportive infrastructure fail to

address inequity. **Equity** is what enables learners/workers to show up for opportunity and sustain success. Equitable supports include access to childcare, transportation, mentorship, career advancement training, mental health, and domestic violence counseling.

Cross-sector leaders must influence and engage the workforce system through compassionate cooperation to break down structural barriers for workers. [15,16] These leaders must ignite action and mobilize partnerships in support of: (1) Providing Wraparound supports (2) Partnering with local community-based organizations & social service providers (3) Employing case managers for 1:1 learner/worker support. (4) Assess, Test Track, Reiterate.

Workers want respectful, inclusive, and dignifying work cultures that foster a sense of purpose and belonging. **Inclusion** is vital to retaining women and URM. It is estimated that exclusion in the workplace can cost a construction company of 100 employees nearly $275K. In addition, toxic stress associated with workplace exclusion, isolation, and harassment increases safety risk. [17]

To drive culture change organizations must (1) Shift to a Total Safety culture that embraces psychological safety and trauma-informed management. (2) Build a culture of allyship, wherein all workers are treated as allies working together to build inclusive environments, are empowered to speak up, and recognize their role in building positive

culture. (3) Implement trainings that center allyship and behavioral change through evidence-based methods e.g., Bystander Intervention and Manager Training. [18]

(4) Assess, Test Track, Reiterate. This paper spotlights a few organizations that offer training and consulting services for building inclusive cultures.

Everyone in the construction industry has a role to play. Every tradeswoman and tradesman, workforce development professional, business, union member, policy maker, and funder can take meaningful action across the system and within their organizations to create impact. Because ultimately organizational culture is not a policy, training, or statement. Culture is what you do every day.

Residential Construction: Talent Shortage & Implications

The residential construction industry is facing dynamic market shifts, supply-side disruption, rising costs, and a highly competitive war for talent. Compounding these factors is a decade-long talent shortage, an aging workforce (40% of which are projected to retire by 2031) and an industry perception that fails to attract young and diverse talent.[19] Although the $3.6 Trillion residential construction industry recovered from its pandemic job losses by the end of 2020, the industry returned to a pre-pandemic talent shortage of roughly 250,000-300,000 workers. [20,21]

The construction industry's unfavorable perception presents an obstacle to recruiting new talent, but the reasons behind it are varied. Young adults perceive the work as difficult and physically demanding and are unaware of its earning potential.[22] Women and underrepresented minorities (URM) that have been historically excluded perceive the industry as unwelcoming. [23,24] The industry's present-day lack of diversity only reinforces this perception, and an overreliance on personal networks for recruiting only entrenches it. Lastly, a high incidence of sexual harassment and discrimination further mar the industry's image driving attrition.

Then there is the matter of training. The highly fragmented structure of the construction industry and lack of sector-wide training standards can be a challenge for workforce organizations to deliver training at scale.

Overcoming the prolonged talent shortage requires a coordinated response and innovative solutions design.[25] Building Talent Foundation (BTF) is one such organization, which convenes and mobilizes stakeholders across the sector and system to coordinate workforce solutions.

Today, residential construction faces the added challenge of recruiting talent in an increasingly competitive labor market at the same time workers across the U.S. are re-evaluating their relationships to work. The August 2021 BLS jobs report cited record level quit rates as millions of workers left their jobs searching for "greener pastures" in a movement many are calling "The Great Resignation[26]." Given its family-sustaining wages and upwardly mobile career options, the residential construction industry has a great opportunity to capture these workers in transition. Still, to do so, it must adapt quickly.

> *"It is not the strongest or the most intelligent who will survive but those who can best manage change."*
>
> - Charles Darwin

Social and Economic Implications

The pandemic exposed a range of social, economic, and environmental challenges.[27] Consequently, many have come away with a heightened awareness of the vast inequalities that deeply affect low-income earners, women, and marginalized communities. Residential construction is a powerhouse with impacts

that ripple throughout the economy affecting businesses, individuals, and communities.

Prolonged talent shortages directly affect firm profitability and competitiveness through fewer projects, longer completion times, lower productivity, and increased safety and quality risks. Small business owners, who make up 82% of the overall construction industry, are particularly affected.[28]

Shortages in housing supply exert pressure on home prices, which spillover into rental markets compounding the affordable housing crisis. The lack of affordable housing exacerbates economic and racial wealth disparities forcing disproportionately low- and middle-income families to make trade-offs on education, health, and savings.[29] Many are forced to relocate further away from jobs and economic opportunities, thus perpetuating cycles of inequality.

When these patterns play out at scale, entire communities are affected. Residents are displaced in cycles of gentrification.[30] Local employers face shortages of teachers and low-income workers.[31] While others find themselves added to a growing crisis of homelessness.

Across the country, we are witnessing the destructive impact of extreme weather patterns due to the environmental crisis. Supply-side shortages in residential construction slow recovery efforts, further straining the housing supply.[32]

However, the residential construction industry is also an "engine" for positive economic and social impact. According to the National Association of Homebuilders (NAHB), investment in residential construction and consumer housing expenditures totaled $3.6 Trillion in 2020, 17.1% of the nation's GDP.[33] NAHB estimates that every 1,000 single family and 1,000 multifamily units constructed generates a combined $269.2M in wages & salaries, $166.87M in taxes, and 4,150 jobs, including jobs in other industries. Additionally, every $10M of remodeling expenditures generates 48.2M in wages & salaries, $3M in taxes revenues, and 75 jobs.[34] The benefits include ripple effects throughout communities as each dollar invested turns over and new residents move in.

This paper makes a case for diversifying residential construction talent pools through workforce training programs that center women. **The gender gap in construction stands out as the widest disparity and largest untapped labor pool.** Women constitute 46.8% of the population but only 10.9% of the construction industry.[35]Disaggregated data reveals that 76% of women in construction work off-site, and 86.7% work in office positions.[36] Meanwhile, women constitute less than 3.4% of frontline skilled construction workers.[37] *Women are the opportunity residential construction needs.* To understand how to recruit, retain and advance women, we must first understand the challenges women face.

Women's Workforce Participation: Barriers & Implications

Societal narratives that divide "men's work" from "women's work" impact women both in and out of the workplace and perpetuate cycles of inequality. Such narratives contribute to occupational segregation, unequal share of care responsibilities and precipitate harmful biases, discrimination, sexual harassment, and assault. Gender norms not only manifest in harmful attitudes towards women but also reflect in how women perceive themselves and their capabilities. The barriers women face are amplified when explored through the lens of intersectionality, e.g., race, sexual orientation and/or transgender identity.

A 2018 comparison of median full-time earnings revealed that **women earned $0.82 per dollar earned by men** totaling $407,760 over a 40-year career.[38] The disparities are as low as $0.50 for women from historically marginalized groups

Occupational segregation accounts for 50% of the gender wage gap. Gender narratives segregate "Men's work" from "Women's work" concentrating women in 23 of the 30 lowest paid occupations. **Discrimination is estimated to account for 38% of the gender wage gap**. Mothers face wider wage gaps, earning $0.69 per dollar earned by fathers, and according to a 2008 study, transgender women experience wage losses of up to ⅓ following male to female transitions. Alternatively, female to male transitions experienced no impact or even slight increases.[39]

Like many workers from underserved backgrounds, women, **especially low wage earners, lack the supportive infrastructure conducive to enabling equitable workforce outcomes. At home, women take on 70% of care responsibilities.**[40] To balance care responsibilities, women are more likely to occupy part-time positions, choose occupations that offer greater flexibility, and forgo opportunities for career advancement, thus entrenching economic disparity.

The pandemic brought this issue to the forefront. By Jan 2021, over 2M women were pushed out of the workforce, many of them mothers. The "She-cession" is estimated to have set women's labor force participation back to the lowest rates since 1988, a far cry from January 2020 when women made up the majority of the labor force for the first time in U.S. history.

40% of women report sexual harassment on the job, and the incidence rate remains unchanged since it was first outlawed in the Civil Rights Act of 1964.[41] A standard solution is sexual harassment training. However, there are promising evidence-based alternatives that we explore later.

Internalized gender narratives impact how women perceive themselves, contributing to low confidence and fear of the stereotype threat. "The risk of realizing a negative stereotype associated with one's group has been shown to negatively affect the academic

performance of women as well as their motivation to improve." [42] This so-termed "Confidence Gap" may deter women from even considering non-traditional male-dominated occupations in the first place. [43]

Lack of Diversity: A Perpetual Cycle

McKinsey reports that women are more likely to experience discrimination when alone in a group of men. In addition to feelings of isolation, women who are the "only" one in the workplace must work harder to prove their competence, are more likely to have their expertise questioned, and are more likely to be subjected to "unprofessional and demeaning remarks."[44] Such experiences threaten retention as women leave in search of more respectful workplace cultures. Furthermore, the lack of diversity may be a potential deterrent for new hires who don't see themselves reflected in the workplace. Thus, the lack of a diverse workforce perpetuates the continued lack of diversity.

Construction Trades Transform Lives

Increasing women's labor force participation in high-paying non-traditional occupations, such as construction trades, can combat occupational segregation, reduce gender wage gaps, drive economic growth, and improve the outcomes of women and their families as women spend a larger portion of their earnings on their family's wellbeing.

[45] For the one-quarter of women employed in female-dominated occupations paying less than $15 per hour, skilled construction trades,

which boast median hourly wages between $23-$27 per hour, are a debt-free ticket to the middle class.[46,47]

For many women pursuing a career in construction is a transformational experience that empowers them mentally and financially. Construction trades provide a path out and up, enabling women to support their families, escape poverty, domestic violence, and even lead to business ownership. Increasing women's participation in residential construction trades doesn't just bridge wage gaps; it transforms lives

Sectoral Workforce Development & Collective Partnerships

The highly fragmented nature of the construction industry, lack of sector-wide training standards, and multivariate barriers in the social determinants of work hinder talent development at scale. Addressing the national talent shortage in construction demands a systems approach galvanized by cross-sector collective impact. Building Talent Foundation (BTF) and Wisconsin Regional Training Partnership (WRTP) are examples of organizations that convene and mobilize stakeholders across the system to employ women and marginalized communities in non-traditional trade occupations.

Elements of Effective Workforce Development

In this research, we conducted a dozen interviews, researched numerous studies, and reviewed over 25 workforce development programs directed towards women and underrepresented minorities (URM). We also spoke with over a dozen industry experts in roles from learners, tradeswomen, program leaders, union members, superintendents, and owners. The program discovery process uncovered seven elements of effective workforce programming:

1. **Sectoral strategies**: A systems approach to workforce development focused on industry specific in-demand skills training, high employer engagement, and learner/worker supports.

2. **Partnerships:** Building and mobilizing synergistic relationships through public-private collaboration of system leaders and stakeholders to align policies, practices, and resources towards a shared vision.

3. **Funding Practices & Policy:** Policy to create and expand flexible workforce development funding for women and marginalized communities.

4. **Measurement:** Use of outcomes-based measurement to identify best practices and inform policy and investment decisions.

5. **Targeted Recruiting:** Designing recruiting with underrepresented groups in mind.

6. **Mobilize Supports:** Wraparound supports aimed at overcoming the systemic barriers to social determinants of work.

7. **Culture Change:** Shifting narratives, power dynamics, structures, and mental models.

Sectoral Programs and Systems Change

In 2007 the **Aspen institute redefined sectoral programs as "presenting it as a systems approach to workforce development."[48]** Taken together, the seven elements reject siloed efforts in favor of a holistic response to the multifaceted needs of diverse stakeholder groups.

Sectoral workforce programs function as labor-market intermediaries serving both demand-side: employers and industry, and supply-side: learners/workers. This dual customer orientation better aligns skills training to in-demand jobs.

Sectoral development programs address the systemic barriers to education, training, and work. Research shows that addressing these barriers cultivates equitable access to well-paying careers.[49] In addition to in-demand skills and job readiness training, sectoral programs offer wraparound services, post-employment retention, career advancement services, and early relationship building with employers, thus creating access to untapped talent pools. Participants in sector focused programs: earned more, were more likely to work, more likely to obtain higher wages, more likely to work in jobs that offered benefits, and had earnings that outpaced those of the control groups.[50,51]

High employer engagement is a key feature of sectoral programs. Through employer-led curriculum development, employers bring focus to training ensuring alignment to the in-demands skills employers need. Employers also assist in building critical social capital for workers through networking and mentorship. Sector training offers greater returns because training programs can develop a skilled workforce in areas with broader industry opportunities. This helps multiple employers in the region and aligns programs with the talent market. The resultant workforce growth can impact not only employers, but also create economic growth in respective regions

Spotlight: Wisconsin Regional Training Partnership[52] (WRTP) is a state-led workforce development collaborative between employers, unions, and community members. The collaborative works with BIG STEP and industry partners to employ a dual-customer model designing workforce programs for businesses and connecting low-income Wisconsin residents to the best family-sustaining jobs.

Curriculums are geared towards relevant job needs in the region, which serves local companies in the industrial sector. In addition, the organization offers individualized support to address structural employment barriers through its Community Workforce Partnership (CWP) framework of community-based organizations.[53]

WRTP is an example of an organization that has developed the necessary convener skills and maintained the role of lead implementer in the state. Competencies include building consensus, sector analysis, strategy formation, facilitating labor-management collaboration, and launching employment-linked training. They have created impact through innovative multi-year funding and program building.

Key Characteristics of Sectoral Programs

1) strong link to local employers that results in an understanding of the target occupation and connections to jobs, 2) capacity building, 3) job readiness, basic skills and hands-on, 4) recruitment, screening, and intake processes 5) individual services to support training composition and success (i.e., Skillworks, YouthBuild, JVS Boston, WRTP and RISE Twin Cities) and 6) post-employment retention and advancement services. [54,55,56,57]

Recommendation: Implement sector-based training with a systemic lens. Include employers, unions, and community in effective design of programs that address major skills gaps, structural barriers, and regional program needs.

Recommended Reading: [Keeping America in Business: Advancing workers, Businesses and Economic Growth](#) • [Tuning Into Local Labor Markets: Findings from the Sectoral Employment Impact Study](#) • [Connecting People to Work: Workforce Intermediaries and Sector Strategies](#)

Strategies for Collective Partnerships

Collective impact is a framework developed by FSG in which cross-sector partners mobilize around a shared vision to affect change. FSG positions five conditions of collective impact: a common agenda, continuous communication, mutually reinforcing activities, shared measurement systems, and backbone organizations.[58] To these we add a sixth condition: Proximate leadership.

There is not a single structure for designing a collective, rather successes point to varied formats tailored to regional needs including, employer-formed and employer-led, community-based organization and labor-management partnerships.[59] Of these, the community-based organizations are most responsive to employer needs.[60] It is essential to ensure that community representatives who may not be part of the programs but are linked to the trainees and target audiences are able to advocate for programs.[61] Having 'boots on the ground' partnership organizers can create mutually beneficial workforce collaborations.[62] This is due to both parties' ability to see the human elements of the relationship which can bring a greater commitment to the outcomes.

Mission & Values Alignment

Alignment across partners around a shared vision is critical to delivering a coordinated and multifaceted response to structural barriers, recruiting, retention and advancement of underrepresented workers.

Continuous Communication

Thought leadership communicates values and mission to various stakeholders and creates consensus around shared as Diversity, Equity, and Inclusion (DEI) in the attainment of collective goals. With clear and succinct messaging, an organization can more easily communicate with collaborators about their

work and intentions and signal to potential partners in their issue space.

This is illustrated by the Skillworks partnership of over 80 employers (through 2003-2013) and their resultant success. As an intermediary and funder collaborative, Skillworks has changed workforce development by investing in workforce partnerships and public policy to achieve the goals of helping low and moderate-income individuals and businesses hire skilled tradespeople. To reach scale, they invested in the following strategies: (1) workforce partnerships, (2) capacity building (i.e., manage partnerships, implement practices, develop programs & services, policies & practices) and (3) Public-policy advocacy.

Proximate Leadership & Co-Creation

Program alignment and success require all stakeholder groups have a seat at the table. This means elevating the voices, experiences, and expertise of those closest to the challenges. Boston-based non-profit, New Profit terms these individuals **Proximate Leaders.**[63] New Profit's "Worker Xpert Advisory Board", part of their Future of Work initiative, comprises frontline workers of diverse backgrounds who serve as advisors and co-creators.

They are essential to leveraging existing assets and resources that may otherwise be dismissed or overlooked. [64]

Co-creation with stakeholders ensures a vested interest in the program and its success and shifts structural power dynamics by granting local workers decision-making power and agency in designing the programs intended to serve them. Involving users in the initial design process leads to better program outcomes.

In "Strategies that Center Underestimated Jobseekers," Saint Paul & Minnesota Foundation followed a 6 step equity-centered design process implemented by Imagine Deliver. The "user as designer" process relied on surveys and focus groups and invited program beneficiaries to co-create solutions alongside board members. Through co-creation strategies, leaders and communities benefit from the lived experiences of program participants.[65]

Shared Measurement

Key to alignment is ensuring organizations are aligned on the same metrics related to the goals and outcomes of the partnership. **Data sharing agreements** can support communication amongst partners, and **long-term tracking** should be employed to allow for more comprehensive analysis.

Data collection and reporting should be managed through a **centralized process, and where possible, an integrated data system is advise**d. **When serving multiple constituent groups, ensure granular data capture to perform disaggregated analysi**s. Lastly, **capacity building** through training, webinars etc. is critical to build data competency among stakeholders.

Backbone Organizations

Backbone organizations coordinate and facilitate cross-sector partnerships reducing fragmentation and enhancing cohesion. This role guides the vision, alignment, measurement, public will, policy, and funding coordination.[66] Through these efforts, they form the infrastructure to strengthen partnerships. Backbone organizations also support the necessary capacity building in sectoral strategies. They help build the expertise needed within workforce systems and drive the adoption of new practices to enact changes across the alliance.

Capacity building strengthens the human infrastructure to support alliances and assist staff and ecosystem stakeholders in their roles. Activities help staff across their roles manage partnerships, develop programs, policy advocacy, adoption, and selection of practices. Practitioners can provide training or support to address organization, program, field, individual, and system activities.[67]

For example, NYC Workforce Fund was able to create synergies across a complex system through capacity building. The entirety of the capacity building efforts included training and effective program methods, messaging, funding, and networking systems.

Spotlight: Building Talent Foundation (BTF)[68] serves as a backbone organization in residential construction with a mission to advance the education, training, and career progression of young people and people from underrepresented groups,

as skilled technical workers and as business owners in residential construction.

BTF's role is to perform coordination activities to advance the sustainable employment goals of builders, trade partners, suppliers and manufacturers, educational partners and those of the communities in which they serve. This alignment is necessary to deliver a cross-sectoral strategy aimed at growing the talent pipeline for residential construction and providing access to meaningful work for all individuals, including women and URM.

In addition to managing coordination and communication between partners, they also send a clear message to potential partners, policymakers, funders, and community members about the work they wish to accomplish. It can take years to develop trust between organizations, but BTF benefits from a network of established relationships, and consistent and open communications to multiple constituents about mutual goals, which helps to build even stronger, long-lasting partnerships. Through continuous communication flow with their partners, they demonstrate a commitment to the problem they wish to solve and build trust in their motivation.

Recommendation: (1) Leverage partnerships using FSG's collective impact framework: common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and backbone support organizations. (2) Partner and co-create with proximate leaders able to identify with the experiences and challenges faced by those the collective intends to serve.

Recommended Reading: Collective Impact | FSG • Six Proven Practices for Backbone Organizations • Backbone Organizations Field Guide • Effective Change Requires Proximate Leaders -- People Who are Guided by Community • Strategies that Center Underestimated Jobseekers • Breakthroughs in Shared Measurement • Implementing Shared Measurement

Common Challenges

Efforts to develop new workforce development programs may be hampered due to various challenges. The process of relationship development for collective impact through partners occurs over a long time, which makes sustaining momentum difficult. There may be related challenges arising from competition among organizations, large communication distances, unclear roles, worker satisfaction, and general sustainability challenges.[69] Timing along with these factors directly impacts capacity building, funding cycles, availability of resources, and focus areas. An organization like Building Talent Foundation (BTF) brings established relationships and learnings to facilitate future relationship building, coaching,

networking, backbone support, and evaluation.[70,71]

Funding Practices & Policy

Funding is a common challenge faced by many workforce organizations. Restricted grants narrowly limit a training organization's ability to provide the much needed indirect supports that impact learner/worker success. And multi-year funding is limited but required to support workforce organizations as it takes time to achieve lasting transitions out of poverty.

Philanthropic solutions are a significant source of non-profit donations. Organizations like the National Fund and Living Cities exist to build workforce development programs. Such programs fund investments in collective impact partnerships with strong policies and proven success in creating lasting change.

Funders can stimulate innovation by funding small scale pilots and encouraging experimentation. Well-designed pilots supported by rigorous qualitative and quantitative data collection and analysis build evidence for the expansion of effective programing and act as risk mitigation to over investing in ineffective strategies.

Public-Private Funding

To support system-based approaches, siloed funding structures also need integration. Innovative financial instruments, such as Pay for Success (PFS) contracts popularized in the U.S. by Boston based non-profit Social Finance is one solution. PFS contracts are outcomes-based social impact investments, wherein

local governments agree to pay investors a return based on predetermined success outcomes. This structure has a tri-fold benefit of attracting private investors, ensuring social impact programs are rewarded based on impactful results, such as placement in upwardly mobile growing occupations and industries, and lastly governments and taxpayers only pay for the programs that actually work. Social Finance offers consulting services to facilitate this process.[72]

Often policy change is required to create more flexible funding structures through blended and braided funding. Blended and braided funding are two approaches to pooling funding from different grant programs and other funding sources to deliver holistic impact.[73] Such funding structures incentivize collaboration and allow partners across the ecosystem to bring their respective solutions together to serve the whole learner/worker journey. Lastly, workforce funds need to include targeted mandates to ensure direct support reaches women and marginalized communities, rather than relying on the 'honor system.'[74]

Measurement

Across the workforce system, there is a vast opportunity for increased measurement and evaluation to expand the evidence basis for what works in workforce development.

Outcomes-driven measures of success, as opposed to a narrow focus on program enrollment and completion rates, are crucial to

lasting impact. Companies can also better engage with external workforce organizations. Non-profits and CBOs should "speak the business language" when engaging potential private-sector partners. Outcomes-based measures include improvements in pay, placement, the transition from benefits, and retention. A concise and engaging multi-year longitudinal data story yields an accurate picture of participants' progress over time, as the full effects of many sectoral programs are realized 2-3 years after enrollment. It also engenders trust through transparency and reflects due diligence via needs analysis and cultural understanding.

In 2004, The Corporation for a Skilled Workforce launched The Benchmarking Project to review data from over 332 programs. Insights revealed key characteristics of program performance and data challenges. For instance, programs that lead to industry-recognized certifications had higher performance. Programs with internships, transitional jobs, on-the-job training, and extended pre-employment services had better retention. And programs that offered post-employment services, smaller enrollment numbers, and low participant staff tended to exhibit better placement and retention results.[75]

Although the project found that organizations solely focused on workforce development outperformed multi-service organizations, key factors influenced this outcome. Sole focus workforce organizations were more likely to

offer additional career services (e.g. vocational training, on-the-job training opportunities, and retention tracking), have more years of experience, and were less likely to serve high need populations. Multi-service organizations were more likely to serve as a vital "first step" for high need populations which require more foundational services such as housing, basic education, or ESL. "Ideally, these services would be well-integrated (with formal linkages from one program to the next), either within a single multi-service organization or through partnerships between organizations with different strengths. [76]

The Benchmarking Project recommends an alliance of partners to standardize data collection, evaluation, and reporting. This group should employ long-term tracking to further understand program outcomes and disseminate learnings from successful programs to strengthen the workforce ecosystem through informed policy decisions and direct investment towards scaling high-impact models.

Recommendations for common challenges: (1) Leverage backbone organizations with established relationships and experience building and managing relationships. (2) Funders provide flexible funding mechanism that incentivize collaboration and experimentation. Leverage innovative funding models e.g., PFS contracts (3) Prioritize standard methods for data collection and analysis, centralized data management, and capacity building

Recommended Reading: Workforce Realigned How New Partnerships are Advancing Economic Mobility • Putting Data to Work by Benchmarking Project (2013) • Putting Data to Work by Benchmarking Project Update (2016)

Spotlight: Women In Non-Traditional Employment Roles (WINTER)[77] is a 10-week Los Angeles pre-apprenticeship program connecting low-income families and underserved communities to union jobs in construction trades. WINTER has a 95% graduation rate and 87% placement rate. High expectations. strong case management, tracking and measurement are key to the program's success in ensuring every graduate has the skills needed to be employable and ready to work.

Applicants participate in a 3-day boot camp to test their endurance and mental toughness, before admittance to the program. In addition, case managers conduct initial screening, assessing candidates' ability to persevere and ensuring they are connected to supports by helping navigate services through every step of the process assisting with calls, follow-ups, applications, and documentation.

Case managers support program graduates over 3 to 5 years. This includes detailed tracking of graduates, from whom they meet with regularly and require weekly pay stubs. Through this process they can better engage unions and funders with evidence of their program's continued success.

Diversity, Equity & Inclusion

Diversity exists when an organization reflects various dimensions of uniqueness. Though often thought of along demographic lines: gender identity, race, ethnicity, sexual or religious orientation; diversity includes other dimensions such as diversity of thought, values, and beliefs.

Diversity within an organization allows individuals to see themselves represented in the existing workforce, which can signal to underrepresented groups that they are welcome. Diversity also clearly communicates values and purpose; therefore, strengthening employee motivation and satisfaction. This is especially important to Millennials and Gen Z workers, for whom diversity and inclusion factors heavily into employment decisions.

Recruiting Women into Skilled Construction Trades

Women often do not consider non-traditional occupations due to a lack of exposure to these roles, which is reinforced by gender narratives and stereotypes.[78] To boost recruiting of women, companies must take steps to increase awareness of construction occupations as viable paths for women. Our research identified the following best practices:

Targeting women in recruiting begins with a commitment to intentional action. Organizations can direct outreach to women by meeting women where they are, in places and online spaces women frequent. A common strategy is to partner with local community-based organizations that serve women.

De-bias recruiting and training materials. Materials should reflect inclusive imagery and language e.g., images of diverse women and men. Let women know that they are invited to the party. Practices regarding the use of gendered vs. non-gendered language are mixed; however, clear signaling is needed to overcome current industry perception and communicate a shift towards welcoming diverse candidates. Feature inclusion statements that use specific and gender inclusive language such as "tradeswomen," "transgender," and "gender-nonconforming." Ensure alignment across all forms of communication brochures, curriculum, websites, social media etc. Lastly debunk common stereotypes.

> "We hear women don't do physical labor well, they're not strong enough, well tell that to my sister who's a nurse's aide that has to lift people out of nursing homes, that's like 150 lbs. of dead weight."

> Fact: Nurses assistants suffer musculoskeletal injury at nearly triple the rate of construction workers.[79]

Inform women about opportunities in construction trades to build awareness. Employers, unions, workforce programs, and construction workers can partner in building

awareness through speaker series, site visits and mock interviews. Oregon Tradeswomen and WINTER use a boot camp experience that gives a sense of what the work is like prior to admission into the program. Programs like Women Building Futures, Chicanos por La Causa, and HHW Ohio start early by engaging young girls in summer build camps.

Representation matters. Create opportunities for women to see "themselves" reflected in the industry. Where possible, hire diverse women recruiters that are reflective of the communities they serve. Mitigate the isolating effects of being "the only one," by training in all women gender cohorts, hiring in multiples, and connecting women to affinity groups or tradeswomen networks.

Assess, Test, Track, Reiterate. "You can't manage what you don't measure." Every organization should track and measure progress and seek feedback through surveys and dialogue. To facilitate learning organizations can conduct small trials and reiterate with evidence-based improvements prior to launch.

Recommendations for Diversity Recruiting: (1) Target (2) De-Bias (3) Inform (4) Represent (5) Assess, Test, Track, Reiterate.

Recommended Readings: Recruiting and Retaining Women in Non-Traditional Positions • Non-Traditional Occupations in America's Workforce: Barriers and Solutions to Female Participation

Spotlight: HHW Ohio[80] (formerly Hard Hatted Women) offers women initial exposure to non-traditional occupations through its Women In Sustainable Employment (WISE) Pathways course. It also serves workforce training providers with capacity building expertise in recruiting, supporting, and training women.

WISE Pathways is an 8-week career exploration course for women that builds awareness and informs them of in-demand occupations wherein women are underrepresented. The "Role Model Speakers Bureau" is the cornerstone of the program and central to its "Find Out, Get In, Move Up, Give Back" philosophy. This unique approach capitalizes on the power of role modeling through storytelling. The role models, often women in the field who come from the same local communities as the students, share their experiences as women working in male-dominated fields. Notably, the role models empower students through the opportunity to see someone like them and know that success is possible. In addition, the course is taught in small cohorts, which fosters supportive relationships. The curriculum also covers workplace skills, including conflict resolution, setting boundaries, and addressing sexual harassment.

WISE Pathways is delivered through community-based organizations ensuring that women are connected to transportation and childcare, even offering classes at night providing on-site childcare and dinner.

(continued)

HHW Ohio, while no longer a direct training organization, at its peak fielded 300-400 applications a year for only 75 openings. As new training programs entered the region, HHW Ohio pivoted, amplifying its impact by building the capacity of training providers to recruit and train women. The organization now offers consulting on the best practices key to success: "centering women and meeting them where they are."

Spotlight: Helen Gordon Davis Centre for Women: Women Building Futures Program (HGCW) [81] is a Tampa Bay, Florida non-profit that aims to help women succeed both personally and professionally. HGCW trains women to enter the construction trades through its Women Building Futures (WBF) program.

A unique aspect of the program is that it's open to any woman who takes an interest. Women sometimes join to learn skills to perform repairs around the home independently. Through the program, the women hear from speakers across the industry and learn about a career path they might not have thought of before. Through its accessibility and small class sizes, WBF offers a safe space for women at any level of experience to gain entry to construction trades without intimidation. Upon completion, graduates obtain NCCER core and OSHA 10 certifications: stepping stones to careers in construction trades.

Program participants also benefit from WBF's employer network as well as a host of other HGDCW services. In partnership with Tampa Bay Works, career skills training and services are offered. In addition, HGDCW organization boasts the only SBA designated Women Business Center in the state and has a free online learning platform, Ascent, to guide women on their path to entrepreneurship. Additional services include counseling and wellness, and the organization partners closely with local CBOs and social service programs to connect program participants to supports.

Building Bridges to Equity

While diversity recruiting is a commendable first step, strategies that attempt to increase diversity without providing access to supportive infrastructure fail to address inequity. Equity is what enables learners/workers to show up for opportunity and sustain success.

Cross-sector leaders must influence and engage the workforce system through compassionate cooperation to break down structural barriers for workers.[82,83] These leaders must ignite action and mobilize partnerships in support of wraparound services to make training, education, and quality jobs more accessible. This is particularly critical for construction training and pre-apprenticeship programs since women have lower completion rates in construction than any other skilled trade.

"Equity is about systems that ensure everyone has equal access to opportunities and is treated according to their needs.[84]"

Wraparound services are a principal characteristic of effective sectoral-based workforce programs. The DOL's framework for quality apprenticeships includes "Access to support services that help participants remain in the program.[85] According to the American Institutes for Research, "Programs are more likely to retain learners when they provide strong wraparound services, like childcare advising and financial support for tuition and transportation."[86] Additional forms of

equitable infrastructure may include flexible work schedules, COVID rent assistance, mentorship, affinity networks, mental health and domestic violence counseling, and training for advancement.

Organizations should remember that siloed supports add another layer of barriers for learners/workers navigating services. 'One-Stop' programs are an integrated solution that lowers barriers to access by providing universal access to an ecosystem of labor services for workers, job seekers, and employers that facilitate workforce development initiatives by creating a single point of entry.[87]

Nearly all organizations included in our case studies provide some degree of wraparound support. Still, no single organization can do it all. Here is where partnerships shine. Partnering with and referring workers to social service providers and local community-based organizations is key to unlocking access to existing support systems.

Case Managers

Mobilizing partnerships can bring support services together in a 'one-stop' solution, but effective case management is key to implementation. Case managers are the first point of contact many individuals have upon entry to a workforce development program. They assess participant's work and life circumstances, identify needs and connect individuals to services. Case managers serve a vital role, helping learners/workers to navigate

application processes, paperwork, and following-up on progress. This 1:1 relationship generally lasts beyond training. Finally, they play a vital role in tracking and measuring long-term outcomes. Some programs such as WINTER provide support lasting 2-5 years, providing women continued support over 3–5-year apprenticeships, and ensuring sustainable employment once placed.

Spotlight: Oregon Tradeswomen (OT)[88], founded in 1989 by four tradeswomen, offers' Pathways to Success' an 8-week pre-apprenticeship training program to position women for careers in skilled trades.

Case managers are the connective thread linking program participants to local support services. Qualifying program participants are connected to PACCI, the region's Pre-Apprentice Child Care Initiative, covering up to 100% of childcare expenses. Program graduates who enter registered apprenticeships in heavy highway construction are connected to Oregon's DOT workforce development financial assistance program for tools, gas, auto repairs, and childcare. In addition, all the women receive a $250 stipend that can be accessed anytime during or after the program. Following graduation, case managers follow up regularly for at least a year and an additional year after graduates begin a first job or apprenticeship.

OT partnerships bestow a variety of benefits to tradeswomen. Employer partners participate in the pre-apprenticeship program by hosting mock interview sessions, 2-day on-site

learning engagements and granting priority access to interviews. Joint partnerships with OT (and ANEW mentioned later) have produced the Western Resources Center for Women in Apprenticeship, which guides training providers and women, and established Rise Up Oregon, a consultancy and training provider for building respectful job site culture. In addition, OT hosts a yearly Women in Trades Career Fair that brings 2000 women and girls together to learn about the trades from other tradeswomen.

Spotlight: Case Study: Chicanos por La Causa (CPLC)[89] was founded in 1969 to empower Mexican American students to confront discrimination. Today it advocates for the economic and political empowerment of all underserved communities and offers a range of services, including healthcare, affordable housing, education, meaningful work, and political representation. The Arizona-based organization also serves Nevada, New Mexico, and Texas and is one of the largest Hispanic community development corporations in the U.S.

In Arizona, CPLC serves a relatively young, predominantly female client base. The workforce solutions team connects workers to various career pathways providing a range of supports to service the "whole person," from assistance with the job search to building awareness on worker rights to empower workers to advocate for themselves.

At CPLC the goal is to meet clients where they are, a philosophy reflected in its location. CPLC is located inside a local mall, which makes it readily accessible and inviting. Pre-Covid, in partnership with local community colleges, CPLC offered ESL courses on-site, removing the fear and intimidation of going to a college campus for the first time not knowing whether someone on campus speaks your language.

CPLC's value lies in its culturally relevant service delivery. The Arizona workforce solutions team is all women, bilingual in Spanish and English, and has the shared lived experience to understand and anticipate client needs. "Everything is intentionally designed with their needs in mind." Their proximity to the community and client experience is what makes CPLC better able to serve.

> "Having support from individuals that really understand where you're coming from is unlike any other support."

Recommendations for Building Equity: (1) Provide Wraparound supports (2) Partner with local community-based organizations & social service providers to unlock access (3) Employ case managers for 1:1 support (4) Assess, Test, Track, Reiterate.

Recommended Readings: The Social Determinants Of Work Forbes • Turning COVID-19's mass layoffs into opportunities for quality jobs • Women's Economic Security Wraparound Strategies

Building Respectful, Inclusive, & Dignifying Culture

Inclusive organizational culture is vital to retaining women in construction trades. The Association of General Contractors of California **estimates that lost productivity, employee turnover, and attrition due to exclusion in the workplace can cost $273,521 annually for a company of 100 employees.** Research also shows that a lack of inclusive culture is associated with increased safety and injury risks as chronic stress due to hostile work environments overloads worker capacity, and workers underreport risks due to fear of retaliation.[90]

"Psychological safety means an absence of interpersonal fear. When psychological safety is present, people are able to speak up with work-relevant content."[91]

In an industry that ranks among the highest for on-the-job injuries promoting a positive safety, culture is paramount. **With 15.3% of workers battling substance abuse and industry suicide rates four times the national average, forward thinking leaders are adopting a holistic approach to safety.[92]**

Pioneering work in the shift to Total Safety culture is a partnership between Mindwise Innovation and NAHB. Mindwise Innovations, a division of Riverside Community Care, is a pioneer in digital health solutions for organizational behavioral health. The organization developed mental health awareness toolbox talks and actionable intervention tools, including mental health screenings and crisis protocols customized for the construction industry. Fundamental to the Mindwise approach is training organizations in principles of psychological safety and trauma-informed practices.[93]

Trauma-informed organizations are characterized by SAMHSA's 'Four R's:' "**Realization** about trauma and how it can affect people and groups, **recognizing** the signs of trauma, having a system which can **respond** to trauma, and **resisting re-traumatization.**"[94] While we often associate trauma with acts of harm or adverse childhood experiences, the underlying causes of trauma are diverse, such as **toxic stress:** "the experience of strong, frequent, and/or prolonged adversity without adequate support or resilience"[95] Living in chronic poverty, experiencing toxic workplace cultures, **minority stress, and racial trauma** (harassment, discrimination, and microinequities experienced by marginalized groups) are all sources of toxic stress.[96,97]

> "...women, especially Black women, are more likely to face microaggressions - also known as everyday discrimination- than men."[98]
>
> - McKinsey

Normalizing the conversation and inviting open discussion about the underlying causes of toxic stress can be an opportunity to learn about the experiences of marginalized

workers, invite feedback, and ensure everyone is heard and valued.

"We're actually helping that journey of empowerment to understand our inherent value and if I expect you to respect my inherent value that means I must also respect yours."

Spotlight: Twin Cities Rise (TCR)[99] is an organization that meets trainees where they are using a unique model that blends workforce development and personal empowerment. The empowerment program marries cognitive behavioral therapy (CBT) with four pillars of emotional intelligence: 1) self-awareness, 3) self-management, 4) other awareness relationship management. By employing CBT, the program brings about active behavior change through practiced habit building.

Through their signature Empowerment Institute, TCR offers workshops, training, and curriculums helping organizations of all types create empowered workplace cultures. The organization is adept at serving low-income adults experiencing barriers to stable employment. Twin Cities is currently piloting a new employer workshop designed to "set the foundation before the DEI work."

Recommendation: We recommend this trauma-informed model for organizations with high-need populations, especially early in the DEI process.

Effective Training Methods

Research has shown that traditional approaches to harassment training engender defensiveness and backlash that results in more harm to women and marginalized communities.

Unconscious Bias (UB) training arose as an alternative, which employs empathy building techniques such as perspective-taking and counter-stereotyping. However, in recent years, UB training has come under fire for an over-emphasis on awareness and perspective change that does not translate into long-term behavioral change.

Employers should look for two critical elements when designing or outsourcing such training: a focus on **allyship** and **behavioral change**.

The article, "Why Sexual Harassment Programs Backfire," highlights two research-based training methods that have proven effective in improving workplace culture: **Bystander Intervention and Manager Training**. The authors emphasize the importance of treating "all workers as victims' allies rather than identifying some of them as potential perpetrators." Bystander Intervention training treats every trainee as an ally and teaches actionable behaviors trainees can deploy to disrupt and de-escalate**,** while "manager training" works because it presents harassment as a challenge that *all* managers must deal with. In that way it resembles bystander training."[100]

A caveat of the phrase "unconscious bias" is that it leads some individuals to conclude that "unconscious" beliefs are not in their realm of control. The article, **"Unconscious Bias Training that Works"** states that emphasizing the brain's malleability and capability for growth as "the single most effective component of UB training." In addition, training should focus on realistic examples of everyday bias and how to change behavior, rather than focusing on extreme cases. Finally, to achieve behavioral change, the authors recommend individual employees track their behaviors and progress on DEI goals, e.g., tracking the number of cross-group interactions.[101]

Again, we underscore the importance of measurement to ensure forward progress in DEI initiatives and build an evidence basis for what works. This vital step begins before any other is implemented. Recognizing there are differing starting points in the DEI journey, it is important to conduct initial assessments using surveys and focus groups to understand where your organization is. These assessments should also include evaluation of available capacity and resources available. The training organizations spotlighted in this section provide a range of services ranging from initial assessment to program design and implementation, including measurement.

Training Customized for Construction Trades

An evaluation of Respectful Workplace Models for application in construction trades recommended RISE Up and Green Dot as effective, accessible, and scalable approaches to building "respectful workplace" cultures. Customized specifically for construction trades, these programs foster allyship, employ bystander intervention, and are carefully engineered to lower defensiveness and reduce friction with experienced traditional anti-harassment training. [102]

One way this is accomplished is through carefully crafted language that avoids negative associations. As Karen Dove, Executive Director of RISE UP for Equity explains, "We don't use any of those terms that D&I professionals use. We do things in a way that makes them think about things differently and opens them up to having a conversation".

Spotlight: RISE Up[103] (Respect, Inclusion, Safety, and Equity in the Construction Trades) was created by ANEW to "shift the culture in a way that they [construction industry] would accept the conversation." ANEW is a workforce development non-profit that connects women and URM to careers in construction trades.

"Thick skin is not the answer"

Rise Up provides bystander invention and unconscious bias training as part of their 6-step process: 1) Executive leadership training & Assessment. 2) Culture committees including creating affinity groups 3) Training 4) Listening through employee surveys etc. 5) Meaningful mentorship including reverse mentorship 6) Measuring results.

Relationship building through common ground was a key theme in our conversation. Affinity groups and Ambassadors designated for mentorship- including reverse mentorship: the process of leaders engaging and learning from workers- were key to building cross-group relations.

The program shies away from overemphasizing beliefs. Instead, the primary focus is on behavior change, "What I care about is how you treat people on the job site... When you're on the job site, there are expectations of how people behave, and that includes not behaving in a way that has a negative impact on other people."

Rise Up has a comprehensive offering designed to meet the needs of organizations at any stage. They offer standardized and custom programming, including training, establishing culture committees, developing mentorship programs, D&I metrics, and customized on-site marketing materials to reinforce respectful workplace values. Impact evaluation is currently underway by an independent 3rd party.

Recommendation: RISE Up training modules are designed to suit organizations at any stage in the inclusive workplace culture journey.

Spotlight: Green Dot[104] was made by Alteristic, a non-profit organization focused on reducing "power-based violence by harnessing the powers of individual action." Initially created for high schools and colleges, the model has proven effective, showing a 17-21% reduction in violence in a 5-year longitudinal study conducted by the CDC. Green Dot has been customized for a variety of institutions and organizations. In 2014, it began work on 'Green Dot for Trades,' in collaboration with Oregon Tradeswomen. In April it launched a new workplace culture offering, 'Green Dot at Work.'

The Green Dot model focuses exclusively on Bystander training through a 4-step process. 1.) Identify Behaviors 2.) Identify Barriers 3.) Identify Actions 4.) Proactive Practice and Communication of Norms through on-site signage and hardhat stickers.

Core to Green Dot is a "zero growth" philosophy. Through a process designed to lower defensiveness, trainees explore their barriers to action and brainstorm actions they can take within their comfort zone, rather than requiring trainees to take on "heroic acts" of intervention. The Green Dot model also goes a step further than other models, shifting the focus to include Proactive culture building behaviors everyone can participate in.

"When more of us than not are engaging in positive bystander behaviors, whether Proactively or Reactively that is what sets the tone of the site. That is what communicates what the organization is like."

Alteristic offers standard &customized training and consulting services including interactive in-person or virtual instructor-led workshops and e-learning modules. 'Green Dot for Trades' is currently being piloted and evaluated by an independent 3rd party.

Recommendation: The Green Dot bystander intervention program serves as an "initial dose" and would be a fit for organizations in the early stages of their inclusive culture journey.

Shifting Mental Models

Leaders must reframe existing mental models throughout the construction industry to enact transformative systems change across the sector. Mental models are those firmly held beliefs and assumptions that influence the way we think, what we do and how we talk about deliberate effort in changing practices to remove barriers for workers and proactively shape organizational culture.[105]

To accomplish this, leaders must shift the diversity narrative from being a lose-lose scenario to a win-win for everyone. The new set of conversations should be centered on allyship, collaboration, and collective survival. Organizations must commit to changing recruiting practices, coordinating equitable supports, and building respectful, inclusive, and dignifying cultures. Organizations must also go beyond grandstanding commitments as a lack of follow-through and accountability upon any D & I effort erodes credibility with stakeholders.

Ultimately, increasing the participation of women and marginalized groups in residential construction requires an "All hands on deck" collaboration oriented around a shared mission to promote diverse, equitable, inclusive, and dignifying. In such organizations, individuals are seen, connected, supported, and proud of the organizations in which they work. Culture change may start with leaders, but individual workers live out organizational values through behaviors they practice every day, because ultimately culture is not a policy, training, or statement. Culture is what you do every day.

Recommendations: (1) Shift to a focus on Total Safety, including psychological safety and trauma-informed leadership. (2) Implement training programs that center allyship through bystander intervention and guide trainees from shifting beliefs to shifting behavior. (3) Focus on building respectful workplace cultures in which all workers can thrive. (4) Assess, test, track, reiterate.

Recommended Reading: Toolbox Talk - Mental Health (nahb.org) • Building Behavioral Health for the Construction Industry • A-Trauma-Informed-Approach-to-Workforce • Tools to address Job Culture in Construction-Respectful-Workplace-Review • Women in the Workplace | McKinsey • How Diversity & Inclusion Matter | McKinsey • Why Sexual Harassment Programs Backfire HBR • Unconscious Bias Training That Works HBR • Getting Serious About Diversity: Enough Already with the Business Case HBR • The Water of Systems Change.

Tradeswomen in the Spotlight

Ramona, Construction Superintendent

"If I do nothing else on this earth all I want is to see women really embrace themselves, love themselves, treat themselves as God said we're worth."

Ramona is a construction superintendent, author, motivational speaker and non-profit leader of UnChained; a faith-based organization dedicated to empowering returning citizens to strive for personal transformation and re-entry success.

Romona's personal journey traverses the plethora of barriers that many workers face, including physical and sexual abuse, domestic violence, homelessness, and incarceration. Starting as a day laborer, her mindset and unparalleled work ethic, against all odds attitude propelled her forward to a Superintendent position. She remains the first and only Black woman working on-site in her region.

Romana's answer: "**Be respectful**. It's that simple." She describes learning each worker's nationality to respect their culture and how she acknowledges everyone with a "Good Morning."

"I do not yell at them, ever. That's inappropriate," she says before going on to describe a sometimes-toxic industry culture in which it's not uncommon for workers to be yelled at or treated as less than human, and how she consciously chooses to craft a safe dignifying environment free of toxicity. Ramona builds rapport by establishing common ground and showing appreciation which can range from a simple "Thank you" or high-five to a pizza lunch.

As a woman in leadership, she explains the importance of establishing boundaries, setting the tone upfront, being consistent, and separating the personal from work. "It is not an even playing field...you're given the opportunity, but you have to continuously prove yourself."

Tiern, HVAC Tech

> "Treat me the same as everyone else, I am not a female here, I'm another worker."

Tiern cites her daughter as her inspiration, recounting the day her then 6-year-old came home from school upset that someone told her she wasn't allowed to like superheroes because "it's for boys." Following a covid layoff, she decided to explore careers in trades, ultimately choosing a career in HVAC. She describes her daughter's amazement at seeing her go to "fix-it" school like boys

> "I want her to see that just because she's a female doesn't mean she can't do something. Her telling me that she was not allowed to like superheroes snapped something for me. I'm going to show you."

Tiern speaks energetically and passionately about her field and is quick to express how much she loves it. Her biggest challenge during training was male chivalry. Her male classmates were a little too helpful, and often tried to lift and carry things for her. Tiern made the message loud and clear,

> "Treat me the same as everyone else. I am not a female here. I'm another worker."

While she often gets confused stares when she shows up on the job site, once she takes out her equipment and heads to her work area, it's business as usual. She enjoys the independent nature of the role and finds the work rewarding and empowering.

To increase the representation of women in the field's she suggests training programs use more inclusive imagery in recruiting materials to show women that there's a female presence in the field. For employers, she recommends more family-friendly scheduling. Such a change would serve the 10 million single moms and dads in the U.S.

Mary Teichert - Teichert Construction, President

> "Our goal is to have it be that talented people would want to work here, no matter what their background or demographics or gender or any other kind of reasons why they historically might not have..."

Mary Teichert is President of Teichert Construction, which was founded in 1887 and remains one of the oldest contractors in California. She launched her business career at Bain and later Apple before her uncle asked her to join the family business. She has since held 13 roles and learned the business from "the ground up," ultimately rising to President in April 2020. Now, as a Sr. Executive she is using her platform to increase diversity.

> "Whenever people ask about Teichert being a family business I point out it's a lot of people's family business...folks in construction if they like it, you know they recruit their son or their nephew or whoever, so it's really about expanding that to recruit their daughters and nieces."

Teichert Construction employs 33% women, well above industry average, but like the industry the figure falls significantly for operator and field roles. The number one issue, she says, is that women aren't choosing construction. She describes the company's commitment to recruit all women graduates from a college, and there only being four. A valuable insight she later learned after conversations with women operators was that "100% of them had family that was either in construction or farming," so they're not intimidated by working outdoors around heavy equipment."

Mary is working to bring greater awareness to young girls early through company engagement with junior high schools and STEM programs. In addition, she is partnering with a range of workforce development programs and charities that work with underrepresented communities. Although, recruiting and training diverse workers at scale remains a challenge, she mentions promising opportunities such as a partnership with state agencies to design a pre-apprenticeship program for re-entry citizens.

Appendix

Small Contractor Quick-Start Guide to New Talent

Finding and keeping talent is tougher now than ever. Talent shortages create longer lead times, project delays, increased safety risk and are especially challenging for small contractors.

The good news is there is plenty of untapped talent out there, which is why we created the quick-start guide on the following page. This guide is intended to help get you started in recruiting talent that is currently underrepresented in residential construction. The outlined tips and organizations can help you on this journey.

Small Contractor Quick-Start Guide to New Talent

Team Up	Build Inclusion	Measure Progress
Building talent requires more than just skills training. Workers need support to overcome challenges that keep them from work and affect their performance at work.	Workers deserve respectful, inclusive, and dignifying job cultures. While this is important to all workers, it is key to attracting and keeping young and diverse talent.	"You can't manage what you don't measure." Set goals to recruit from new diverse talent sources and ensure inclusive culture and measure your progress.
No single employer can tackle these challenges on their own. Partner and build relationships with other organizations to reach untapped talent.	Many women and diverse workers don't realize construction trades are a path open to them. Let new and existing workers know that everyone is welcome!	The training organizations mentioned previously include measurement as part of services. Whether using a 3rd party or going at it on your own, below are a few tips.
1.) Team up with collective impact organizations (partnerships made of employers, nonprofits, government, worker & community) that build workforce programs, especially those bringing untapped talent e.g., women and diverse talent into the field. 2.) Partner directly with pre-apprenticeship and training programs, which can be a source for recruiting new talent. Build relationships through: Speaking at career events, mentoring, hosting mock interviews and job-site visits. 3.) Build relationship with and refer employees to established community organizations and social service programs that offer wraparound supports like: childcare, transportation, counseling etc. **Building Talent Foundation (BTF)** is an organization that coordinates partnerships for collective impact.	1.) Communicate that diverse workers are welcome on websites, job postings, and employee materials through inclusion statements, specific language, and diverse imagery. 2.) Emphasize a Total Safety Culture that is both physical & psychological safety, where all workers are safe from intimidation and violence. 3)Train employees and managers in respectful job culture. Use trainings that treat everyone as allies working together to building positive culture, and providing practical actions. The organizations below provide consulting and training on workplace culture to businesses of all sizes and budgets. **RiseUp by ANEW** · **Green Dot by Alteristic** · **Empowerment Institute by Twin Cities Rise** · **MindWise**	1) Assess the current state of your business to create a baseline. Does your hiring process reach diverse talent? How do existing workers feel about the culture? What knowledge and resources available to transform hiring and job culture? 2) Test and run small trials to figure out what works and what doesn't. Every business, and workforce has unique needs. Test out different hiring practices, different partnerships, and different work culture practices. 3) Track your progress against your baseline (just as you might track other business goals or finances). Data tracked should include employee feedback and surveys (again the workforce culture organizations mentioned can assist here). 4) Reiterate. Not every trial will work, but you can learn from each attempt. Be willing to try new methods, learn from mistakes, and try again. Be sure to share learnings with partners!.

Glossary

Allyship - when a person of privilege works in concert with a marginalized group to take down the systemic barriers that create inequalities for those in less advantaged positions.

Backbone Organizations - a separate organization necessary in collective impact with staff and skillset required to coordinate cross-sector organizations and agencies.[106]

Behavioral change - encouraging a new way of thinking and communicating to motivate individual behaviors around racial and gender norms that create barriers.[107]

Benchmarking - creating a standard set of data that is used as a reference for learning and program development which enables fair comparisons and assessments of programs related to workforce development.[108]

Blended Funding - Blended funding combines, or "comingles," multiple funding streams for one purpose without continuing to differentiate or track individual sources."[109]

Braided Funding - "Braided funding pools multiple funding streams toward one purpose while separately tracking and reporting on each source of funding."[110]

Bystander Intervention - scenario where assumption is that individuals can be allies working to solve harassment, assault, sexism, or racism problems rather than perpetrating these behaviors.[111]

Cognitive behavioral therapy (CBT) - Cognitive behavioral therapy (CBT) is a form of psychological treatment that has been demonstrated to be effective for a range of problems including depression, anxiety disorders, alcohol and drug use problems, marital problems, eating disorders, and severe mental illness.[112]

Collective Impact - centralized framework that includes a dedicated staff, and a set of structured process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all stakeholders.[113]

Confidence Gap - The belief that women lack confidence when compared to male colleagues and this in turn creates a barrier to their advancement in the workplace.[114]

Diversity exists when organization reflects various dimensions of uniqueness. Though often thought of along demographic lines: gender identity, race, ethnicity, sexual or religious orientation; diversity is also reflected in psychographic dimensions such as diversity of thought.

Equity "Equity is about systems that ensure everyone has equal access to opportunities and is treated according to their needs."[115]

Gender Narratives - the intersectionality of gender identity and the influence of society on one's expected behavior in that society.

Glossary

Gendered Work - Case where work is framed and valued in a way that depicts patterns of male and female relationships and the attached masculine and feminine meanings and identifications in a socioeconomic context.[116]

Great Resignation - Period after April 2021 when Americans dropped out of the labor force in record numbers without returning.[117]

Implicit Bias - Predetermined beliefs that unconsciously affect our understanding, actions, and decisions.

Microaggressions - A type of prejudice that is demonstrated as covert acts that is not detected or recognized by offenders.[118]

Microinequities - Ways in which biases manifest themselves as varied treatment of people who are considered the marginalized group.[119]

Minority stress – A source of toxic stress that includes the collective stressors—e.g., discrimination, micro aggressions, internalized stigma, and identity concealment—faced by a marginalized community. [120]

Occupational Segregation - Case where industry distributions of workers is uneven based upon racial, ethnic and gender demographics.[121]

Proximate leaders - Frontline workers of diverse backgrounds who serve as advisors and co-creators and elevate the voices, experiences, and expertise of those closest to the societal challenges.

Psychological Safety- "A belief that the workplace is safe for speaking up with ideas, questions, concerns, and even mistakes. It's a since of confidence that your voice is valued." [122]

Racial trauma - Sources of toxic stress, harassment, discrimination, and microinequities experienced by marginalized groups

Re-traumatization - Further experiencing a series of events that have an enduring effect on an individual's mental, physical, social and spiritual well-being

She-cession - The mass exodus of working women who are reducing amount of work or leaving work entirely due to childcare affordability, stress and family responsibilities.[123]

Sectoral strategies: A systems approach to workforce development focused on industry specific in-demand skills training, high employer engagement, and learner/worker supports.

Total Safety – A culture that recognizes workers need not only physical safety, but psychological safety and that the two are intertwined. Total Safety includes safety from harassment, intimidation, gender violence, racial violence and other forms of identity motivated harm.

Glossary

Toxic Stress - "The experience of strong, frequent, and/or prolonged adversity without adequate support or resilience "and living in chronic poverty, experiencing toxic workplace culture.[124]

Trauma informed - Organizations characterized by SAMHSA's 'Four R's:' "Realization about trauma and how it can affect people and groups, recognizing the signs of trauma, having a system which can respond to trauma, and resisting re-traumatization."[125]

Unconscious bias (UB) or implicit bias - Type of bias that occurs automatically and unintentionally to affect judgments, decisions, and behaviors often about race and gender. Implicit bias creates barriers for employers who wish to employ women and URM. [126]

Underrepresented Minority (URM) - individuals that consider themselves Black or African American, Hispanic or Latino, American Indian or Alaska Native, or Native Hawaiian or other Pacific Islander.[127]

Wraparound Supports - services offered to trainees and employees such as childcare advising and financial support for tuition and transportation."[128] Wraparound supports help to reduce barriers to work through equitable infrastructure such as bus passes, gas cards, housing, COVID rent assistance, flexible work schedules, mentorship, affinity networks, mental health support and training for advancement.

About the Authors

Misty Farrell is a 2021 Social Impact MBA candidate from Boston University with a background in engineering and more than 15 years of professional experience in technology product development, commercialization, and sales. Through her graduate research she has gained strategy skills and a comprehensive understanding of social impact in business. Misty has created learning programs to enrich, inspire and motivate students of color. She has built and deployed a multitude of collaborative educational programs for organizations like the NAACP, universities, innovation labs, and telecommunication companies that span audiences from high school students to professionals. She seeks to further understand and mitigate the effects of the racial wealth and skills gaps that appear throughout the labor economy and manifest as inequities in job placement in the Future of Work. Her mission is to help women and underrepresented minorities (URM) create pathways to socioeconomic success through training and entrepreneurship.

Teilachanell Angel is a 2021 Social Impact MBA from Boston University with a personal mission to advance equity through economic mobility. She is a systems thinker with an affinity for complex problems and a natural enthusiasm for learning, synthesizing trends, and elucidating insights to drive strategic and operational decisions. Teilachanell is refocusing +10 years of progressive business experience towards reducing labor market inequality and building an equitable Future of Work.

References

[1] "The next Normal in Construction: How Disruption Is Reshaping the World's Largest Ecosystem." McKinsey & Company. McKinsey & Company, October 20, 2020. https://www.mckinsey.com/business-functions/operations/our-insights/the-next-normal-in-construction-how-disruption-is-reshaping-the-worlds-largest-ecosystem.

[2] "Housing's Economic Impact." NAHB. Accessed November 11, 2021. https://www.nahb.org/News-and-Economics/Housing-Economics/Housings-Economic-Impact. Excel file Web Dec 2020. https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics/economic-impact/housing-contribution-to-gdp.xls.

[3] "Residential Construction: Net Job Gains Offset Losses from the Pandemic: NAHB Now: The News Blog of the National Association of Home Builders." NAHB Now | The News Blog of the National Association of Home Builders | NAHB Now | The News Blog of the National Association of Home Builders, January 11, 2021. https://nahbnow.com/2021/01/residential-construction-net-job-gains-offset-losses-from-the-pandemic/.

[4] Scott, Amy. "The Homebuilding Industry Still Needs Thousands of Workers, and It's Looking in New Places to Hire." Marketplace, September 17, 2020. https://www.marketplace.org/2020/09/17/homebuilding-industry-empty-jobs-training-program-high-school-students-housing-demand/.

[5] Smart, Tim. "The Labor Market Is Undergoing a Seismic Shift as Markets …" US News. US News, October 7, 2021. https://www.usnews.com/news/economy/articles/2021-10-07/the-labor-market-is-undergoing-a-seismic-shift-as-markets-await-septembers-jobs-report.

[6] U.S. Census Bureau; Current Population Survey, Series ID LNS12037918, Sept. 2021, generated by Teilachanell Angel using DataFinder;

[7] BigRentz, Inc. "Home." BigRentz, January 19, 2021. https://www.bigrentz.com/blog/women-construction.

[8] "2020 Annual Averages - Employed Persons by Industry, Sex, Race, and Occupation." U.S. Bureau of Labor Statistics. U.S. Bureau of Labor Statistics, January 22, 2021. *Note metric used is construction and extraction https://www.bls.gov/cps/cpsaat17.htm.

[9] "Construction and Extraction Occupations: Occupational Outlook Handbook." U.S. Bureau of Labor Statistics. U.S. Bureau of Labor Statistics, September 8, 2021. https://www.bls.gov/ooh/construction-and-extraction/home.htm.

[10] "Undervalued and Underpaid in America - Institute for Women …" Institute for Women's Policy Research. Institute for Women's Policy Research, September 2020. https://iwpr.org/wp-content/uploads/2020/09/D508-Undervalued-and-Underpaid.pdf. https://www.nytimes.com/interactive/2020/03/04/opinion/women-unpaid-labor.html.

[11] "Who Will Build the Homes of the Future? Analyzing the Labor Shortage in Residential Construction." Building Talent Foundation. May 2020. https://www.buildingtf.org/s/Statement-of-the-Problem-Who-will-build-homes-of-the-future_.pdf.

[12] Kania, John, and Mark Kramer. "Collective Impact (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2011. https://ssir.org/articles/entry/collective_impact.

[13] "Effective Change Requires Proximate Leaders." NP GO. New Profit, October 26, 2020. https://www.newprofit.org/go/effective-change-requires-proximate-leaders/.

[14] Turner, Shiloh, Kathy Merchant, John Kania, and Ellen Martin. "Understanding the Value of Backbone Organizations." The Collective Impact Forum, March 12, 2014. https://www.collectiveimpactforum.org/sites/default/files/Understanding_the_Value_of_Backbone_Organizations.pdf.

References

[15] Becker, Jeanine, and David B. Smith. "The Need for Cross-Sector Collaboration (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2018. https://ssir.org/articles/entry/the_need_for_cross_sector_collaboration.

[16] Jackson, Dr. Angela. "Grads of Life Brandvoice: The Social Determinants of Work." Forbes. Forbes Magazine, August 26, 2021. https://www.forbes.com/sites/gradsoflife/2021/08/26/the-social-determinants-of-work/.

[17] Brown, Rita, et al. "The Business Case for Diversity Inclusion – Dev.agc.org." The Association of General Contractors, November 8, 2018. https://dev.agc.org/sites/default/files/Files/Advocacy/AGC%20Report%20on%20Biz%20Case%20for%20D%26I%20FINAL.pdf

[18] Dobbin, Frank, and Alexandra Kalev. "Why Sexual Harassment Programs Backfire." Harvard Business Review, 2020. https://hbr.org/2020/05/why-sexual-harassment-programs-backfire.

[19] "The next Normal in Construction: How Disruption Is Reshaping the World's Largest Ecosystem." McKinsey & Company. McKinsey & Company, October 20, 2020. https://www.mckinsey.com/business-functions/operations/our-insights/the-next-normal-in-construction-how-disruption-is-reshaping-the-worlds-largest-ecosystem.

[20] "Residential Construction: Net Job Gains Offset Losses from the Pandemic: NAHB Now: The News Blog of the National Association of Home Builders." NAHB Now | The News Blog of the National Association of Home Builders | NAHB Now | The News Blog of the National Association of Home Builders, January 11, 2021. https://nahbnow.com/2021/01/residential-construction-net-job-gains-offset-losses-from-the-pandemic/.

[21] Scott, Amy. "The Homebuilding Industry Still Needs Thousands of Workers, and It's Looking in New Places to Hire." Marketplace, September 17, 2020. https://www.marketplace.org/2020/09/17/homebuilding-industry-empty-jobs-training-program-high-school-students-housing-demand/.

[22] Quint, Rose. "Young Adults & the Construction Trades." NAHB. NAHB, March 1, 2017. https://www.nahbclassic.org/GENERIC.ASPX?SECTIONID=734&GENERICCONTENTID=255983&CHANNELID=311&_GA=1.39149667.1346323624.1489973586.

[23] Hatcher, Michael R., and Janea J. Hawkins. "Creating Solutions to Racism Problem in Construction Industry." The National Law Review. Jackson Lewis P.C. Publication, March 31, 2021. https://www.natlawreview.com/article/creating-solutions-to-racism-problem-construction-industry. NAH

[24] Watson, Travis. "Union Construction's Racial Equity and Inclusion Charade (SSIR)." The Racism of Labor Union Construction and Boston's 'White Way', June 14, 2021. https://ssir.org/articles/entry/union_constructions_racial_equity_and_inclusion_charade.

[25] "Who Will Build the Homes of the Future? Analyzing the Labor Shortage in Residential Construction." Building Talent Foundation. May 2020. https://www.buildingtf.org/s/Statement-of-the-Problem-Who-will-build-homes-of-the-future_.pdf.

[26] Smart, Tim. "The Labor Market Is Undergoing a Seismic Shift as Markets …" US News. US News, October 7, 2021. https://www.usnews.com/news/economy/articles/2021-10-07/the-labor-market-is-undergoing-a-seismic-shift-as-markets-await-septembers-jobs-report.

[27] "Get the Facts on Inequality and Covid-19." Inequality.org, October 14, 2021. https://inequality.org/facts/inequality-and-covid-19/.

[28] Abdel-Baqui, Omar. "U.S. Housing Market Booms, but Small Contractors Miss Out." The Wall Street Journal. Dow Jones & Company, June 26, 2021. https://www.wsj.com/articles/u-s-housing-market-booms-but-small-contractors-miss-out-11624699809.

References

[29] "The Impact of Housing Affordability on Families." Cost of Home. Accessed November 11, 2021.
https://www.habitat.org/costofhome/housing-affordability-and-families.

[30] "What Are Gentrification and Displacement." Urban Displacement, November 3, 2021.
https://www.urbandisplacement.org/about/what-are-gentrification-and-displacement/.

[31] Castañeda, Leonardo. "Silicon Valley Worker Shortage Creates Upside-down Labor Market." The Mercury News. The Mercury News, December 27, 2018. https://www.mercurynews.com/2018/12/26/silicon-valleys-worker-shortage-creates-an-upside-down-labor-market/.

[32] Ortiz, Guillermo, Valerie Novack, Heidi Schultheis, and Aleah Holt. "A Perfect Storm." Center for American Progress, October 17, 2019. https://www.americanprogress.org/article/a-perfect-storm-2/.

[33] "Housing's Contribution to Gross Domestic Product." NAHB. Accessed November 12, 2021. https://www.nahb.org/news-and-economics/housing-economics/housings-economic-impact/housings-contribution-to-gross-domestic-product.

[34] "Housing's Economic Impact." NAHB. Accessed November 11, 2021. https://www.nahb.org/News-and-Economics/Housing-Economics/Housings-Economic-Impact. Excel file Web Dec 2020 https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics/economic-impact/housing-contribution-to-gdp.xls.

[35] U.S. Census Bureau; Current Population Survey, Series ID LNS12037918, Sept. 2021, generated by Teilachanell Angel using DataFinder;

[36] BigRentz, Inc. "Home." BigRentz, January 19, 2021. https://www.bigrentz.com/blog/women-construction.

[37] "2020 Annual Averages - Employed Persons by Industry, Sex, Race, and Occupation." U.S. Bureau of Labor Statistics. U.S. Bureau of Labor Statistics, January 22, 2021. *Note metric used is construction and extraction https://www.bls.gov/cps/cpsaat17.htm.

[38] Bleiweis, Robin. "Quick Facts about the Gender Wage Gap." Center for American Progress, November 2, 2021. https://www.americanprogress.org/article/quick-facts-gender-wage-gap/.

[39] IBID Schilt, Kristen, and Matthew Wiswall. "Before and after: Gender Transitions, Human Capital, and Workplace Experiences." De Gruyter. De Gruyter, September 11, 2008. https://www.degruyter.com/document/doi/10.2202/1935-1682.1862/html.

[40] Wezerek, Gus, and Kristen R. Ghodsee. "Women's Unpaid Labor Is Worth $10,900,000,000,000." The New York Times. The New York Times, March 5, 2020. https://www.nytimes.com/interactive/2020/03/04/opinion/women-unpaid-labor.html.

[41] Dobbin, Frank, and Alexandra Kalev. "Why Sexual Harassment Programs Backfire." Harvard Business Review, 2020. https://hbr.org/2020/05/why-sexual-harassment-programs-backfire.

[42] Patterson, Luke, Eileen Poe-Yamagata, Neha Nanda, and Carolyn Corea. "Non-Traditional Occupations in America's Workforce ..." IMPAQ International, November 2016 https://impaqint.com/sites/default/files/issue-briefs/Non-Traditional%20Occupations%20in%20America%27s%20Workforce_Barriers%20and%20Solutions%20to%20Female%20Participation.pdf.

[43] Patterson, Luke, Eileen Poe-Yamagata, Neha Nanda, and Carolyn Corea. "Non-Traditional Occupations in America's Workforce ..." IMPAQ International, November 2016 https://impaqint.com/sites/default/files/issue-briefs/Non-Traditional%20Occupations%20in%20America%27s%20Workforce_Barriers%20and%20Solutions%20to%20Female%20Participation.pdf.

References

44 Sneader, Kevin and Lareina Lee "One is the Lonlines Number." McKinsey & Company. Accessed November, 2021. https://www.mckinsey.com/featured-insights/gender-equality/one-is-the-loneliest-number.

45 "Investing in Women and Girls." OECD. Accessed November 11, 2021. https://www.oecd.org/dac/gender-development/investinginwomenandgirls.htm.

46 "Construction and Extraction Occupations: Occupational Outlook Handbook." U.S. Bureau of Labor Statistics. U.S. Bureau of Labor Statistics, September 8, 2021. https://www.bls.gov/ooh/construction-and-extraction/home.htm.

47 "Undervalued and Underpaid in America - Institute for Women ..." Institute for Women's Policy Research. Institute for Women's Policy Research, September 2020. https://iwpr.org/wp-content/uploads/2020/09/D508-Undervalued-and-Underpaid.pdf. https://www.nytimes.com/interactive/2020/03/04/opinion/women-unpaid-labor.html.

48 Conway, Maureen. "Sectoral Strategies for Low-Income Workers - Aspen Institute." The Aspen Institue, 2007. https://www.aspeninstitute.org/wp-content/uploads/2007/10/Sectoral-Strategies.pdf.

49 Patterson, Luke, Eileen Poe-Yamagata, Neha Nanda, and Carolyn Corea. "Non-Traditional Occupations in America's Workforce ..." IMPAQ International, November 2016 https://impaqint.com/sites/default/files/issue-briefs/Non-Traditional%20Occupations%20in%20America%27s%20Workforce_Barriers%20and%20Solutions%20to%20Female%20Participation.pdf.

50 Benner, Chris, et al. "Final Version Connecting People to Work - the Aspen Institute." The Aspen Institute, June 2014. https://www.aspeninstitute.org/wp-content/uploads/2014/06/Final-Version-Connecting-People-to-Work.pdf.

51 Katz, Lawrence F., Jonathan Roth, Richard Hendra, and Kelsey Schaberg. "Why Do Sectoral Employment Programs Work? Lessons from Workadvance." NBER, December 21, 2020. https://www.nber.org/papers/w28248.

52 "Welcome to WRTP: Big Step." WRTP, October 28, 2021. https://wrtp.org/.

53 Patterson, Luke, Eileen Poe-Yamagata, Neha Nanda, and Carolyn Corea. "Non-Traditional Occupations in America's Workforce …" IMPAQ International, November 2016 https://impaqint.com/sites/default/files/issue-briefs/Non-Traditional%20Occupations%20in%20America%27s%20Workforce_Barriers%20and%20Solutions%20to%20Female%20Participation.pdf.

54 Katz, Lawrence F., Jonathan Roth, Richard Hendra, and Kelsey Schaberg. "Why Do Sectoral Employment Programs Work? Lessons from Workadvance." NBER, December 21, 2020. https://www.nber.org/papers/w28248.

55 Benner, Chris, et al. "Final Version Connecting People to Wo−k - the Aspen Institute." The Aspen Institute, June 2014. https://www.aspeninstitute.org/wp-content/uploads/2014/06/Final-Version-Connecting-People-to-Work.pdf.

56 Maguire, Sheila, et al. "Findings from the Sectoral Employment Impact Study." The Aspen Institute. Public/Private Ventures, 2010. https://www.aspeninstitute.org/wp-content/uploads/2017/05/TuningIntoLocalLaborMarkets-ExecSum.pdf.

57 Conway, Maureen. "Sectoral Strategies for Low-Income Workers - Aspen Institute." The Aspen Institute, 2007. https://www.aspeninstitute.org/wp-content/uploads/2007/10/Sectoral-Strategies.pdf.

58 Kania, John, and Mark Kramer. "Collective Impact (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2011. https://ssir.org/articles/entry/collective_impact.

59 Benner, Chris, et al. "Final Version Connecting People to Work - the Aspen Institute." The Aspen Institute, June 2014. https://www.aspeninstitute.org/wp-content/uploads/2014/06/Final-Version-Connecting-People-to-Work.pdf.

References

60 Ibid

61 Ibid

62 Ibid

63"Effective Change Requires Proximate Leaders." NP GO. New Proft, October 26, 2020. https://www.newprofit.org/go/effective-change-requires-proximate-leaders/.

64 Jackson, Angela, Tulaine Montgomery, and John Kania. "Effective Change Requires Proximate Leaders (SSIR)." People Who are Guided by Community, October 2, 2020. https://ssir.org/articles/entry/effective_change_requires_proximate_leaders.

65 "Strategies That Center the Voice of the Underestimated Job …," December 2019. https://www.spmcf.org/uploads/general/What-We-Do/Files/MSPWin/Strategies-that-Center-Underestimated-Jobseekers-10-2019.pdf.

66 Turner, Shiloh, Kathy Merchant, John Kania, and Ellen Martin. "Understanding the Value of Backbone Organizations." The Collective Impact Forum, March 12, 2014. https://www.collectiveimpactforum.org/sites/default/files/Understanding_the_Value_of_Backbone_Organizations.pdf.

67 Benner, Chris, et al. "Final Version Connecting People to Work - the Aspen Institute." The Aspen Institute, June 2014. https://www.aspeninstitute.org/wp-content/uploads/2014/06/Final-Version-Connecting-People-to-Work.pdf.

68 Building Talent foundation. Accessed November 15, 2021. https://www.buildingtf.org/who-we-are.

69 Dillman, Lisa. "Collective Impact: Successes and Challenges from the Field." Education Northwest, March 26, 2015. https://educationnorthwest.org/northwest-matters/collective-impact-successes-and-challenges-field.

70 Ibid

71 Kania, John, and Mark Kramer. "Collective Impact (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2011. https://ssir.org/articles/entry/collective_impact.

72 Social Finance, Federal Reserve Bank of Atlanta, Federal Reserve Philadelphia, "Workforce Realigned How New Partnerships Are Advancing Economic Mobility," Accessed November 12, 2021 Social Finance, 2021. Workforce-Realigned-Full-Book-Social-Finance-and-Federal-Reserve-Banks.pdf (socialfinance.org)

73 "Blended and Braided Funding." Blended and Braided Funding | Local Workforce System Guide. Accessed November 11, 2021. https://workforce.urban.org/strategy/blended-and-braided-funding.

74 Sugerman, Lauren. "Infrastructure Bill Could Expand Opportunities for Women." Construction Dive, August 24, 2021. https://www.constructiondive.com/news/infrastructure-bill-could-expand-opportunities-for-women/604976/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue%3A+2021-08-26+Construction+Dive+Newsletter+%5Bissue%3A36351%5D&utm_term=Construc.

75 "Making Data Work for Community-Based Workforce Development …" Accessed November 12, 2021. https://skilledwork.org/wp-content/uploads/2013/12/MakingDataWorkforCommunityBasedWorkforceDevelopmentPrograms.pdf.

76 Ibid

77 "Winter 2020." WINTER 2020. Accessed November 15, 2021. https://www.winterwomen.org/.

References

[78] Patterson, Luke, Eileen Poe-Yamagata, Neha Nanda, and Carolyn Corea. "Non-Traditional Occupations in America's Workforce ..." IMPAQ International, November 2016 https://impaqint.com/sites/default/files/issue-briefs/Non-Traditional%20Occupations%20in%20America%27s%20Workforce_Barriers%20and%20Solutions%20to%20Female%20Participation.pdf.

[79] Zwerdling, Daniel. "Hospitals Fail to Protect Nursing Staff from Becoming Patients." NPR. NPR, February 4, 2015. https://www.npr.org/2015/02/04/382639199/hospitals-fail-to-protect-nursing-staff-from-becoming-patients.

[80] "Introducing the New Hard Hatted Women." HHW Ohio. Accessed November 15, 2021. https://www.hhwohio.org/.

[81] The Helen Gordon Davis Centre for Women. "Women Building Futures." Accessed November 11, 2021, https://womenbuildingfutures.ca/.

[82] Becker, Jeanine, and David B. Smith. "The Need for Cross-Sector Collaboration (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2018. https://ssir.org/articles/entry/the_need_for_cross_sector_collaboration.

[83] Jackson, Dr. Angela. "Grads of Life Brandvoice: The Social Determinants of Work." Forbes. Forbes Magazine, August 26, 2021. https://www.forbes.com/sites/gradsoflife/2021/08/26/the-social-determinants-of-work/.

[84] Brady, Susan MacKenty, and Elisa van Dam. "The Inclusive Leader's Playbook," Simmions University Institute for Inclusive Leadership, 2021. FREE Diversity and Inclusion Guide: The Inclusive Leadership Playbook (thinkherrmann.com).

[85] "Pre-Apprenticeship: Pathways for Women into High – ... - Dol." Accessed November 12, 2021. https://www.dol.gov/sites/dolgov/files/ETA/apprenticeship/pdfs/Pre_Apprenticeship_GuideforWomen.pdf.

[86] Cronen, Stephanie, Terry Salinger, Amy Dalsimer , and Amanda Ahlstrand. "Providing Pathways out of Poverty and into Careers: The ..." American Institutes for Research, August 2021. https://www.air.org/sites/default/files/2021-08/IET-and-Workforce-Training-for-Underserved-Adults-WDEMP-August-2021.pdf.

[87] Barnow, Burt S., and Jeffrey Smith. "Employment and Training Programs Http://Www.nber.org ..." National Bureau of Labor Statistics, October 2015. https://www.nber.org/system/files/working_papers/w21659/w21659.pdf.

[88] Oregon Tradeswomen, November 11, 2021. https://oregontradeswomen.org/.

[89] Chicanos Por La Causa. Accessed November 15, 2021. https://cplc.org/.

[90] Brown, Rita, et al. "The Business Case for Diversity Inclusion - Dev.agc.org." The Association of General Contractors, November 8, 2018. https://dev.agc.org/sites/default/files/Files/Advocacy/AGC%20Report%20on%20Biz%20Case%20for%20D%26I%20FINAL.pdf.

[91] "Five Fifty: Is It Safe?" McKinsey & Company. Accessed November 13, 2021. https://www.mckinsey.com/featured-insights/leadership/five-fifty-is-it-safe.

[92] Desai Lisa and Bryan Kohl. "Building Behavioral Health in the Construction Industry." MindWise Innovations, Winter 2020. MindWise for The Leader Magazine.pdf (hubspotusercontent00.net)

[93] Hanzel-Snider, Nick. "Behavioral Health & Workplace Safety ... - Blog.mindwise.org." Mindwise Innovations. Accessed November 13, 2021. https://blog.mindwise.org/blog/behavioral-health-workplace-safety.

References

94 "National Coalition for Homeless Veterans - NCHV." National Coalition for Homeless Veterans. Accessed November 13, 2021.
https://www.nchv.org/images/uploads/Research_Brief_61_-_SAMHSA_Trauma_Care.pdf.

95 Choitz, Vickie, and Stacey Wagner. "A Trauma-Informed Approach to Workforce." National Fund for Workforce Solutions.
Accessed November 12, 2021. https://nationalfund.org/wp-content/uploads/2021/04/A-Trauma-Informed-Approach-to-
Workforce.pdf.

96 Choitz, Vickie, and Stacey Wagner. "A Trauma-Informed Approach to Workforce." National Fund for Workforce Solutions.
Accessed November 12, 2021. https://nationalfund.org/wp-content/uploads/2021/04/A-Trauma-Informed-Approach-to-
Workforce.pdf.

97 Galindo, Nellie, MSW, MSPH. The Intersection of Trauma and Minority Stress in the LGBTQ Community. Great Valley Publishing
Company. Accessed November 13, 2021. https://www.socialworktoday.com/archive/exc_070220.shtml.

98 Dixon-Fyle, Sundiatu, Kevin Dolan, Vivian Hunt, and Sara Prince. "Diversity Wins: How Inclusion Matters." McKinsey & Company.
McKinsey & Company, November 2, 2021. https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-
how-inclusion-matters.

99 "Emotional Intelligence Training and Employee Programs: Empowerment Institute." Twin Cities R!SE. Accessed November 15,
2021. https://www.twincitiesrise.org/empowerment-institute.

100 Dobbin, Frank, and Alexandra Kalev. "Why Sexual Harassment Programs Backfire." Harvard Business Review, 2020.
https://hbr.org/2020/05/why-sexual-harassment-programs-backfire.

101 Gino, Francesca, and Katherine Coffman. "Unconscious Bias Training That Works." Harvard Business Review, August 30, 2021.
https://hbr.org/2021/09/unconscious-bias-training-that-works.

102 Metro, Oregon Tradeswomen, and Work Systems. "Regional Respectful Workplace Model Review Committee Recommendations:
Tools to Address Jobsite Culture in Construction." RiseUP4Equity. Accessed November 13, 2021.
https://riseup4equity.org/wp-content/uploads/2021/03/Respectful-Workplace-Review-Committee-Recommendations-
Report.pdf.

103 Tindi, Faith. RISE Up For Equity, January 29, 2021.
https://riseup4equity.org/#:~:text=RISE%20Up%20(Respect%2C%20Inclusion%2C,and%20productive%20environment%20for%
20everyone.

104 Alteristic. "Green Dot.", January 8, 2019. https://alteristic.org/services/green-dot/.

105 John Kania, John, Mark Kramer, and Peter Senge, "The Water of Systems Change." FSG May 2018.
https://www.fsg.org/publications/water_of_systems_change.

106 Turner, Shiloh, et al. "Understanding the Value of Backbone Organizations in Collective Impact: Part 1 (SSIR)." Stanford Social
Innovation Review: Informing and Inspiring Leaders of Social Change. Stanford Social Innovation Review, July 17, 2012.
https://ssir.org/articles/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_1.

107 "Realize: Social and Behavioral Change for Gender Equity and Diversity." The Tops Program. FSN Network, 2017.
https://www.fsnnetwork.org/resource/realize-social-and-behavioral-change-gender-equity-and-diversity.

108 "Making Data Work for Community-Based Workforce Development ..." Accessed November 12, 2021.
https://skilledwork.org/wp-
content/uploads/2013/12/MakingDataWorkforCommunityBasedWorkforceDevelopmentPrograms.pdf.

References

[109] "Blended and Braided Funding." Blended and Braided Funding | Local Workforce System Guide. Accessed December 1, 2021. https://workforce.urban.org/strategy/blended-and-braided-funding.

[110] Ibid

[111] Dobbin, Frank, and Alexandra Kalev. "Why Sexual Harassment Programs Backfire." Harvard Business Review, 2020. https://hbr.org/2020/05/why-sexual-harassment-programs-backfire.

[112] "What Is Cognitive Behavioral Therapy?" American Psychological Association. American Psychological Association, July 2017. https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral.

[113] Kania, John, and Mark Kramer. "Collective Impact (SSIR)." Stanford Social Innovation Review: Informing and Inspiring Leaders of Social Change, 2011. https://ssir.org/articles/entry/collective_impact.

[114] Guillen, Laura. "Is the Confidence Gap between Men and Women a Myth?" Harvard Business Review, March 26, 2018. https://hbr.org/2018/03/is-the-confidence-gap-between-men-and-women-a-myth.

[115] Brady, Susan MacKenty, and Elisa van Dam. "The Inclusive Leader's Playbook," Simmions University Institute for Inclusive Leadership, 2021. FREE Diversity and Inclusion Guide: The Inclusive Leadership Playbook (thinkherrmann.com)

[116] "Encyclopedia of Quality of Life and Well-being Research." SpringerLink Accessed November 12, 2021. https://link.springer.com/referenceworkentry/10.1007%2f978-94-007-0753-5_1138.

[117] Pazzanese, Christina. "Harvard Economist Sheds Light on 'Great Resignation'." Harvard Gazette. Harvard Gazette, October 20, 2021. https://news.harvard.edu/gazette/story/2021/10/harvard-economist-sheds-light-on-great-resignation/.

[118] Williams, Monnica T. "Microaggressions: Clarification, Evidence, and Impact - Monnica T. Williams, 2020." SAGE Journals. Perspectives on Psychological Science, vol. 15, 1: pp. 3-26. , August 16, 2019. https://journals.sagepub.com/doi/10.1177/1745691619827499.

[119] Brady, Susan MacKenty, and Elisa van Dam. "The Inclusive Leader's Playbook," Simmions University Institute for Inclusive Leadership, 2021. FREE Diversity and Inclusion Guide: The Inclusive Leadership Playbook (thinkherrmann.com)

[120] Galindo, Nellie, MSW, MSPH. The Intersection of Trauma and Minority Stress in the LGBTQ Community. Great Valley Publishing Company. Accessed November 13, 2021. https://www.socialworktoday.com/archive/exc_070220.shtml.

[121] Weeden, Kim A. "Occupational Segregation - Stanford University." Stanford Center on Poverty and Inequality, 2019. https://inequality.stanford.edu/sites/default/files/Pathways_SOTU_2019_OccupSegregation.pdf.

[122] "The Importance of Psychological Safety: Amy Edmondson." YouTube. YouTube, August 5, 2020. https://www.youtube.com/watch?v=eP6guvRt0U0.

[123] Covington, Meredith, and Ana Hernandez Kent. "The 'She-Cession' Persists, Especially for Women of Color https://www.stlouisfed.org/on-the-Economy/2020/December/She-Cession-Persists-Women-of-Color." Saint Louis Fed Eagle. Federal Reserve Bank of St. Louis, December 24, 2020. https://www.stlouisfed.org/on-the-economy/2020/december/she-cession-persists-women-of-color.

[124] Choitz, Vickie, and Stacey Wagner. "A Trauma-Informed Approach to Workforce." National Fund for Workforce Solutions. Accessed November 12, 2021. https://nationalfund.org/wp-content/uploads/2021/04/A-Trauma-Informed-Approach-to-Workforce.pdf.

References

125 "National Coalition for Homeless Veterans - NCHV." National Coalition for Homeless Veterans. Accessed November 13, 2021. https://www.nchv.org/images/uploads/Research_Brief_61_-_SAMHSA_Trauma_Care.pdf.

126 "Implicit Bias." National Institutes of Health. U.S. Department of Health and Human Services. Accessed November 12, 2021. https://diversity.nih.gov/sociocultural-factors/implicit-bias.

127 "Reporting on Race and Ethnicity Glossary: Emory University: Atlanta Ga." Emory University | Atlanta GA. Accessed November 12, 2021. https://equityandinclusion.emory.edu/equity-inclusion/affirmative-action/race-ethnicity-glossary.html.

128 Cronen, Stephanie, Terry Salinger, Amy Dalsimer, and Amanda Ahlstrand. "Providing Pathways out of Poverty and into Careers: The ..." American Institutes for Research, August 2021. https://www.air.org/sites/default/files/2021-08/IET-and-Workforce-Training-for-Underserved-Adults-WDEMP-August-2021.pdf.