

BUILDING AN EQUITABLE, DIVERSE, & UNIONIZED CLEAN ENERGY ECONOMY:

**What We Can Learn from
Apprenticeship Readiness**



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Disclosure: Melissa Shetler is a previous Executive Director of Pathways to Apprenticeship, one of the organizations profiled in this report.

DIRECTOR'S MESSAGE

The Climate Jobs Institute is founded on the position that the U.S. is facing two historic crises – a crisis of climate change and a crisis of inequality of race, gender, income, wealth, opportunity and hope. To avoid climate catastrophe, we must take immediate and bold action to lower greenhouse gas emissions. As we rebuild our economy to be climate safe, we have a tremendous opportunity to redress historic inequities and create a fairer, more just and inclusive economy and society. Trillions of dollars of investments and tens of millions of new jobs will be created to build the clean energy economy that we need. The CJI has worked closely with labor unions, policymakers, environmental leaders and others to develop ambitious climate jobs plans in New York and around the country that tackle climate change while also ensuring that new clean energy jobs are good union careers that sustain families and communities. History shows that a good paying job with excellent benefits is one of the best ways to reduce inequality of income, wealth, race and gender and create a path into the middle class.

With this report, the CJI addresses another core aspect of tackling the dual crises of climate change and inequality: ensuring that frontline, historically underserved communities have expansive, effective pathways into high-quality union clean energy careers. The Inflation Reduction Act and the Infrastructure Investment and Jobs Act have brought increased attention to two important clean energy workforce questions. First, does the U.S. have enough trained workers to meet the demands of the clean energy economy? And second, how do we ensure that the clean energy workforce is diverse and inclusive? This report responds to both of these questions by showing that there are model programs across the U.S. that create pathways for underserved communities into apprenticeship readiness, union apprenticeship programs, and ultimately, good union careers.

This study, as well as our many years of experience in the field, have taught us that there is no simple or easy solution to creating or scaling successful pathways. These pathways exist in an ecosystem of essential and interdependent actors that must be focused on the common goal of building a diverse, equitable and unionized clean energy workforce. Key actors and components include: union-led climate coalitions advocating for bold, equitable climate action; policymakers implementing ambitious, jobs-led climate policy; strong labor and equity standards that ensure clean energy jobs are good union jobs; high-quality union apprenticeship programs that pay apprentices well and make sure that the clean energy workforce is highly-skilled and well-trained; trusting partnerships between labor unions, environmental justice organizations, community groups, employers, MWBE contractors, government, and academic institutions; and the focus of this report, high-quality apprenticeship readiness programs that provide participants with the support they need to successfully enter union apprenticeship.

Looking ahead, CJI will build on this report to deepen and expand our work on clean energy, workforce development, and equity. This work will include tracking job creation from the Inflation Reduction Act, studying working conditions in new clean energy sectors, and acting as a resource to labor partners and policymakers who are committed to establishing effective apprenticeship readiness programs. In Winter 2024, CJI will organize a NYS conference on “Clean Energy, Workforce Development, and Equity” for key stakeholders who are committed to expanding successful pathways from frontline communities into union clean energy careers.

Forward! To the climate safe, equitable economy, workforce and society we need!



Dr. Lara Skinner

Executive Director, Climate Jobs Institute

The Climate Jobs Institute (CJI) at Cornell University's ILR School is guiding the nation's transition to a strong, equitable, and resilient clean energy economy by pursuing three aims: to tackle the climate crisis; to create high-quality jobs; and to build a diverse, inclusive workforce.

Through cutting-edge policy studies, deep relationships with on-the-ground partners, and innovative training and education programs, CJI provides information that policymakers, the labor and environmental movements, industry leaders, and others need to navigate this historic transition to a zero-carbon economy.

Core Activities and Objectives

CJI delivers high-quality research, innovative policy solutions, and top-notch educational programming that connects key stakeholders to design and implement climate plans.

The CJI's main areas of work include:

Applied Research and Policy Development for Legislators and Labor, Environmental, and Industry Leaders. CJI crafts equity- and worker-oriented climate policies and analyses indicating how states can address climate change while maximizing high-quality job creation and economic development. The Institute's research and policy efforts result in reports, case studies, policy briefs, and visual tools and maps meant to guide the nation's transition to a clean, equitable economy.

Technical Assistance. CJI provides rapid response data and policy analysis on the labor, employment, and economic impacts of climate and clean energy issues. The Institute's technical assistance work offers legislators, policymakers, and others real-time support. This work also generates legislative briefings, policy briefs, blog posts, op-eds, and other written materials targeting legislators, local government officials, and leaders in labor, environmental movements, and industry.

Training and Education. CJI organizes a variety of educational convenings that strengthen stakeholders' knowledge, confidence, and motivation to tackle climate change and to build a large, equitable clean energy economy with high-quality jobs. Programs include the Institute's annual Climate Jobs Summit; the design and delivery of member trainings; legislative briefings; educational delegations for legislators, labor leaders, and others; and an online Climate Jobs certificate.

Workforce Development. CJI provides a critical link between the future clean energy workforce we need and workforce development programs that meet these needs. The Institute also provides a pipeline from frontline Black, indigenous, and people of color communities to paid on-the-job training and high-quality careers.

Student Engagement. CJI enriches the ILR and Cornell student experience by engaging undergraduate and graduate students in important aspects of the Institute's core work through fellowships, research assistantships, hands-on clinical experiences, internships, labor-climate undergraduate and graduate courses, and more.



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ARC affiliate participants, New York City

EXECUTIVE SUMMARY

Key Points

- **We are facing dual crises of climate change and inequality.** Climate change endangers the habitability of our planet, while inequality—of income and wealth, race, gender, hope, and opportunity—threatens to tear apart the fabric of our society. Interventions that attempt to solve the former without addressing the latter are insufficient.
- **Tackling the climate crisis has enormous job-creation potential.** Increasing wind and solar installations, retrofitting buildings, building out transmission, expanding public transit, and investing in a clean energy supply chain can put people to work across the country. But there is no guarantee that these jobs will be *good* jobs.
- **Creating an equitable, robust clean energy economy requires high-quality jobs and expanded access.** Increasing unionization rates is a central component of high-quality job growth in burgeoning climate sectors, but it is inadequate on its own. Stronger unionization must be coupled with expanded job access to bring promising opportunities to people from frontline, marginalized, and underrepresented communities.
- **Our current political and economic moment presents a unique opportunity to tackle these dual crises.** Through legislation like the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, the federal government has poured trillions of dollars into clean energy. Much of this funding comes with compelling incentives to use union labor and drive investment to underserved communities.
- **Apprenticeship readiness programs are key to seizing this moment and creating a just, sustainable economy.** Apprenticeship readiness programs broaden opportunities for people to learn about the trades, join registered apprenticeship programs, and secure high-quality careers in the unionized construction industry. These programs are essential to recruiting the construction workforce needed for a transition to net zero.
- **Apprenticeship readiness programs explicitly serve people from underrepresented communities.** Existing programs target veterans, women, people of color, justice-involved individuals, public housing residents, and other populations. Offerings involve coursework, mentorship, industry acclimation, support services, and sometimes direct entry into union apprenticeship programs. Importantly, direct entry enables graduates to bypass the otherwise long and uncertain general recruitment process.
- **A direct link exists between enhancing apprenticeship readiness and tackling the climate crisis.** As society transitions away from fossil fuels, there is reason to believe construction workers will see increased work hours on projects tied to the clean energy economy. Apprenticeship readiness is integral to ensuring we have the workforce needed to make this transition happen in communities across the country. This potential is especially pronounced when apprenticeship readiness is included as part of a larger strategy to grow the construction industry, expand union market share, and attract, train, place, and retain high-quality workers from diverse backgrounds.

APPRENTICESHIP READINESS CASE STUDIES

It takes a village to build a successful apprenticeship readiness program. Organized labor, construction employers, and community organizations play central roles in creating and effectively operating a program. Other parties, such as government agencies and philanthropic institutions, also provide resources and help build capacity so programs can thrive.

This report profiles several apprenticeship readiness programs. These case studies were prepared with three goals in mind:

- Illuminating best practices for practitioners interested in starting or expanding their work in the apprenticeship readiness space;
- Providing a series of recommendations for three stakeholder groups—organized labor, construction employers, and community-based organizations—on how to approach apprenticeship readiness work in order to maximize impact; and
- Offering additional suggestions for governmental policymakers and private funders, both of whom can support apprenticeship readiness and build organizational capacity.

<p>HIRE360 Chicago, Illinois</p>	<p>CityBuild San Francisco, California</p>	<p>Apprenticeship Readiness Collective, New York City</p>
<ul style="list-style-type: none"> ■ Established in 2019 ■ A nonprofit targeting recruitment to low-income communities of color, primarily on the city’s South and West Sides ■ Has “four pillars” that work in tandem: 1) workforce development; 2) building a diverse contractor base; 3) building a diverse supplier base; 4) developing future builders through youth engagement ■ Has deep buy-in and partnerships with labor unions, training centers, employers, and community organizations ■ Is growing rapidly and expanding its footprint throughout Illinois ■ Does not have direct entry status 	<ul style="list-style-type: none"> ■ Established in 2005 ■ A city agency that recruits from low-income and high-minority zip codes throughout San Francisco ■ Rooted in a history of community activism around diverse hiring on construction projects ■ Has four key stakeholder groups: community organizations, industry employers, labor unions and training centers, and city agencies ■ Helps San Francisco meet legally mandated local hiring requirements on public construction projects ■ Has longstanding relationships in the industry ■ Has direct entry status 	<ul style="list-style-type: none"> ■ An umbrella organization for four programs: 1) The Edward J. Malloy Initiative for Construction Skills; 2) Nontraditional Employment for Women; 3) Pathways to Apprenticeship; 4) New York Helmets to Hardhats ■ Each organization has its own target audiences and funding models, though there are many similarities in structure and curricula ■ Each program has strong relationships with community organizations and public agencies central to advancing opportunity for their unique audiences ■ Each program has direct entry status

BEST PRACTICES AND RECOMMENDATIONS

Best Practices in Operating Successful Apprenticeship Readiness Programs

- **Industry-Driven Programming Tied to Demand:** The unionized construction industry is unique in many respects. Programming should align with the realities of this industry and ensure program participants understand how the industry operates.
- **The Right People at the Table:** Successful programs center their main goal—expanding opportunities to high-quality construction careers—and work relentlessly to recruit parties that *need* to be involved to drive success. Common stakeholder groups include construction employers, building and construction trades unions, and a blend of government agencies and community-based organizations.
- **Shared Infrastructure Amongst Partners:** Once the right parties are at the table, they should share resources to maximize impact. These resources can take multiple forms. They can be *physical*, like tools and classroom space; *human capital*, like donated staff time for instruction; or *relational*, like access to community contacts to enhance recruitment.
- **Clarity About Populations Served:** Given finite resources, programs can rarely cast as wide of a net as they would like. Identifying a key population to serve, and focusing resources on doing that work effectively, is typically a winning strategy.
- **Credible Messengers:** The most effective program evangelists are often programs' own graduates. Building a roster of graduates and people from similar backgrounds who are willing to share their experiences and spread the word about career opportunities can encourage recruitment and retention.
- **Clear Metrics of Success and Data Tracking:** Each program described in this report uses a set of metrics to gauge effectiveness. Popular measures include program graduation rates, apprenticeship or job placement rates, and participant demographics. However, leaders should avoid becoming overly dependent on data; overreliance can lead to inflexibility when adapting to changing circumstances in the field.
- **Funding that Best Serves Participants' Needs:** Granting participants financial support is critical, but not every population needs the same type of support. Whether stipends, travel vouchers, daycare services, or other supports, programs should prioritize participants' unique needs and offer financial assistance that best meets those demands.
- **Sustainable Funding Models:** Successful programs provide highly personalized services. Substantial amounts of money and staff time are thus required. There is no one-size-fits-all approach to fundraising. Regardless of funding strategies, effective programs seek to secure sustainable funds to run their organizations for the long term.



Pathways to Apprenticeship graduation

Recommendations for Key Parties

Organized Labor

- **Establish Direct Entry Relationships with Apprenticeship Readiness Programs:** Apprenticeship applicants with no prior connections may struggle to navigate the application processes and timelines for different trades. Upon establishing a direct entry agreement with an apprenticeship readiness program, unions can offer qualified graduates a more direct path into the trade of their choice. Graduates can then bypass the often lengthy waiting lists for entry.
- **Work with Apprenticeship Readiness Organizations to Better Track Apprenticeship and Career Outcomes:** Data tracking is important for apprenticeship readiness programs, but it frequently stops after an apprenticeship placement. Organized labor can help track longer-run retention and career advancement statistics, giving all parties richer data by which to judge their effectiveness at diversifying the industry and providing long-term career opportunities.
- **Incorporate Apprenticeship Readiness into an Overall Organizing Strategy:** Apprenticeship readiness is not a panacea. The construction industry is a complicated ecosystem with many parts that must move together. To have maximum impact, apprenticeship readiness should be part of a larger organizing strategy that includes multiple avenues for bringing in new members *and* building trust with existing members.

Construction Employers

- **Create Employment Pathways for Graduates:** Apprenticeship readiness is only effective if apprenticeship and job placement opportunities are available for graduates. Direct entry allows organized labor to open space for program graduates, but employers must also prioritize creating job opportunities for those individuals. This goal can be realized through various means: committing to local hiring, funding workforce development programs, and setting strong diversity standards through project labor agreements, collective bargaining agreements, and other avenues.

Community Organizations

- **Enter New Partnerships:** Community organizations often have complicated relationships with employers and organized labor. If an apprenticeship readiness program meaningfully includes community organizations in decision-making structures, values these parties' input and expertise, and shows real dedication to diversifying the construction industry, then community organizations' participation can be transformative for the industry and community alike. Keeping an open mind when engaging with new partners can make all the difference.

Organized Labor, Construction Employers, and Community Organizations

- **Prioritize Providing Time and Resources:** This recommendation cuts across the three types of organizations outlined above. Although it may seem obvious, dedicating time and resources to tasks that many view as outside the scope of everyday work can be immensely difficult. Yet one could argue that apprenticeship readiness is *essential* to all parties' long-term success and deserves substantial investment.

Policymakers

- **Invest in Growing Key Industries Like Clean Energy:** Apprenticeship readiness programs can only succeed in a robust construction market. A thriving market guarantees labor demand, opening more apprenticeship slots and driving employers to bid on jobs and hire more workers. Policymakers can help maximize these programs' effectiveness by investing in key industries—and, in turn, creating a pipeline for graduates into registered apprenticeship programs and onto job sites. Clean energy, energy efficiency, public transit expansion, and climate resilience projects should get top investment priority.
- **Include Strong Labor and Equity Standards on All Publicly Funded Projects:** When government entities provide money or incentives for project development, policymakers have opportunities to attach labor and equity requirements as conditions for receiving funds. Any public investments in projects—whether in clean energy or more broadly—should come with wage floors, apprenticeship utilization mandates, targeted hiring goals, and other measures to guarantee high-quality jobs and equitable access.
- **Require “Labor Voice” on Workforce Development and Other Public Boards:** To make sure workers' interests are represented at all levels of government, policymakers can require “labor voice”—or a representative from organized labor—on decision-making boards covering topics such as workforce development, energy and energy efficiency, construction, and economic development. Policymakers can also establish “just transition” boards and require voices from both organized labor and community organizations.
- **Provide Adequate, Flexible Funding for Programs:** Robust public funding enables programs to expand their footprint without sacrificing quality. But money should not come with too many strings attached. Successful programs allocate resources based on their knowledge of specific communities and what participants need to succeed. Policymakers should follow the lead of apprenticeship readiness practitioners and avoid cumbersome requirements that ultimately detract from the work at hand.

Private Funders

- **Make Longer-Term Commitments to Fund Work:** The transitory nature of foundation-based and philanthropic funding is a major source of stress for nonprofit leaders. In a field like apprenticeship readiness, where it takes time to build relationships and identify the main players in an industry, year-to-year funding can greatly impede program creation. Private funders can experiment with longer-term funding commitments, freeing workforce development practitioners to do what they do best: analyze the industry, establish relationships, and develop programs that will have long-term impacts.
- **Institute Flexible Metrics for Success:** Similar to public funders, philanthropies can follow the lead of practitioners when determining the appropriate use of funds and metrics for success. Programs should set measurable goals, track progress, and use data to inform practice. However, these aspects must be balanced with reasonable exceptions to accommodate on-the-ground realities. Apprenticeship readiness is meant to familiarize participants with a given industry. Sometimes, people drop out of a program upon discovering it is not a good fit. Attrition may count against graduation rates, but is not necessarily indicative of failure.
- **Help Programs to Build Capacity in Key Areas:** Nonprofit leaders occasionally struggle to develop the visionary practices *and* the day-to-day logistics needed for long-term success. Although it is important to fund service provision, investing in long-run capacity building (e.g. visioning, strategic planning, coaching, personnel and project management, and data tracking) is also vital.

INTRODUCTION

Every day, it becomes clearer that climate change is an existential threat that we must confront now rather than in some distant future. Extreme weather events such as wildfires, droughts, floods, and heat waves are increasing worldwide. If we want to stave off scientists' most dire predictions of future calamity, we have no choice but to take swift action to drastically reduce emissions and transition to a clean energy economy.

We are also facing an existential crisis in inequality. Whereas climate change endangers the habitability of our planet, inequality—of income and wealth, race, gender, hope, and opportunity—threatens to tear apart the fabric of our society. Any intervention that attempts to solve the former without addressing the latter is insufficient. At this time, we have an opportunity to put forth bold solutions to help mitigate the climate crisis at the scale science demands while centering high-quality job creation, righting historical wrongs, and delivering equitable growth to communities across the country.

Tackling the climate crisis has enormous job-creation potential. Expanding wind and solar installation, retrofitting buildings, putting up new transmission lines, and building out a clean energy supply chain can put people to work nationwide. Put simply, the best route to **high-quality** job creation runs through the labor movement.

Over decades and across sectors, organized labor has been the most powerful force in America pushing for fair pay, quality benefits, and dignified working conditions. Union members typically have better pay and benefits than similarly situated workers without a union card. Even nonunion workers tend to see their wages go up when union density is high.¹ Union worksites also tend to be much safer than nonunion sites, especially in the construction industry where labor has a central role in training and dispatching the workforce.² Indeed, parts of the nonunion clean energy sector heavily rely on a precarious, underpaid workforce toiling in unsafe conditions.³

Expanding unionization is a prerequisite for growing high-quality climate jobs, but it is important to recognize organized labor's shortcomings. In the construction industry, as in many other sectors, exclusionary practices have been far too common for far too long. Activists, workers of color, and women have fought hard to have construction workplaces better reflect their communities. Any strategy to build an equitable clean energy economy must create high-quality union jobs **and** expand access to those jobs for frontline communities and groups who have traditionally been left out.

Our current political and economic landscape presents a rare chance to tackle the dual crises of climate change and inequality. Through legislation like the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), the federal government has allocated trillions of dollars to clean energy development and other infrastructure projects. Government leaders have further centered union job creation and equity. Strong incentives exist to meet labor standards when using federal funds, largely enforced via the tax code. Through initiatives like Justice40, the Biden Administration has also committed itself to allocating substantial benefits from federal legislation to traditionally underserved communities.

1 "Unions provide major economic benefits for workers and families." *Senate Joint Economic Committee Democrats*, June 10, 2022. <https://www.jec.senate.gov/public/index.cfm/democrats/issue-briefs?ID=A608604E-AAF6-4867-A080-648B29198E24>

2 Manzo, F., & Jekot, M. "The Impact of Unions on Construction Worksite Health and Safety: Evidence from OSHA Inspections." *Illinois Economic Policy Institute & University of Illinois Project for Middle Class Renewal*. November 30, 2021. <https://illinoisepi.files.wordpress.com/2021/11/ilepi-pmcr-unions-and-construction-health-and-safety-final.pdf>

3 Kaori Gurley, L. "Shifting America to Solar Power is a Grueling, Low-Paid Job." *Vice*. June 27, 2022. <https://www.vice.com/en/article/z34eyx/shifting-america-to-solar-power-is-a-grueling-low-paid-job>

These federal efforts, along with similar models passed in states and localities across the country, have brought attention **and** resources to bear in creating a fairer, more sustainable economy. But many of the levers to create high-quality jobs are incentives, not mandates. To take advantage of this moment, union leaders, employers, community leaders, policymakers, and philanthropic institutions need to be moving in the same direction. They also need to invest resources into workforce development interventions that are most likely to have real effects on the ground.

This report highlights one of these critical interventions: apprenticeship readiness programs. Such programs recruit, support, and prepare people to enter and successfully complete registered apprenticeship programs. They routinely target the construction industry, aiming to provide opportunities for members of underserved communities and people underrepresented in the building trades. Existing programs target veterans, women, people of color, justice-involved individuals, public housing residents, and other populations. The programs offer coursework, mentorship, industry acclimation, support services, and sometimes direct entry into union apprenticeship programs. In the latter case, graduates get to bypass the lengthy, uncertain general recruitment process.

It is worth noting that apprenticeship readiness is not a panacea. The construction industry is a complicated ecosystem whose many parts must move together. To have maximum impact, apprenticeship readiness should be part of a larger strategy to grow the industry; expand union market share; and attract, train, place, and retain a growing number of high-quality workers from diverse backgrounds. When implemented correctly, apprenticeship readiness can offer transformative experiences and expand access to family- and community-sustaining jobs for people from marginalized and underserved communities.

But what does this have to do with climate change? Transitioning to a sustainable economy has the potential to create millions of jobs. Many of these positions will open in the construction industry, with workers carrying out deep-energy building retrofits, renewable energy installation projects, and public transportation expansion, to name a few key projects. As the Biden Administration has prioritized union job creation, apprenticeship centers will play significant roles in training the construction workforce of the future.

Union apprenticeship programs have been legitimately critiqued in terms of diversity and barriers to entry. Apprenticeship readiness is hence a key tool for recruiting our future workforce and making sure underserved communities have access to high-quality, sustainable employment. In other words, it is indispensable for tackling the dual crises of climate change and inequality as described above.

This report is built around three case studies, all exemplary in their own ways. These apprenticeship readiness programs—HIRE360 in Chicago, CityBuild in San Francisco, and the Apprenticeship Readiness Collective (ARC) in New York City—differ in history, geography, target audiences, funding sources, successes, challenges, and structures. By examining each in detail, we took away several lessons on how to operate and scale up programs that expand high-quality career opportunities to underserved communities.

Before diving into the cases, we would like to provide additional context on what apprenticeship readiness programs aim to do, where they sit within the overall construction industry, and why they—in conjunction with other strategic interventions—are critical in building out an equitable clean energy economy.

The Construction Industry, Apprenticeship, and the Centrality of Organized Labor

If we are serious about taking on climate change, there are few sectors more strategically placed than construction. Our built environment—buildings, energy systems, water infrastructure, and transportation—is both made and **remade** by workers. Any economic transition will go through the construction industry by necessity.

The unionized construction industry is distinct from other economic sectors in many ways. Construction firms tend to employ a small number of full-time tradespeople, whereas unions assume prominent roles in training and dispatching labor to job sites. It is common for tradespeople to have multiple employers over the course of their careers as well as several periods of unemployment. When a construction project ends, workers usually return to the union hiring hall, where a designated person (or people) attempts to find other opportunities and send workers to new job sites.

In this sector, the joint labor-management training center is the primary mechanism for providing industry employers with skilled tradespeople. Organized labor and signatory contractors collectively fund and administer registered apprenticeship programs. These programs are registered with either the state or federal government, depending on location, and are heavily regulated. Training centers offer ongoing education and certification for journey-level workers who have completed their initial apprenticeship training, but the bulk of programming at these centers is geared towards training apprentices as they learn their chosen crafts.

Apprenticeship programs seek to match their recruitment schedules with industry demand. As such, many training centers do not offer a consistent number of apprenticeship slots from year to year. In fact, during economic downturns, apprenticeship programs can go extended periods without welcoming many new union members. Elected union leaders strive to limit the amount of time any given member spends out of work. This focus helps drive decisions about apprenticeship recruitment schedules.

Registered apprenticeship programs and unionized construction careers have created pathways to dignified, high-quality, well-paid work for millions of people over the years. A union card, especially in construction, has long been an important tool for working-class communities to secure good jobs without a college degree. Further, most union apprenticeship programs come at no direct cost to participants. Those enrolled can instead “earn while they learn” by getting paid to complete hands-on construction work at job sites during their apprenticeship. Wages, benefits, training, and safety standards on unionized construction sites far exceed those on nonunion sites.

Beyond improving wages and working conditions for union members, organized labor is integral to healthy construction industry operations. Unions contribute in several ways.

- **Workforce development:** According to North America’s Building Trades Unions (NABTU), “workforce training is at the foundation of the core mission and existence of each building trades union.” Organized labor runs more than 1,900 apprenticeship centers across the US and Canada, investing close to \$2 billion annually to train apprentices and journey-level workers.⁴ Roughly three-fourths of construction apprentices go through joint labor-management training programs, which register around 75,000 new apprentices each year.⁵

Journey-level union members also use training centers to update certifications, receive training on new technologies, and gain skills. According to a 2016 study from the Pew Research Center, 87% of workers believe they will need to receive training and develop new job skills over the course of their careers to keep up with workplace-related changes.⁶ Organized labor provides much of the training infrastructure needed to make this happen.

- **Skilled labor dispatching:** Construction is an infamously fickle industry, with projects and labor demand fluctuating constantly as economic circumstances shift. Contractors rarely have a large permanent workforce; rather, they depend on organized labor to control the labor supply and dispatch workers through their hiring halls.

4 “Apprenticeship & Training.” *North America’s Building Trades Unions*. https://nabtu.org/workforce_dev/apprenticeship-training/

5 “Enhance Your Skills, Advance Your Life.” *North America’s Building Trades Unions*. https://nabtu.org/wp-content/uploads/2021/09/NABTU_ApprenticeshipPrograms2021-Web.pdf

6 “The State of American Jobs.” *Pew Research Center*, October 6, 2016. <https://www.pewresearch.org/social-trends/2016/10/06/the-state-of-american-jobs/>

Employers thus enjoy some flexibility, knowing they likely have the number of workers needed—no more and no less—at any time.

- **Industry stabilization:** Through collective bargaining agreements and project labor agreements (PLAs), unions set industry standards for pay, benefits, and working conditions. These guidelines grant union contractors some degree of certainty, locking in fixed costs and allowing for long-term planning. By establishing standards across trades, unions help prevent a race to the bottom, where contractors compete to win projects by lowering costs (often through cuts to wages and benefits) instead of delivering efficient, quality work.

Exclusionary Practices

The unionized building and construction trades (as well as the nonunion sector) have a history of exclusion and closing off opportunities to women, people of color, and other marginalized groups. Both employers and trade unions have contributed to this dynamic. As Maria Figueroa, Jeff Grabelsky, and Ryan Lamare note,

“Dating back to the 1960s, the unionized construction industry was a focal point for the civil rights movement as communities of color witnessed a construction boom offering the false promise of good jobs for urban residents. Because of discriminatory hiring practices, the overwhelming majority of union construction jobs went to white workers. In New York City, for example, 92% of building trades union members [were] white. Some of the skilled trades had virtually no African American members.”⁷

In addition to discriminatory hiring practices that can serve as barriers to entry into the trades, informal practices unintentionally maintain homogeneity. Word of mouth has traditionally been a main source of recruitment into trade unions. People’s networks tend to be populated with others who look like them or come from similar backgrounds. As people spread the word about career opportunities to their family and friends, union membership can skew towards certain neighborhoods or demographics.

Recent years have brought examples of progress in diversifying the trades. In 2017, the Economic Policy Institute found that New York City’s “union construction sector employs a greater share of Black workers and pays them more than the nonunion construction sector, and unions are drawing many more Blacks into construction through apprenticeships compared to 20 years ago.” In many respects, non-union construction lags behind the unionized sector when it comes to diversifying the industry.⁸

But still, women and people of color constitute a small percentage of unionized building trades members nationwide. White workers make up 75% of union membership in construction,⁹ while the number of women remains in the single digits nationally.¹⁰ Fortunately, organized labor is in a strong position to change this. A recent study from the Institute for Construction Employment Research found that, “In terms of both levels and proportions... union-based apprenticeship programs feature greater gender and racial diversity than their non-union counterparts.”¹¹ Organized labor and unionized contractors have also invested heavily in systems of inclusion, like apprenticeship readiness, recently.

7 Grabelsky, J., & Lamare, R. “Community Workforce Agreements: A Tool to Grow the Union Market and to Expand Access to Lifetime Careers in the Unionized Building Trades.” *Labor Studies Journal*, 2013.

8 Mishel, L. “Diversity in the New York City union and nonunion construction sectors.” *Economic Policy Institute*. March 2, 2017. <https://www.epi.org/publication/diversity-in-the-nyc-construction-union-and-nonunion-sectors/>

9 Feliciano Reyes, J. “Broken Rung.” *The Philadelphia Inquirer*. August 30, 2022. <https://www.inquirer.com/news/inq2/more-perfect-union-trade-construction-racism-pennsylvania-20220830.html>

10 Hegewisch, A., & Mefferd, E. “A Future Worth Building.” *Institute for Women’s Policy Research*. November 2021.

11 Bilginsoy, C., & Bullock, D. “Diversity, Equity, and Inclusion Initiatives in the Construction Trades.” *The Institute for Construction Employment Research*. March 2022. <https://nabtu.org/wp-content/uploads/2023/01/ICERES-Study-22Diversity-Equity-and-Inclusion-Initiatives-in-the-Construction-Trades22.pdf>



Pathways to Apprenticeship Sanitation Jobs

Apprenticeship Readiness

So what is apprenticeship readiness, and what role does it play in expanding access to unionized construction careers? The U.S. Department of Labor defines it as “a program or set of strategies designed to prepare individuals to enter and succeed in a Registered Apprenticeship program.”¹² Partnership for Working Families has provided a more detailed definition in *The Construction Careers Handbook*:¹³

Pre-apprenticeship programs recruit and orient new workers, help them identify the apprenticeship program most suited to them, prepare them to take the test,¹⁴ and support their initial career efforts. In addition to orientation to the industry, they sometimes provide other kinds of support including life skills training, financial literacy and job readiness. Some pre-apprenticeship or pre-training programs provide stipends to help pay for tools and equipment, and may even offer help with transportation and childcare.

12 “Explore Pre-Apprenticeship.” *Apprenticeship USA*. [https://www.apprenticeship.gov/employers/explore-pre-apprenticeship#:~:text=Pre%2DApprenticeship%20is%20a%20program,Registered%20Apprenticeship%20Program%20\(RAP\)](https://www.apprenticeship.gov/employers/explore-pre-apprenticeship#:~:text=Pre%2DApprenticeship%20is%20a%20program,Registered%20Apprenticeship%20Program%20(RAP)).

13 “Construction Careers Handbook.” *Partnership for Working Families*. 2013.

14 Apprenticeships do not universally require testing, but it is a common practice.

Many organizations, like Partnership for Working Families, use the term “pre-apprenticeship” rather than “apprenticeship readiness.” Additionally, different organizations and areas of the country have their own preferences about which phrasing to use. We use both terms interchangeably throughout this report but refer to “apprenticeship readiness” more often. Further, apprenticeship readiness programs exist in multiple sectors, but this report focuses on the construction industry.

WHAT IS APPRENTICESHIP READINESS?

Partnership for Working Families has stated that apprenticeship readiness programs, otherwise known as “pre-apprenticeships,” “recruit and orient new workers, help them identify the apprenticeship program most suited to them, prepare them to take the test, and support their initial career efforts.” These programs exist in virtually every state as well as Washington, D.C. and Puerto Rico.

No two apprenticeship readiness programs are the same, but common elements include the following:

- Basic construction skills training
- Construction math, tool identification, and basic blueprint reading
- Test preparation services
- An introduction to various trades
- Visits to apprenticeship training centers and active construction sites
- Case management services to help participants navigate the apprenticeship application process
- Mentorship and connections with tradespeople from similar backgrounds
- Financial support such as stipends and travel vouchers

Increasingly, organized labor is investing in apprenticeship readiness to diversify its membership and recruit highly qualified applicants to apprenticeship programs. Apprenticeship readiness programs draw from underserved and underrepresented populations, including women, low-income areas, communities of color, justice-involved individuals, public housing residents, veterans, and high school students.

Because the primary goal of apprenticeship readiness is to prepare people to enter and succeed in an apprenticeship, program structures seldom mirror those of conventional workforce development programs. Programming instead reflects the realities of working in construction to familiarize participants with the industry. Program leaders and industry partners frequently connect to discuss new market trends and workforce needs. Open communication helps ensure that curricula and recruitment strategies align with circumstances on the ground.

Apprenticeship readiness programs tend to share several features. The Aspen Institute in 2009 and 2010 identified key curricular elements such as these:

- An introduction to one or more trades
- Tool identification and use
- Construction math and blueprint reading
- Workplace safety
- Job readiness training and “soft skills”
- Various certifications, including OSHA 10, flagging, and CPR¹⁵

In addition to classroom and hands-on training, programs normally provide a suite of support and career exploration services. Services range from stipends, travel vouchers, and other financial support to more hands-on help such as case management or mock interviews. Participants also visit worksites and engage with industry leaders to identify the right career paths for them.

Apprenticeship readiness programs’ structures, target populations, and curricula vary. For example, some programs simulate construction workers’ typical work hours whereas others offer more flexible training (e.g., on a part-time basis, at night, or on weekends).¹⁶ Many programs use NABTU’s Multi-Craft Core Curriculum (MC3) as a standard, but even this structure allows for some optionality.

The quality of apprenticeship readiness programs differs, but high-quality programs have been shown to lead to several positive outcomes for participants:

- Increasing participants’ knowledge of the construction industry and its career opportunities
- Providing participants with technical skills and hands-on experience in the construction trades
- Helping participants develop soft skills such as communication, teamwork, and problem solving
- Improving participants’ employability and job readiness
- Raising participants’ likelihood of entering and succeeding in apprenticeship programs
- Generating greater career earnings and union career opportunities

Program leaders and staff can recruit in any manner and from any target audience they choose. That said, apprenticeship readiness has become a core way of diversifying the construction trades as of late. Labor unions, employers, and other partners are investing time and energy into setting up programs that focus on various underrepresented communities. In fact, NABTU explicitly describes the MC3 program as “a gateway for local residents—focusing on women, people of color, and transitioning veterans—to gain access to building trades’ registered apprenticeship programs.”¹⁷

Finally, several apprenticeship readiness programs have so-called “direct entry” status with the U.S. Department of Labor and partner with local building trades unions. Essentially, successful graduates of designated apprenticeship readiness programs can “fast track” by entering directly into an apprenticeship should they meet that trade’s requirements. This opportunity is crucial for diversifying the trades: it presents qualified apprenticeship readiness graduates from diverse

15 Conway, M., & Gerber, A. “Construction Pre-Apprenticeship Programs: Results from a National Survey.” *The Aspen Institute*. July, 2009.

16 Conway, M., Gerber, A., & Helmer, M. “Construction Pre-Apprenticeship Programs: Interviews with Field Leaders.” *The Aspen Institute*. Summer, 2010.

17 “Apprenticeship Readiness Programs.” *North America’s Building Trades Unions*. 2023.
<https://nabtu.org/apprenticeship-and-training/apprenticeship-readiness-programs/>

backgrounds with a more direct path into apprenticeship and construction careers. However, direct entry requires approval from building trades unions and government bodies, and many apprenticeship readiness programs have not established agreements.

Apprenticeship readiness is one of the most valuable tools available for recruiting and orienting underrepresented populations to the building and construction trades. When done well—and when combined with other efforts to enhance apprenticeship retention and graduation, job placement and career advancement, and a sense of belonging on job sites—it can help move the needle towards expanding access to high-quality construction careers.

TRADEFUTURES

TradesFutures is a non-profit organization focused on enhancing, developing, and promoting apprenticeship readiness programs within the construction industry. The organization targets its work towards underrepresented communities, including women, veterans, and people of color. TradesFutures develops and disseminates educational resources and curricula—including the national Multi-Craft Core Curriculum (MC3)—and assists community-based organizations with apprenticeship readiness programs, all while advocating for a range of initiatives that catalyze sustainable career paths in the unionized construction trades.¹⁸

TradesFutures introduces candidates to apprenticeship possibilities and aims to improve program retention rates by offering a thorough understanding of the construction industry and the influential role of trade unions. Between the CHIPS Act, the Infrastructure Investment and Jobs Act, and the Inflation Reduction Act, there is already evidence of increased demand for skilled workers in construction. TradeFutures works with existing local infrastructure—leveraging the grassroots knowledge of community groups, high schools and community colleges, local workforce boards, local building trades councils, and local governments—to recruit and train workers and ensure they receive the skills needed through union apprenticeships to build out an equitable clean energy economy that meets climate goals.

This year, recognizing the need to make a robust investment and scale this important work, the US Department of Labor announced a \$19 million dollar cooperative agreement with TradeFutures and the Urban League. Deemed the “Scaling Apprenticeship Readiness Across the Building Trades Initiative,” the goal is to “substantially increase the number of participants from underrepresented populations and underserved communities in registered apprenticeship programs within the construction industry sector.”¹⁹ Starting with Missouri, Ohio, Pennsylvania, and Tennessee, the partners will utilize MC3, provide supportive services, and engage grassroots community networks to enroll over 13,000 participants in apprenticeship readiness programs, and place at least 7,000 of them in registered apprenticeship programs nationwide over the next four years.

18 Tradesfutures. (n.d.). About. TradesFutures. Retrieved October 22, 2023, from <https://tradesfutures.org/about/>

19 “TradesFutures Abstract.” 2023 <https://www.apprenticeship.gov/sites/default/files/TradesFutures-Abstract-2023.pdf>



MULTI-CRAFT CORE CURRICULUM (MC3)

The Multi-Craft Core Curriculum (MC3), an initiative under North America's Building Trades Unions (NABTU), plays a crucial role in shaping the future of construction work in the United States and Canada. NABTU, an association of 14 national and international unions, promotes economic security and employment opportunities for construction workers.²⁰ NABTU's unions and contractor partners spend over \$1.6 billion annually for more than 1,900 apprenticeship training centers.²¹ These investments highlight their commitment to training and middle-class job creation, particularly for women, communities of color, and military veterans.²²

The MC3 is a 120-hour construction course that provides a high-quality, industry-recognized pre-apprenticeship training. In line with NABTU's commitment to building a diverse and skilled union workforce, the MC3 was designed with an emphasis on providing a union career pathway for underserved populations into the construction industry. Programs use MC3 in partnership with a local building trades council, and the curriculum connects secondary schools and workforce training programs with registered apprenticeships, ensuring that participants are well-equipped to enter careers in construction. The MC3 is recognized and certified by various state education departments, and its graduates are deemed some of the safest and most skilled construction workers worldwide.²³

In January of 2023, NABTU's Governing Board of Presidents voted to house MC3 within TradesFutures, an effort to push forward the work NABTU started over 15 years ago. TradesFutures is now responsible for the administration and implementation of MC3, in conjunction with local building and construction trades councils and their community partners. This curriculum and training is provided at no cost to programs or participants.

Building the Clean Energy Economy

The vast majority of apprenticeship readiness programs, including those discussed in this report, do not focus exclusively on clean energy. The MC3 curriculum integrates elements of green construction, but most programs have a more general aim to help participants navigate the construction industry writ large.

20 NORTH AMERICA'S BUILDING TRADES UNIONS. (n.d.). NABTU. Retrieved October 20, 2023, from <https://nabtu.org/wp-content/uploads/2020/07/NABTU-MC3-Schools-PPT-July-2020.pdf>

21 Ibid

22 TRADESFUTURES. (n.d.). MC3 Apprenticeship Readiness Program. Retrieved October 20, 2023, from <https://nabtu.personalearning.com/Default.aspx>

23 Ibid

This broader orientation makes sense; apprenticeship programs teach people a craft, not a job. Apprenticeship intentionally cultivates transferable skills that participants can use to build a long-term career. Journalist Lee Harris wrote about this dynamic in the solar industry, observing that

“Training a ‘solar installer’ rather than an electrician is like training a ‘burger-flipper’ rather than a chef. It confers a limited number of skills, which are only appropriate for the current industry. And it does not correspond to any Department of Labor–certified apprenticeship program, so it could be a dead end for workers who could otherwise flip to electrical work in another sector.”²⁴

However, it stands to reason that construction workers will be seeing increasing work hours on projects tied to the clean energy economy in the coming years. In a 2023 report, “Equity in Focus: Job Creation for a Just Society,” authors Anne Marie Brady, Risa Lieberwitz, and Zach Cunningham outlined the extent of work necessary:



Workers on a solar installation project - Mid-America Carpenters Regional Council

“We need to massively scale-up our energy efficiency, retrofit efforts and decarbonize buildings. We need to expand public transportation, electrify most of our transportation fleet, and figure out how to transition long-haul and heavy transport to low-carbon fuels. The amount of electricity we generate from solar, wind, nuclear, and other low-to-zero carbon energy sources is nowhere near sufficient. And our electrical grid needs to be three to five times larger than it currently is to accommodate electrification in the transportation and buildings sectors. We are not creating a brand new economy from scratch, but we do need a strategy to transform our economy and grow clean energy to the scale science demands of us.”²⁵

Any effective strategy to tackle climate change will require massive job creation, especially in the construction sector. The U.S. Department of Energy reported that nearly 8 million people worked in an “energy job” in 2021; these jobs include “all the professional, construction, utility, operations, and production occupations associated with energy infrastructure, production, and use.” Around 40% of the positions were in “net-zero emissions–aligned” areas, which are growing faster than traditional energy jobs in fossil fuels and nuclear energy.²⁶

Recent efforts at the federal and state levels are likely to accelerate these trends. Federally, the IJA (2021) and the IRA (2022) have poured trillions of dollars into clean energy development, decarbonization, and other infrastructure priorities. Several states have also put serious money behind decarbonization. For instance, many northeastern states have agreed to procure significant amounts of electricity produced by renewable sources like offshore wind. Illinois passed the Climate and Equitable Jobs Act in 2021, which commits millions to solar installations, workforce development, and other areas. A 2020 study by Rewiring America estimated that an aggressive electrification and decarbonization strategy could create 25 million jobs over 15 years.²⁷

24 Harris, Lee. “Workers on Solar’s Frontlines.” *The American Prospect*. December 7, 2022. <https://prospect.org/labor/workers-on-solars-front-lines/>

25 Brady, A. M., Lieberwitz, R., & Cunningham, Z. “Equity in Focus: Job Creation for a Just Society.” *The Worker Institute*. 2023.

26 Keyser, D. “2022 U.S. Energy & Employment Jobs Report (USEER).” *U.S. Department of Energy*. June 2022.

27 Griffith, S., Calisch, S., & Laskey, A. “Mobilizing for a Zero Carbon America: Jobs, Jobs, Jobs, and More Jobs.” *Rewiring America*. July 2020.

FEDERAL POLICY AND CLEAN ENERGY INVESTMENTS

In 2021, the IIJA committed \$1.2 trillion in federal funding to the nation's infrastructure. The IIJA specifically earmarked billions for clean energy investments and infrastructure, including the following:²⁸

- \$15 billion for low-carbon mobility, including the first federal investments in electric vehicle charging infrastructure and funds for a new Clean School Bus Program
- \$5.25 billion for Amtrak to reduce emissions in its operations
- \$10–12 billion for electrical grid improvements
- Roughly \$45 billion in funding for the Department of Energy to invest in innovative energy technologies
- Billions in investments for domestic manufacturing and the launch of national clean hydrogen hubs
- Additional funds for weatherization programs, Superfund sites, orphan well cleanups, and additional resilience projects

Furthermore, the IRA of 2022 contains significant investments and incentives to boost domestic energy production and support the uptake of clean energy throughout the country. Many of these provisions include strong labor standards. Some major initiatives are as follows:²⁹

- The expansion of the Investment Tax Credit and Production Tax Credit, which target energy production and investment in solar technologies, wind turbines, geothermal systems, offshore wind, fuel cells, and other clean energy technologies
- Projects qualify for enhanced Investment Tax Credit and Production Tax Credit rates if they meet labor requirements such as paying prevailing wages on all construction work and employing a certain percentage of registered apprentices on a project.
- Bonus tax credits for projects that source certain percentages of steel, iron, and manufactured products from the United States
- Bonuses for projects located within federally designated “energy communities”

28 Higman, M., Carey, L., & Naimoli, S. J. “The Infrastructure Investment and Jobs Act Will Do More to Reach 2050 Climate Targets than Those of 2030.” *CSIS*. August 18, 2021. <https://www.csis.org/analysis/infrastructure-investment-and-jobs-act-will-do-more-reach-2050-climate-targets-those-2030>

29 “Summary of Inflation Reduction Act provisions related to renewable energy.” *United States Environmental Protection Agency*. June 1, 2023. <https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>

The Biden Administration has also committed itself to high-quality job creation and equitable outcomes in the burgeoning clean energy economy. In his first State of the Union address in 2021, President Biden said, “When I think climate change, I think jobs.”³⁰ The IRA includes several provisions meant to encourage job quality and unionization in clean energy, while the Administration’s Justice40 initiative set a goal to have 40% of the benefits from federal investments “flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution.”³¹

As conversations about a workforce shortage persist in the media and academia, many wonder where exactly these workers will come from. Joint labor-management training centers are a key part of the puzzle. Existing training centers, with some tweaks, are equipped to teach many of the skills needed for clean energy and energy efficiency work. To complete this work at scale, though, centers will need to significantly increase the number of apprentices and journey workers in the coming years. Apprenticeship readiness is an important element in making this happen.

Report Outline

This report examines three apprenticeship readiness programs: HIRE360 in Chicago, CityBuild in San Francisco, and the ARC in New York City. The case studies address several aspects of each program, including their history, structures, funding sources, target audiences, recruitment and retention strategies, programming, and metrics for success. In each case, we evaluate the challenges the organizations are facing and their keys to success. We drafted the case studies after extensive field research in each location that included site visits, document and data reviews, and personnel interviews.

After detailing each organization, we turn our attention to distilling best practices and recommendations for parties interested in expanding the apprenticeship readiness model. The following insights are provided:

- A series of best practices gleaned from our research on HIRE360, CityBuild, and ARC. These practices are geared towards practitioners who wish to start or broaden their work in the apprenticeship readiness space.
- Guidance for three main stakeholder groups in apprenticeship readiness: organized labor, construction employers, and community-based organizations. These suggestions primarily concern how best to approach apprenticeship readiness in order to maximize impact.
- Recommendations for governmental policymakers and private funders, who both play a part in funding apprenticeship readiness work and building organizational capacity. These sectors have complementary, and oftentimes overlapping, roles in expanding successful apprenticeship readiness models.

Our current moment provides a once-in-a-generation opportunity to tackle the dual crises of climate change and inequality. Existing clean energy investments are a step in the right direction towards alleviating the climate crisis. Investments in apprenticeship readiness give us the chance to prepare the highly-skilled workforce needed to fight climate change and to build a clean energy economy for the future without replicating past inequities. If carefully designed and funded, apprenticeship readiness can unlock pathways to careers historically denied to many people of color, immigrants, and women. These paths can lead to family-sustaining jobs with benefits. They can also help low-income people move out of poverty and into community-sustaining careers.

30 NBC News. “Biden: ‘When I Think Climate Change, I Think Jobs.’” *YouTube*. April 28, 2021. <https://www.youtube.com/watch?v=ifp9UtoxA3Q>

31 The White House. “Justice40: A Whole of Government Initiative.” (n.d.). <https://www.whitehouse.gov/environmentaljustice/justice40/>

Introduction

Chicago is an iconic American city. It is the third largest city in the United States behind New York City and Los Angeles. It has been at the center of many industries over time, with steel plants, slaughterhouses, and other economic powerhouses spread throughout the metropolitan area.

Unsurprisingly, Chicago is a city of great wealth. One source lists Chicago as the fourth wealthiest city in the United States and the eleventh wealthiest in the world.³² It is also a city of immense inequality: the average income for Chicagoland's top one percent of earners is almost 28 times larger than the average income for its bottom 99 percent.³³ By some analyses, Chicago is also "the most segregated big city in America," with its Black and Hispanic populations concentrated on the South and West Sides.³⁴

Chicago is facing many threats due to our changing climate. Like other cities, it experiences intense rainfall, extreme weather events, and heat waves. The city also sees drastic swings in Lake Michigan's water levels, with various impacts on the local population.³⁵ Chicagoans do not feel these climate effects equally. In 1995, the city fought an infamously bad heatwave that, according to the National Resources Defense Council, "killed 739 Chicagoans, most of whom were poor, elderly, and Black."³⁶

This is the environment in which HIRE360, a nonprofit workforce and economic development organization based in Chicago, operates. The organization uses the tagline "industry-led and community-focused," emphasizing its "unique partnership between developers, general contractors, the hospitality industry and trade unions with the common goal to ensure... work is done equitably and inclusively." Its initiatives are grounded in "four pillars," which we discuss at length later: "preparing work-ready adults, scaling up diverse contractors, elevating a more robust supply chain and developing the next generation of builders."³⁷ These pillars are meant to work in tandem to achieve HIRE360's mission of building a diverse, resilient industry.

32 Rodgers, S. "By headcount of millionaires, Chicago is the fourth-wealthiest city in the U.S." *Chicago Business*. April 18, 2023. <https://www.chicagobusiness.com/economy/chicago-fourth-wealthiest-city-us-survey-says>

33 "Income inequality in the United States." *Economic Policy Institute*. 2023. <https://www.epi.org/multimedia/unequal-states-of-america/#/New%20York>

34 Loury, A. "While things have improved, Chicago remains the most segregated city in America." *WBEZ*. June 19, 2023. <https://www.wbez.org/stories/chicago-remains-the-most-segregated-big-city-in-america/2ec026b3-b11b-4c68-872b-3>

35 McGill, T. (2022, March 1). Chicago is no safe haven from climate change. Fox 32 Chicago. <https://www.fox32chicago.com/weather/what-does-un-climate-report-say-about-illinois>

36 Uchoa, K. "The Deadly Chicago Heat Wave Is As Relevant to Racial Justice Today As It Was 25 Years Ago." *National Resources Defense Council*. July 15, 2020. <https://www.nrdc.org/stories/deadly-chicago-heat-wave-relevant-racial-justice-today-it-was-25-years-ago>

37 HIRE360. "Industry-Led. Community-Focused." 2023.

History

HIRE360's beginnings trace back to 2016, when many leaders in the construction industry and organized labor anticipated a construction boom. Major players—including the Chicagoland Associated General Contractors, public sector leaders, leading developers, the Chicago & Cook County Building and Construction Trades Council, the Chicago Federation of Labor, and the United Way—did not believe that available workforce development programs could accommodate the union apprenticeship process and provide the number of skilled workers needed in that moment.



HIRE360 Executive Director Jay Rowell with Chicago Mayor Brandon Johnson

Many of these same people were talking about diversity, equity, and inclusion within their own organizations. The City of Chicago had set both diversity and local hiring goals for projects using public resources, a reaction to longstanding issues with diversity in construction. This industry was tasked with assigning 26% diverse contractors and 50% city residents to projects with some level of city involvement.³⁸ Key labor leaders, including Robert Reiter, then Secretary-Treasurer and current President of the Chicago Federation of Labor, were dedicated to breaking down longtime barriers to entry for underrepresented communities.

Following these initial conversations, a subset of United Way staff members began speaking with community leaders about construction and job opportunities. Several of these leaders wanted community members to have access to high-quality jobs but were frustrated with workforce providers who failed to deliver on promises. Some leaders were skeptical that new efforts would yield positive results.

United Way staffers also met with union leaders and apprenticeship centers to learn how they operated. Staff members benefited from the United Way's ongoing partnership with the Chicago Federation of Labor and the Chicago & Cook County Building and Construction Trades Council, giving these individuals credibility when striking up conversations. Staffers noticed some core differences in how individual apprenticeship programs operated, but there were also notable similarities in policies, procedures, and expectations. Staff members left these discussions with a deeper understanding of what building trades unions sought in apprentices. Staffers then began to map areas of overlap between what they had heard from community groups and labor unions, respectively.

Based on information gathered from multiple stakeholders, the United Way launched a pilot program known as "Access United." The pilot started with a small number of community and workforce groups. According to organizers, it placed approximately 50 people from targeted communities into union apprenticeship programs during its first two years.

The pilot program's success captured the attention of important funders. Access United received a major grant through the Chicago Cook Workforce Partnership for the Illinois Tollway, which allowed the program's work to expand. Access United subsequently received funding from the Workforce Funders Alliance to establish a Barrier Reduction Fund (BRF, described later), which remains a key part of HIRE360's work to this day.

Access United increased staffing following this infusion of funding. In 2019, the organization hired its current Executive Director Jay Rowell, a former Deputy Treasurer for the State of Illinois and former Director of the Illinois Department of Employment Security, who had experience in workforce development and relationships with key labor leaders in Chicago. By 2020, the organization established its "four pillars" approach and changed its name to HIRE360.

³⁸ "Apartments/Condominiums, Site Development Construction Project Lead, Chicago, IL 60616." *Construction Journal*. July 6, 2023. <https://www.constructionjournal.com/projects/details/abc42978d3d747bbb169599b060d12ac.html>

Four Pillars

HIRE360's four pillars are meant to form a cohesive whole.

I. Workforce Development

Workforce development is most pertinent to our report, particularly HIRE360's role as an apprenticeship readiness provider that recruits and prepares participants from underserved communities for careers in the construction industry.

HIRE360's construction apprenticeship readiness program has two paths. The first is a cohort-based program funded through the state's Illinois Works Jobs Program Act. HIRE360 has run three cohorts using this model thus far. The first cohort ran for 12 weeks, with the most recent running for eight weeks. The programming was largely unchanged for the third cohort; however, HIRE360 chose to condense the timeframe based on previous difficulties keeping people enrolled and engaged.

Programming for Illinois Works includes 162 hours of instruction, most of which comes through the TradesFutures Multi-Craft Core Curriculum (MC3). The Illinois Works funding stipulates that participants must attend at least 80% of each class. Additionally, the program includes test preparation courses and regular site visits to union apprenticeship centers and active construction sites. These visits, which are mandatory, are often one of the most revelatory parts of the program for participants.

Each participant receives an hourly stipend along with access to support services during the program. Roughly 40 people have completed the program from the first two cohorts, most of whom have at least applied for apprenticeship positions; a number have already been placed. It is difficult to gauge the program's success fully because it is fairly new, and some graduates may still be waiting for applications to open up in their trade of choice. As of this writing, the latest cohort included 23 participants.

The second path that HIRE360 offers is a less formalized set of programming that staff call the "à la carte" option. Far more people have used these services than have gone through an Illinois Works-funded program. This pathway aims to attract people who are employed full time but looking for a career change, as well as people who have family care or other needs that make full-time enrollment infeasible. Participants can choose the courses they wish to take, complete sample tests online, receive 12 hours of test preparation for the trade they hope to enter, and may seek supplementary tutoring and guidance based on their initial sample test results and other identified needs.

Many of HIRE360's services are available to all participants regardless of the program in which one enrolls. These services include test preparation, case management that continues into an apprenticeship placement, and access to the BRF to cover expenses. HIRE360 also runs workforce development programming in the hospitality industry in conjunction with the labor union UNITE-HERE.

A final element of HIRE360's workforce development pillar is its "signature projects." For example, HIRE360 has partnered with the Chicago Transit Authority, which has prioritized hiring women and people of color onto its construction projects. HIRE360 specifically works with Chicago Women in the Trades (CWIT), Central States SER, and the Hispanic American Construction Industry Association to recruit diverse candidates into apprenticeship programs and onto Chicago Transit Authority job sites. This partnership will continue for future Chicago Transit Authority service expansions.

Another signature project is HIRE360's work with the Obama Foundation. The Obama Foundation is developing the Obama Presidential Center and Library on Chicago's South Side, and the Foundation has set hiring targets above those

the city has established. These goals include recruiting 10% of the workforce from the area immediately surrounding the project site and an additional 35% from South and West Side neighborhoods. To achieve diversity objectives, the Foundation has partnered with the We Can Build It coalition, which includes HIRE360 and other apprenticeship readiness programs like CWIT, Revolution Workshop, and St. Paul Community Development Ministries. The coalition also includes the Chicago Regional Council of Carpenters and IBEW Local 134.

We Can Build It serves as a workforce hub for the Obama Foundation project. When construction managers need workers in particular trades, they often call HIRE360 or another workforce partner for help. HIRE360 uses its database of program graduates to identify union members who meet required criteria and then collaborates with union locals to place workers on job sites. One high-level Black trade union leader with over 30 years of construction experience in the city called the Obama Foundation project “the most diverse” construction site he had ever seen, showing the power of cross-community partnerships on major projects.

II & III: Diverse Contractors & Suppliers

HIRE360’s second and third pillars are closely related, and the organization approaches them in similar ways.

Diverse Contractors

One of HIRE360’s goals is to grow the base of women and minority-owned contracting firms in Chicago. HIRE360 believes this aim is worthy in its own right, but it is also meant to work in tandem with other pillars. Theoretically, a diverse set of contractors—some of whom have come through the ranks of union apprenticeship programs—can provide more opportunities for the diverse workforce HIRE360 is bringing into the construction trades through its apprenticeship readiness programs.

After speaking with small contractors, HIRE360 identified several hurdles to expansion. Small contractors often have difficulty bidding on large projects because they have insufficient credit, cannot meet cash and bonding requirements, or find insurance costs to be prohibitive. These challenges can prevent many upstart, minority-, and women-owned contractors from growing their businesses and becoming union signatory contractors.

Relatedly, smaller subcontractors may struggle to meet the contractually mandated pay timelines. Subcontractors are ultimately responsible for cutting paychecks to the workforce, and they depend on general contractors and developers to pay them on time. Unfortunately, timely payment often does not happen, especially for government-funded projects.

Given these realities, HIRE360 has pinpointed capacity building and access to capital as potential interventions. They engage in this work in several ways, including:

- Helping contractors with the job bidding process, including offering assistance on how to provide proper cost estimates
- Offering accounting and bookkeeping services that are crucial to securing bonds
- Guaranteeing loans with banks for contractors—with certain assurances in place from businesses to limit HIRE360’s exposure to risk—using privately raised money, largely from trade unions, general contractors, and developers
- Helping with initial payments required by union contracts, such as employer contributions to health and welfare funds



HIRE360 participants on a construction site tour

HIRE360 also helps new contractors build the social capital needed to grow and bid on larger construction projects. For example, the organization helps contractors connect with established minority- and women-owned contractors who can provide guidance for those new to the field and serve as mentors.

Overall, HIRE360 hopes to create an ecosystem where high-road, diverse contractors successfully bid on large-scale jobs, become signatory contractors, and hire more unionized construction workers from diverse backgrounds—many of whom have entered the trades through HIRE360. Contractors are often too small when they come to HIRE360 to compete for the types of large jobs that employ union construction workers. Therefore, access to capital and other services is intended to help these contractors grow to a point that they can effectively bid on union work. HIRE360 also helps contractors in the process of “sponsoring” people into unions. As businesses expand, they can sponsor even more workers. As of early 2023, HIRE360 was working with roughly 140 businesses, 75% of which were signatory contractors.

Suppliers

Alongside its efforts to diversify Chicago’s unionized contractor base, HIRE360 seeks to build more diverse firms in the construction supply chain. A significant proportion of construction work is in materials and supplies. Leaving this area untouched would limit the overall impact of HIRE360’s work.

As with its contractor focus, HIRE360 helps aspiring suppliers with technical services such as bookkeeping, insurance, and pricing—a particularly troublesome area for new suppliers. HIRE360 also helps contractors expand into supply chain work. In addition to technical services, HIRE360 plans to provide storage space in its future office and warehouse building (to be discussed later) where new suppliers can keep materials until they find a space of their own. Many contractors and developers are interested in this initiative, as using minority distributors helps them meet city, county, and state diversity targets.

IV. Developing Future Builders Through Youth Engagement

This pillar is the least developed of the four. The COVID-19 pandemic halted HIRE360’s plans to attend events in schools and other locations where young recruits gather. However, HIRE360 leaders say they have established relationships with Chicago Public Schools and the Chicago Teachers Union. The organization hopes to draw upon these connections as it builds this pillar moving forward.

HIRE360 has already seen some progress on this front. In March 2023, the organization partnered with Chicago Public Schools to host a construction exposure event for about 3,200 students. The event included panels and opportunities to meet representatives from various trades and contractors.

Apprenticeship Readiness Deep Dive

The previous section sketched the contours of HIRE360's apprenticeship readiness programs. Here, we take a deeper look at specific elements crucial to its operations.

Recruitment

HIRE360's recruitment efforts largely target low-income communities of color in Chicago, particularly on the city's South and West Sides. Partnerships with community organizations are an important part of HIRE360's recruitment. As an example, HIRE360 partners with the Safer Foundation, an organization that aims to empower justice-involved individuals and provides services to ensure these people are supported and successful. The Safer Foundation also provides many different employment services, including referrals to HIRE360 for clients ready to pursue careers in the construction industry.

Community-based organizations are on the ground providing multiple services to people with different needs and skills, and they know the types of candidates HIRE360 is seeking. Therefore, through candidate referrals, organizations help to play a "screening role" by identifying individuals who meet HIRE360's criteria and are eager for the opportunity.

HIRE360 cooperates with other apprenticeship readiness programs that have deep ties to community organizations throughout the city. As previously mentioned, CWIT partners with HIRE360 on the Obama Foundation grant. The organizations will refer candidates to each other when a particular individual seems like a better fit elsewhere. CWIT has a long track record of placing women into apprenticeship programs and onto construction job sites. Sometimes it makes more sense for a particular candidate to work with CWIT, and HIRE360 can make a referral.

Community partnerships are crucial, but HIRE360 mostly recruits through targeted digital advertisements. This tactic was born out of necessity in 2020 when HIRE360 began ramping up its online efforts once COVID-19 hit and eliminated in-person events. With digital ads, which are typically targeted to people in specific zip codes, HIRE360 casts a wide net and makes contact with many potential applicants.

All recruits, regardless of how they discovered HIRE360, will encounter an online landing page. These landing pages are programmed such that HIRE360 can see how recruits heard about the program—whether it be through a community group, a digital ad, or some other method. This information enables the organization to understand where their recruitment efforts are most effective. It also provides data that community partners can use when seeking funding for their own programs.

There is no specific formula for how many participants HIRE360 aims to recruit and matriculate. However, deep partnerships with unions and contractors can give the organization a sense of how many construction workers will be required in the near future. For instance, contractors put in "job orders" for projects to estimate how many workers they will need. HIRE360 can then refer to these figures to inform their recruitment efforts.

Intake

After filling out information on a landing page, participants are invited to attend an online orientation session where they learn more about HIRE360 and can determine whether it is a good fit for them. If participants are still interested, they normally meet with a case manager. Individuals who fulfill the entry requirements (i.e., 18 years of age, high school diploma or equivalent, legally authorized to work in the United States, and a valid driver's license) can join the program. If someone needs help meeting these requirements, they are referred to another organization that can provide associated

services, such as GED test prep. According to one case manager, participants tend to be in their late 20s or early 30s with work experience when they enter HIRE360.

During the early program stages, participants take a pre-test to gauge where they are strong and where they will need the most support as they prepare to apply and enter an apprenticeship. Different trades require distinct skills; therefore, this assessment helps participants determine which apprenticeship program makes the most sense for them. HIRE360 developed the test together with partners in the trades. Staff members stressed that the results are purely diagnostic and have no bearing on participants' acceptance or continued enrollment in the program. Test outcomes and early conversations with a case manager help shape a participant's path through the program.

Programming

Programming varies by participant, depending on the route one takes through HIRE360. Individuals in the Illinois Works program complete the MC3 curriculum and some additional coursework. Upon finishing, each participant is certified in OSHA 10, CPR & First Aid, and MC3.

Participants also take several site tours while in the program, including visits to union apprenticeship training centers. These tours expose participants to the nuances of a particular trade. Visits also outline what is expected of them (as applicants and apprentices), timelines, and other matters (e.g., when and how drug testing will take place). During these tours, participants can speak with apprentices about their experiences and ask questions about the elements of a given trade. They also have the chance to learn about various crafts within each trade union, which opens their eyes to possible areas of work they can pursue.

These tours are particularly impactful for participants, who can start to synthesize and build on knowledge gained in the classroom. Having tour guides with similar backgrounds or who are from similar neighborhoods as HIRE360 participants also helps. Connecting with someone's story and hearing how they turned construction into a successful career enables participants to visualize themselves in the trades.

Illinois Works participants also tour active construction sites. Construction managers from partner contractors mostly lead these tours with HIRE360 staff in attendance. Several staff members and participants cited the importance of these visits, which allow participants to see different trades in action. Individuals can also get a feel for life on a construction site, including the unvarnished viewpoints of tradespeople, supervisors, and foremen.

Multiple HIRE360 staff members shared an anecdote about one participant's experience during a construction site tour. HIRE360 was visiting a high-rise apartment building under construction. As usual, the tour guide took participants to the top floor of the development. Windows had not yet been installed on this floor, so participants were exposed to the wind and other elements typical of vertical construction. The participant became nervous and quickly realized this field was not right for them. They left the program shortly thereafter.

Despite losing a participant, staff viewed this outcome as a "success" of sorts. Even though the organization would like to see as many diverse candidates enter the trades as possible, all parties agreed that it is better for someone to discover construction is a poor fit during the early days of apprenticeship readiness. If a person enrolls in an apprenticeship program only to drop out, they have wasted their time. Industry partners, meanwhile, have wasted money on training and



HIRE360 participants touring a joint labor-management training center

must start anew with another apprentice. This is one reason why construction site visits play a central role in HIRE360's programming.

Programming is much less formal for "à la carte" participants. They can pick the classes that seem most relevant to them while taking advantage of the placement and financial services described below. Similarly, all participants have access to tutoring to improve their test performance. Retired Chicago Public Schools teachers help lead tutoring sessions, which HIRE360 offers in partnership with the Chicago Teachers Union Foundation.

Some classroom programming covers the basics of the construction industry. Courses help familiarize students with the many professionals who work on a construction site, what their roles are, and where apprentices fit into the bigger picture. Instructors also review the structure of the industry, such as key parties (e.g., project owners, general contractors, and subcontractors) and macroeconomic trends affecting job availability, to demystify these areas for participants. Reviewing the people and jobs on a site enriches participants' perspectives and showcases the numerous career paths available in construction.

Services

All participants, irrespective of how they enter the program, receive financial and career support. Case managers help participants navigate the program, determine which trade they want to enter, follow application timelines, prepare for required tests, and submit all paperwork and fees needed to be considered for an apprenticeship placement. Several partners mentioned relative unfamiliarity with the apprenticeship application process as a barrier to diversifying the trades. HIRE360 case managers simplify this process and give participants confidence.

Individuals who go through the Illinois Works program are entitled to additional financial support, including a \$13/hour stipend during their time in the program and either free rides, gas cards, or transit cards for site visits. On our research trip in February, several participants said these financial services—particularly the stipend—made their participation possible. Without a certain level of income, albeit small, people with families and other responsibilities likely would have elected to find employment elsewhere instead of joining HIRE360.

HIRE360 provides job and career placement services to program graduates as well. On-staff "industry representatives" seek out job opportunities for these individuals. HIRE360 has held "job club" events where tradespeople who are out of work can learn about job openings. The organization works closely with partner unions to highlight career options, but services involving industry reps and job clubs are especially important for graduates who belong to a union that does not run its own hiring hall.

The Barrier Reduction Fund is one of HIRE360's most noteworthy service innovations. This fund is largely unrestricted, and participants can draw from it for expenses associated with navigating apprenticeship readiness and entering into an apprenticeship program. Some costs the BRF typically covers are as follows:

- Stipends for participants with long periods of unpaid training at the beginning of an apprenticeship program. This expense is the BRF's largest, with IBEW and the Carpenters (both popular destinations for HIRE360 graduates) having several weeks of initial unpaid training.
- An initial set of tools, work clothes, and other materials that apprentices are expected to have on day one of an apprenticeship program
- Initial union fees and dues
- Back dues that program graduates owe to keep their union membership current when facing a long period of unemployment

Through trial-and-error, HIRE360 has placed certain limits on how it uses the BRF. But because these funds are largely unrestricted, the organization can provide the services and financing it deems necessary to help candidates succeed. Funders rarely offer this type of flexibility, but it has proven essential as HIRE360 carries out its mission.

Funding

Executive Director Jay Rowell has made a concerted effort to diversify funding streams for HIRE360. He believes that doing so can minimize setbacks should a funding source dry up unexpectedly. His goal is to have an even split between government, philanthropy, and industry (both contractors and labor unions). Such a balance is fairly unusual in practice, but the organization has reported substantial funding from each area, with industry donations being a particular strength. HIRE360 also benefits from extensive in-kind donations, including both materials and space to conduct activities.

WRTP | BIG STEP

WRTP | BIG STEP is one of the most successful workforce development and apprenticeship readiness programs in the country. Based in Wisconsin, the work of **WRTP | BIG STEP** dates to the 1970s when the Building Industry Group Skilled Trade Employment Program (**BIG STEP**) set out “to increase the number of women, minorities, and younger workers employed in the building trades.”³⁹

WRTP | BIG STEP's Board of Directors includes representatives from major employers and from organized labor. It provides apprenticeship readiness training, including MC3, for people interested in entering the trades. It also offers programming geared towards widening career opportunities in manufacturing and other industries.

As an established apprenticeship readiness program in the Midwest, **WRTP | BIG STEP** helped HIRE360 navigate its own launch. HIRE360 was able to build on **WRTP | BIG STEP**'s model and shape it for the specific circumstances in Chicago. To learn more about **WRTP | BIG STEP**, please visit <https://wrtp.org/>.

Challenges and Keys to Success

HIRE360 is young and susceptible to the types of growing pains one would expect from a developing organization. A handful of challenges and keys to success stand out thus far.

Challenges

COVID-19

When HIRE360 started in January 2020, leaders had no idea a global pandemic was right around the corner. COVID-19 completely changed how the organization planned to function: all classes were transferred into a virtual format, and the in-person visits that are so critical to learning about construction were suddenly impossible. Briefly, during the worst of the pandemic, the construction industry also was forced to make cutbacks, creating fewer opportunities for apprenticeship readiness graduates across the country.

39 “Our History.” WRTP. 2023. <https://wrtp.org/our-history-wrtp-big-step/>

Unfamiliarity with the Construction Industry

One of the most urgent challenges HIRE360 has faced is a general lack of knowledge about the construction industry's inner workings. Multiple individuals involved in HIRE360's founding and initial growth came from traditional workforce development and saw deficiencies in the system. Some believed that workforce development programs were not focused enough on the practicalities of finding someone a job. Others thought existing programs, funders, and government bodies had little sense of the construction industry's structure, where unions often assume workforce development and job placement functions and workers bounce between jobs and employers repeatedly. In reality, funders tend to penalize things like apprenticeship (rather than **job**) placement and frequent employment changes.

Many people interested in entering the trades are also unaware of how the industry works. High school students are routinely steered towards college and given limited information about careers in construction. This dynamic limits the candidate pool and leaves people with a fuzzy concept of work in this industry. Moving from one job to another with regular stretches of unemployment is common. How does one budget with this in mind? Meanwhile, a construction site features multiple layers of management and ownership. How does one navigate this setting and determine who is who? These are some of the questions HIRE360 helps participants answer.

Bureaucratic Hurdles

Funding streams—both public and private—often have cumbersome and perplexing requirements. Issues can range from restrictions on how funds are used to unreasonable paperwork demands. Sometimes these obstacles overlap with unfamiliarity with the construction industry.

HIRE360 recently placed a participant into an apprenticeship program before he had formally graduated. A spot became available in his trade of choice, and he was accepted. Staff considered this outcome to be positive; the organization's goal is to expose participants to the trades and place them in an apprenticeship program. Had the applicant waited to graduate from HIRE360, an opening in his trade may not have been available anytime soon. His actual placement likely would not have happened without HIRE360's connections and services. Yet organizational leaders had to spend time convincing a funder that this was a success story rather than a failure. Leaders had to spend valuable time expanding the funder's limited focus on program completion as a metric.

Retention

The participants that HIRE360 recruits regularly come from difficult circumstances. To model practices in the construction industry, HIRE360 maintains strict attendance requirements and other expectations. Yet childcare, job responsibilities, unreliable transportation, unforeseen expenses, and similar hurdles can keep people from participating fully.

Leaders cited participants finding other full-time employment as a major reason why people drop out of HIRE360. The stipend for Illinois Works participants is helpful, but the paid hours while in the program are not equivalent to full-time employment. Sometimes the draw of another job can be enough for participants not to finish the HIRE360 program or pursue a union apprenticeship.

Timing of Union Apprenticeship Openings

Union apprenticeship programs from trade to trade, or even local to local, do not operate on the same schedule—nor do they always consistently release applications and accept new apprentices. Therefore, people can graduate from HIRE360 at a time when their trade of choice is not accepting applicants, leading to an unpredictable wait for placement.

HIRE360 case managers tend to be busiest when apprenticeship applications are open. As noted, case managers are important in ensuring participants are keeping up with paperwork, submitting letters of recommendation, paying required fees (with support from HIRE360's BRF), and completing other necessary tasks. When several trades are open simultaneously, the small team of case managers can have difficulty monitoring all required work and providing the level of personalized service on which they pride themselves.

Lack of Direct Entry

Several successful apprenticeship readiness programs across the country offer some degree of direct entry. That is, graduates of designated programs can “skip the line” in some capacity—often by avoiding waiting lists—and enter an apprenticeship directly should they meet all requirements. HIRE360 does not have a direct entry relationship with trades in Chicago, though staff indicated that this arrangement is in the works. Several staff members and supporters believed that gaining direct entry status would be a major victory. It would shorten the waiting time between completion and placement, enable contractors, developers, and unions to meet targeted hiring goals more efficiently, and create a more predictable placement timeline for recruitment purposes.

Providing Ongoing Support Through Apprenticeship

HIRE360 provides participants some support after they graduate and enter an apprenticeship program. The organization offers services that are of interest to graduates, such as mentoring and working with contractors on placement. Ultimately, however, HIRE360 relies on graduates themselves to maintain contact. Staff are incredibly busy helping current participants succeed. It can thus be challenging to stay in touch with a growing pool of people who are entering the trades and navigating their careers.

Perceptions from Apprenticeship Coordinators and Employers

Trust with apprenticeship coordinators and employers is the cornerstone of apprenticeship readiness programs' success. These parties need to know they are receiving high-quality applicants who are competent in their trade and able to work as part of a team. It takes time to cultivate these connections, and HIRE360 seems to be doing so effectively.

Nonetheless, HIRE360 must still combat perceptual issues. For example, staff members collaborate with partner organizations to place individuals with criminal records. Some employers—and, to a lesser extent, apprenticeship coordinators—are nervous to work with this population. HIRE360 continually strives to open as many avenues as possible for participants, which often involves educating partner organizations.

Personal Touch While Scaling Up

Despite being a relatively new venture, HIRE360 has captured the attention of policymakers and construction industry leaders. Growing the program is a key priority; program leaders can only make a true dent in diversifying the construction industry if they continue to provide a pathway into the trades for more and more people from targeted communities.

A key to HIRE360's success (and that of other apprenticeship readiness programs) is personalized attention. As the organization continues to gain accolades and funding, leaders will need to emphasize *smart* growth. How can HIRE360 enroll more individuals in the program and set participants up for success in the trades without losing a personal touch as people learn about construction and decide which trade to pursue long-term? This question is important for HIRE360 to ponder.



US Labor Secretary Julie Su tours HIRE360's facility

Keys to Success

Deep Understanding of the Construction Industry

To counter the challenge of parties' unfamiliarity with the construction industry, HIRE360 has gone to great lengths to educate key parties (e.g., workforce development officials, funders, program participants, and others) about the industry and how it works. Every aspect of the program—from coursework and test preparation offerings, to the largely unrestricted use of BRF funds, to the strong relationships with contractors and union apprenticeship directors—has been implemented with this in mind. The organization's emphasis on industry nuances has contributed to various successes mentioned below.

The Right People in the Room

Several individuals involved with HIRE360 stated that the foundation of the program's success is getting community organizations, labor unions, developers, and contractors together in one room to steer the ship together. Community organizations are intimately familiar with the city's population and know which services will help people succeed. Labor unions have a laser focus on training the future workforce, and they know how to move people from being apprentices to being highly skilled journey-level workers. Contractors are well acquainted with market trends, the jobs coming down the pike, and the number of workers (and amount of money) needed for any given project.

Workforce development programs that fail to bring these parties together seldom produce tangible results. People involved with HIRE360 acknowledged that getting everyone on the same page is not always easy, especially when animosity or distrust stem from past experiences. That said, most interviewees believed that getting these stakeholder groups together—along with important government actors—has been pivotal to HIRE360's initial success.

Data Collection & Tracking

HIRE360 performs data collection and tracking to determine if the organization is fulfilling its mission. These data are also used to tailor recruitment advertisements to the program's target populations. Whenever people express interest in the program and sign up for information sessions, HIRE360 tracks how they learned about the program. The organization also records race, gender, and other demographic information for every participant who comes into and advances through the program.

As of June 2023, 340 HIRE360 graduates had been accepted into an apprenticeship program. Of those placed, roughly 37% were African American and more than 41% were Hispanic or Latino. HIRE360 also placed 451 people

into employment opportunities over the same period. Organizational records indicated that more than half of these placements involved African Americans, while Hispanic or Latino participants accounted for roughly 34% of placements.

The Illinois Works apprenticeship readiness program requires that three metrics be monitored closely:

- Enrollment: How many people enroll in the program
- Completion: How many people complete the program
- Transitions: How many people have passed a test to enter an apprenticeship program and/or are on the waiting list at minimum

HIRE360 tracks similar information for its programming via a Salesforce database.

Not all information can be tracked properly. It is not necessarily a “failure” for HIRE360 when someone drops out of the program after realizing construction is not a good fit. But setting clear goals and observing progress towards those objectives is important in enabling any apprenticeship readiness program to monitor its success and secure additional funds. HIRE360 has internalized this need and put effective data-tracking systems in place.

An Ecosystem to Diversify Construction on All Levels

HIRE360’s “four pillars” model is unique. Building a diverse base of suppliers and contractors in the construction industry is central to the organization’s mission. Staff members also see this effort as integral to the success of its apprenticeship readiness programming. Focusing on contractors and suppliers can produce career pipelines and mentors for tradespeople who complete the program. This attention can also expand the base of signatory contractors in the city, providing more opportunities for apprenticeship programs to open slots that HIRE360 can help fill. The hope is that, as the organization develops its youth engagement programming, it will create a steady flow of workers into apprenticeship readiness, apprenticeship programs, and construction careers.

Future

For a young organization, HIRE360 has done a remarkable job of building the infrastructure and securing the funding needed to have a lasting impact on Chicago’s construction industry. As the program continues to place graduates into apprenticeships and construction careers, more resources will become available for mentorships and word-of-mouth recruitment. We identified four areas expected to shape HIRE360’s work in the near future.

New Facilities

As COVID-19 continues to wane, HIRE360 aims to hold more of its programming in person. As such, the organization acquired a space on Chicago’s near-South Side that it plans to rehabilitate and populate in the coming months. The 45,000-square-foot warehouse will include meeting rooms, offices, and classrooms. Staff will move to the new location, and there will be hands-on training spaces where partners in the trades and the hospitality industry can use equipment and demonstrate their work for members and HIRE360 participants. Solar arrays on the roof will power the building, and there will be a dedicated training space for IBEW solar installers. Additionally, much of HIRE360’s coursework and other programs—including all MC3 courses—will be held at this location. The facility will also include a space where participants’ children can play during training sessions.

The new facility will help HIRE360 expand its work to establish women- and minority-owned contracting and supply chain businesses. The staff who work on these issues will have substantial office space. Two bays will be available where companies looking to expand into construction supplies can store materials as they grow their businesses and acquire other property.

Executive Director Jay Rowell expects the project to cost \$14 million, including kitchen space and equipment for programs run with UNITE-HERE. Partner unions and contractors have donated materials and helped to keep costs down. HIRE360 chose this warehouse largely due to location: people can easily travel to the site by highway, and it is on the green line train that services Chicago’s South and West Sides—two low-income areas targeted for recruitment. This location can also ease the burden for city residents who now need to go to suburban training locations to gain experience with hands-on construction work.

Climate and Equitable Jobs Act Statewide Training Hubs

In 2021, Illinois Governor J.B. Pritzker signed the Climate and Equitable Jobs Act into law. Its passage led significant sums of money to be allocated to building out renewable energy in the state. Millions of dollars were dedicated to training a diverse workforce for careers in this burgeoning industry through the Climate Works Pre-Apprenticeship program. As a result of this law, the labor-driven coalition Climate Jobs Illinois is working to establish apprenticeship readiness “hubs” in three regions of the state.

Chynna Hampton, a former HIRE360 staff member, is spearheading these efforts. She has worked over the past two years to cultivate relationships with community organizations and local building trades councils statewide. The goal is to establish hubs where key actors work together to provide apprenticeship readiness training, career services, and access to careers in the trades—much like HIRE360 is doing in Chicago.

At the urging of Illinois’s labor leaders, HIRE360 applied for a grant to expand its footprint and administer the program across the state. The plan is for the organization to deploy its extensive resources to administer the grant. Local community organizations will then be free to play to their strengths by conducting necessary training and providing wraparound services using a BRF like that of HIRE360.

By pursuing this initiative, HIRE360 can help build the capacities of community and workforce development organizations around the state. The organization will also move more explicitly into the clean energy sector, which will be a core source of construction jobs throughout Illinois in the coming years.



HIRE360 participants tour a construction site

THE CLIMATE AND EQUITABLE JOBS ACT

The Climate and Equitable Jobs Act (CEJA), signed into law in Illinois in 2021, is a comprehensive climate, equity, and jobs bill. Its passage was an important milestone in moving forward the state’s environmental and economic objectives.

CEJA promotes economic growth through a clean energy transition. The bill moves Illinois towards 100% carbon-free power by 2045 through investments in clean energy, energy efficiency, and transportation. It also prioritizes building a diverse, skilled workforce to meet growing labor demand by investing in registered apprenticeships, apprenticeship readiness training, and other avenues to create and maintain high-quality jobs. In many ways, Illinois has developed a nation leading model of how to move forward an equitable transition to a clean energy economy.

Some of the major workforce investments include:

- **Clean Jobs Workforce Network:** Establishes a series of “Climate Works Hubs” across the state to “offer training, certification preparation, and skill development for entry-level jobs in clean energy-related industries,” as well as an “Energy Transition Barrier Reduction” fund for participants.⁴⁰
- **Climate Works Pre-Apprenticeship:** Provides “training to prepare people to succeed in apprenticeship programs in construction and building trades that are expected to see clean energy job growth. The goal is to create a qualified, diverse pipeline of clean energy workers.” This program is backed by \$10 million in annual funding to be used at three regional locations throughout the state. It also has access to “Energy Transition Barrier Reduction” funds.⁴¹
- **Returning Resident Clean Jobs Program:** Provides “training to prepare people in the custody of the Illinois Department of Corrections for entry-level clean energy jobs.” This program has a \$6 million annual allocation.
- **Contractor Accelerator:** Provides grants and support to contractors looking to scale up and innovate in the clean energy space.

40 “Clean Jobs Workforce Network Program.” *Illinois Department of Commerce & Economic Opportunity*. 2023. <https://dceo.illinois.gov/climateandequitablejobs/clean-jobs-workforce-network-program.html>

41 “Climate Works Pre-apprenticeship Program.” *Illinois Department of Commerce & Economic Opportunity*. 2023. <https://dceo.illinois.gov/climateandequitablejobs/climate-works-pre-apprenticeship-program.html>

Direct Entry

HIRE360 does not have direct entry status with any trades in Chicago, but discussions are in progress. Any trade can establish a direct entry relationship with HIRE360, provided the required paperwork is filed with US Department of Labor officials. Candidates with direct entry status need to meet the same requirements as any other apprentice. The unions ultimately decide who is ready to be accepted into a program. Qualified candidates can be fast tracked, allowing the unions to bring in members to satisfy community workforce and diversity targets.

Many staff and union partners believe that establishing direct entry relationships is a critical step for HIRE360 to deepen impact. The organization will have to engage in ongoing relationship building and educational efforts. It would not be surprising to see these developments in the near future.

Further, this statewide work is providing new avenues for direct entry. Climate Jobs Illinois and HIRE360 are trying to coordinate educational symposia and develop model direct entry language that defines what this type of relationship looks like. These resources will educate trades partners and community organizations so they can more easily establish direct entry relationships.

Additional Signature Projects

Earlier, we discussed HIRE360's workforce development and placement relationships with the Chicago Transit Authority and the Obama Foundation. These relationships have been mutually beneficial, providing opportunities for HIRE360 graduates and helping project owners meet diversity targets on project construction. Similar arrangements are in the works with the Chicago Transit Authority's red line expansion and a soon-to-be-built casino in Chicago. HIRE360 is likely to continue and expand signature projects like this moving forward.

Introduction

Like Chicago, San Francisco is a city of immense wealth and inequality. It sits at the center of Silicon Valley, a regional hub for technological development and innovation. It is also at the center of the climate crisis; extreme precipitation and raging wildfires are becoming commonplace in the city and surrounding areas. In September 2020, San Francisco's skies turned an eerie orange as Northern California wildfires choked the city with thick smoke.

A glaring gap exists between San Francisco's wealthiest residents and its working class. This chasm is even wider than in Chicago, with the average income of the top 1% eclipsing that of the bottom 99% by more than 34 times.⁴² Skyrocketing housing costs, which are partially to blame for increasing racial segregation within the city's borders, exacerbate this issue.⁴³

CityBuild aims to relieve some of these problems by advancing access to high-quality construction careers for marginalized communities. In contrast to HIRE360, CityBuild is a public workforce development program in the City of San Francisco's Office of Economic and Workforce Development (OEWD). OEWD "strives to create a thriving and resilient economy, where barriers to economic and workforce opportunities are removed, and prosperity is shared equitably by all."⁴⁴ Its workforce division funds various services that provide career training and opportunities for underrepresented and disadvantaged job seekers, including training and placement programs in sectors like healthcare, hospitality, technology, transportation, and construction.

CityBuild Pro and CityBuild Academy are OEWD programs centered on the construction industry. CityBuild Pro largely focuses on recruiting for administrative positions within the construction industry. CityBuild Academy is the organization's apprenticeship readiness arm. The latter program is the focus of this case study.

History

For years prior to CityBuild's founding, community organizers and others strove to diversify the city's construction industry and bring opportunities to people from local communities. Organizations deployed several tactics, even going so far as to physically block construction sites that lacked diversity. Many people were concerned about the lack of progress in spite of these actions. As in Chicago, advocacy and workforce development efforts were not as coordinated as actors would have liked, and the desired results remained elusive.

In 2005, the City of San Francisco introduced the CityBuild program under the leadership of then-Mayor Gavin Newsom. It marked an attempt to bring together major players from the community, labor, and the construction industry to work

42 "Income inequality in the United States." *Economic Policy Institute*. 2023. <https://www.epi.org/multimedia/unequal-states-of-america/#/New%20York>

43 Narayan, S. "Bay Area segregation is worsening. Housing policy is partially to blame, UC study finds." *San Francisco Chronicle*. June 23, 2021. <https://www.sfchronicle.com/local/article/Bay-Area-segregation-is-worsening-UC-Berkeley-16266636.php>

44 "About." *City and County of San Francisco, Office of Economic and Workforce Development*. 2023. <https://sf.gov/departments/office-economic-and-workforce-development>

towards shared goals. The idea was to house this program within city government while looking to nonprofit partners for recruitment, outreach, and screening assistance.

The program saw some initial success placing residents from low-income communities into union apprenticeship programs. However, progress was slower than many envisioned. City procurement language called only for a “good faith effort” to place city residents on job sites. After realizing further improvements were needed to grow demand and bolster placements on public construction projects, the city passed a local hiring ordinance in 2010. This ordinance was crucial to unlocking CityBuild’s full potential.

The policy applies to contracts for San Francisco public works projects estimated at or above \$1 million. The threshold began at \$400,000 and gradually rose over time. The local hiring ordinance initially required that San Francisco residents work 20% of total hours per trade, with a 5% annual increase until the figure reached 50 percent. The City amended the ordinance in 2017 to set a permanent minimum 30% requirement. Additionally, San Francisco residents must work 50% of apprentice hours per trade on covered projects. The policy includes a reciprocity agreement with San Mateo County to count its residents in the required numbers for public utilities projects in the county, including major projects at San Francisco International Airport.

Following the City’s local hiring ordinance, CityBuild continued to adapt its practices to best meet industry needs. The program’s standards for acceptance were updated. Its curricula were also strengthened in terms of hard and soft skills. The program formed deeper working relationships with construction employers and union training staff, and its reach expanded into projects not directly controlled by the City of San Francisco.

SAN FRANCISCO’S LOCAL HIRING POLICY AS A DEMAND DRIVER

San Francisco passed a local hiring ordinance in 2010 that required contractors completing construction work on city projects to hire from local communities. City residents must perform 30% of the work and 50% of the apprentice hours per trade on all city construction projects estimated to cost \$1 million or more. This policy unlocked career pipelines for underserved communities. CityBuild, together with its partner organizations, recruits participants from low-income and high-minority zip codes into its apprenticeship readiness programs. Registered apprenticeship programs then offer slots to CityBuild graduates, knowing participants will likely meet the rigorous expectations placed on apprentices. As apprentices and journey-level workers, CityBuild graduates can in turn meet demand from contractors for city residents to complete public construction projects. When done well, contractors, unions, **and** program graduates become invested in this model and seek to enroll more underserved and underrepresented community members.

This policy has also created opportunities for city residents on non-covered projects. For example, the University of California, San Francisco (UCSF)—which is not covered under the city’s ordinance—aims to hire city residents to complete 30% of all work on major capital projects. By partnering with CityBuild, contractors, unions, and others, UCSF has placed more than 1,800 local tradespeople on jobs for 39 UCSF construction projects, including hospitals, student housing, and instructional buildings.⁴⁵

⁴⁵ “OEWD CityBuild Cornell University CityBuild Visit Presentation.” *San Francisco Office of Economic and Workforce Development*. February 2023.

Funding, Policy Underpinnings, & Organizational Structure

As a public program, 100% of CityBuild’s funding comes through the general fund in the City of San Francisco’s budget. Several other City policies also contribute to the program’s success.

The most relevant policy is the aforementioned local hiring ordinance, which stipulates that city residents must work at least 30% of job hours and 50% of apprenticeship hours by trade on City projects over \$1 million. This mandate sparks steady demand for CityBuild graduates in union apprenticeship programs and on public worksites throughout the city. CityBuild contracts with LCPTracker, a firm with experience in prevailing wage enforcement, to monitor compliance with this ordinance.

CityBuild has partnered with several other entities—both public and private—to place graduates on projects throughout San Francisco. These placements are linked to local hiring mandates or, more often, voluntary goals from project owners. Here are a few examples:

- **First Source:** On private projects above a certain size or dollar amount, contractors “must notify CityBuild of all new hiring opportunities” and make “good faith efforts to employ disadvantaged workers.” Covered projects include commercial spaces of at least 25,000 square feet, residential projects with at least 10 units, or “Public Professional Services Contracts” above \$50,000 in cost.
- **Office of Community Investment and Infrastructure (OCII):** OCII is a state-authorized body responsible for development in several San Francisco neighborhoods. It is a successor organization to the San Francisco Redevelopment Agency. Projects awarded by OCII require that 50% of work hours by trade are reserved for city residents. OCII also sets goals for 25.6% diverse hires and 6.9% female hires on projects in the Mission Bay neighborhood.
- **Section 3 Housing:** For housing developments supported by the U.S. Department of Housing and Urban Development, the bodies receiving these funds must provide opportunities to low-income people and those who receive government housing assistance. One-quarter of labor hours are set aside for these individuals. The projects have the same diverse-hire and female-hire goals as the OCII projects described above.
- **University of California, San Francisco (UCSF):** UCSF capital projects valued at \$5 million or more have a 30% local-hire goal. The UCSF partnership, officially known as the “Community Construction Outreach Program,” has been a clear success for CityBuild. According to organizational materials, UCSF has placed more than 1,800 local tradespeople on jobs in 39 UCSF construction projects, including hospitals, student housing, and instructional buildings.

CityBuild staff often refer to their stakeholders as the program’s “four pillars.” These actors include community-based organizations, construction industry employers, labor unions and apprenticeship programs, and city agencies (including the City College of San Francisco). They are briefly described below; we will detail each “pillar’s” role later.

Community Organizations

Community-based organizations generally perform outreach, recruitment, screening, and case management functions for CityBuild. Organizations receive public monies to carry out these duties.

Recruitment normally takes place through tabling and other activities at community events. Several organizations also have office space in their neighborhoods, enabling them to recruit walk-in populations. Partner community organizations



CityBuild participants watch a carpentry demonstration

have a firm understanding of the types of candidates that are a good fit for CityBuild, and they will steer recruits who meet these criteria towards the program. Community organizations provide participants with case management services as individuals move through the program and into a trade. These organizations also stay in contact with recruits during these participants' time in the program and beyond.

In terms of community groups, CityBuild frequently partners with Mission Hiring Hall, the A. Philip Randolph Institute, Brightline Defense, Charity Cultural Services Center, the Anders and Anders Foundation, and Young Community Developers. Each organization has deep roots either in particular communities or with specific populations. They draw upon these relationships to help bring participants into CityBuild and assure target populations of the program's legitimacy.

Construction Industry Employers

Employers' most important role is to hire CityBuild graduates onto their job sites. Developers, contractors, and subcontractors establish projects and employ the workforce. They also share information about career opportunities with program participants, co-lead interviews with CityBuild applicants, and present to participants during the 12-week program.

Employers further test new and expanded hiring policies to shore up demand for CityBuild graduates. One example is Webcor's "hyper-local" pilot program. Webcor is a major developer and contractor in San Francisco, and the firm is working on a 10-year water infrastructure project for the City's Public Utilities Commission. The City's local hiring ordinance covers this project. But Webcor is piloting a program that goes beyond typical requirements: the firm has set aside a certain number of work hours for people who live in zip codes closest to the project. Experiments like this, which are similar to the Obama Foundation project in Chicago, can fortify local hiring policy impact.

Labor Unions and Apprenticeship Programs

The purpose of apprenticeship readiness is to prepare people to enter a registered apprenticeship program. CityBuild partners with organized labor to place graduates into joint programs that labor runs with employers. Different from HIRE360, labor unions in San Francisco have a direct entry relationship with CityBuild per a citywide Project Labor Agreement implemented in 2020, allowing program graduates who meet apprenticeship entry requirements to skip the often drawn-out recruitment process.

Building and construction trades unions regularly send representatives to speak with CityBuild cohorts. Two trades present to participants every Friday, discussing opportunities and craft specifics with which participants may not be familiar. Unions also provide instructors for construction skills portions of the curriculum and offer equipment for participants to use when learning about different trades.

The Northern California District Council of Laborers are a prime example of a union deeply engaged with apprenticeship readiness programs to grow membership. The Laborers are involved with CityBuild and several other apprenticeship readiness programs throughout the region. The union frequently sends trainers to provide programming for soon-to-be-released inmates about career opportunities in the trades.

City Agencies

CityBuild is itself a city agency, but it is important to note that staff members also work closely with leaders throughout city government to make sure they are meeting local hiring requirements with well-trained, highly-qualified workers. The City College of San Francisco, also housed within city government, is a key partner in CityBuild's work. All classroom instruction takes place on campus, and the college provides instructors for many of CityBuild's programs. Participants have access to amenities typical of college campuses, such as computer labs and printing services.

Apprenticeship Readiness Deep Dive

CityBuild Academy is a 12-week apprenticeship readiness program that prepares graduates to enter a registered apprenticeship and a career in the unionized building and construction trades. CityBuild's primary components are discussed below.

Recruitment & Intake

As noted, community-based organizations serve outreach, recruitment, and screening functions for CityBuild. Mission Hiring Hall's work typifies the key roles community organizations play in CityBuild's success.

Like the Safer Foundation in Chicago, Mission Hiring Hall provides several employment and workforce development services to job seekers and employers. It generally takes on clients as walk-ins through its two physical locations and through community fairs and other events where information is distributed. Based on initial conversations with clients, Mission Hiring Hall helps determine what career path and services make the most sense for a given person; options include enrollment in CityBuild or any number of other opportunities.

Mission Hiring Hall knows CityBuild's ideal candidates. Staff usually refrain from suggesting that clients apply to CityBuild unless the individuals appear to be a good fit for the program and the industry. People who want to enroll in CityBuild have to meet several eligibility requirements: they must be San Francisco residents, age 18 years or older, have a valid driver's license and either a high school diploma or GED. They must also be able to lift 70 pounds and pass a drug



CityBuild participants at Plasterers & Cement Masons Local 300

screening. Any San Francisco resident is eligible for the program, but recruitment efforts target low-income communities with high unemployment rates as well as communities of color.

Before enrolling in CityBuild, applicants must attend an information session about the program and a “Construction On Ramp” training. This three-day job readiness intensive profiles different trades, teaches soft skills, tests basic math and reading comprehension, and provides OSHA 10 training **before** people formally enter the program. This preparation also helps ensure that those who apply for CityBuild are more likely to see it through until graduation.

Once people decide they want to join this program, they must go through the organizational application process. Previously, union and employer representatives would join admission interviews, but this practice ceased during the pandemic. Program staff hope to restart the practice with future cohorts.

CityBuild runs two cohorts per year. The program regularly receives 75–80 applicants per cohort, 50 of whom are accepted. Roughly 80–85 percent of participants graduate. Program graduates have a 92% placement rate.

Programming

Once accepted, participants join a cohort and go through NABTU’s 12-week MC3 apprenticeship readiness training. Classroom education is a core component of this program. Instructors at the City College of San Francisco lead many of the lessons, which introduce participants to the construction industry, labor history, and other topics.

Some content is directly related to job site skills or preparation for apprenticeship tests, such as blueprint reading and construction math. Other foci include so-called “soft skills,” like financial literacy and interviewing for jobs. Modules that cover culture and expectations on construction worksites are meant to prepare participants to succeed as apprentices and on the job. Program expectations reinforce these lessons: participants receive demerits for arriving late to class or other required activities. The curriculum also includes diversity and sexual harassment training.

Participants gain hands-on construction skills throughout the program, including general construction safety, tool identification, tape measure usage, power tool safety and skills, and scaffolding safety. Participants typically learn a few skills tied to certain trades, like general laborer skills, basic carpentry, introductory welding, and rough framing. During one research visit, participants were learning how to operate forklifts provided by an Operating Engineers local. Instructors from union apprenticeship programs—including the Plasterers, Cement Masons, and crafts that fall under IUPAT District Council 16’s jurisdiction—often teach construction skills courses. Many participants view these classes as essential to their growth during CityBuild.

Participants also have several opportunities to learn about different trades throughout the program from union representatives and construction industry partners. In the past, CityBuild has held “contractor open house” events that participants can attend. Additionally, each Friday during the program, participants hear from union officials in two trades. This practice further helps to familiarize participants with different industry opportunities.

In the end, participants leave the program with several transferable certifications that will make them more attractive job applicants. Every potential participant completes the OSHA 10 training, which is a requirement on any construction job site. CityBuild also trains and certifies participants in confined space, CPR and first aid, and other areas.

CityBuild's primary work in the construction trades comes through its 12-week, cohort-based apprenticeship readiness program. Like HIRE360, the organization is involved in several "special projects" that place workers directly onto major job sites. Here, participants go through "mini-CityBuild Academies" before working on major projects. Examples include the Chase Center, a basketball arena for the Golden State Warriors. CityBuild also recently ran an all-woman cohort tied to development of the Mission Rock neighborhood, anchored by the San Francisco Giants' Oracle Park. Community groups such as Mission Hiring Hall help recruit participants for special projects as well.

Services

As with other apprenticeship readiness programs, CityBuild credits much of its success to the wraparound services participants can access. Graduates' exit surveys show that job placement and career opportunities are the primary reasons why people join the program. We have already listed some career-related services, like contractor open houses and information sessions with union representatives. CityBuild also has "employment liaisons" on staff who help participants connect with employers. Each participant meets with a liaison once per week while in the program. They also meet once weekly with the case manager assigned to them through their intake organization to navigate career choices and other challenges.

Participants receive monetary compensation, too. Benefits include \$3,000 in stipends during their time in the program, distributed in monthly installments of \$500, \$1,000, and \$1,500, respectively. Mayor London Breed prioritized making these funds available to CityBuild participants, and the funding comes from a citywide "universal basic income" initiative. Participants receive an additional \$450 per month for transportation and groceries. Although few program graduates cite stipends as their motivation for *joining* the program, many say this assistance made it much easier to participate.

Graduates also receive financial assistance. Many apprenticeship programs require new apprentices to have a basic set of tools. CityBuild provides funding for graduates to purchase these tools and to cover other expenses (e.g., union initiation fees and initial dues payments) that can be prohibitive for new workers. Once participants matriculate into an apprenticeship program, CityBuild and partner organizations like the City College of San Francisco provide retention services, though several people acknowledge the organization could use resources to improve in this area.

Challenges and Keys to Success

Challenges

COVID-19

CityBuild's success is built on strong relationships and high-quality, hands-on learning. Therefore, it is not surprising that the abrupt stop to in-person events during the pandemic complicated things for CityBuild participants, staff, and partners. While CityBuild has resumed in-person operations, some practices have not fully restarted. Contractor open houses, where participants could network with employers, and the practice of having contractors and union leaders join participant interviews will likely return. However, their current absence highlights the difficulty of "going back to normal" following disruptions from COVID-19.

Trust Over the Long Haul

CityBuild has had remarkable success placing people into union apprenticeship programs and construction careers over the years. This success is partly due to organizational leaders' painstaking efforts to build credibility amongst industry partners. As new leaders enter CityBuild and its partner organizations they must be intentional about cultivating relationships and maintaining the credibility their predecessors built.

Below, we outline a few potential issues in maintaining these relationships:

- The best way to maintain trust with industry partners—both labor unions and employers—is to continue sending high-quality candidates. Some people worry that COVID-19 and the shift to online learning resulted in CityBuild graduates who were not as prepared as they should have been to work in the trades, mostly because of struggles with remote or hybrid learning. Construction is a hands-on, in-person industry, and it is important for training to mirror this reality.
- It can be difficult to balance CityBuild's dual roles as a workforce development organization and as a provider of social services for participants. CityBuild staff rarely come out of the building trades. Instead, they enter the organization following government service or stints in the nonprofit sector. Industry partners want to make sure the program prioritizes construction skills and career readiness rather than emulating "bleeding heart" nonprofits, as one person put it.
- People find out about CityBuild in various ways, which could be considered a strength. One staffer from a community partner emphasized that "no door is the wrong door" when finding career opportunities for underserved populations. But sometimes CityBuild refers people who have not gone through or graduated from the apprenticeship readiness program to jobs. If these individuals do not work out, industry leaders may lay the blame at CityBuild's feet.

These issues are neither insurmountable nor unique to CityBuild within the apprenticeship readiness world. Even so, preserving relationships and a positive reputation in the workforce development space requires constant attention, open dialogue, and a deep commitment.

Budgets and Funding

In some respects, CityBuild is fortunate to be funded entirely through public coffers. The organization does not have to worry about a large foundation shifting priorities and withdrawing a significant portion of its funding. Nonetheless, CityBuild's funding model poses its own obstacles.

Some of these challenges apply to any public agency. CityBuild is subject to shifting priorities amongst political actors in San Francisco. The organization could also lose funding during an economic downturn when tax revenues dry up or when a federal funding source that filters through city agencies runs out. According to officials, CityBuild and the OEWD each saw budget cuts after federal COVID-relief funds to municipalities expired. These realities mean CityBuild must constantly prove its worth to political leaders who make annual budget decisions.

CityBuild's reliance on public funding can also create issues for the community organizations with whom it partners. Community organizations like Mission Hiring Hall receive funds directly from the City of San Francisco to carry out recruiting, screening, case management, and other duties for CityBuild. With public funds come paperwork requirements and other logistical hurdles with which small organizations may struggle to comply given limited staffing and budgets.

A final remark on funding relates to the physical resources available to CityBuild participants. CityBuild is fortunate to have dedicated space for programming at the City College of San Francisco. However, this institution faces similar



CityBuild participants

budget constraints as other community colleges nationwide. Some of the amenities available to CityBuild participants (computer labs, meeting spaces) are therefore not always in great condition. This issue is not major but was mentioned in conversations while gathering data for this report.

Retention Services

As in many apprenticeship readiness programs, rates of graduation and job or apprenticeship placements are some of the metrics CityBuild tracks. CityBuild and its partner organizations dedicate resources to retention and ensuring that graduates continue finding gainful employment in construction. Close monitoring can be difficult given never-ending responsibilities to recruit and train incoming and existing cohorts. The nonprofit organizations on which CityBuild relies for case management may also struggle to keep in touch with graduates to make sure they persist in the industry. Some people stated that strong relationships with contractors and unions can help alleviate this issue, but it is still a challenge.

Female Participation

Even though CityBuild has made great strides in increasing racial diversity within San Francisco's construction industry, the number of female construction workers remains low. The City's 2023 local hiring report indicated that women composed just over 4% of San Francisco residents working on projects covered by the local hiring ordinance⁴⁶—down from 6% the year before.⁴⁷

46 "Local Hire for Construction." *City and County of San Francisco, Office of Economic and Workforce Development*. 2023. <https://sf.gov/sites/default/files/2023-03/2023%20Local%20Hiring%20Policy%20Annual%20Report.pdf>

47 "Local Hire for Construction." *City and County of San Francisco, Office of Economic and Workforce Development*. 2022. <https://oewd.org/sites/default/files/Workforce/Workforce-Docs/2022%20Local%20Hire%20Report.pdf>

CityBuild is making efforts to improve this number, including by graduating its first all-female cohort associated with the Mission Rock project. According to Mayor London Breed, this project supported participants through stipends and childcare funds. But in the industry, and even nationwide, the lack of gender diversity in construction is still a concern. San Francisco is no exception.

Residency Requirement

The local hiring ordinance that CityBuild helps enforce is meant to drive economic benefits for city residents and to create pathways into high-quality careers for low-income individuals, women, and people of color. However, San Francisco is in the midst of a housing crisis. Climbing costs are pushing lower-income residents outside of city limits. If the cost of living in the city continues to rise, some leaders wonder if the local hiring mandate will start missing the populations it has long sought to target. San Francisco has made some tweaks to its local hiring rules, but this problem underlines the salience of housing in broader efforts related to economic justice.

Keys to Success

Data Collection & Tracking

One of CityBuild’s most impressive feats is its extensive data operation. Leaders use data to judge programmatic effectiveness on several levels. For the program itself, staff members track graduation rates (roughly 80%), job and apprenticeship placement rates (over 90%), and various demographic statistics to gauge whether the organization is recruiting the populations it prioritizes.

As noted in the City’s 2023 local hiring report, “over 1,700 San Francisco residents have graduated from CityBuild training programs” since 2006. Of the more than 1,800 current and former participants, roughly 31% are African American, 32% are Asian/Pacific Islander, and 24% are Hispanic or Latino. About 13% are women; this figure, as mentioned, is lower than CityBuild would like, but above the national average.

Given CityBuild’s close relationship to San Francisco’s local hiring mandates, it makes sense to judge CityBuild, at least in part, by the city’s ability to meet the requirements of this ordinance. OEWD releases an annual report listing projects covered by the local hiring law along with the percentage of work hours and apprentice hours that local residents completed.⁴⁸ City residents completed 34% of all construction hours and 51% of apprentice work hours in 2022. Both numbers exceeded statutory mandates. The report also breaks down the project hours worked by race. A majority of San Francisco residents who worked on covered projects in the past year were people of color, with Hispanic residents accounting for about 42% of all local workers.



CityBuild participants observe scaffolding demonstration

⁴⁸ “Local Hire for Construction.” *City and County of San Francisco, Office of Economic and Workforce Development*. 2023. <https://sf.gov/information/local-hire-construction>

The city tracks more granular data as well, including by deconstructing the above information by project and city department. Interestingly, the 2023 report notes that PLA-covered projects overperformed in terms of local hiring for apprentice hours and overall hours worked, at 80% and 51% each, respectively.

Data monitoring is essential to a successful local hiring policy. These data can guide practice by revealing strengths and areas for improvement. As discussed, San Francisco contracts with LCPtracker to gather key data through certified payroll reporting. Records feature worker information (addresses, demographics); project data (project value, contractor tree); trade/craft data; and classifications, hours, and wages.

Direct Ties to Policy Mandates

For these types of data to be meaningful, they must be measured against concrete objectives. In some places, including Chicago, many contractors or governments have goals for diverse, female, and/or local hires. San Francisco is unique in that it employs **mandates**. By law, the City requires that a certain number of work hours come from city residents. CityBuild is a key part of making this happen. This regulation has set a standard, leading major employers not covered by the law—like UCSF—to follow suit. Although the mandate is restrictive in some ways (e.g., it does not, and **cannot**, set explicit race requirements), targeted recruitment can help ensure that local hiring promotes racial and gender justice on projects within city limits or that use public funds.

Relationships Formed Over Time with Key Players

CityBuild's primary stakeholders and partners consist of community organizations, construction industry employers, labor unions and apprenticeship programs, and city agencies. It took years to identify the program's "four pillars," build relationships, and establish the trust necessary to run a successful workforce development program.

As with any effective apprenticeship readiness program, CityBuild thoroughly understands the construction industry and what its main players need to thrive. This comprehension has influenced several aspects of CityBuild's operations, including its lengthy orientation and application process and its instructional choices. Furthermore, instead of using blunt enforcement tools, CityBuild often partners with contractors to remedy compliance issues. Doing so allows the program to maintain relationships with key partners while working towards its goal of employing local residents on major construction projects.

Strong relationships in these areas also provide participants with a richer experience. For instance, union officials help with much of the training and provide equipment so participants can better understand the life of a construction worker. Several interviewees said that hands-on training, such as forklift operation, helped to familiarize them with particular trades and see a career for themselves in areas they previously did not know about.

As mentioned, maintaining these trusting relationships requires consistent and intentional effort. CityBuild has excelled in this area over the course of two decades.

Relationships Between Staff and Participants

One challenge to diversifying the construction industry is cultural: why would someone join an industry or organization if there is no one else who looks like them or shares their experiences? For these reasons, the people recruiting and training CityBuild participants are critically important. During recruitment and intake, as well as throughout the program via case management meetings, participants interact with community organization staff who deeply understand their communities. Several participants cited how much CityBuild staff and instructors care about them—both as people and in terms of career success. Having others who are sincerely invested in their success grants many participants the motivation to continue in the program even when it is difficult to do so.

Cohort members serve as another source of encouragement for participants. Participants often lean on each other for support while in the program. Some guidance emerges organically, and some is intentionally cultivated. For example, CityBuild sets aside time for women to meet once per week to discuss specific obstacles they face. Female interviewees said this activity has produced a warm, inviting space conducive to developing a sisterhood. These weekly meetings also help establish a network of support for women who enter the trades and struggle with predominantly male workplaces and training facilities.

The relationships participants forge during CityBuild contribute to a virtuous cycle that facilitates recruitment and builds organizational capacity. CityBuild graduates often become program advocates, spreading the word and recruiting future participants from their families and communities. Graduates commonly return to teach for the program after building their own construction careers. Every program needs ambassadors, and CityBuild creates them from within.

Flexibility

Over the years, CityBuild—and the City of San Francisco as a whole—has been willing to modify practices as needed. This flexibility often results from changing conditions on the ground. San Francisco is involved in several projects outside city limits, including drinking water infrastructure and updates to San Francisco International Airport. The city has changed its local hire requirements for such projects over time through a reciprocity agreement with San Mateo County. This agreement allows for non-residents to count towards local hiring numbers as long as the projects they work on are in their own communities. This condition acknowledges the regional nature of economic development without undermining the overall goal of putting local residents to work.

A flexible approach also allows organizational leaders to recognize when there are valid exceptions to each rule. For instance, if someone is placed into a union apprenticeship program before they formally graduate from CityBuild, this placement counts as a “graduation” according to program metrics. Apprenticeship applications often open up at unpredictable times. Even if a participant did not complete all graduation requirements before matriculating into an apprenticeship program, CityBuild and industry partners see themselves as having fulfilled their mission: to recruit underrepresented populations and help these individuals unlock career opportunities in construction.

Not everyone agrees with the compromises made over time. For example, San Francisco does not include certain populations, such as out-of-state workers, when calculating local hire percentages. In other words, if 25% of a project’s workforce comes from out of state, local hiring requirements only apply to the 75% of project workers from California. One could perceive this calculation as watering down the law’s intent. Similarly, the initial target for local hires was set to grow to 50% but was later fixed at 30 percent. Overall, though, a flexible approach to this work—grounded in years of on-the-ground relationships and experience in the construction industry—enables CityBuild to implement measures for the greater good of the apprenticeship readiness program and local hiring.

Future

No major changes appear to be on the horizon for CityBuild. Several people would like to see the program reinstate practices that fell off at the height of the pandemic. Staff members are likely to pursue partnerships on signature projects like sports stadiums and neighborhood redevelopments. Leaders would also like to see certain demographic groups, namely women, be better represented in CityBuild and the construction industry at large. Additionally, it will be intriguing to see how CityBuild responds to a likely infusion of federal infrastructure funds, which should increase construction projects led by the public and private sectors. In summary, CityBuild will likely continue producing dozens of qualified city residents to enter the unionized building and construction trades in the years ahead.

APPRENTICESHIP READINESS COLLECTIVE

Introduction

New York City is the nation's most populous city, with an iconic infrastructure of bridges, tunnels, and skyscrapers. It is home to nearly 8 million people⁴⁹ and approximately one million buildings.⁵⁰ New York is also a city of enormous wealth—and endemic poverty. The State of New York has the highest income inequality in the country, with much of the extreme wealth being concentrated in New York City. The city has a poverty rate of nearly 17 percent.⁵¹ New York Congressional District 15, in the Bronx, is one of the poorest in the United States.⁵²

New York is no stranger to the effects of climate change. Hurricane Irene and Tropical Storm Lee consecutively struck the East coast in 2011, causing extensive wind damage, heavy rainfall, and significant flooding in eight upstate New York counties. In 2012, Hurricane Sandy wreaked havoc along the shore again, especially in New Jersey, New York City, and Long Island. The storm caused more than \$60 billion in damages, including widespread power outages, transportation disruptions, and permanent changes to New York's coastline.⁵³ New York City also faces risks from extreme heat, which climate change and structural inequalities only intensify. This extent of heat brings health hazards, particularly to areas with historic disinvestment, and strains the city's infrastructure and vulnerable populations.⁵⁴ Recent events such as a storm in September 2023, which flooded New York City with more than 7 inches of rain, further illuminate the city's vulnerabilities.⁵⁵ The South Bronx is grappling with acute air pollution issues due to heavy traffic and industrial activity, resulting in higher rates of asthma-related emergency room visits for children. In brief, environmental injustices disproportionately affect the area's at-risk communities.⁵⁶

New York must swiftly scale a response that drastically cuts emissions and builds a clean energy infrastructure to support the transition to net zero. The state must also meet goals laid out in the Climate Leadership and Community Protection Act to reduce economy-wide greenhouse gas emissions by 40% by 2030 (and by no less than 85% by 2050) from 1990 levels.⁵⁷ Yet addressing these matters without a plan to narrow staggering income gaps and redress historic inequities would be an epic failure.

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56 Bedrosian, S. *Bronx organizations pushing for environmental justice with high asthma rates in community*. *CBS News*. April 20, 2023. <https://www.cbsnews.com/newyork/news/bronx-asthma-rates-environmental-justice/>

57 "New York State Climate Action Council Finalizes Scoping Plan to Advance Nation-leading Climate Law." *NYSERDA*. December 19, 2022. <https://www.nyscrda.ny.gov/About/Newsroom/2022-Announcements/2022-12-19-NYS-Climate-Action-Council-Finalizes-Scoping-Plan-to-Advance-Nation-Leading-Climate-Law>

To build a more equitable city, many members of the labor movement have committed to developing programs that support historically-marginalized and low-income communities by ensuring access to family- and community-sustaining careers. The building and construction trades are known for allowing people without college degrees to build middle-class lives. One would be remiss not to acknowledge that construction unions, like many organizations in this country, have a history of systemic exclusion: for far too long, opportunities were not open to women and people of color. But progress has been and continues to be made thanks to leaders who recognize this past and have built programs to support diversity—with measurable effects.

New York City’s construction unions have made meaningful strides in diversity in recent years. In 2014, Black workers constituted 21.2% of union construction employment compared with 15.8% in nonunion sectors. Union apprenticeships had over 60% people of color in that same year, twice the rate from 1994; these union advantages also brought the Black community an additional \$152 million in annual wages.⁵⁸

New York City has a number of gold-standard apprenticeship readiness programs that, along with partners in the Building and Construction Trades of Greater New York, have been working together to assemble a diverse and inclusive workforce in the unionized construction industry. In 2019, four high-quality programs jointly launched the first-in-the-nation Apprenticeship Readiness Collective—or ARC. With support from Gary LaBarbera of the Building and Construction Trades of Greater New York (BCTC), program leaders composed this collective for multiple purposes: to amplify their work’s impact, exchange best practices, seek shared funding opportunities, enhance their programs, and grow the number of life-changing career opportunities available to the populations they serve.

ARC is a horizontal collective of four apprenticeship readiness programs that partner with and are endorsed by the BCTC. The Collective consists of The Edward J. Malloy Initiative for Construction Skills, Inc. (CSKILLS), Nontraditional Employment for Women (NEW), NY Helmets to Hardhats (NYH2H), and Pathways to Apprenticeship (P2A). Each of these programs connects hundreds of New Yorkers to union apprenticeship programs each year; together, they have placed thousands of workers. ARC’s founders shared that as a collective, each founding partner integrates their unique expertise with particular communities, and is the primary resource for direct entry and apprenticeship readiness recruitment for each affiliate of the Building and Construction Trades Council of Greater New York.⁵⁹

Additionally, these programs represent a tool that building trades can leverage as part of broader diversity initiatives while meeting contractors’ local and targeted hiring needs. In cooperation with agencies such as the Metropolitan Transit Authority, the Port Authority, and the City of New York’s Department of Design and Construction, ARC affiliates support agencies’ recruitment strategies and retention programs meant to help uphold diversity, equity, and inclusion commitments—both to New Yorkers and to the communities where projects are occurring.

Direct Entry

New York has a recognized state apprenticeship agency (SAA). The New York State Department of Labor oversees the registered apprenticeship systems and the certification of Direct Entry programs. Direct Entry is a preparatory program in New York State that equips individuals with essential skills to meet apprenticeship requirements, offering successful participants a chance to interview with registered apprenticeship sponsors. The program is especially intended to benefit women, minorities, and veterans.⁶⁰ Participating organizations must have a registered apprenticeship program as a

58 “Unions promote racial diversity and increase wages in NYC construction.” *Economic Policy Institute*. March 2, 2017 <https://www.epi.org/press/unions-promote-racial-diversity-and-increase-wages-in-nyc-construction/>

59 “ARC - Apprenticeship Readiness Collective.” NYC Building Trades. 2023. <http://www.nycbuildingtrades.org/arc.aspx>

60 “Apprenticeship Direct Entry.” *Department of Labor*. (n.d.). <https://dol.ny.gov/direct-entry>

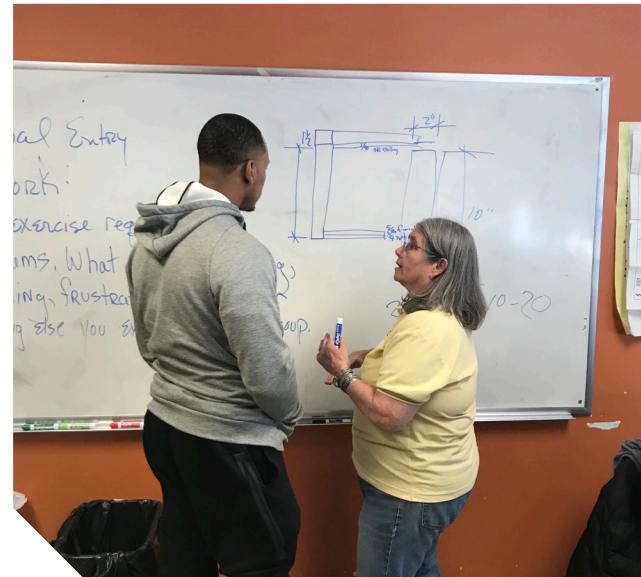
partner, who adds them to their Equal Employment Opportunity statement in order to obtain direct entry status. All ARC programs have this status with the New York State Department of Labor. They can therefore collaborate with partners to move program graduates into apprenticeships without going through the general recruitment process, potentially avoiding the general recruitment timeline.

The application process varies by union: some offer paper applications, others have an online portal, and still others require an entrance exam—but all are in high demand. People line up overnight to apply in person, such as for the Carpenters' union. Laborers Local 79 recruits online and sees 2000 slots fill in the first three minutes of applications opening. Moving apprenticeship readiness graduates more smoothly from graduation to placement is vital for increasing recruitment and retention. It is part of the value these programs add and can cut down on wait times for people trying to access an apprenticeship.

Additionally, just as the apprenticeship readiness process is rigorous on its own, the apprenticeship recruitment process is highly competitive. For example, a structural ironworker earns \$30/hour in their 1st-year apprenticeship⁶¹ and has a benefits package that includes healthcare, pension credits, vacation checks, and more. Given these elements, combined with free training and the “earn-while-you-learn” model of apprenticeship, it’s no wonder there are thousands of applicants when recruitment cycles open. Direct entry is a powerful tool that enables target populations to gain access to high quality union career opportunities.

History

ARC emerged in 2019 to expand apprenticeship readiness through collective advocacy. The Collective also seeks to share resources and best practices in order to enhance members' work and establish greater support for opportunities through higher visibility. Each program helps remove barriers for underrepresented communities, provides access to good union careers, and aims to promote a diverse construction workforce and a more inclusive economy through union opportunities in construction for all New Yorkers. Members' partnerships help the city, private developers, and public agencies fulfill PLA commitments with respect to community hiring goals. A qualified pool of low-income New Yorkers, broadly representing women and people of color from frontline communities, can thus benefit from development-focused investments and projects which forward the transition to a clean energy economy.



Construction math instruction for an ARC affiliate participant

ARC Program Profiles

Before describing ARC's successes and challenges, it is important to profile each individual program's history, mission, size and scope, and focal populations.

61 “Construction Apprentice Prevailing Wage Schedule.” *City of New York Office of the Comptroller*. July 1, 2023. <https://comptroller.nyc.gov/wp-content/uploads/documents/ConstructionApprenticeSchedule-2023-2024.pdf>

Construction Skills

In 2001, under the direction of then-President of the New York City Building and Construction Trades Council Edward J. Malloy, Construction Skills was created in partnership with the New York City Department of Education and the School Construction Authority. This program was originally a vocational offering in the city's public high school system. It concentrated on construction, finance, and other industries under the name "Project Pathways." The NYC School Construction Authority at first funded this initiative to provide career opportunities across industries.

By focusing on New York City high schools, the program could support career-seeking students with basic skills and an understanding of the building and construction trades. Students could also receive assistance with choosing, applying for, interviewing at, and succeeding in the apprenticeship of their choice. Construction Skills continues this work and has become an established leader in apprenticeship readiness programming.

The organization now runs two distinct but related programs. The first program carries on the organization's early work to serve New York City high school students. This program recruits directly from technical education schools and targets those offering construction, architecture, and engineering programs. The program is open to any seniors who meet attendance and academic requirements. Students need to have a cumulative GPA of at least 70% and must maintain a 90% attendance rate.

The second program that Construction Skills offers is for adults. This program emerged from the need to help New York City recover from Hurricane Sandy. At the beginning, it solely recruited and supported low-income New Yorkers and New York City public housing residents affected by the storm. The adult training model broadens Construction Skills' reach and opportunities offered through the organization's enduring relationships and reputation for preparing people to succeed in union apprenticeship.

Since 2001, Construction Skills has partnered with the Consortium for Worker Education to conduct the classroom and hands-on education portions of the program. MC3 was adopted in 2020 to continue offering programming during the pandemic. This curriculum's asynchronous model enabled participants to complete courses when COVID-19 hit and for subsequent classes to be held despite a halt in in-person training.

Results

Construction Skills has placed more than 2,500 New York City residents into union apprenticeship programs. The organization has played a key part in fostering workforce diversity: 90% of individuals placed were people of color, representing a candidate pool that may not have had this type of opportunity otherwise.⁶²

Nontraditional Employment for Women (NEW)

NEW was established in 1978. It has become a national model of excellence for preparing women in New York City for careers in the building and construction trades, transportation, clean energy and green jobs, public utilities, and building maintenance and operations. By enabling women to enter good union careers, NEW is also helping them develop economic independence and build a more stable future for themselves, their families, and their communities.

The importance of recruiting, training, placing, and retaining women in the trades cannot be overstated. According to the Institute for Women's Policy Research, women make up just 11% of the construction workforce. The proportion is even

62 "Study: Innovative Pre-Apprenticeship Program for Minority Youth Deserves Expansion." *Columbia University*. March 24, 2014. <https://news.columbia.edu/news/study-innovative-pre-apprenticeship-program-minority-youth-deserves-expansion>

smaller for tradeswomen, namely those who “work with the tools,” at 3.9% of the labor force.⁶³ This talent pool has yet to be well tapped. As the industry faces impending recruitment challenges due to retirements and an anticipated boom in construction jobs, a pressing need and financial opportunity exist to address this gender imbalance. Women can then secure rewarding, well-paid careers in an evolving sector.⁶⁴

NEW is open to female, trans, and nonbinary individuals who are age 18 or older, are eligible to work in the United States, hold a high school diploma, and have an interest in construction. The organization offers several training programs grounded in apprenticeship readiness: Blue Collar Prep (daytime), NEW at Night (evening), and Boot Camp (abbreviated).

Blue Collar Prep is a full-time program that runs for seven weeks, Monday through Friday, from 7:30am to 4pm. It offers a well-rounded pre-apprenticeship curriculum that affords women a clear understanding of the building and construction trades along with hands-on experience. This way, participants can gain the skills and confidence needed for their apprenticeship journey.

NEW at Night is an evening alternative for women who cannot attend Blue Collar Prep. This program spans nine weeks; it is held on Saturdays from 7:30am to 4pm and on Tuesday, Wednesday, and Thursday evenings from 6pm to 8:30pm. It allows women with jobs or other daytime commitments, such as childcare, to receive instruction at more personally convenient times and in fewer hours than Blue Collar Prep.

Boot Camp is a condensed program that introduces women to the trades, and pre-apprenticeship options, so they can decide if they wish to pursue NEW’s other offerings. This program includes a boot camp for all ages. It also has a track for young women (ages 18–24) who are curious about the trades but not necessarily ready to commit to a full apprenticeship program.

Results

NEW has helped to raise women’s representation in New York City trade careers from 2 to 7 percent. This representation has reached or exceeded 15% for union construction apprenticeship programs that partner with NEW. Although there is much more work to be done, these figures are over three times the national average of 4 percent,⁶⁵ highlighting the potential for high-quality apprenticeship readiness programs to drive diversity and equity in the trades. NEW has placed more than 3,000 women in construction-related careers in the last decade. The organization is currently training over 350 students and places more than 275 each year.⁶⁶



ARC affiliate participants

63 “Numbers Matter: Clarifying the Data on Women Working in Construction.” *Institute for Women’s Policy Research*. March 31, 2022. <https://iwpr.org/numbers-matter-clarifying-the-data-on-women-working-in-construction/>

64 Munn, M. “Women Into Construction.” *Womenintoconstruction.org*. (n.d.). <https://www.women-into-construction.org/wp-content/uploads/2019/08/building-the-future-women-in-construction.pdf>

65 Daniel, R. “Meeting the Moment: Expanding Career Pathways for Women.” *Department of Labor*. October 26, 2022. <https://blog.dol.gov/2022/10/26/meeting-the-moment-expanding-career-pathways-for-women>

66 “Nontraditional Employment for Women.” *new-nyc.org*. 2023. <https://www.new-nyc.org/>

TRADEFUTURES CHILD CARE PILOT

Building a truly diverse and inclusive clean energy economy calls for dedicated training and placement pathways along with access to comprehensive, flexible childcare funding for pre-apprentices, apprentices, and journey workers in construction. Childcare costs in New York State are the sixth most expensive in the nation, consuming 22.1% of the median family income on average.⁶⁷ Even when costs are covered, most childcare facilities are not structured to support people working in construction, a field whose hours conventionally fall outside of daycare centers' operating times. Overtime is also common in the industry. For instance, construction workers often leave for work as early as 5:00am to make their 7:00am start time. They may learn that they have to work overtime on the same day.

Daycare centers, on the other hand, rarely open before 7:30am and often close by 5:00pm. Additionally, new careers in industries like offshore wind can require being at sea for up to two weeks at a time. Many construction workers thus rely on family members or friends to provide the kind of flexible care hours they need. Offering workers funding to meet these demands (e.g., by paying family members or other providers of choice and supporting pilot childcare programs that serve nontraditional hours) will help bring more training opportunities to communities with limited resources. These arrangements will also remove a considerable barrier to many workers' entry into this field.

In recognizing the high costs, insufficient options, and misaligned schedules available to construction workers, TradesFutures is striving to facilitate childcare for skilled tradespeople. Two pilot programs are being launched—one in Milwaukee and one in New York City—to provide workers support through local childcare coalitions and cash assistance: tradeswomen and apprentices can receive these services for a year to increase their economic mobility and work opportunities. NEW is a partner in this initiative, which seeks to establish replicable, scalable models that expand trades members' childcare access.

Pathways to Apprenticeship (P2A)

A group of leaders within the Laborers' union and their many community partners established P2A in 2013. It started as a navigation program for general recruitment into a single local union: staff partnered with the Osborne Association, a re-entry program, to help justice-involved individuals become union apprentices. The program's early days were a resounding success; more community and re-entry partners became engaged, and the founders decided to expand P2A to a program with multiple trades to increase the number and types of opportunities people could access.

Mason Tenders District Council, the Greater New York Laborers-Employers Cooperation and Education Trust, and advocates from a re-entry organization saw a dire need to provide career pathways into the building and construction trades for people recently released from prison. They wondered what might happen if individuals who had been involved with the criminal justice system were immersed in a learning community through an apprenticeship readiness program. P2A was intended to help these individuals acclimate to the workplace expectations of construction and provide them with support in navigating into the industry. Recognizing the importance of building social capital through mentorship, staff members provided ongoing support with the application and interview process. Peer mentors with expertise in the field offered supplementary guidance.

In January 2016, P2A became a formal 501(c)3 with a board of directors comprising representatives from the building trades and community organizations. In 2017, the New York State Department of Labor certified P2A as a Direct

⁶⁷ "Child care costs in the United States." *Economic Policy Institute*. 2023. <https://www.epi.org/child-care-costs-in-the-united-states/#/NY>

Entry Pre-Apprenticeship Training and Placement program. P2A has also moved from working exclusively with the Laborers' union to nearly all NYC Building and Construction Trades Locals. Through classroom instruction, peer-to-peer mentorship, and career services, P2A participants complete a five-week training underpinned by four elements:

- Social capital building through a peer-to-peer mentorship circle
- Civic leadership through root cause and power analyses
- Career immersion through partnership with training centers and labor unions
- High expectations/high support through a continuum of care with wraparound supports

Community Need

Each year, 4.9 million people are jailed in the United States. More than one in four of these people are jailed more than once.⁶⁸ In a 2018 report titled *Out of Prison & Out of Work: Unemployment among Formerly Incarcerated People*, the Prison Policy Institute found that “formerly incarcerated people are unemployed at a rate of over 27%—higher than the total U.S. unemployment rate during any historical period, including the Great Depression.”⁶⁹

Over 600,000 people are released from prison each year with meager prospects for gainful employment. While the number of people in jail has declined in New York, the number of people caught up in the criminal justice system because of parole violations has risen.⁷⁰ In addition to the stigma associated with incarceration, the threat of recidivism upon release looms large. A criminal record becomes a perpetual punishment under these circumstances. The ramifications for justice-involved individuals can seem never-ending as people encounter “disenfranchisement and disqualification from public housing, welfare benefits, and job training, to greatly increased exposure to fatal diseases.”⁷¹ Along with these societal and institutional barriers, this population must contend with other employment obstacles such as a thin work history and limited job search experience, and poor access to transportation or work-appropriate clothing.

P2A's apprenticeship readiness training is meant to support people who are disenfranchised and underemployed. Justice-involved individuals may benefit from access to quality careers and economic opportunities after serving their sentences. Unionized jobs in the building and construction trades are some of the most viable and financially secure career pathways for people with this history. Individuals can gain meaningful employment and middle-class careers. P2A assists other groups as well: members of low-income communities in New York City who are underemployed, young adults exiting the foster care system, and public housing residents. The organization is especially proud of its work supporting leadership development for program graduates within local unions after their apprenticeship readiness journeys have ended. Many graduates have gone on to become shop stewards, organizers, classroom instructors, political advocates, and community leaders. These workers have built strong support structures within their local unions. Informal job referral networks have also blossomed, helping dismantle historic structural barriers that workers of color have faced in construction.

A standout feature of P2A is its commitment to using peer mentors. These individuals facilitate classes, conduct information sessions, and have built a network for job referrals and union activism. The organization believes that the model of credible messengers improves the realities of affected communities. This model is an evidence-based approach where people with lived experiences, often within the criminal justice system, mentor others to deter them from negative paths or support them in building positive social networks.⁷²

68 Jones, A., & Sawyer, W. “Arrest, Release, Repeat.” *Prison Policy Initiative*. August 2019.

69 Couloute, L., & Kopf, D. “Out of Prison & Out of Work: Unemployment among formerly incarcerated people.” *Prison Policy Initiative*. July 2018.

70 “Who Pays for the Rising Number of State Technical Parole Violators in NYC Jails?” *New York City by the Numbers*. August 27, 2019.
<https://ibo.nyc.ny.us/cgi-park2/2019/08/who-pays-for-the-rising-number-of-state-technical-parole-violators-in-nyc-jails/>

71 Mauer, M., & Chesney-Lind, M. (Eds.). *Invisible Punishment: The Collateral Consequences of Mass Imprisonment*. The New Press. October 2003.

72 “*Breaking The Cycle of Incarceration: A Roadmap to Credible Messenger Recruitment*.” Columbia SIPA. (n.d.).
<https://www.sipa.columbia.edu/breaking-cycle-incarceration-roadmap-credible-messenger-recruitment>

Results

Since its inception, P2A has placed over 400 people from historically disadvantaged communities into union apprenticeships. True to its mission, 66% of those placed have been involved with the justice system. P2A has also reported that 98% of its participants identify as members of one or more minority groups.

New York Helmets to Hardhats (NYH2H)

ARC's fourth partner program is New York Helmets to Hardhats (NYH2H). This program does not provide a traditional apprenticeship readiness training model but is a direct entry partner that recruits and supports veterans transitioning into the building trades via apprenticeship opportunities. Helmets to Hardhats was founded in 2002 to help post-9/11 veterans find secure careers. New York was among this organization's first locations owing to the city's prominent union density and large veteran population. New York City continues to be a national leader. NYH2H takes a hands-on approach, working with each applicant to identify a prospective career in the trades. Along with the strong wages and benefits a union apprenticeship offers, veterans can use the G.I. Bill to supplement their income during training.

Despite New York City's high union density and sizable veteran community, transitioning from the military to civilian life still comes with numerous challenges. Veterans are 57.3% more likely to commit suicide than non-veterans,⁷³ and Black troops attempt suicide more often than white service members.⁷⁴ Justice-involved veterans are at a greater risk of addiction, post-traumatic stress disorder, and depression. They also show higher usage rates of VA homeless programs.⁷⁵ Programs such as NYH2H serve as a bridge for veterans to build civilian careers. The building trades unions are actively engaged in ensuring these opportunities remain available.

NYH2H's approach centers on direct engagement and support. Staff members work with each applicant to help veterans map out a career trajectory into the trades. This assistance is reinforced by advice from seasoned professionals in local trades. Veterans are further supported through an apprenticeship program where they receive practical exposure to construction sites and training. As noted, these apprentices can capitalize on G.I. Bill benefits to supplement their income during training. Other platforms support these individuals' endeavors as well. Given the many challenges veterans confront, programs such as NYH2H are critical in presenting employment opportunities and addressing broader issues around mental health, addiction, and societal reintegration.

Results

More than 3,000 veterans have entered construction careers thanks to NYH2H.⁷⁶

73 Holliday, R. "Suicide Among Justice-Involved Veterans: Understanding Risk and Meeting Needs." *Council on Criminal Justice*. September 28, 2023. <https://counciloncj.org/suicide-among-justice-involved-veterans-understanding-risk-and-meeting-needs/>

74 Vandiver, J. "Service members in several minority groups more likely to attempt suicide, report finds." *Stripes*. February 9, 2021. <https://www.stripes.com/theaters/us/service-members-in-several-minority-groups-more-likely-to-attempt-suicide-report-finds-1.661563>

75 Holliday. "Suicide Among Justice-Involved Veterans: Understanding Risk and Meeting Needs."

76 "About Us" *Helmets to Hardhats*. 2023. <http://nyh2h.org/about-us/>

ARC'S COLLECTIVE WORK

Programming

ARC affiliates' programming and curricula share similarities, although each program is suited to the populations it serves. The core curriculum is industry-aligned (regardless of program) and aims to provide participants with high-quality training to support their future as union trades members. NYH2H is an exception: it provides several of the same types of support and applies many overlapping recruitment strategies but does not include classroom training as the other three programs do. Conversely, NYH2H draws on the extensive training that most veterans have received as service members.

ARC programs tend to adopt a training model that is cohort-based. The scheduling models dictate programs' length, but most options have the same key elements and overall amount of training in total hours.



ARC affiliate participant

Classroom time is a major component. The classroom is where participants learn about the construction industry, labor history, building trades, registered apprenticeship structures, and industry-specific skills like tool identification, blueprint reading, and construction math. Other topics address “soft skills,” such as effective communication, interview strategies, and the industry expectation that “early is on time, and on time is late.” Some modules cover the culture and hierarchy of construction worksites; this content is meant to prepare participants to succeed as apprentices and in the field. The curriculum also includes information on work rules, overtime, and financial management.

Diversity and sexual harassment trainings are offered as well. On this point, P2A has established a creative partnership with the nonprofit organization Working Theater. Professional actors read a series of short scenes, written by members of IBEW Local 3, that feature moments of sexual and racial discrimination on the job. These scenes ignite conversations about industry-related challenges, workers' rights, and how union shop stewards and other officials can protect union members at work.

Participants gain hands-on construction skills throughout each program, but these abilities are not the top priority. This distinction can come as a surprise when people are first learning about apprenticeship readiness. Yet it is important to remember that these programs are not intended to train individuals to work in a specific trade. Rather, the curricula prepare participants for apprenticeships with trade-based experts who have the skills and experience to guide people through the ins and outs of a trade. Participants are nevertheless exposed to tool identification, safety principles, measuring and cutting skills, and safe worksite communication during their apprenticeship readiness programs.

Often seen as the most essential part of these programs, ARC affiliates work to ensure participants are well aware of union opportunities, have chances to visit joint labor-management apprenticeship training facilities, and encounter guest speakers in a range of industry positions—from union organizers to construction management representatives. Site visits to training centers give participants a firsthand look at work in a trade and let them speak directly with instructors and apprentices.

Finally, participants receive several certifications as part of their training. Their site safety training includes OSHA 30, a minimum requirement on any construction site in New York City. Construction Skills and NEW also follow the MC3 curriculum, as we have described.

Services

All ARC programs support participants' success as much as possible while acknowledging the difficulties of raising funds to meet every individual's needs. The programs offer stipends, support for union initiation fees, transportation vouchers and reimbursements, and other wraparound services. They also provide a starter kit for all participants, including supplies such as tape measures, hardhats, and other job-based materials. NEW has a full-time social worker on staff. Construction Skills students can access support through their high schools, though the adult program would benefit from broader access. P2A depends heavily on its re-entry program and other community partners to close gaps in support. The collective also leverages others' expertise to focus on coordinating mentorships and leadership development. All people with whom we spoke seemed enthusiastic about the childcare pilot, saying that even government funding is becoming more flexible in how organizations can allocate funds for support services.

Partnerships

Every ARC organization works with different community partners to enhance the program's own efforts and support its target populations. The following examples show the types of partnerships with which public entities or private organizations can offer high-quality pre-apprenticeship programs. Such actions enhance general commitments to providing more equitable employment opportunities to surrounding communities. These partnerships have reinforced the demand for a qualified pipeline of workers that ARC affiliates are positioned to provide.

New York City Housing Authority

The New York City Housing Authority (NYCHA) is the largest public housing agency in the country. If the agency were a city, its 528,105 residents would make it the 35th most populous nationwide.⁷⁷ More than 70% of their buildings are at least 50 years old, and investments are sorely needed to foster a healthier living environment.⁷⁸

Opportunities in construction for residents exist due to a provision of the Housing and Urban Development Act of 1968. NYCHA's capital work comes with an existing Local Hire and Prevailing Wage Mandate known as Section 3. This mandate requires that employment and economic opportunities produced by federal assistance to public housing authorities shall be directed to public housing residents and other low and very low-income residents whenever possible, and NYCHA additionally created the Resident Employment Program which requires that 15% of labor costs must be spent on resident hiring when contracts exceed \$500,000.⁷⁹ ARC affiliates are important partners in helping NYCHA realize its goal of seeing residents access union construction jobs. The hiring driver of Section 3 requirements, coupled with a PLA on a large portion of NYCHA's portfolio, leaves room for partnerships to guarantee that a trained workforce is available. Pre-apprenticeship and expanded apprenticeship can help to ensure a pipeline of qualified workers available to truly meet the potential of Section 3 hiring requirements.

Department of Education

The NYC Department of Education works directly with Construction Skills to identify students interested in union construction career opportunities upon graduation. By completing an apprenticeship readiness program while still in high school, these students can graduate and begin to "earn while they learn" in their union trade of choice. At a time when student loan debt is a mounting concern for many young people, particularly from lower-income families, this opportunity can be very attractive.

77 "NYCHA 2023 Fact Sheet." *New York City Housing Authority*. April 2023.

78 "NYCHA Climate Mitigation Roadmap." *New York City Housing Authority*. 2023. www.nyc.gov/assets/nycha/downloads/pdf/NYCHA-LL97-Whitepaper.pdf

79 "Section 3 Employment Information." *Opportunity NYCHA*. <http://opportunitynycha.org/job-opportunities/section-3-information/>

Columbia University

When a private project involves a community benefits agreement with targeted hiring quotas and a PLA, ARC affiliates build bridges to help accomplish associated goals. Columbia University, as part of its Manhattanville expansion, committed to hiring a percentage of workers from the local community for this project. P2A partnered with the university to hold classes in these zip codes, and in-person recruitment and courses took place in West Harlem. The two institutions continued working together (once participants had graduated and been placed in union apprenticeships) to identify and solicit local union workers for the expansion project.

Signature Projects

NEW developed its Signature Projects program to increase the demand for women's participation in the construction workforce. NEW works with project developers to set goals, support local and minority hiring, rapidly refer qualified union tradeswomen, and provide technical support to unions and contractors striving to meet diversity goals. NEW's Signature Projects have included 1, 2, 3, and 4 World Trade Center, the new Delta terminal at LaGuardia airport, Cornell Tech Campus, and more⁸⁰.

Recruitment & Intake

ARC affiliates share some recruitment methods but also deploy their own strategies to suit their partners and target populations. They all recruit from low-income communities of color throughout the city's five boroughs. Some affiliates administer a TABE test to evaluate candidates; others perform interviews or offer a trial day session to help potential participants get a better sense of program expectations. Attending information sessions prior to applying is mandatory. Many individuals are referred by community organizations, past graduates, or parole and probation officers who are familiar with the program. Through a city partnership under the umbrella of the Small Business Services program, ARC affiliates can recruit via the Workforce One system—a virtual career center that notifies candidates of upcoming class recruitment. Additionally, ARC affiliates attend job fairs sponsored by large development projects and agencies involved in efforts such as the Columbia University expansion or airport expansion outreach with the Port Authority of New York.

ARC affiliates engage many models and partners in their recruitment strategies. NEW hosts weekly information sessions and open houses for potential applicants. Construction Skills has the unique opportunity to work directly with New York City public schools. P2A has cooperated with Federal Parole, the Fortune Society, Center for Economic Opportunities, and with renowned community organizations like the Red Hook Initiative in Brooklyn and Community Capacity Development in Queensbridge.

Program Requirements

ARC affiliates align their program requirements with those of industry partners. In most cases, participants must meet the following criteria:

- 18 years of age or older
- High school diploma or equivalent
- Able to perform physical labor
- Committed to a clean and sober environment

80 "Get Involved." *Nontraditional Employment for Women*. <https://www.new-nyc.org/getinvolved>

Challenges and Keys to Success

Challenges

Market Share & Demand

Perhaps the most integral component of any apprenticeship readiness program is its ties to labor demand. If the market share for unions is low or is decreasing, then the demand for new apprentices will also decline, and programs will have fewer slots or placement opportunities for graduates. PLAs and community hiring agreements can buttress demand and produce a more optimistic market forecast with which unions may predict recruitment needs. The Inflation Reduction Act, with its tax credits and direct pay incentives tied to apprentice use, has been an impetus of economic opportunity for high-quality apprenticeship readiness programs. Organizations can therefore work with unions, contractors, and government agencies to grow a more equitable clean energy workforce.

Funding

All ARC programs receive funding from overlapping sources. A majority of financing comes from public sources: the City of New York's Small Business Services, the Department of Labor, allocations in the New York State Budget. Other funding sources include the AFL-CIO's Workforce Development Institute, TradesFutures, discretionary funding from city council representatives, and the U.S. Department of Labor. Private fundraising from Building and Construction Trades Council affiliates, industry partners, and the philanthropic community is also impactful.

Although funding has been fairly consistent, obtaining long-term financing that allows for flexible spending to meet diverse needs is important. This type of support can enable programs to build out more services for participants—especially for individuals who are facing structural barriers.

Retention Services

ARC affiliates address retention by assembling mentor networks and building strong relationships with graduates within local unions. The TradesFutures child care pilot is one example of an attempt to expand support for retention. However, securing the funding to establish dedicated resources is difficult. Additional funds are needed so that programs can hire staff dedicated to providing more support for retention. Government and philanthropy can both work to expand allowable uses of funds to create more flexibility for retention services tailored to the needs of individuals.

Data Collection & Tracking

Data collection and tracking have presented challenges for some ARC affiliates. Most either use, or have recently adopted, customer relationship management systems such as Salesforce to gather information on applicants, participants, placements, and longer-term successes. A major hindrance is that people do not necessarily remain in touch with an organization after being placed in an apprenticeship program. Relatedly, many people relocate and/or change their contact information. Unions are generally responsible for monitoring the number of hours an apprentice works and project placements; programs cannot track these data directly. CityBuild represents an informative model for obtaining details about specific outcomes: the program is tied to a local hiring mandate, housed within the city, and able to track targeted project hires.



ARC affiliate participants tour a construction site

Female Participation

As mentioned in the profile of NEW, women tend to be sorely underrepresented in the trades. ARC supports NEW's efforts to enable women to learn in a space uniquely reserved for them. Affiliate programs are cognizant of the need to attract and support more women into their cohorts as well, and have expanded those efforts in several ways. Affiliates are aiming to ensure tradeswomen attend recruiting events and are depicted in recruitment materials. All ARC programs have historically been run by women or people of color, and all are committed to upholding the diversity they seek to bring to the trades within their own organizations.

Keys to Success

Relationships with Community, Labor, and Government

If a program has not built relationships with the industry in which participants will work, the program may find itself training just to train. Far more job skill training programs are available than career preparation and placement programs. Apprenticeship readiness is distinctly advantaged in this regard. Establishing trust with the communities that programs serve is essential for equity. Making sure that a program's requirements and expectations are fully articulated—and that the program has a track record of success—can temper skepticism about whether a program is worth a potential participant's time.

This uncertainty is rooted in the exclusionary history with which building trades are reckoning and the program fatigue that many participants experience. High-quality apprenticeship readiness training represents a standout in terms of workforce development. Unfortunately, not all job training programs are tied to union opportunities. The more government and industry work to enforce labor standards, encourage PLAs, labor peace agreements, and other pro-labor initiatives, the more high-quality career openings will be created.

Union partners strengthen the ARC programs in many ways. They lend space and resources, their members and leaders commit time and expertise, and they support fundraising efforts. They also ensure a pipeline of opportunity for

program graduates. Lastly, they advocate for PLAs and community workforce agreements that prioritize community and targeted hiring goals to continue growing a diverse workforce while advocating for workers to have a more secure job environment with union representation.

Care and Commitment

Without exception, all staffers with whom we spoke in the pre-apprenticeship realm were passionate about their work. They expressed gratitude for having the chance to genuinely help others. Their positions require long hours and personal sacrifice. Many people come through organizations' doors with challenges that ARC affiliates wish they could better address. However, the economic opportunity offered by a union career is a valuable commodity that staffers are committed to providing people whenever possible. As one founder said, "There's nothing like getting that call when someone buys their first home. Not just their first home, but the first home to be owned by their family, and they say 'Thank you.' And you think, 'No, thank **you**. You made this happen, and I get to be a part of your journey.' What could be better?"

Community and Industry Mentors

All industries have their own culture. Construction can be a daunting one, especially for women and communities who have not been historically represented in the trades. Programs therefore need to make sure that, when staff members train, recruit, and mentor for apprenticeship readiness programs, participants are representative of—and have experience working with—the communities being served.

ARC programs work closely with labor union partners and their own graduates to establish a robust network of people who can relate to participants. Staff members are then able to walk participants through their journeys with a richer understanding of potential challenges. Program graduates have subsequently assumed roles such as mentors, classroom instructors, and guest speakers. This model allows for an informal type of support that inspires a culture of acceptance and belonging. Many participants shared that they were both surprised by and appreciative of this environment.

Future

ARC plans to continue partnering with public agencies, private developers and funders, and programs based in frontline communities of color. ARC is at the forefront of tracking union opportunities in the ever-expanding clean energy economy to ensure that all New Yorkers have a pathway into the workforce. ARC will continue to advocate for funding for services such as childcare, transportation, stipends, and other supports so their graduates can become successful journey workers and build a secure future for themselves, their families, and their communities.

Additionally, ARC partners hope that the U.S. Department of Education will acknowledge apprenticeship as a valid outcome. This recognition would lead more resources to be directed towards students interested in pursuing alternatives to college after graduation. Historic investments in clean energy and infrastructure, together with the retirement of many baby boomers, have uncovered opportunities for unprecedented numbers of people to enter the construction workforce and build solid middle-class careers.

Apart from NEW, no ARC partners have dedicated training spaces. They instead depend on partnerships within individual contracts. P2A has constructed a uniquely place-based model that can build community awareness and improve recruitment cycles; Construction Skills relies on the NYC Department of Education and the Consortium for Worker Education. Other programs can benefit from a space where they can implement hands-on components of their training or have room for mentor meetings and leadership development classes.

ARC has some expanded funding and work pipeline opportunities within the NYC Pathways to Industrial and Construction Careers program and the Good Jobs Challenge grant that the city recently received through the American Rescue Plan. Through the city's Human Resources Administration and the NYC Mayor's Office of Talent and Workforce Development, along with the Consortium for Worker Education, the program will build out sectoral partnerships and target users of local public systems such as cash assistance, SNAP, and NYC public housing. The program will facilitate these individuals' transitions into unionized, good paying jobs.⁸¹

BUILDING PATHWAYS

Building Pathways in Massachusetts is another example of a program that has recruited women, people of color, and other underrepresented groups into the building and construction trades. This program seeks to increase diversity and opportunities for these communities. Since its founding in 2011, Building Pathways has played a key part in helping job seekers navigate the construction industry. Staff members guide participants through workforce challenges in pursuit of family- and community-sustaining union jobs. Apprenticeship readiness training is the basis of this work.

In light of the struggles women face in navigating the trades, Building Pathways helped launch the Northeast Center for Tradeswomen's Equity. This project focuses on helping women feel confident in their skills and establish strong networks to develop successful careers in construction. The program hosts workshops, holds "Tradeswomen Tuesdays" educational and networking events, and implements other support strategies to connect women—particularly those of color—with opportunities in the unionized building trades.

The organization's efforts have improved diversity in the construction workforce. Women's participation as a percentage of active union apprentices in Massachusetts more than doubled between 2012 and 2022 and now stands at over triple the national average.⁸² Building Pathways also encourages public policies and industry practices that boost demand for program graduates.

The Massachusetts Building and Construction Trades unions and their signatory contractors operate more than 40 joint apprenticeship training centers across the state. These entities also invest nearly \$55 million annually to ensure a steady supply of highly-trained workers who are prepared to meet industry needs in clean energy and beyond.⁸³ They partner with programs such as Building Pathways to increase diversity and expand career opportunities for members of historically marginalized communities.

81 "Pathways to Industrial and Construction Careers." *New York City Office of Talent and Workforce Development*. 2023. <https://www.nyc.gov/site/wkdev/recent-initiatives/pincc.page>

82 "Massachusetts triples national average for women in union construction apprenticeships. Policy Group on Tradeswomen." *Tradeswomenissues*. March 30, 2021. <https://policygroupontradeswomen.org/2021/03/30/massachusetts-triples-national-average-for-women-in-union-construction-apprenticeships/>

83 "Apprenticeship: 'The Other Four-Year Degree.'" (2023)." *Massachusetts Building Trades Unions*. <https://massbuildingtrades.org/directory-of-apprenticeship/>

BEST PRACTICES & RECOMMENDATIONS

As the case studies in this report illustrate, it takes a village to build a successful apprenticeship readiness program. Many organizations and individuals contribute to effective program operations over time. External parties, primarily government agencies and philanthropic institutions, are similarly crucial in providing the resources and capacity needed to develop a more equitable, diverse industry.

Given this reality, our recommendations target several actors. First, we summarize best practices gleaned from our research on HIRE360, CityBuild, and ARC. These suggestions will be most useful for practitioners hoping to set up or bolster their presence in the apprenticeship readiness space.

Next, we lay out a series of recommendations geared towards three types of organizations involved in apprenticeship readiness: organized labor, construction employers, and community organizations. We close with advice for government agencies and funders. These sectors play complementary, and often overlapping, roles in expanding successful apprenticeship readiness models.

Best Practices in Operating Successful Apprenticeship Readiness Programs

Industry-Driven Programming Tied to Demand

The unionized construction industry is distinctive in many ways. Firms tend to employ a small number of full-time tradespeople, while unions take on significant roles in training and placing workers onto job sites. People often have several employers over the course of their careers (or even within a given year) as well as multiple stints of unemployment.

Furthermore, apprenticeship programs aim to match their recruitment schedules with industry demand. Many training centers thus do not offer a consistent set of apprenticeship slots from year to year. In fact, during economic downturns, apprenticeship programs can go extended periods without consistently welcoming anyone new into union membership.

Against this backdrop, apprenticeship readiness cannot merely mimic conventional workforce development programs in structure or programming. Programming should instead approximate industry realities and ensure that participants truly understand how construction operates. These tasks require close communication between program leaders, industry partners, and relevant staff to discern market trends and workforce needs. Programming, certifications, and recruitment strategies can then be updated accordingly.

The Right People at the Table

Given the unique structure of unionized construction, stakeholders must have a say in apprenticeship readiness design. Several programs studied for this report arrived at their present iterations through trial and error. Leaders regularly identified parties who were interested in diversifying the construction industry but encountered roadblocks to meaningful collaboration. Successful programs tend to center their main goal—expanding opportunities to high-quality construction careers—while working relentlessly to recruit parties that **need** to be involved.

These parties are numerous but traditionally include construction employers, building and construction trades unions, associated apprenticeship programs, and a constellation of government agencies and community-based organizations. Each organization helps to foster equity in the industry:

- Government agencies can provide funding and set diversity mandates or goals that drive demand for apprenticeship readiness graduates.
- Community organizations usually have strong on-the-ground relationships in underserved communities, which helps when recruiting prospective program participants.
- Unions and apprenticeship programs accept new apprentices and invest in training them on their chosen crafts.
- Employers hire apprentices and journey-level workers to complete construction projects.

Setting a multi-stakeholder table reinforces accountability. Clear objectives are paramount, but enforcing them is complicated. Parties in successful programs collaborate to devise goals and promote transparency through shared data. Outcome evaluations shed light on programs' successes and failures, verify that all players are holding up their ends of the bargain, and bring best practices to the fore.

Collaboration is not always easy. There is often deep-seated skepticism or outright hostility between parties based on past experiences. But many organizations we examined witnessed breakthroughs after conducting an honest assessment of key actors in the local construction industry and then working to bring these parties to the decision-making table.

Shared Infrastructure Amongst Partners

Successful apprenticeship readiness programs place a premium on building partnerships with key stakeholders. A natural extension of this principle is that effective programs draw extensively on their partner organizations' resources. These assets can be **physical**, such as CityBuild leasing classroom space and using instructors from the City College of San Francisco. The organization also uses union-donated tools and machinery for instruction. Other resources include **human capital**; many unions and employers donate staff time to teach courses, lead mock interviews, and take other steps to develop participants' knowledge and skills. Finally, resources can be **relational**, such as when community organizations draw on their contacts in a certain neighborhood to drive recruitment and retention.

Shared infrastructure is not a one-way street: apprenticeship readiness programs also help build their partner organizations' capacities. CityBuild and the City of San Francisco provide extensive funding to community organizations to engage in recruitment and case management. When HIRE360 opens its 45,000-square-foot warehouse, office, and training building, space will be available for unions to conduct solar installation training and for small-scale suppliers to store inventory as they work to expand their own footprint.

It is also typical for successful apprenticeship readiness programs to partner with one another to maximize impact. A pertinent case is ARC: the organization serves as an umbrella under which multiple programs share resources, lessons,

and best practices with different populations in the field. HIRE360's partnerships with CWIT and other organizations provide another example. One HIRE360 staffer said that CWIT has strong bonds with community organizations, and HIRE360 has built deep relationships with industry partners. By combining resources and leaning into specific areas of expertise, each organization improves and can help assemble a diverse workforce for projects like the Obama Presidential Center.

Clarity About Populations Served

As resources are finite, few apprenticeship readiness programs can cast as wide of a net as they would like. Defining the holes a program plans to fill, and focusing resources on doing so effectively, is a winning strategy. For instance, HIRE360's recruitment efforts largely pertain to Chicago's South and West Sides, where the city's high-poverty neighborhoods and communities of color are concentrated. Each ARC program has a primary, if not **exclusive**, focus—high school students, women, veterans, and justice-involved individuals.

CityBuild's programming is meant to help San Francisco meet local hiring requirements on construction projects. Participants must live within the city limits, and CityBuild principally recruits from high-poverty, high-unemployment areas. The program's community partners are also place-based, mostly serving populations in neighborhoods that need high-quality career opportunities. Knowing the precise populations CityBuild aims to serve enables leaders to tailor their services and maximize their push to bake equity into the city's construction industry.

Credible Messengers

If programs want to maximize their impact with a given population, then the right messengers should contact potential applicants. Relying on community organizations for recruitment and case management goes a long way. Several organizations also prioritize building their own messengers to connect with applicants and participants.

Traditionally, word of mouth has been a major element of recruitment into the unionized building and construction trades. This practice has benefits but can also (oftentimes unintentionally) exacerbate homogeneity. People's networks tend to be populated with other individuals who look like them or hail from similar backgrounds. As people spread the word about career opportunities to family members and friends, union membership can skew towards certain demographics.

Apprenticeship readiness can turn this paradigm on its head. Many graduates become evangelists of sorts for their programs: they share information about their specific apprenticeship readiness program or trade, highlight the quality pay and benefits they receive even early in the apprenticeship, and stoke excitement within their networks. Program graduates can therefore be some of the best recruiters, bringing more people from their orbits into training programs and effectively diversifying trade union membership.

Credible messengers hold value beyond the recruitment phase as well. During research visits, several participants who were enrolled in programs stated how powerful it was to learn from people who looked like them or were from similar backgrounds. Program graduates who return later in their careers to teach courses in their programs cultivate deep connections with participants and help perpetuate a virtuous cycle of recruitment, enrollment, and engagement.

Clear Metrics of Success and Data Tracking

Each program featured in this report measures its strengths and weaknesses using particular metrics. The most frequent are program graduation rates and apprenticeship or job placement rates. Programs' emphases on diversity and equity in the construction industry also compel many organizations to record participants' demographics, most notably race and

gender. By setting measurable goals and monitoring progress, program leaders can better determine if they are recruiting their target audiences, serving participants in the best ways possible, and working in line with their organizational goals.

CityBuild has the most robust data-tracking operation of the organizations we explored. Program leaders collect many of the above statistics, and the City of San Francisco contracts with an outside company to gauge progress towards the city's local hiring policy mandates. HIRE360, and many other programs, use the Salesforce platform to track numbers and modify priorities accordingly. Many leaders have also identified pitfalls in their data tracking. For example, several people noted a gap in recording graduates' retention and completion rates in apprenticeship programs.

Data tracking is often a struggle for nonprofits and other small-scale organizations, and apprenticeship readiness programs have varying degrees of success in this area. The practice takes time and money, both of which are in short supply at many organizations. However, robust goal setting and data tracking help organizations understand where they are doing well or falling short. When married with stories from program participants and community members, data can guide leaders in sharing their own stories with the public, ultimately enhancing recruitment and fundraising efforts.

Using data to judge success has limits. Interviewees from the studied programs, as well as leaders from national-level organizations, have emphasized that not every person who exits a program is a "failure." A major goal of apprenticeship readiness is to familiarize participants with the industry itself. Sometimes, people realize that construction is not the right fit for them. The most successful programs tend to strike a balance between setting measurable goals, implementing robust data tracking, and knowing when to look beyond data to evaluate effectiveness.

Funding that Best Serves Participants' Needs

First, one cannot underestimate how vital financial services are for apprenticeship readiness programs. It is incredibly difficult for low-income individuals to commit to several weeks of training and site visits without some form of financial aid. Programs usually offer stipends, travel vouchers, and the costs associated with starting an apprenticeship (like a basic

Pathways to Apprenticeship graduation speech



toolset, union dues, and initiation fees). Simply put, organizations cannot expect to retain participants without helping these individuals pay their bills and other expenses.

The most suitable uses of aid, though, differ from place to place and from audience to audience. For instance, monthly stipends may not be as critical for high school students in the Construction Skills program as they are for a 30-year-old woman with two children going through NEW. Program leaders should be mindful of flexibly using funds to remove as many barriers as possible for their target population to succeed.

HIRE360 exemplifies this point. First, the organization provides multiple forms of transportation support to its Illinois Works cohorts. Options include train or bus passes for participants who use public transportation, pre-loaded gas cards for those who need to drive, and a large van (provided by the Chicago Federation of Labor) to transport those who can meet in a central location.

One of HIRE360's more innovative practices is its BRF, from which participants can draw for unexpected issues that could impede full participation. Leaders have learned over time which expenses are more or less appropriate for BRF usage. In general, the premise is to grant the organization maximum flexibility in offering the services any person needs to fully participate and make their way into paid apprenticeship opportunities.

Sustainable Funding Models

Due to the numerous expenses associated with apprenticeship readiness training, adequate funding is one of the most important factors in expanding successful programs. We talk more about public and private funding later in this section, but organizational leaders can take measures to encourage long-term effectiveness.

HIRE360 prioritizes diversifying its funding sources. Organizational leaders aim to gain equal funding from three groups: public agencies; private charities or philanthropies; and industry partners, including labor unions and employers. Many programs use a similar strategy in an effort to avoid budget crises if and when a major donor decides to stop donating. CityBuild takes a different approach, relying on a public budget line item—not public or private grants—for all its funding. Regardless of the method, successful programs strive to amass sustainable funds to run their organizations for the long term.

Pathways to Apprenticeship Sanitation graduation ceremony



Recommendations for Key Parties

Best practices are essential to consider for those interested in starting or expanding apprenticeship readiness programs. Longstanding success requires buy-in from several parties, both internal and external. In this section, we offer recommendations to maximize effectiveness for several stakeholders: organized labor, construction employers, community organizations, government agencies, and philanthropic funders. Given their centrality to programs' internal operations, we begin by addressing organized labor, construction employers, and community organizations.

Recommendations for Organized Labor, Construction Employers, and Community Organizations

Prioritize Providing Time and Resources

This recommendation cuts across all three types of organizations. Although this point may seem obvious, dedicating time and resources to a task or effort many view as outside the scope of everyday work can be difficult. But we would argue that apprenticeship readiness is a component of all parties' long-term success and is worthy of substantial investment.

- For **organized labor**, apprenticeship readiness can add new dues-paying members. Unions can also be positioned as key partners in securing equitable outcomes and providing skilled workers for construction projects. These emphases can open doors to new contracts that put members to work.
- For **construction employers**, apprenticeship readiness can help meet equity targets, which are routinely incentivized or mandated on major construction projects. It can also create a long-term pipeline of well-trained workers and deepen professional relationships with the building and construction trade unions responsible for training and placing workers on the job.
- For **community organizations**, apprenticeship readiness can activate new public and private funding sources. Mission-driven organizations' investment in such readiness can heighten local community impacts by helping community members enter high-quality construction careers.

Organized Labor: Establish Direct Entry Relationships with Apprenticeship Readiness Programs

Timing is one of the more difficult aspects of applying to and entering the unionized building and construction trades. Different trades have different application timelines, and people may need to wait an extended period for a slot to become available in their preferred trade. Case management services within an apprenticeship readiness program can facilitate the application process, but direct entry helps expedite timelines for moving diverse populations into the trades.

Several apprenticeship readiness programs have direct entry relationships with local unions, but this practice could become much more common. Partnership for Working Families has defined direct entry as “a targeted hiring system in which graduates of a named pre-training program (or programs) who meet apprenticeship eligibility criteria have a direct route into an apprenticeship program.” Graduates of these programs “skip the list and go right into apprenticeship after demonstrating they meet the entry qualifications.”⁸⁴

84 “Construction Careers Handbook.” *Partnership for Working Families*. 2013.

The last portion of the above definition, “after demonstrating they meet the entry qualifications,” is especially important to union partners. There is a misconception that establishing a direct entry relationship with an apprenticeship readiness program will require labor to take **anyone** who graduates. This is not the case. Apprenticeship programs still determine their eligibility requirements and the number of slots available. Direct entry simply means that qualified applicants who come from an apprenticeship readiness program can jump to the front of the line for admission. In our research, several people referenced apprenticeship coordinators whose views on direct entry changed after matriculating high-quality applicants into their programs.

Registering a direct entry relationship requires filing paperwork with the state or federal authorities that regulate apprenticeship programs. Interested union partners should contact apprenticeship readiness programs and their local Building and Construction Trades Councils to learn more about how to formalize this type of relationship.

Organized Labor: Work with Apprenticeship Readiness Organizations to Better Track Apprenticeship and Career Outcomes

Apprenticeship training is a major investment, and trade unions want to see as many people as possible complete training and become journey-level workers. Apprenticeship completion rates in the United States remain quite low,⁸⁵ meaning training centers pour considerable money each year into training people who do not complete a program. In theory, apprenticeship readiness helps to remedy this problem, as program graduates enter an apprenticeship with a strong idea of the expectations and nature of the work. We spoke with several parties during our research who verified this assumption anecdotally.

More information would be extremely useful in this area, though. Apprenticeship directors can partner with apprenticeship readiness leaders to monitor completion rates for various demographics and for graduates of different apprenticeship readiness programs. These data may help programs judge what is working well and identify what remains to be done. If data indicate stronger apprenticeship completion rates for apprenticeship readiness graduates, then this trend can help persuade stakeholders to invest in this work.

Organized Labor: Incorporate Apprenticeship Readiness into an Overall Organizing Strategy

Apprenticeship readiness is critical for creating pathways that bring diverse populations into the unionized building and construction trades. But high-quality programs, especially at their present scale, will not move the needle to the extent needed. Therefore, building direct entry relationships with apprenticeship readiness programs should be viewed as one component of an organizational strategy to draw new populations into union membership.

Organizing happens on many levels, including by sending staff or union members to nonunion workplaces and convincing contractors to sign on to collective bargaining agreements. Each union has staff dedicated to approaching this work in the most appropriate way for their industry.

A common denominator across unions is the need to talk with **current** members about why apprenticeship readiness and direct entry are in their best interests. These conversations should account for local and personal circumstances. Several points can promote buy-in around equity-focused organizing and workforce development campaigns:

85 “Overview of United States Apprenticeship.” *United States Department of Labor*.
<https://www.dol.gov/sites/dolgov/files/OPA/files/20211103-apprenticeship-equity.pdf>

- Expanding membership and union density builds power and puts unionized contractors in a better position to win bids for work. This advantage will enhance opportunities for all union members.
- More and more governments are considering equity and a commitment to diverse hiring when providing public funds for a project. Direct entry programs put unionized contractors in a better position to gain work hours on these types of projects.
- Membership in a trade union is the most impactful way to help people access fair wages and benefits. Apprenticeship readiness and other organizational efforts spread current members' life-changing opportunities to a broader population.
- At its core, trade unionism is built on solidarity that stretches across lines of race, gender, neighborhood, and other areas of difference. Centering equity is putting principles of solidarity to work.
- Welcoming new members with diverse perspectives and backgrounds can provide the union with fresh ideas, which can yield benefits that we cannot necessarily predict at this moment.

Construction Employers: Create Employment Pathways for Graduates

Apprenticeship readiness is only effective if apprenticeship and job placement opportunities are available. Tools such as direct entry enable organized labor to open space for apprenticeship readiness graduates, but employers must also prioritize job opportunities for these individuals as they become apprentices and journey-level workers. Employment pathways can be developed in ways such as these:

- Sponsoring individuals into union membership, where possible and appropriate
- Setting company-wide diversity, equity, and inclusion goals—and providing the resources and enforcement mechanisms to make sure they become reality
- Testing different local hiring (or *hyper*-local hiring) targets on key projects
- Agreeing to commit funds to apprenticeship readiness and other workforce development programs in PLAs and other negotiations
- Engaging in good faith discussions with labor to set targeted hiring goals and mandates through PLAs, collective bargaining agreements, and other avenues

Community Organizations: Enter New Partnerships

Community organizations serve an important but distinct role compared with organized labor and construction employers in the apprenticeship readiness ecosystem. Whereas labor and employers control certain levers of entry, community partners tend to be facilitative: they help recruit and provide services to people in the communities they serve as individuals navigate employment and training options in the construction industry.

Community organizations sometimes have complicated relationships with employers and organized labor, usually based on histories of exclusion and limited access to high-quality careers. The resulting distrust can be difficult to get past; however, doing so can open doors for members of underserved communities and unveil new funding sources for (often cash-strapped) organizations.

High-quality apprenticeship readiness programs empower community groups, holding them as central to program success rather than as junior partners. If a program consciously integrates community organizations in its decision-making structures, values these representatives' input and expertise, and shows a real commitment to diversifying the construction industry, then these organizations' participation can be transformative.

Recommendations for Policymakers

Invest in Growing Key Industries Like Clean Energy

Even with vigorous buy-in and sufficient resources, apprenticeship readiness programs' success will be limited without a robust construction market. These programs determine the number of available slots based on demand for construction workers, and employers will only hire the number of union members needed to perform the jobs that firms are responsible for completing. Policymakers can help maximize apprenticeship readiness programs' utility by investing in key industries. Such investment builds a pipeline for graduates to enter registered apprenticeship programs and job sites.

Clean energy and other climate-related work is a key area for public investment. Funding in this domain can tackle multiple goals at once: creating high-quality jobs, expanding access to employment opportunities, and combating the existential threat of climate change. Some ideas for areas where policymakers can make targeted investments include the following:

- Making direct public investments into building clean energy sources
- Installing solar panels or other clean energy sources on government buildings and publicly owned land
- Agreeing to purchase energy produced from wind, solar, and other clean sources from private companies
- Retrofitting and upgrading public buildings and transportation systems (including schools) to maximize energy efficiency
- Providing financial incentives for individuals and businesses to make energy-efficient upgrades to their buildings and vehicles
- Requiring energy-efficient and carbon-free energy sources on new construction
- Investing in expanding and upgrading public transportation systems
- Taking steps to make infrastructure more resilient to heat waves, extreme weather events, and other effects of climate change
- Repairing and replacing water lines and other crucial public infrastructure

Include Strong Labor and Equity Standards on All Publicly Funded Projects

Investing in key industries can help drive markets but will not necessarily create high-quality jobs. Whenever governments provide money or incentives (including tax breaks) for project development, policymakers have a chance to implement specific measures as conditions for receiving the funds. This ability is powerful for generating high-quality jobs, advancing equity, and ensuring successful work in the apprenticeship readiness space.

Labor and equity standards can advance several goals. Obligating project owners to pay prevailing wages guarantees a wage floor higher than the statutory minimum. It also puts unionized contractors in a stronger position to bid for work, as low-road contractors cannot win bids simply by cutting labor costs. Similarly, requirements or incentives to hire people from certain communities can spur high-road economic development and open opportunities for underserved communities. Policymakers can even encourage and work with contractors to forge partnerships with apprenticeship readiness programs to build a pipeline of workers for a given project.

CityBuild provides one of the best examples of this virtuous cycle. Once public projects reach a certain size, they trigger the municipality's local hiring requirement. San Francisco works with multiple parties to fulfill this requirement: employers; CityBuild; community groups, which recruit from highly impoverished, underserved communities; and labor unions, which provide staff for jobs and negotiate PLAs that set wages, working conditions, and other employment regulations.

We have already outlined a few labor and equity standards, but below is a list of other measures that policymakers should contemplate:

- Instituting prevailing wage and PLA requirements for construction work
- Requiring labor peace agreements for operations and maintenance work attached to publicly funded projects
- Implementing community workforce agreements with targeted hiring goals
- Drafting apprenticeship utilization requirements
- Lifting existing bans or limitations on local hiring and other targeted hiring policies

PROJECT LABOR AGREEMENTS AND COMMUNITY WORKFORCE AGREEMENTS

Project Labor Agreements are legally binding, collective bargaining agreements that developers, general contractors, and labor unions negotiate to establish the terms and conditions of project employment before hiring begins. These agreements often require labor peace on the projects and set working schedules, hiring requirements, pay rates, safety rules, and a grievance process.

Community Workforce Agreements are PLAs that contain targeted hiring provisions meant to expand employment opportunities for underrepresented populations and people who live near a construction site. In addition to local hiring, these agreements normally require contractors to adhere to wage and benefits standards and to pay into a training fund. For instance, in 2017, the Port of Los Angeles and Los Angeles/Orange Counties Building and Construction Trades Council signed a 10-year agreement requiring nearly a third of the well-paying jobs and apprenticeships generated by major Port construction projects to go to residents of the harbor area and to high-unemployment communities in the City of Los Angeles.¹

1 "Port of Los Angeles Approves 10 Year Agreement" [Press release]. September 17, 2017. https://www.portoflosangeles.org/references/news_090717_labor_agreement

PROJECT LABOR AGREEMENTS AND OFFSHORE WIND

As the offshore wind industry grows across the country, unions can help expand access to high-quality jobs. In May of 2022, NABTU and the offshore wind developer Orsted signed a PLA that covers all work up and down the East coast. The agreement includes diversity, equity, and inclusion provisions that are beginning to take shape on the ground.

In Rhode Island, Orsted and Eversource are partnering with government, business, labor, and the Community College of Rhode Island to build out a robust offshore wind training infrastructure. Building Futures, a successful apprenticeship readiness program, will play a key part in this effort. Building Futures' Executive Director Andrew Cortés explained that “these training dollars will help ensure that diverse community residents experiencing poverty... will have a clear path to family sustaining careers through Registered Apprenticeships in the construction trades.”⁸⁶

In Maryland, Orsted is spending hundreds of millions of dollars to develop and operate offshore wind projects and upgrade ports. As part of this effort, Orsted says it “will convene Maryland colleges, universities, community colleges, school systems, registered apprenticeship programs, pre-apprenticeship programs and community organizations to ensure the industry’s immense opportunities are available equitably and sustainably.”⁸⁷

These are just two examples of how labor can use expanding projects to collaboratively develop apprenticeship readiness training that can enhance job opportunities for frontline and underrepresented communities.

Require “Labor Voice” on Workforce Development and Other Public Boards

Having advocates for high-quality job creation and equitable access in public office is critical to creating a diverse, equitable clean energy economy and construction industry. Yet nothing can replace workers’ experiences and perspectives. To represent workers’ interests at all levels of government, policymakers can require “labor voice”—or a representative from organized labor—to be included on decision-making boards. These boards can cover topics like workforce development, energy (and energy efficiency), construction, economic development, and other subjects.

In the clean energy space, public entities can establish “just transition” boards or offices focused on creating a fair transition to a zero-carbon economy. Any board should include voices from both organized labor and community organizations. In the same vein, just transition offices should have formal avenues for input on decisions from these populations. An advisory board is one way to amplify diverse voices.

Provide Adequate, Flexible Funding for Programs

Finally, policymakers can provide direct funds for apprenticeship readiness. The success of programs examined in this report is primarily due to the individual attention and service that staff members give participants. It takes time to build

86 “CCRI teams with Orsted and Eversource to launch training for Offshore Wind workers.” *Community College of Rhode Island*. August 3, 2022. https://ccri.edu/marketing/news_events/2022/August/offshorwindtraining.html

87 “Orsted Applauds Major Investment in Maryland’s Offshore Wind Workforce Training.” *Orsted*. August 3, 2022. <https://us.orsted.com/news-archive/2022/08/major-investment-in-marylands-offshore-wind-workforce-training>

the relationships needed to recruit from underserved communities and to help people enter the building and construction trades. Rather than increasing staff members' caseloads, staffing and other resources should be expanded to scale programs.

Policymakers can help by including apprenticeship readiness funding in public budgets. As stated, effective programs allocate resources based on an understanding of specific communities and what participants need in order to succeed. Policymakers should thus let program leaders use funding flexibly and in ways that best serve their target populations.

We do not mean to suggest that public funds should have no strings attached. It makes sense to establish and track key metrics, such as program demographics and apprenticeship placement rates. But overly strict funding criteria and heavy paperwork requirements take time away from professionals in the field doing what they do best: serving participants and graduates.

Policymakers should also listen to apprenticeship readiness leaders and ponder ways to allocate funds towards particular needs. For example, childcare expenses and availability are major hurdles to successful participation. If childcare is too expensive, or if daycare hours do not match construction industry schedules, then otherwise-motivated individuals may opt not to apply or enroll. Policy interventions, such as childcare vouchers, can lighten these burdens to make it as easy as possible for people to take part.

EQUAL REPRESENTATION IN CONSTRUCTION APPRENTICESHIP

California's Equal Representation in Construction Apprenticeship (ERiCA) grant⁸⁸ seeks to forge sustainable career pathways for women, nonbinary, and underserved communities in the building and construction sectors. Housed within the state's Department of Industrial Relations, this grant recognizes the challenges in balancing work and childcare, dedicating funds towards childcare support for pre-apprenticeship and apprenticeship programs registered with California's Division of Apprenticeship Standards.

According to ERiCA's webpage, funds "can be used to support stipends intended to pay for childcare, or to cover the cost of childcare coordination or in-house childcare for the families of the participants." The program also awards funds to organizations that prioritize community outreach, ensuring underrepresented populations are well-connected in the construction ecosystem.

Childcare is a barrier to participation in apprenticeship readiness and apprenticeship programs nationwide. Initiatives like ERiCA in California are pivotal in addressing this issue, removing barriers to participation, and creating a diverse and resilient workforce. Lawmakers, community-based organizations, education agencies, and unions can explore similar models as they look to expand opportunity and mold the building and construction landscape.

Government funding is crucial for apprenticeship readiness programs, but so too is private money. Philanthropists and other private actors can provide the funds needed for programs to expand and succeed. The next section presents a series of recommendations for private funders (many of these recommendations also apply to the government).

88 "Apprenticeship Standards Equal Representation in Construction Apprenticeship (ERiCA) Grant." *California Department of Industrial Relations*. (n.d.). <https://www.dir.ca.gov/DAS/Grants/ERiCA.html>

Recommendations for Private Funders

Make Longer-Term Commitments to Fund Work

The transitory nature of foundation-based and philanthropic funding is a great source of stress for nonprofit leaders. When funds are granted on a short-term basis, leaders must continuously worry about securing funds, which can take time and attention away from building an organization. In a field such as apprenticeship readiness, where it takes time to cultivate relationships and identify the players needed in an industry, year-to-year funding can constrain program development.

We suggest that private funders experiment with longer-term funding commitments in the apprenticeship readiness space. Funds may need to come with clawback provisions if a funded organization is clearly not making progress. But the certainty of longer commitments can free workforce development practitioners so they may play to their strengths—industry analysis, relationship building, and program development—to make an impact over the long-term.

The Arbor Brothers Grant Initiative,⁸⁹ based in the New York tri-state area, addresses poverty by infusing nonprofits with financial and institutional support. The grant allocates a financial contribution (with support totaling \$300,000) by evaluating socioeconomic challenges in organizational operations. Arbor Brothers invests 200–300 consulting hours per grantee over 9–12 months, with funding provided over three years. The provision includes executive coaching, strategic planning, financial management, and outcome measurements. The initiative supports nonprofits involved in education, youth development, and job training to ensure that these organizations deliver tangible, enduring benefits to their communities.

State and municipal governments should consider the success of this grant, which supports career pathways in the building and construction sectors for underrepresented communities. Providing funds for childcare and community outreach lowers barriers and engages a range of stakeholders, from community organizations to unions. This grant also goes beyond financial support, offering childcare resources for parents in construction apprenticeships registered with the Division of Apprenticeship Standards. It bolsters community outreach as well. This initiative provides a model for fostering an inclusive industry and enhancing equity in the construction ecosystem.

Institute Flexible Metrics for Success

Similar to public funders, philanthropies can follow the lead of practitioners on the ground when determining the appropriate use of funds and metrics for success. We discussed the importance of flexibility in using funds in the previous section. Here, we describe why flexible metrics are so important.

Setting measurable goals, tracking progress towards those goals, and using data to inform practice are key to running a successful apprenticeship readiness program. However, these tasks must be balanced with reasonable exceptions arising from on-the-ground realities. Two examples shed light on this dynamic.

As noted earlier, HIRE360 once helped place a participant into a union apprenticeship prior to graduation. There was an opening in the person's desired trade, and it was unknown when the union would be taking applications again. With the program's support, the participant was accepted and enrolled into the apprenticeship, effectively fulfilling the program's mission. However, leaders had to convince a funder that this was a "success" over the course of many conversations. The participant did not formally graduate from the program, which was a primary measure of effectiveness.

89 "Our Approach." *Arbor Rising*. (n.d.). <https://arborrising.org/approach/>

Also at HIRE360, staff once took an apprenticeship readiness class to a high-rise construction site early in the program. After bringing participants to the top floor, which was an open-air construction site with no windows or walls yet installed, one person realized she was terribly afraid of heights. Even though she originally believed that a career in construction was right for her, this experience led her to reconsider and leave the program. The staff viewed this as a success of sorts even though she did not graduate. After all, a major purpose of apprenticeship readiness is to familiarize participants with the industry and help them decide if it suits them. It was far better for the woman to discover that construction was not a good fit at that point than after being accepted to an apprenticeship program and filling a spot that would better serve another person.

It is not easy to perfect an approach that uses data to judge effectiveness *and* can reasonably adjust to circumstances. But it is possible, and it is necessary when funding apprenticeship readiness. Funders must take the time to build relationships with practitioners and create flexible metrics with which to assess programs and allocate funding.



Classroom instruction

Help Programs Build Capacity in Key Areas

Many upstart nonprofits, including apprenticeship readiness programs, are filled with passionate advocates and subject matter experts. However, these professionals sometimes struggle to develop both the visionary practices and the day-to-day logistics to sustain success. Philanthropies and governments need to fund service provision, but investing in long-term capacity building is also essential.

Apprenticeship readiness leaders need to have the time and tools to engage in leadership development work, such as visioning, strategic planning, coaching, and managing personnel. Investing in retention services and long-term communication with program graduates were suggested across the organizations we examined. Leaders see this work as key to understanding their long-run impact in diversifying the industry, but it is difficult to dedicate the time and resources required to implement a strategic growth plan and expand in these areas. Other metrics—such as program graduation rates and apprenticeship placements—garner most of the staff’s attention.

Many other tools and skills are also critical to building sustainable success. Examples include project management skills and data-tracking software. But both items often take a backseat to the daily grind of task completion, especially in stretched-thin community organizations that are critical to apprenticeship readiness programs’ recruitment and case management. As funding agents consider where to allocate money, they should balance immediate needs with long-range investments.

CONCLUSION

With the climate crisis worsening each day, policymakers and industry leaders must take bold action to decarbonize the economy, build new sources of clean energy, and harden our infrastructure to the effects of extreme weather. How we respond as a society in the next few years will determine the health of our planet for generations.

Climate action should not happen on the backs of working people and frontline communities. Instead, leaders must help create millions of high-quality, unionized jobs—and expand access to these jobs—for populations typically left behind.

The time to make this happen is now. There have been unprecedented investments in climate action at the federal, state, and local levels. Many of these investments come with incentives, and sometimes mandates, to integrate strong labor and equity standards.

The unionized construction trades have been a source of family- and community-sustaining jobs for decades. Through joint labor-management training centers, organized labor has helped produce generations of highly skilled tradespeople to complete important construction projects. Organized labor must be at the center of any “just transition.” Building the clean energy economy with low-road, precarious jobs will only aggravate inequality and undermine support for decarbonization in communities throughout the United States.

While it is essential to acknowledge discriminatory practices—both past and present—within the construction industry, apprenticeship readiness programs provide a viable path forward for diversifying the building and construction trades and supplying the labor force needed to perform climate work into the future. Apprenticeship readiness should be woven into a broader strategy with multiple goals: to expand the industry; enlarge union market share; and attract, train, place, and retain a growing number of high-quality workers from diverse backgrounds. Associated programs will be transformative in widening access to family- and community-sustaining jobs for people from marginalized and underserved communities.

The case studies in this report illustrate how leaders across the country are using apprenticeship readiness to improve access to high-quality construction careers. Practitioners can use the suggested best practices to expand their impact. Further, these multipronged recommendations can help inspire the policy and funding conditions that the apprenticeship readiness model needs to scale up nationally.

The clean energy economy is already here, and it is set to grow exponentially in the coming years. We hope the organizations and lessons highlighted in this report, as well as guidance for different parties, demonstrate how apprenticeship readiness can help tackle the dual crises of climate change and inequality.

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