How Pre-Apprenticeship and YouthBuild Foster New Opportunities for Under-represented Groups in the Construction Trades in Illinois

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Executive Summary

Pre-apprenticeship programs are a substantial component of the larger universe of workplace-based learning programs. Particularly as apprenticeship grows as a priority for businesses, funders and government, and as apprenticeship is broadened beyond traditional construction into other industries, there is increasing need for an understanding of what makes for a quality pre-apprenticeship program that successfully prepares workers to be competitive in fields such as construction. During 2019 and 2020, the Institute reviewed the literature and conducted a series of five case studies of Chicago-area pre-apprenticeship and YouthBuild programs to identify and describe the elements that help pre-apprenticeship programs succeed in efforts to improve diversity within the construction trades. We specifically focused on programs that enjoy good reputations among trade unions and construction contractors:

- Chicago Women in Trades
- St. Paul Church of God in Christ Community Development Ministries, Inc.
- Reconstruction Technology Partners A Safer Foundation Social Enterprise
- Revolution Workshop
- CityIncite YouthBuild and B.U.I.L.D. programs

All of these pre-apprenticeship programs serve groups that are under-represented in the construction industry. In addition to helping individuals qualify for careers in the construction trades, these programs have taken on the difficult mission of changing the composition of the industry workforce to better reflect the general population of the Chicago Metro area. Our observations and conclusions are summarized below.

While none of the participating programs were compensated for their time, they understood that another aim of this study was to bring greater attention to their accomplishments and serve as an additional rationale for general financial support of pre-apprenticeship and YouthBuild programs. Finally, some participating programs indicated that these case studies may help grow stronger ties with unions and contractors and inspire government to continue improvements to both policies and funding.

What are pre-apprenticeship programs?

The body of research on pre-apprenticeship programs reflects the national ambiguity regarding the meaning of "pre-apprenticeship." Programs can use the term without the need to conform to U.S. Department of Labor (USDOL) guidance. Furthermore, they need not adhere to specific performance measures unless required to do so by their funding sources such as the Workforce Innovations Opportunity Act. In addition, since pre-apprenticeship programs often aim to prepare individuals to enter into further training, such as an apprenticeship, traditional measures of success can be somewhat blurred.

YouthBuild is a pre-apprenticeship model funded through the USDOL that serves at-risk youth between 18 and 24 years of age. With the exception of YouthBuild, pre-apprenticeship programs are un-regulated in all but a small handful of states. New York and Massachusetts are

among the states that do regulate pre-apprenticeship programs; both of these states also regulate apprenticeships. Illinois is one of twenty-five states that rely on the U.S. Department of Labor to register apprenticeship programs in the state. Although it does not register pre-apprenticeship programs, the state policy has adopted USDOL guidance regarding the design of high-quality pre-apprenticeships.

What factors influence the success of pre-apprenticeship programs?

The construction industry has made significant strides moving the composition of its workforce toward better reflecting the demographic characteristics of the general population. The State of Illinois, civic and philanthropic organizations, unions, and contractors have made good faith efforts to move the needle toward greater equity and equality in the industry. Preapprenticeship programs, as demonstrated by the initiatives highlighted in this study, can serve as important gateways for under-represented populations to embark on careers in the trades.

Based on our interviews with the seven identified successful programs, our reviews of their curricula and operations, and on the existing literature on pre-apprenticeships, we can report that the following elements have been revealed as contributing to their apparent success.

- Training and Fundamentals: All of the programs perform well in terms of providing participants with the needed fundamentals: basic skills training, education in math and reading, effective on-the-job training, and industry-accepted credentials.
- Career Readiness: They all prepare their trainees to meet the minimum thresholds for the next phase of their careers, including teaching them how to pass entry tests, prepare a resume where warranted, and interview well.
- **Partnerships:** They all have strong partnerships with unions, contractors, or other employers with whom these training programs have built trusted relationships.
- **Support Services:** Wraparound services are as fundamental as the training, education, and credentials their clients receive. These services are a difference-maker.
- **Funding:** Funding is challenging for the workforce development world generally, but it is especially so for pre-apprenticeship programs, which often must pay their instructors as adjuncts. Stable organizational support sufficient to underwrite ongoing operations would improve already high-performing programs significantly.

All of the programs in this study are designed to help workers who are traditionally under-represented overcome systemic barriers to entry and viable careers in the construction trades. Wraparound services, such as case management, CWIT's Barrier Reduction Fund, and RTP's relationship training programs, to name a few, are a critical part of the foundation for success for all pre-apprentices, but especially so for those who are under-represented in the trades. Unfortunately, the direct provision of such services adds considerably to the bottom line of programs aimed at opening the trades to under-represented groups. In a world of limited resources and tight silos, these extra costs, in effect, limit the scale and reach of such programs.

Drawing from our work in workforce development and from this project, we believe that critical wraparound services that are common to several training initiatives should be funded as a

utility function that comprise the foundation for and a shared cost of these training initiatives. We acknowledge that this structure will require significant changes in how these programs are designed and funded, but there are examples of how this may work. For instance, it is similar to the funding model for corporate universities that play a central role in institutional memory and collective learning for the business. It is also similar to the design of our public education and training institutions such as community colleges. Tax dollars go into the basic educational infrastructure, and tuition and contract revenues cover some overhead as well as for training and education that may be more targeted.

Although this study was not designed to explore demand-side issues, we believe that they, too, warrants additional investigation. In particular, simply focusing on the supply of under-represented workers through pre-apprenticeships is insufficient to increasing their numbers in the trades. There has to be a sustained demand-side pull into the trades at long-term employment rates that substantially exceed historic levels.

While some programs have either formal or informal relationships that give some advantage to their graduates with respect to entry into apprenticeship programs, they still must compete with the general population for coveted apprenticeship slots. A way forward to materially improving the demand-side is to further strengthen the articulation of qualified preapprenticeship programs with apprenticeships. Clearly, agreements of this kind must necessarily include all stakeholders as well as respect their individual and collective interests.

Employers must also do their part by growing the number and overall percentage of historically under-represented populations on jobsites and in their businesses. Public agencies such as the Illinois State Tollway Highway Authority took such a step through its ConstructionWorks initiative a few years ago. The Chicago Transit Authority, the Metropolitan Pier and Exposition Authority, and the Chicago Department of Aviation are also working to expand opportunities for under-represented groups. Private developers and the construction contractors that they hire need to step up their efforts as well by establishing clear goals and measures of their progress.

One other note: we heard a great deal about what happens on the jobsite. Entry programs cannot solve these problems for contractors. Workers who already face obstacles because of longstanding traditions and the general culture of the industry cannot be expected to also carry the entire burden of fitting in.

Acknowledgements

The report is wholly the product its authors and of the Institute. The findings and opinions expressed in this report are solely of those of the authors, and do not reflect the findings and opinions of any of the pre-apprenticeship providers, any of the members of the Board of Directors of the Institute, or the Chicago Federation of Labor.

Introduction: History and Purpose of the Project

Pre-apprenticeship programs are a substantial component of the larger universe of workplace-based learning programs. Particularly as apprenticeship grows as a priority for businesses, funders and government, and as apprenticeship is broadened beyond traditional construction into other industries, there is increasing need for an understanding of what makes for a quality pre-apprenticeship program that successfully prepares workers to be competitive in fields such as construction... During 2019 and 2020, the Institute reviewed the literature and conducted a series of five case studies of Chicago area pre-apprenticeship and YouthBuild programs to identify and describe the elements that help pre-apprenticeship programs succeed in efforts to improve diversity within the construction trades. We specifically focused on programs that enjoy good reputations among trade unions and construction contractors:

- Chicago Women in Trades
- St. Paul Church of God in Christ Community Development Ministries, Inc.
- Reconstruction Technology Partners A Safer Foundation Social Enterprise
- Revolution Workshop
- CityIncite YouthBuild and B.U.I.L.D. programs

All of these programs serve groups that are under-represented in the construction industry. In addition to helping individuals qualify for careers in the construction trades, these programs have taken on the difficult mission of changing the composition of the industry workforce to better reflect the general population of the Chicago Metro area. We cast a broad net to include programs which are operated by a variety of sponsoring organizations. Since participation in this study was voluntary, the programs profiled are not fully representative of the range of high-performing pre-apprenticeship programs. Nonetheless, these programs share elements that clearly are tied to their successes in recruiting, retaining, and graduating their participants into registered construction apprenticeships and construction jobs. These elements are the same that are described by the limited number of other studies of construction industry preapprenticeships.

In this report, first we present an overview of pre-apprenticeship and YouthBuild as they are delivered across the U.S., with a brief outline of key elements that make for a successful program. Then we present case studies for the seven programs listed above. For each program, we provide the history of the oganization, a brief description of its training, and its strategies for long-term successful partnerships. We also describe the program's supportive services and outreach, key benefits and outcomes, its progress toward/achievement of elements of the USDOL Pre-apprenticeship Quality Framework, key challenges, and our conclusions.

This report closes with our general conclusions, in which we extract and highlight the most significant implications for pre-apprenticeships and YouthBuild. A bibiliography is included in the Appendix.

Pre-Apprenticeship and YouthBuild Across the U.S.

Context of Pre-Apprenticeship and YouthBuild

The U.S. Department of labor describes "apprenticeship" as "an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a portable credential." According to the Education Commission of the States, at least 36 states have a state-level policy addressing apprenticeships. Twenty-five states, including Illinois, use the U.S. Department of Labor to register apprenticeships. The remaining states plus the District of Columbia and Puerto Rico have their own registration systems. Illinois is among at least 24 states that have coordinated, centralized apprenticeship programs (see:

https://www.illinoisworknet.com/ApprenticeshipIL/Pages/default.aspx).

Pre-apprenticeships comprise a sub-class of work-based learning (WBL). The definition of WBL varies across the country and by whether the defining entity is a state educational agency, state department of labor or workforce development group, or a national organization. The latter includes organizations that focus on WBL, career and technical education, college and career readiness, and those with business and industry representation.³

Some state departments of labor or workforce development formally include "preapprenticeship, youth apprenticeship, and Registered School-to-Apprenticeship" as activities in which a person may engage prior to an apprenticeship within the meaning of WBL. The available literature shows that these labels and their derivatives, such as "internship," are ubiquitous and used somewhat interchangeably. The more colloquial uses of these labels range from programs that embrace a rigorous curriculum and supervised on-the-job training leading to specific educational and skills outcomes to those that include career exploration, job shadowing, and some basic or remedial education. In fact, it is somewhat common to find the mention of "pre-apprenticeship" or a related term as a proposed programmatic element of a comprehensive WBL policy without attaching any specific meaning to the term. It is listed simply as something that should be supported.

The U.S. Department of Labor does not register or certify pre-apprenticeship programs. Instead, it has published guidance adopted by the Illinois Workforce Innovation Board. The pertinent guidance is excerpted below:

 Pre-apprenticeship Definition and Quality Framework. Pre-apprenticeship is defined here as a program or set of strategies designed to prepare individuals to enter and succeed in a Registered Apprenticeship program and has a documented

¹ https://www.apprenticeship.gov/employers.

² https://www.ecs.org/50-state-comparison-statewide-apprenticeships/.

³ Giffin, Jessica, GeMar Neloms, Amanda Mitchell, and David Blumenthal. "Work-Based Learning Definitions: Themes from States and National Organizations." College & Career Readiness & Success Center at American Institutes for Research, January 2018, p. 1.

⁴ Ibid., p. 3.

- partnership with at least one, if not more, Registered Apprenticeship program(s). A quality pre-apprenticeship program is one that incorporates the following elements:
- Approved Training and Curriculum. Training and curriculum based on industry standards and approved by the documented Registered Apprenticeship partner(s) that will prepare individuals with the skills and competencies needed to enter one or more Registered Apprenticeship program(s);
- <u>Strategies for Long-Term Success.</u> Strategies that increase Registered Apprenticeship opportunities for under-represented, disadvantaged or low-skilled individuals, such that, upon completion, they will meet the entry requirements, gain consideration, and are prepared for success in one or more Registered Apprenticeship program(s) including the following:
 - Strong recruitment strategies focused on outreach to populations underrepresented in local, state, and national Registered Apprenticeship programs;
 - Educational and pre-vocational services that prepare individuals to meet the entry requisites of one or more Registered Apprenticeship programs (e.g. specific career and industry awareness workshops, job readiness courses, English for speakers of other languages, Adult Basic Education, financial literacy seminars, math tutoring, etc.); and
 - Assists in exposing participants to local, state and national Registered Apprenticeship programs and provides direct assistance to participants applying to those programs
- <u>Access to Appropriate Support Services.</u> Facilitates access to appropriate support services during the pre-apprenticeship program and a significant portion of the Registered Apprenticeship program;
- Promotes Greater Use of Registered Apprenticeship to Increase Future
 Opportunities. To support the ongoing sustainability of the partnership between
 pre-apprenticeship providers and Registered Apprenticeship sponsors, these efforts
 should collaboratively promote the use of Registered Apprenticeship as a preferred
 means for employers to develop a skilled workforce and to create career
 opportunities for individuals;
- Meaningful Hands-on Training that does not Displace Paid Employees. Provide
 hands-on training to individuals in a simulated lab experience or through volunteer
 opportunities, when possible, neither of which supplants a paid employee but
 accurately simulates the industry and occupational conditions of the partnering
 Registered Apprenticeship sponsor(s) while observing proper supervision and safety
 protocols; and
- <u>Facilitated Entry and/or Articulation.</u> When possible, formalized agreements exist with Registered Apprenticeship sponsors that enable individuals who have successfully completed the pre-apprenticeship program to enter directly into a Registered Apprenticeship program and/or include articulation agreements for earning advanced credit/placement for skills and competencies already acquired.⁵

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⁵ "Defining a Quality Pre-Apprenticeship Program and Related Tools and Resource," Training and Employment Notice, Employment and Training Administration, U.S. Department of Labor, 13–12, November 13, 2012, pp. 2–3.

More formal recognition or registration of pre-apprenticeship programs exists at the state level. At least four state departments of labor or workforce development agencies define WBL as activities in which a person may engage prior to apprenticeship: Arizona, North Carolina, Rhode Island and Wisconsin. In addition, some states require formal approval of pre-apprenticeship programs. New York, for example, goes so far as to register both apprenticeship and pre-apprenticeship programs. Some states, such as New York and Massachusetts (which also registers apprenticeships) facilitate direct entry agreements between pre-apprenticeship and apprenticeship programs.

YouthBuild is a pre-apprenticeship program administered by the Division of Youth Services, Office of Workforce Investment within the Employment and Training Administration of the U.S. Department of Labor. It is "a community-based ... program that provides job training and educational opportunities for at-risk youth ages 16–24 who have previously dropped out of high school." Through YouthBuild, clients learn vocational skills in construction and in other indemand industries. They also provide community service through construction or rehabilitation of affordable housing for low-income or homeless families in their own neighborhoods. Youth split their time between vocational and classroom work where they can earn a high school degree. Youth are also mentored, and receive follow-up education, employment, and personal counseling services.⁸

Aside from YouthBuild, the lack of clarity with respect to the meaning and rigor of preapprenticeship training allows many organized activities to claim the mantle of being a "preapprenticeship" program without being required to deliver specific benefits to either the participants or the employers who seek to fill entry-level positions.

What the literature tells us: Critical elements of effective programs for addressing the needs of under-represented groups in the construction industry

The annotated bibliography attached at the end of this paper includes more than forty reports and guides that pertain mostly to the construction industry. This bibliography represents a large sample of substantive research and policy thought on pre-apprenticeships or their relationship with apprenticeships. These titles are culled from nearly 100 documents published in the last two decades that mention pre-apprenticeship. The research on pre-apprenticeship is but a small fraction of the much large body of work on apprenticeships and the broader universe of technical and vocational education of which apprenticeship is a subset.

JFF (formerly Jobs for the Future) and the Aspen Institute are prominent sources of policy thinking on pre-apprenticeships. In 2009, the Aspen Institute surveyed workforce development programs connecting individuals to jobs and apprenticeship opportunities in the construction

⁶ Giffin, Jessica, GeMar Neloms, Amanda Mitchell, and David Blumenthal. "Work-Based Learning Definitions: Themes from States and National Organizations." College & Career Readiness & Success Center at American Institutes for Research, January 2018, p. 3.

⁷ https://www.dol.gov/agencies/eta/youth/youthbuild

⁸ Ibid.

sector.⁹ Given the variations in the uses and meanings of "pre-apprenticeship," the authors determined to include "all entry-level construction trades training and placement programs."¹⁰ The report reflects the responses of 236 programs.

Given that a driving interest behind our study revolves around improving diversity in the construction trades, the following more pertinent conclusions from the Aspen Institute report are included here:

- 1. While pre-apprenticeship programs were found to be more accessible than registered apprenticeship programs (e.g., they may have lower barriers to entry or broader admission requirements), many entry-level programs did not report placing substantial numbers of graduates into the apprenticeship system. One reason is the limited availability of apprenticeship openings. This constraint was especially the case at the time of the study when the economy was in the early stages of an economic recovery. Another challenge relates to the larger goals and purposes of the programs. Some respondents served the needs of a specific population and did not necessarily expect all participants to enter an apprenticeship. This variance in expectations generally remains the case for youth-serving programs for which finishing high school or obtaining a GED may be the first priorities. In addition, some programs may have found that participants are not prepared to enter an apprenticeship but may do so after finding some other work. Therefore, participants might have secured construction jobs, but not necessarily as apprentices. What these alternatives mean in terms of wages and career pathways remain outstanding questions.
- 2. Demand-side interventions can be used to expand the number of apprenticeships and entry-level job opportunities. Two such tools are project labor agreements and apprenticeship utilization requirements.
- 3. The lack of knowledge of effective practices may explain some of the variation in program strategies. Program services and content varied substantially from program to program, the markets being served, and the educational and service needs of the programs.
- 4. A common practice among programs is that they seem to involve partnerships. The majority of programs studied by Aspen appeared to involve several kinds of organizations operating a program; only a few did not cite having a partner. How these partnerships operate requires further examination.
- 5. A subset of programs that connect participant services and employer relationships reported higher job placement rates, even though they worked with disadvantaged populations. Others reported high levels of success in connecting participants to apprenticeship slots.¹¹

¹¹ Ibid. pp. 38-39.

⁹ Conway, Maureen, and Allison Gerber. "Construction Pre-Apprenticeship Programs: Results from a National Survey." Aspen Institute, July 2009.

¹⁰ Ibid., p. 4.

JFF has published a series of reports on apprenticeships and pre-apprenticeships. *JFF's*Framework for a High-Quality Pre-apprenticeship Program sets out six major elements for such a program:¹²

- 1. Transparent Entry and Success Requirements. In addition to making these requirements clear, the program should have strategies to help participants address gaps in requirements for entry into an apprenticeship; and, where such gaps cannot be overcome by the program itself, work with registered apprenticeship sponsors to remove or improve accessibility with respect to these barriers.
- 2. Alignment with Skills Sought by Local Employers and High-Quality Apprenticeship Programs. Notably this includes instruction and training to reach underserved populations.
- 3. Culmination of One or More Industry-Recognized Credentials. This includes supports such as test delivery.
- 4. Development of Skills Through Hands-on Activities and Work-Based Learning. One goal is to prioritize opportunities for WBL in which the participant completes meaningful job tasks in a workplace. Also, WBL should help participants understand industry culture and learn how to navigate it.
- 5. Offering of Academic, Career Exploration, and Wraparound Supports. Wraparound supports include tutoring and case management, such as childcare resources, mental health, transportation, and housing.
- 6. Transition into a Registered Apprenticeship or Other High-Quality Apprenticeship Program. Recommended strategies include:
 - a. "Partners with industry, employers, unions, intermediaries, and the public workforce system to facilitate placements;
 - "Works with program sponsors to determine their form of selection preference for program graduates, such as guaranteed interviews or direct entry into a highquality apprenticeship;
 - c. "Facilitates the provision of advanced standing when the curriculum of the preapprenticeship program overlaps with the apprenticeship program;
 - d. "Connects program graduates who do not enter an apprenticeship to a postsecondary and training option, or to an employer in a related field for an interview." ¹³

A few specific studies of initiatives aimed at improving the diversity of the local or statewide construction workforce have included the role and design of pre-apprenticeships. A long running series of such studies on Oregon's efforts to diversify the construction trades has been undertaken by researchers at Portland State University. In one study published in 2017,

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¹² Allen, Lili, Charlotte Cahill, Deborah Kobes, Eric Seleznow, and Myriam Milfort Sullivan. "JFF's Framework for a High-Quality Pre-Apprenticeship Program." JFF Center for Apprenticeship and Workbased Learning, June 2019, pp. 2–4.

¹³ Ibid.

researchers Maura Kelly and Lindsey Wilkinson conducted a longitudinal study of two preapprenticeship programs: Oregon Tradeswomen, Inc. and Constructing Hope. Among their findings, they reported that pre-apprenticeships played a significant role in recruiting marginalized workers, particularly women, into apprenticeships. They also reported that ongoing, non-financial support promoted retention in apprenticeships. Other evaluation studies on construction apprenticeships and Oregon's efforts to improve the diversity of the workforce showed growing rates of diversity supported by direct interventions.

New York City's Edward J. Malloy Initiative for Construction Skills is a large-scale cooperative effort by the city's Department of Education Career and Technical Education (CTE) High Schools, apprenticeship programs jointly sponsored by Building and Construction Trades Council unions and unionized construction contractors, local government agencies, and the non-profit workforce development community. While there are several key elements that are unique to New York (e.g., it is embedded in the CTE high schools and it operates in a state that registers both apprenticeships and pre-apprenticeships), nonetheless there are lessons that can be inferred for Illinois and the Chicago metro region. Critically, based on a study of the Malloy Initiative in 2014 by Ester Fuchs, Dorian Warren, and Kimberly Bayer, there are three essential elements of the initiative's success that may be transferrable to Chicago: (1) it has strong partnerships, especially with the registered apprenticeships; (2) it offers a direct link and pathway from the program into apprenticeship positions; and (3) the program is sized to fill the projected number of apprenticeship positions.

In addition, the findings of a study by the Massachusetts Gaming Commission¹⁶ on an initiative to promote diversity in the trades participating in casino construction, reinforce the conclusions of JFF of the Molloy initiative study. In its conclusions, this study framed the problem of improving diversity as both a supply AND a demand problem.

Attempting to achieve diversity in the construction industry had historically been viewed from a supply approach, but creating demand is essential. It requires diversity goals and hiring diverse workers, but also developing the workforce—ensuring that there are available, qualified, job-ready women, minority and veteran workers to hire. Similarly, with contractors, it's not just about a commitment to contract with women, minority and veteran owned businesses, but also about finding ways that these oftensmall contractors can fit into a large project, ensuring these companies are certified as W/M/VBEs and building their capacity to bid on and complete jobs. And, essential to all of this is the constant monitoring to ensure that diversity goals are being met and problem solving to address obstacles that come up. It takes an integrated, data-driven supply and demand strategy that engages all the stakeholders in the industry to move

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¹⁴ Wilkinson, Lindsey and Maura Kelly. "Evaluation of Pre-Apprenticeship and Retention Services in the Construction Trades in Oregon." Portland State University, June 2017, pp. 5–9.

¹⁵ Fuchs, Ester R, Dorian Warren, and Kimberly Bayer. "Expanding Opportunity for Middle Class Jobs in New York City: Minority Youth Employment in the Building and Construction Trades." Columbia University, School of International and Public Affairs, March 2014.

¹⁶ Barringer, Peg. "Built to Last: Best Practices for Diversity in the Construction Industry; The Massachusetts Casino Gaming Experience." The Massachusetts Gaming Commission, June 2019.

the numbers. However, the crucial element for success in this model is to have a designated leader or diversity team from the property owner focusing on implementation and innovation from the beginning.¹⁷

With respect to the demand side, the report described the broad outreach in recruiting participants into pre-apprenticeship programs. Unions played a direct role in these efforts. Community groups and advocacy organizations worked with contractors to address obstacles to hiring and retaining diverse workers. Also, one pre-apprenticeship program negotiated direct entry into union apprenticeship programs.¹⁸

YouthBuild

As we mentioned previously, YouthBuild is a distinct model of a pre-apprenticeship program. The literature with respect to YouthBuild generally is more evaluative since the framework for the program is established by the USDOL (see https://www.youthbuild.org/research). Established as a federal program in 1992, YouthBuild was administered initially by the U.S. Department of Housing and Urban Development, and then transferred to the Department of Labor in 2006. In 2014, the Workforce Innovation Opportunity Act designated YouthBuild as a pre-apprenticeship program model. USDOL grants funds directly to YouthBuild programs through a competitive process. Local YouthBuild programs must raise 25 percent of their support through other sources as a match. There are 156 USDOL-funded YouthBuild programs in 42 states, Puerto Rico, and Washington, DC. There are two means by which a program may use the YouthBuild name: it can be a grantee of the federal government or it can be licensed by YouthBuild USA, a not-for-profit organization.¹⁹

YouthBuild programs assists hard-to-serve youth who are homeless or in foster care. It aims to educate its participants, help them onto career paths (primarily, but not exclusively in construction), and instill life-skills that will help them in their lives. While many of the program elements generally are consistent with those of many other pre-apprenticeship programs, YouthBuild programs serve a younger population than many other programs, with a notable exception being the Malloy initiative in New York. A study of YouthBuild Philly, which works with retail businesses, notes three important program elements. First, it identifies "good-fit" business partnerships that set young people up for success. Second, it strengthens front-line management through coaching and feedback. Third, it provides customized training to help business partners institutionalize a supportive culture and management.²⁰

¹⁸ Ibid., p. 7.

¹⁷ Ibid., p. 5.

¹⁹ https://www.youthbuild.org/department-labor-youthbuild.

²⁰ Weissbourd, Jenny, and Amanda Newman. "The Benefits of Bridging Divides: How YouthBuild Philly Shares Its Supportive Practices to Build Business Value and Better Jobs." Aspen Institute, January 28, 2020, pp 7–9.

Case Studies

The organizations participating in the case studies were recruited by the project authors. All of the programs are held in high regard by their union or contractor partners. Program leadership were told that the aim of the study was to identify and describe critical elements and important practices that they deem essential to their apparent successes. These elements are described in the USDOL guidance and are consistent with the existing body of research on preapprenticeships.

While none of the participating programs were compensated for their time, they understood that another aim of this study was to bring greater attention to their accomplishments and serve as an additional rationale for general financial support of pre-apprenticeship and YouthBuild programs. Finally, some participating programs indicated that these case studies might help grow stronger ties with unions and contractors and inspire government to continue improvements to both policies and funding.

Chicago Women in Trades (CWIT)

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Linda Hannah, Program Director lhannah@cwit2.org

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 Telephone: (312) 942-1444

 Chicago IL 60608
 Website: https://cwit.org

History of the Organization and its Pre-Apprenticeship Program

Chicago Women in Trades (CWIT) was founded in 1981 by a group of tradeswomen "to improve women's economic equity by increasing their participation in high-skill, blue-collar occupations."²¹ CWIT began as a support network, and by 1987 it had established the Preapprenticeship Tutorial Workshop, now the Technical Opportunities Program (TOP), to increase the number of women prepared to enter the construction trades. TOP is offered in three sessions of approximately 180 hours over twelve weeks. It serves an average of seventy-five women annually.²² CWIT also operates the Women in Welding Program in partnership with the Jane Addams Resource Corporation. The purpose is to provide women with welding instruction for entry-level into manufacturing jobs. The full-time training program runs over the course of thirteen weeks. It provides successful graduates with forklift driving certification, OSHA 10 certification, and American Welding Society credentials.²³

CWIT is regarded widely as a national leader working on behalf of women entering male-dominated industries and occupations. Through the National Center for Women's Equity in Apprenticeship and Employment, CWIT and its "gender equity" partners offer comprehensive guidance and resources on the design and implementation of successful and effective preapprenticeship, apprenticeship, and industry partnership programs.

The guidance and resources on pre-apprenticeship programs reflect CWIT's own program design and years of experience. It has five major components:

- Outreach and career education recruiting women into the construction trades
- Assessment aligning selection to maximize opportunity and success for female candidates
- Training to industry standards
- Case management
- Job placement and retention²⁴

²³ Ibid.

²¹ "Herstory," https://cwit.org/mission-impact/herstory.

²² Ihid

²⁴ http://womensequitycenter.org/pre-apprenticeship-providers/.

It is best to understand CWIT, and initiatives such as TOP, in the larger context of the CWIT's commitment and focus with respect to the sisterhood of women working in construction and other male-dominated occupations and industries. Based on this framework, success is defined by CWIT's role in opening doors for women, who first need to see where opportunities exist, and then need pathways along which they may pursue these opportunities. It also helps to build and sustain this sisterhood (e.g., having each other's backs) so that women are able to fully exert their agency over their careers and on the job.

This concept of sisterhood was referenced throughout a 2 ½-hourlong focus group of approximately a dozen CWIT participants and alums. The focus group emphasized that the program is wholistic. It equips participants with required vocational skills, supports them with wrap-around services and resources, teaches them what to expect on the job site, offers strategies for dealing with hazing as well as sexual and racial abuse, and provides a relative safe-harbor for women in the trades.

Partnerships

Since Illinois construction trades do not have direct-entry agreements to apprenticeship programs with any pre-apprenticeship program, CWIT is limited in its ability to help move women into construction apprenticeships. Nonetheless, a CWIT graduate has some advantage in competing for apprenticeship slots, depending on the trade. One trade permits CWIT to submit sponsorship letters, allowing students access to the application process. Others award points to TOP graduates on the test/experience form. Still others have developed a good working relationship with CWIT, and program graduates are looked upon favorably. Many apprenticeship programs require sponsorships by contractors. In at least one instance, there is no subjectivity in the process, and CWIT grads do well based on the strength of their training. In summary, for the most part, the strength of CWIT's partnerships are the result of long-term engagements. The challenge is that it is difficult to advance the percentage of women in the construction workforce substantially when relying on these more informal arrangements.

CWIT recognizes that long term success begins with the pre-apprenticeship program, but that success ultimately depends on tradeswomen moving into leadership in the unions and industry. CWIT is working to build tradeswoman leadership in the unions through mentorship and retention initiatives by the Painters, Carpenters, Plumbers, the multi-trades Council, a new Bricklayers and Allied Craftworkers women's committee, and a new electrician's group that focuses on advocacy and mentoring. In addition, one tradeswoman became a trustee for Ironworkers Local #63, and another is the first female instructor with Plumbers Local #130. Once again, however, numbers make a difference – a critical mass of tradeswomen in leadership is needed in order to achieve the cultural changes that will welcome women to enter into the construction industry. CWIT's constant engagement with contractors, local and state governments, developers, and the unions sets the conditions for such changes, and enlists them as allies to work towards a welcoming working environment.

Training Details

TOP runs twelve weeks, with classes on Tuesday and Thursday nights from 6:00 p.m. – 9:30 p.m. and on Saturdays from 8:00 a.m. to 3:00 p.m. These classes are provided at no cost to the students. The pre-requisites are:

- High School Diploma or GED
- Driver's license
- Birth certificate or other proof of eligibility to work in the United States
- Physically fit
- Able to demonstrate basic math and reading skills on an aptitude test
- Able to pass a drug test.

The curriculum includes:

- Math: Fractions, decimals, ratios and percentages, area and perimeter, square roots, exponents, feet and inches, and basic algebra
- Test preparation: Spatial relations, mechanical reasoning, and numerical reasoning
- Physical conditioning: Stretching, stamina, balance, aerobic, and weight-lifting exercises
- Basic construction skills: Safety, tool recognition and use, measuring, and blueprint reading
- **Job readiness**: Goal setting, interviewing, resume preparation, budgeting, and sexual harassment prevention
- Hands-on lessons: Learning experiences in carpentry, electrical work, sheet metal working, plumbing and pipefitting, bricklaying, and more instructed by experienced tradeswomen.

Classroom instruction and physical conditioning through circuit training occur during the evening sessions. Hands-on lessons and visits to the various trades occur during the Saturday sessions. Consistent with the values of CWIT, the curriculum for TOP is shared on-line for others to use.

Upon successful completion, the student is able to:

- Demonstrate accurate linear measurement skills
- Know what to expect regarding aptitude tests and apprenticeship entry exams
- Understand and read blueprints
- Demonstrate improvement in basic tool recognition and safe handling
- Show a marked improvement in math skills
- Regain the ability to apply geometric formulas and principles
- Learn the function of the individual trades and their scope of work

- Show a marked increase in physical stamina, strength and endurance
- Learn the basics of physical science applications.

The course requirements are attendance and active participation in classes, completion of all course work, and completion of a personal "survival kit" that prepares them for apprenticeship, on-the-job performance, and workplace conditions. They must also pass midterm and final examinations.

The Women in Welding Program is a fast-track training program that prepares women to build skills for manufacturing and metalworking. Currently, CWIT is contemplating whether to upgrade the program. Training is provided Monday through Thursday, 9:30 a.m. to 3 p.m. The pre-requisites are:

- Birth certificate
- Driver's license or other identification.

The curriculum covers:

- Welding (MIG, Stick, and TIG), leading to MIG welding American Welding Society certification
- Basic metal working and blueprint reading
- OSHA 10 certification
- Workplace readiness and job search assistance

For a while, CWIT was able to support the Barrier Reduction Fund. The fund was established through the help of Access United with support from United Way and the Chicagoland Workforce Funders Alliance Obama Equity Fund. Prior to this, CWIT used its own funds, which were obviously limited, to provide financial assistance. Through access to the fund, CWIT was able to provide weekly stipend amounts from \$75 to \$225 for graduates in "pre-job" programs. Currently, there are no resources to support the fund. The importance of such support was made clear by one focus group participant, a returned citizen, who lived in a dangerous neighborhood. She reported that CWIT, through the Fund, enabled her to secure a car, since public transportation was inadequate to serve her job needs. She noted that she still has the vehicle after five years.

Life-skills training and support runs throughout CWIT's training and operational ethos. Women entering the construction trades are made aware of the negative assumptions they are likely to encounter on the job. Having the confidence and self-esteem that is needed by someone who is often the sole women on a jobsite is a challenge for every woman. As some remarked, women are not conditioned to see themselves in a positive light and need support as they grow personally. A fundamental element of CWIT training is to confront these challenges. In addition, the identity of tradeswomen as a sisterhood helps them overcome barriers and negative conditions and grow comfortable and confident in their own skins.

Outreach

CWIT conducts outreach on several levels and offers several orientation programs over the course of a year. Every orientation includes a presentation about CWIT, testimonials by tradeswomen, special presentations by a union or trade school, and an overview of the training program, schedule, and content.

The publication, You Can Do It! A Women's Guide to Construction Careers, provides an overview on the construction industry, the opportunities it offers for women, testimonials by tradeswomen, and guidance about how to get into construction and whether it is right for the reader. CWIT also offers regular introductory classes and participates in career education events.

In 2019, 300 women out of 837 total participants attended the We Can Build It Career Expo held at the IBEW union hall in conjunction with the general contractor for the Obama Center, Lakeside Alliance, the Illinois State Toll and Highway Authority, the Chicago Department of Aviation, and the Chicago Transit Authority. It attracted fifty-two vendors, including preapprenticeship programs, sixteen contractors, and nearly every local apprenticeship program.

In addition, CWIT's high energy Drum Corps of tradeswomen is attracting attention for the program at parades and other events. One focus group participant said that it made her aware of the program and was affected by the joy and enthusiasm of the Corps.

CWIT is engaged broadly in local, state, and national circles on behalf of its agenda to support inclusion and equity for tradeswomen. It advances policies and promotes personal advocacy by tradeswomen. It works with policy makers, public agencies, developers and contractors to connect women with and promote their retention on publicly funded projects. It also works to build the capacity of pre-apprenticeship and apprenticeship programs to grow the numbers of women in construction, manufacturing, rail, and transit careers.

There is a distinction between women entering and completing an apprenticeship and long-term employment in the trades. CWIT has focused attention on public works projects by promoting policies that ensure equitable opportunities for women to access and retain employment on those projects. It has also advocated on behalf of the Gender Equity in Apprenticeship contract and expansion of the Women's Apprenticeship and Non-Traditional Occupations Act (WANTO). CWIT has worked with OSHA and industry partners to address harassment as a safety and health issue. In addition, it organized the Health and Safety for Women in Construction Policy Forum at the Tradeswomen Build Nations conference.

A distinguishing characteristic of CWIT is that it takes a comprehensive view of the industry ecosystem. It appreciates that focusing exclusively on training does not necessarily lead to success for its graduates. All elements of the construction industry from developers and public works agencies to contractors, unions, and jobsites must act in concert to provide equitable and hospitable work opportunities for women.

CWIT serves a diverse population of women. All-in-all in 2019, 241 individuals participated in a CWIT program or received services; 234 participants were women or girls and seven were transgender or non-gender conforming. Ninety-two participants were African or African American, seventy-four were Latinx, sixty-seven were European American/Caucasian, two were Arab American/Middle Eastern, Asian, or Pacific Islander, two were Native American, and four were multi-racial. In terms of income, 40% were below the poverty level, 50% were lower income, 10% were middle income. The age split was 30% who were twenty and younger, and 70% between twenty-six and fifty-nine. Geographically, 80% were from City of Chicago, with 12% of the total from the north side, 48% from the south side, and 20% from the west side. In addition, 15% were from the south suburbs and 2% each from the west and north suburbs.

Personal Experiences of Participants

CWIT organized a gathering of over a dozen women apprentices and tradeswomen who graduated from TOP. It was an extraordinary 2 ½ hours during which time they were stunningly candid about their experiences, the importance of their sisterhood, the support that many women must have in order to succeed during training and while in the trades, and their sense of their futures. Here are some of the major take-aways.

CWIT provides a means into the trades, but it begins with the woman having a "why," a strong personal reason to get into the trades. For women with children, it requires a strong support system, composed mostly of family and friends, who are willing to pitch in and take care of the kids while mom is pursuing her career. Family can also help with the "why," especially family members who are in the trades already. One woman talked about seeing how her husband had good benefits, rising income, and financial stability, and that she realized that this work would provide a similar avenue for her, especially because she didn't have a college degree and wanted to avoid incurring debt.

Another participant described how CWIT prepared her through comprehensive training for what came in apprenticeship and on the job. She knew how to organize her "team" of support to help cover for her kids and family obligations while she pursued her career.

One tradeswoman summed up the importance of the CWIT environment:

The mental health that you get provided here is beyond my understanding and does support the sisterhood that we have here. You don't get that at the average place. Like the person could be vulnerable and open to who they are, no matter what culture they come from, no matter what background they come from, [no matter] what race we are. That sisterhood here is so strong, is what I've never experienced in my adulthood and I'm about to be 40 years old... This what you have is unique and is beyond the average person's understanding, because you have to be here to understand it, and everything that they ask of us, they're giving 1000 percent.

The group laid bare their experiences with harassment. One person recounted:

One of the main reasons I want to be in the union is because when I was at [a previous employer], I was in the warehouse. I was the only one of the only two females in the warehouse. The other one was on second shift. I had a group of guys that were trying to get me pushed out of the warehouse for almost two years. They harassed me. They made my life hell. They text me at all hours from different numbers, all kinds of inappropriate stuff. When I said something to H.R., I got in trouble. The thing about having a union, mind you, is if that happens at my company now, I'd be on the phone. I have my business agent's numbers in my pocket. I'll be on the phone with the business agent right away and I will be placed in a different company almost immediately. But at [the previous employer], I wasn't union. I was a frontline employee. But like all the warehouse guys were union. I was shipping and receiving. So, I was not union. So, I had no one to back me up. And H.R. did not back me up. No one backed me up... And that's like one of the good things about being in the union is that, you know, that there are people behind you. Now, I know that my union is very much a boys' club and they all know each-other and they are very good friends with each other. But I also know that they would never do. They wouldn't want that sort of situation on their hands.

Nonetheless, harassment is common, vicious and often an attempt to pit women against each other. As one participant described: "I've literally been sexually harassed on every single job I've been on. I've been in this trade since 2017. I've never not been sexually harassed. I've never not been sexually harassed. It's the culture, it's the people, and it's the women that was before me." Jayne Vellinga, CWIT Executive Director, described this as "divide and conquer," a tactic to keep women from banding together.

The importance of the sisterhood was a recurring theme. As one woman described: "So my biggest day is I've met some women in the trade. And even in things that I dealt with, like it was rough... They told me this was going happen and that was going to happen. Maybe me being inexperience I thought, 'that ain't going to happen to me.' [But] it prepared me...Now, I know what to do to build myself back up." Paraphrasing, it is important for women to know what will happen so that they can prepare and be ready for what happens.

The focus group was composed of mostly African American women, so the conversation steered into the intersection of racism and sexism. A few women talked about being aware of being part of a checklist meant to fulfill various quotas. Some regarded it as a way in. Others were less accepting but tolerated it. All who commented insisted that whatever advantage they achieved because of some quota was short-lived and that their focus was on learning their trade and advancing their careers through the skills and experience.

The group also provided some insight into their work experiences. Those who work for small contractors were emphatic about the value of having to take on many tasks. They have to jump in on more advanced tasks simply because there is no one else to do them. Those who work for very large contractors described the limited pathways for advancing their skills. They talked about having to work as flaggers and to clean-up rather than learn their trade.

Key Benefits and Outcomes

In 2019, three classes began TOP training, enrolling eighty-two participants. Four classes completed training (including carryovers from one year to the next), graduating ninety-four participants. Forty-six women were enrolled in the welding program, of which twenty-eight completed training and earned American Welding Society certification, and ten remained enrolled and were expected to graduate. An additional fourteen participants were enrolled in a new skills advancement program. Ninety-three women were placed in apprenticeship or other non-traditional occupations. Fifty-five women entered apprenticeship in 2019, twenty-seven women entered welding related positions, primarily in manufacturing, and eleven unemployed tradeswomen were placed with contractors at an average wage of \$20.58. Overall, 89% of participants placed in apprenticeship or employment remain retained, employed, or in apprenticeship for a minimum of ninety days.

Key Challenges

CWIT's long history and track record in training and in advancing the careers of tradeswomen has enabled it to grow into a sustainable training and advocacy organization. Nonetheless, continued barriers to advancement for many tradeswomen put an effective cap on the ability of CWIT and other training organizations to grow substantially the proportion of women in the construction trades. While women who graduate from TOP are able to compete successfully for apprenticeship or job slots, the same conditions that have contributed to the continued dominance of men in the trades are perpetuated by the absence of any direct entry agreements.

What happens after women leave the program and enter an apprenticeship or are hired by a business makes a difference in terms of interest in and the success of the overall program. While harassment and racial discrimination on the job site make advancement difficult and working conditions in some places nearly intolerable, many unions and some contractors have taken direct action to address and eventually eliminate these negative factors. The actions and policies taken by public agencies that secure construction services have helped set the conditions for improvement. The attention that CWIT focuses on harassment as a job safety issue makes a case that appeals to the self-interest of contractors that seek to reduce on-the-job injuries. Aside from the human toll — which is critical — injury reduction reduces delays due to lost labor, and limits workers compensation and other liability insurance payments.

Funding is and will continue to remain a challenge. While personnel and other direct costs of TOP drive the program budget and fall within general funding parameters, essential wraparound services are less easy to fund. It is difficult to create metrics for the Barrier Reduction Fund used to cover transportation assistance, childcare, personal emergencies, and other functional barriers to training. Anecdotally, the Fund is the difference between success, failure, and whether a person can even see her way to enroll in TOP. It serves as a means for assisting the hardest to serve.

Conclusions

CWIT provides a comprehensive immersion experience that addresses both technical prerequisites as well as the mind and body challenges that women will face in a traditionally maledominated family of occupations. It aims to prepare them for the tests that they must take to qualify for an apprenticeship, but it also addresses the conditions that are instrumental to successful careers in the trades.

Funding for pre-apprenticeship typically focuses on the technical skills, perhaps because it is easier to measure the results. Perhaps it is tied to a limited appreciation of the dynamics between technical knowledge and cultural knowledge. As one woman put it, it is essential that women in the trades understand what is coming at them before it happens so that they can prepare, seek guides and partners, and have a pathway forward. They do this by acting together, by relying on CWIT well beyond their time in the program, and by using the survival skills that they learn in the program. These so-called "soft skills" are collectively an essential element in the training package but are not funded to the level that is needed, if at all.

In addition, the Barrier Reduction Fund is treated by funders as an apparent "add-on" or "stipend." It is, in fact, an essential support to overcome substantial barriers to entering apprenticeship. Women face significant and on-going barriers, but the time to learn how to address them comes very early in the training process. The time slots and hours that are demanded by TOP are small in comparison to apprenticeship. Learning how to address childcare, transportation, and other barriers, and having a modest stipend to work with, helps the graduate pre-apprentice by allowing them to develop the skills, knowledge, and support systems that can sustain them later on.

St. Paul Church of God in Christ Community Development Ministries, Inc. (SPCDM)

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History of the Organization and its Pre-Apprenticeship Program

St. Paul Church of God in Christ Community Development Ministries, Inc. (SPCDM) was established in 1995 as a community-based, Illinois not-for-profit corporation. The Preapprenticeship/Career-Readiness Training Program was established in May 2000. This case report refers only to the pre-apprenticeship program.

The mission of the program is to help remove all educational and psychological barriers to increase the number of historically underserved, hard to serve, minority, and women populations entering into the construction trades.

Candidates and participants start at a place of readiness by meeting basic mandatory requirements. These requirements align with the expectations of union apprenticeship programs, including a valid driver's license, birth certificate or valid passport, high school diploma or GED certificate, passing an aptitude test (math and reading), and passing a drug screening for non-usage. Additionally, the candidates are interviewed to ensure a match for a career in the construction trades.

SPCDM has nearly 20 years of documented performance dedicated to serving the un- and under-employed through career-readiness and pre-apprenticeship training. SPCDM has recruited more than 2,000 individuals trained more than 500 participants and referred over 200 completers to USDOL registered apprenticeship programs or sponsoring construction firms.

SPCDM offers an intensive 10-week (90 hour) program for individuals with a background in the construction industry and a 12-week (300 hour) customized program designed to enhance educational and life skills in preparation for entry into construction apprenticeships and other related industries.

Partnerships

St. Paul Church of God in Christ Community Development Ministries, Inc. encourages graduates to apply for all available union apprenticeship programs. SPCDM's goal is to have their graduates score in the upper 5 percent of scoring. Consequently, its program enjoys a strong reputation for graduating competent and well-prepared future apprentices. Some unions will

award additional points to SPCDM applicants. In addition, SPCDM leadership is active in the Apprenticeship Information Center (AIC) and the Illinois State Apprenticeship Council.

Funding for SPCDM is a reflection of its relationship with the building trades, contractors, and government. Over the years, it has received support through grants and contracts from the City of Chicago, the Illinois Department of Transportation, the Illinois Department of Commerce and Economic Opportunity, the Chicagoland Workforce Funders Alliance, the Obama Foundation, the Chicago Teachers Union Foundation, the Illinois State Treasurer, the Turner Construction Foundation, the Illinois State Treasurer, W.E. O'Neil Construction, the Hill Group, and the Chicago Area Project.

Training Details

The 12-week program curriculum is grouped into three major topic areas:

Classes geared toward passing aptitude tests:

- Math Remediation
- Reading Remediation
- Blueprint Reading
- Construction History, Terminology & Tools
- Paper Folding

Classes on safety:

- OSHA with a certificate upon completion
- CPR/First Aid with a certificate upon completion
- Wellness and Stress Management

Life skills classes:

- Financial Literacy
- Resume Writing
- Interview Techniques
- Self-Awareness
- Critical Thinking
- Creative Thinking
- Decision Making
- Problem Solving
- Effective Communication
- Interpersonal Relationship

In addition to classes, the 12-week program includes wrap-around and counseling services to address several barriers for a complete holistic approach. This component is in conjunction with enhanced case management services for a successful retention rate within the program and upon entry into a USDOL registered program.

Success in the trades is not simply a matter of doing well on the entry test. Students are trained in how to perform in an interview, in how to complete personal evaluation forms, how to be responsive to questions about themselves, and how to write a resume.

SPCDM seeks to help its students make the transition into a highly structured industry where every worker is expected to do their part. Program participants quickly become acclimated to the rhythm of construction work. For example, classes begin as early as 6:00 a.m., students adhere to a dress code, and, in the class session that we observed, they are required to stand and respond to questions from the instructor. This particular class session focused on the history of the construction trades and trade unionism.

Construction is also an industry that is perceived by many African Americans and women as being closed to them and where they are treated unequally. Consequently, SPCDM helps the students learn how to address adversity. SPCDM helps to acclimate its students to the culture and processes of the industry. It works on self-awareness and on steps that each student can take to grow his/her inner strength and personal compass.

Outreach

SPCDM hosts building and construction trades fairs to showcase opportunities in the trades. Recruitment is through its extensive network of "connectors" in the community: aldermanic offices, state legislative offices, state and local government offices, employment services, various expos, local chambers of commerce, not-for- and for-profit organizations, and area churches.

SPCDM works in all areas of the City of Chicago and its surrounding areas. Its primary focus is on reaching racial and ethnic minorities and women regardless of race or ethnicity. The program draws a predominantly African American student population. While SPCDM is open to all ages, experience suggests that students who are younger than 25 are less successful than their older counterparts. The rigors and discipline of the construction industry require a level of maturity that many younger workers have not attained. However, SPCDM works with concrete and machinery contractors in connecting prospective students who are not quite ready for full employment to functionally paid internships.

SPCDM also sets a strict bar for entry into its program. Students must meet a minimum score of 10.0 on the Test for Adult Basic Education (TABE). While SPCDM will, based on available resources, offer a brush-up workshop on math in advance of administering the TABE, it does not provide pre-entry remedial education. It refers prospective students who require such additional remedial work to other programs.

Personal Experiences of Participants

One participant's story illustrates the importance of SPCDM's wholistic approach. "M" learned about the SPCDM through an email from his Alderman. "M" had tried construction once and gave it up. He tested for the SPCDM program and was accepted. While the "hard skills" instruction in math and other cognitive skills was important, he derived great strength from the

training he received in how to be a tradesman. His instructors paid attention to him. They showed that they wanted him to succeed. They prepared him for the challenges that he would face on the job — especially racist encounters.

"M's" story was somewhat akin to a religious and spiritual awakening. He described it as teaching him how to think, act, and treat family. He said that it prepared him to change a life — his life — and how to be part of the middle class. Professionally, he succeeded in becoming a plumber's apprentice and expects to become a journey plumber next May. He also remains part of a larger SPCDM community by staying in touch with the people who went through the program with him.

Key Benefits and Outcomes

SPCDM's intensive, "high touch" program prepares its participants for success in the trades by addressing both the substantive and cultural basics of construction. It is laser-focused on moving its students directly into a registered union apprentice program by training hem to pass any entry test and interview. More importantly, it prepares them to succeed once they become an apprentice. The legacy of African Americans in the construction trades remains a material challenge for Blacks who consider the trades. Barriers are perceived to persist. SPCDM prepares its students to address these barriers as they encounter them.

Key Challenges

Funding is a constant challenge for SPCDM and for pre-apprenticeship in general. SPCDM services go well beyond rote classroom work. It prepares for success African Americans, women, and similar groups who have historically been denied equitable opportunities in the construction trades. It provides a community from which its students can draw strength and inspiration even after they become apprentices and journey workers. These so-called "soft skills" are difficult to measure and assess, but they are nonetheless necessary to efforts aimed at expanding the diversity of the construction industry workforce.

Conclusions

SPCDM's track record of "placing" nearly all of its program graduates into apprenticeships or jobs is the result of rigorous entry assessments. SPCDM provides an intensive training program that teaches the basics as well as the culture and equips its students with the tools they need to succeed. Its ability to move the needle on the entry of African Americans and women into the trades is a function of acquiring sufficient resources to expand its operations to meet demand. Its instructors' and case managers' services — both enhanced and wraparound — are vital, but these personnel are paid only for their time and essential assistance. Without a specific source of revenue, SPCDM is limited in its ability SPCDM to expand. Consequently, funding is needed to support long term growth and capacity.

Reconstruction Technology Partners (RTP), A Safer Foundation Social Enterprise

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History of the organization and its pre-apprenticeship program

Reconstruction Technology Partners (RTP) is a social enterprise of the Safer Foundation. It is a full-service construction business that trains and employs people in the construction trades who have arrest and conviction records. It works to rebuild neglected neighborhoods and properties as a means for rebuilding the lives of its employees.

RTP gives returning citizens on-the-job training and practical experience through its various construction projects. To help its employees retain their jobs, RTP provides wrap-around services to assist them with challenges that they encounter. This is accomplished through weekly team meetings, case management, transportation subsidies, and treatment referrals, if needed. RTP uses leading technologies to improve efficiency and effectiveness. As a social enterprise, it creates an unrestricted revenue stream that grows RTP and furthers the mission of the Safer Foundation. The social impact is the effect that RTP has on the well-being of the community. One measure of the community benefits that are achieved is the above-minimum wages that it pays to its crew members.

Safer Foundation provides a full spectrum of services, policy, and advocacy to support the efforts of people with arrest and conviction records to become employed, law-abiding members of the community and to avoid becoming recidivists. This agenda is accomplished through specialized workforce development, community corrections, substance and mental health treatment and housing, education and industry training, transitional and permanent jobs, social enterprises in staffing and in housing construction, and through its advocacy on public policies and legislation. It operates in 11 places in Illinois and Iowa, and it employs more than 300 people.

Safer Foundation has more than 47 years of experience in workforce development serving people with records. Their moto is "Work – Works!" When returning citizens work, they become taxpayers and contribute to society, employers get the workers that they need, and crime is reduced. In FY 2017, Safer Foundation served over 5,000 clients and more than 3,500 started in jobs. Job retention in 2017 was 91% over 90 days, 83% over 180 days, and 75% over one year. Also, 99 GEDs were earned in 2017.

Participants in the pre-apprenticeship training for RTP may later join RTP, go on to a registered apprenticeship, be employed by another contractor, or be employed by BKE Enterprises, a

custom woodworking and furnishings business on Chicago's West Side. In addition, the Safer Foundation has placed clients in pre-apprenticeship and apprenticeship training operated by the Illinois Chapter of Associated Builders and Contractors.

Partnerships

RTP is a social enterprise of the Safer Foundation that employs Safer clients in construction. Those who participate in the construction training offered by RTP also may compete for apprenticeship opportunities with the construction trades or be employed by other construction contractors. In addition, RTP has a close working relationship with BKE Designs, a small Chicago business that designs and builds custom furnishing. For example, the RTP offices showcase original conference tables that were designed and built by BKE.

RTP provides a supportive environment for returning citizens who wish to work in construction. Providing a positive environment was an incentive for establishing RTP because union apprenticeships generally were not perceived as welcoming. As a for-profit social enterprise, RTP also creates a funding stream in support of the Safer Foundation's mission. Given its focus on projects in economically challenged communities on Chicago's west and south sides, RTP seeks to bring new opportunities to the communities where many of its clients and their families reside.

Training Details

Training runs approximately 14 weeks. Safer provides intake, assessment, and a career interview. It works out an individual employment plan for every participant and provides WorkKeys and Job Readiness training. Training is provided daily for 2 hours every day. Entry into the program requires a minimum score of 7 on the TABE for carpentry and 9 for electrical. The students are expected to score at least 9 and 11 respectively by the end of the program.

Students undertake 4 weeks of intensive literacy and math training that downshifts to 1 day per week once construction training begins in week five. This continues until they achieve a G.E.D.

Students undertake construction apprenticeship training and pre-apprenticeship classes in construction beginning in week five, extending for 10 weeks. Time for training is 240 hours at 24 hours per week. Core training is covered over 72 hours and includes basic safety, construction math, construction drawing and blueprint reading, construction rigging, and an introduction to basic hand tools and building materials. Level 1 carpentry builds on core training and adds training in floor and wall systems, ceiling joist and roof framing, basic stair layout, and an introduction to building envelope systems. This instruction is covered over 168 hours. In addition, students receive further pre-apprenticeship training that is aimed at preparing them for the construction industry. These classes include the culture of the industry, personal appearance, teamwork, work ethics, non-disciplinary issues and timeliness. RTP has a mocked-up house on site for students to practice their skills.

Over the course of the full 14 weeks, RTP provides financial literacy training. It engages students in real work experience from job bids through implementation, covering 8 hours per

week. Entrepreneurship training is based on the ideas in, *Who Owns the Ice House? Eight Life Lessons by an Unlikely Entrepreneur*. Students receive a stipend to help with personal expenses.

Students are assessed on fifteen factors by class instructors, the remedial facilitator, the case manager, and human capital manager. With regard to scoring, each factor can receive a maximum point value of 3, with 45 being a perfect score. The Passing score needed to be selected by RTP is 40 to 45. This evaluation determines a participant's level for continuation in the construction industry after completing the pre-apprenticeship. All 15 areas are key to their success in any industry or job they pursue.

- Attendance
- Communication skills
- Initiative
- Preparedness
- Personal experience
- Teamwork
- Job knowledge and skills
- Internal and external interactions with others
- Work ethics and non-disciplinary issues
- High on the learning curve
- Problem solving, decision making and viable solutions
- Coachable
- Knowledge and compliance with all RTP safety regulations/OSHA 10
- Quality, timeliness, safety
- Identification and proper use of tools

As mentioned above, RTP has a special working relationship with BKE Designs, a business founded by Brian K. Ellison and located on Chicago's west side. BKE designs and makes custom interiors and furniture and commissioned art and has trained four cohorts of participants. A fifth was suspended due to the COVID-19 pandemic emergency.

BKE receives training cohorts of between four and sixteen participants, with six being the ideal number. Each training cohort meets for 8 to 12 weeks, 24 hours per week, typically Thursday through Saturday. Thursdays entail lectures, sketch exercises, or field trips. Fridays and Saturdays consist of "shop time" experiences where over the course of the cohort, BKE involves the participants with one large group project, and then individual projects that they have designed using the skills that he teaches them.

The field trips include:

• The Garfield Park Conservatory

²⁵ Taulbert, Clifton L., and Gary Schoeniger. 2010. Who Owns the Ice House? Eight Life Lessons from an Unlikely Entrepreneur. Cleveland, Ohio: ELI Press.

- Merchandise Mart
- High end furniture stores
- Art Galleries
- Tours of other shops similar to BKE Designs
- Visit to homes of art collectors who also are clients of BKE Designs
- Visits to architecture or design firms
- The MCA and Art Institute

Outside of teaching participants on the use of woodworking tools and equipment, BKE teaches and conducts exercises on:

- Introduction to design and sketching
- How to "design"
- Guided meditation
- What makes "you" feel good about "you"
- Watch YouTube videos of interesting woodworking projects
- Slide presentations that show the step by step process of previous projects that BKE has completed

Lunchtime sometimes involves episodes of the furniture design-based reality show in which BKE has participated. The day typically ends with a 15 to 20-minute group discussion about how productive they felt the day went, what they learned, and any positive or negative feedback. Throughout, participants are encouraged. The instructors promote their brilliance and emphasize that no mistakes can be made. A major goal is to build esteem, help them realize that they are the decision maker, they are the designers. While this program is not specifically designed for participants to "get a job" when it is over, the aim is to instill important social and personal skills that will serve them in later jobs. One participant was hired after the program to do woodworking, several students have gone into furniture repair, and another buys, refinishes, and sells second-hand furniture.

Typically, at the conclusion of a cohort, there is a "show", where the participants are able to display and present the pieces they have designed and made. One cohort designed and executed "Spell-casting For Peace," a public arts project for Elevated Chicago. Another cohort designed and made \$10 - \$50 items and sold them at a popup market at The Hatchery. They all had matching BKE Designs sweatshirts and appeared as team. Anything that was left unsold was given to the participants to do with as they wished.

Outreach

Students are recruited from Safer Foundation clients. All students are returning citizens.

Key Benefits and Outcomes

Sixty-two clients have been trained in the trades through RTP (clients also have the opportunity to continue training with ABCIL to become a Journeyman): 45 in carpentry and 17 in electrical.

The average wage earned is \$13.50. Seventy-three percent (45) were employed in the following areas after training: construction: 19; union apprenticeship: 2; Manufacturing: 12; Service: 2; Medical: 1; and Other: 9. RTP paid \$1,578,890 in FY2019 to RTP crewmembers and subcontractors, and \$1,286,319 in FY 2018.

Key Challenges

RTP works with participant who are often considered to be the hardest to serve. Its clients are all returning citizens. As reflects the criminal justice system, participants predominantly are minority and male. Program leadership emphasized that their clients face barriers because of both their race and public perceptions about their past. This was apparent during an RTP team meeting where both leadership and participants discussed candidly that participants have to be nearly better than perfect. They can expect that RTP clients may talk or act in ways that are disrespectful and distrustful of the crew. The instruction to participants: take-it, and do your jobs.

Privately, we raised the question as to when this should become a two-way street. In other words, what expectations should be placed on RTP clients? Participants already have to learn math and reading, as well as new skills. They have to meet the goals of their individual plans. They have to walk successfully the hard path to their return to citizenship. Given all this, they also have to learn to be larger than the people who pay RTP for construction work. Everyone in the trades has to be competent in the skills of the trades. RTP clients and participants have to learn how to be successful in the industry and in their lives. These factors require levels of commitment and support that dwarf the effort that is put towards the basics.

The relationship with BKE Designs provides an alternative experience that focuses on creative expression. It also creates a controlled environment that enables participants to work without the challenges and possible abuses of being on a construction job site. On the other hand, funding for BKE Designs cohorts can only support a one-time set of experiences for 8-12 weeks. Ideally, the entire process should extend to three levels of training in order to attain sufficient mastery.

Conclusions

RTP provides a "controlled" environment for returning citizens who wish to enter into the trades. Rather than relying solely on apprenticeships and construction jobs from outside contractors as the landing spot, Safer clients can work in jobs and for a contractor that can serve as the bridge to the job world at large.

At the same time, RTP prides itself as a high-quality contractor. It competes with other construction contractors and must win jobs on the basis of performance and cost. The build-out of RTP offices is an excellent example of RTP's work. We commented frequently about the high quality of the fit and finish of the build-out without first knowing that RTP did the work. RTP's partnership with high-end craftsmen such as BKE Designs provides an alternative route for crewmembers into other related industries.

As a social enterprise, RTP is intended to provide an independent funding stream for the mission of the Safer Foundation. While RTP and Safer receive support from the Illinois Department of Commerce and Economic Opportunity (DCEO) and other public agencies for construction training, RTP is a business venture like any other commercial business. What it does receive in government support enables it to provide the counseling and other wraparound services that are required to help a population that other organizations are neither equipped nor inclined to serve.

Revolution Workshop

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History and Background

Revolution Workshop (RW) was founded and incorporated as a 501(c)3 not-for-profit corporation in August 2017. Initial funding was provided by a founding member and donor. It also receives funding through a Talent Pipeline grant under the federal Workforce Innovation Opportunities Act (WIOA). RW's mission is to reduce inequity in Chicago by providing training that leads to financial independence for residents in underserved communities. RW seeks to provide employers in the trades with trained, skilled workers so as to reduce talent shortages in that sector.

RW's first training cohort was admitted in October 2018. The program provides accredited training for the construction trades, and through its social enterprise, trainees build fine, custom woodworking products for individual customers and the commercial sector. RW operates in a 7,500 square foot shop in the East Garfield Park neighborhood on Chicago's west side. Its central location is accessibly by public transportation. The Green Line CTA train extends across the spines of both Chicago's west and south sides and through some of the most economically challenged and racially segregated communities in Chicago. The target populations served by RW includes un- or under-employed adults over 18 years old. It recruits minorities, women interested in non-traditional careers, returning citizens, and underserved young adults — groups that historically have faced barriers in the construction sector.

Partnerships

RW works with high schools, aldermen, community leaders, and other providers to introduce students, constituents, and clients to its program. It receives referrals from agencies in the East and West Garfield Park, North Lawndale, Austin, and Humboldt Park neighborhoods. These include the Safer Foundation, American Jobs Center, the YWCA, Breakthrough Urban Ministries, the Institute for Non Violence, Above and Beyond Treatment Center, Mothers Against Senseless Killings, the North Lawndale Employment Network, Inspiration Corporation, Salvation Army, Heartland READI Chicago, Treatment Alternatives for Safe Communities (TASC), and Community Support Advisory Councils (CSAC). It also receives referrals of returning citizens from the Illinois Dept. of Corrections. The program is open to all returning citizens except for those who were convicted of the most severe offenses.

RW works with six large contractors – F. H. Paschen, Power, Pepper, Walsh, McHugh, and Focus – and with many small employers as well. RW seeks employers who will sponsor workers in a

union: about 22% of RW clients have entered union apprenticeships, primarily the Laborers' International Union of North America and the United Brotherhood of Carpenters. It is working with the Plumbers Union and IBEW #134 on pathways into their apprenticeship programs. The goal is to achieve a 40% rate of union apprentices by graduating clients.

Training Details

Prior to enrollment, candidates attend 1-on-1 interviews to determine program fit, identify specific challenges to their attendance, and screen for eligibility for government training funds. Everyone in the program is eligible for WIOA. Enrollees attend on-boarding sessions to finalize registration, complete academic and financial assessments, and address immediate barriers to participation, such as the need for childcare or transportation assistance. The common TABE score of enrollees is between the 5th and 6th grade levels. Enrollees who do not have a driver's license are helped to attain a license within 10 weeks. RW will help with reinstatement of driver's licenses for those whose licenses have lapsed, been suspended, or revoked. The first two weeks at RW is functionally probationary. RW partners with Literacy Chicago to provide basic education, principally in math. Overall, RW provides an accredited 10-week preapprenticeship to 96 trainees per year. RW embeds training in critical thinking throughout the program. It also relies on an advisory council of union and non-union contractors to keep the program aligned with the demands of the industry.

Technical Curriculum

RW's vocational program is based on an evidence-based sectoral training model. The National Center for Construction Education and Research (NCCER) Core curriculum covers safety, rigging, hand and power tools, construction math and blueprint reading, materials handling, and communication. Participants are required to pass the NCCER math module after two weeks. Participants who are struggling with the math component receive tutoring.

The project-based training component requires participants to build a tool shed from the ground up in a simulated work environment. They receive technical instruction in electrical, plumbing, drywall, roofing, siding, carpentry, and woodworking skills. These classroom and hands-on experiences prepare trainees to enter any of the trades while earning industry recognized NCCER Core and OSHA 10 Safety certifications.

Classes are organized into teams with rotating team leads. This structure teaches leadership and teamwork, communication, and construction culture. Students also receive technical skills, life skills, job readiness, and financial literacy training daily. Teams are rotated into the social enterprise one day per week.

Individual employment plans are developed through 1-on-1 coaching. These serve as employment and retention roadmaps for trainees and alumni.

Woodworking Social Enterprise.

Trainees build custom high-end tables for residential and commercial customers. Through this program, they are able to hone fine woodworking skills as they sand, plane, join, stain, and varnish wood. Each custom-ordered project enables trainees to experience every step of manufacturing the table, including design, build, delivery, installation, and customer interaction. The social enterprise is intended to spark entrepreneurship and creativity in the trainees, and it prepares trainees who might prefer a manufacturing career opportunity.

Employability Coaching Curriculum

RW simulates the work environment to the extent possible. It uses a "three-strike" strategy: three unexcused absences or instances of tardiness can require the participant to re-start the program.

Participants are taught employability skills over the course of the 10-week program. Week one provides an overview of career pathways and entry-level opportunities. Over the ensuing weeks, they receive coaching on resume building, job searching, interviewing and interviewing strategies, and compensation negotiations. Throughout they receive case management support. In addition, they roleplay and are coached on how to deal with harassment and racism, and effective ways to deal with authority.

Financial Coaching Curriculum

Financial literacy and related skills are taught concurrently with the other training components. These include lessons on banking, credit scores, taxes, financial planning, asset building, making large purchases (e.g., cars, housing), and building a small business. Counseling is also included to stabilize a participant's immediate financial situation, modify financial behaviors, and help develop SMART (Specific, Measurable, Attainable, Relevant, and Timely) goals and work plans.

RW is expanding the financial coaching component to include services to alumni. A Financial Coach conducts financial assessments, financial education, and 1-on-1 coaching. A new Alumni Relations Specialist will help new workers budget incomes to meet obligations, and help them resolve workplace issues to retain employment, advance in their careers, and meet long-term financial goals. RW believes that the first one to three months on the job are critical as graduates enter a demanding construction culture, resolve barriers to job retention such as transportation, and learn to manage their incomes responsibly.

Support services

Extensive support services are provided to all trainees, but they are needed especially by returning citizens. RW covers the costs to reinstate driver's licenses, obtain IDs and birth certificates, pay court fees, and sometimes pay rent since lack of housing is a barrier to employment. RW provides transportation assistance to participants and to half of program graduates during the first month of employment as they save to buy a car. RW provides a modest weekly stipend, lunch during training, and work clothes, boots, and tools to start

graduates in their jobs. External partners provide adult basic education, housing, substance abuse counseling, and legal help.

Outcomes

RW began training operations with a pilot cohort in October 2018. It has served 105 people through six training cohorts. As of March 2020, RW has suspended training temporarily because of the coronavirus pandemic.

RW reports that upon the completion of training in 2019, the outcomes for the first four cohorts were:

- 74 unduplicated trainees enrolled (95% of goal)
- Completion: 86.49% (64) completed by cohorts 1 − 4
- Placement: 85.9% (55) placed for cohorts 1 4; 95.5% (43) placed of the first 3 cohorts
- Retention (3 months): 86.05% (37 of 43) of the first three cohorts were retained 3 months
- Retention (6 months): 80% (24 of 30) of the first two cohorts were retained 6 months
- Average wage: \$18/hr. exceeding the \$15/hr. goal

Placement is still underway for the fourth cohort. Cohorts 3 and 4 have not reached all retention benchmarks yet. RW attributes these high-performance rates to its practical, industry-informed training and deep experience working with these population.

RW reports also achieving these additional benchmarks:

- Employers sponsored 12 of 55 placements (21.8%) into unions.
- Twenty-eight (60%) of enrollees in the first three cohorts were returning citizens; twenty-four (85%) of those enrollees graduated; and twenty-two (90%) of those graduates obtained jobs.
- Trainees obtained the following industry-recognized credentials:
 - NCCER Core -65
 - NCCER Carpentry-33 (cohorts 1 and 2 only)
 - OSHA 10-65; Forklift Operator-13 (cohort 3 only)
 - While not consistently tracked, two participants obtained GEDs, twenty-three received or recovered driver's licenses, and every graduate obtained personal protective equipment and a basic tool kit for work.
- Financial coaching resulted in ten participants opening bank accounts and nine developing financial plans to resolve debt.

In FY2020, RW will expand the financial training component to better measure long-term impact as it tracks additional measurable gains such as 1-year job retention, promotions and wage increases, credit score increases, and asset gains.

The social enterprise is a key part of the RW model, providing transitional employment for those who need a steppingstone to permanent, unsubsidized employment. Organizationally, the social enterprise component provides an income stream to support the training program and diversify the agency's funding base. As a result of nearly 1,000 visitors to Revolution Workshop during the 2019 Open House Chicago, the social enterprise outreach is fulfilling dozens of orders for cutting boards and custom tables.

Key Challenges

RW is a relatively new program when compared to other pre-apprenticeship programs in this report. The current executive director, Manny Rodriguez, has experience in the worlds of economic and workforce development, manufacturing, and construction. Most recently prior to helping to establish RW, Mr. Rodriquez was education and safety director at ABCIL, where he helped to establish the Community Builders program there. This experience is evident in the design of the RW curriculum.

RW is now accommodating cohorts of between twenty and twenty-five participants. Capacity and funding are challenges, as they are for all pre-apprenticeship programs. It has strong working relationship with major contractors, ABCIL member contractors, and is growing its relationships with Chicago-area trade unions.

Conclusions

Revolution Workshop has, in short order, established a pre-apprenticeship program that focuses on serving un- and under-employed populations that are under-represented in the construction trades. RW is notable for enrolling participants who are under-served by traditional workforce development programs, including returning citizens. It offers two major career pathways: construction and manufacturing. The latter is through its social enterprise efforts. While the role of the social enterprise in the overall business model of RW was not explored for this report, social enterprises can provide a source of revenue that supports the overall mission and operations of RW.

RW can also be viewed as a model program in terms of how it tracks with the guidelines that the Department of Labor has promulgated with respect to pre-apprenticeships. The training curriculum conforms to industry-wide standards and leads to industry-accepted credentials. It provides direct avenues to employment and apprenticeships in instances where employers sponsor RW graduates for union apprenticeships. It also engages contractors on their needs through an advisory committee of union and non-union businesses. Finally, it provides extensive support services that extend throughout the program and eventually into post-program placement. These services are critical to the personal and career success of program participants.

CityIncite – YouthBuild and B.U.I.L.D. Programs

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History of the organization and its pre-apprenticeship program

CityIncite launched in 2012 with its core program, Building Up Important Lives and Dreams (B.U.I.L.D.), which provides a 12-month career-training program targeting "alternative youth, who are often forgotten about...students that have been dismissed from traditional public schools." CityIncite notes that the main reasons for these students' challenges include excessive absences, poor academic performance, domestic issues, and behavioral issues.

B.U.I.L.D began in the business and hospitality sectors. In 2015, CityIncite branched into the construction industry. This expansion resulted from two key considerations: (1) recognition of the need to provide opportunities for low-income and particularly minority youth into the construction trades, and (2) the need for a broader effort to improve the housing in Chicago's south side, which was experiencing a high volume of foreclosures and lack of affordable housing options in the community. CityIncite wanted not only to train Chicago's youth for the construction industry but to make an impact on the south side housing situation.

B.U.I.L.D was enhanced by its sister program, YouthBuild, which is a local grantee of the well-known national USDOL YouthBuild initiative. CityIncite is one of over 200 YouthBuild programs nationally and one of three in Chicago. B.U.I.L.D and YouthBuild run in parallel, sharing many of the same program and curriculum elements, and linking participants to the same overall pool of employer and ongoing training/education opportunities. Both programs focus on youth ages 18 – 24 who are low-income and at risk, having not completed high school.

CityIncite serves more than 50 students per year and is proud of solid outcomes including:

- Nearly all students acquire the "OSHA-10" safety certification
- 89% high school graduation rate for those in YouthBuild and B.U.I.L.D.
- 94% of youth with criminal records do not re-offend
- 68% of participants who have completed high school are now in college
- 78% of completers are employed or in a further education/training program

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²⁶ CityIncite program description, 2019.

Partnership and Funding Structure

CityIncite's program is funded primarily through the YouthBuild grant from USDOL. The separate B.U.I.L.D programs are funded through a range of grants from public and foundation sources. CityIncite has received renewal funding of its YouthBuild grant twice since the program launched, and it is confident they will continue to receive funding as their performance on the USDOL measures has been solid.

CityIncite is well connected to its host, Olive-Harvey College. The GED program that includes many of their students is held on the third floor of the building. The alternative school for the remainder of the students' academic elements is in the basement of the college. The program also partners with a number of community-based organizations to provide supportive services and case management for students. These are generally organizations that referred students facing particular barriers to stability and success and are the initial providers of social services to them and their families.

As a USDOL YouthBuild program, CityIncite is supported by the American Job Center system and is a required partner of the WIOA system. They are partnered with the WIOA American Job Center in the Pilsen neighborhood of Chicago, but they appear to have limited contact with that program and are not leveraging the employer partnerships, case management, or support service resources available through co-enrolling with that program.

The next step for a portion of YouthBuild students is the JobCorps program, a residential model with which CityIncite has built a strong partnership. While the local JobCorps is essentially a parallel program to YouthBuild and does not provide a following step along a career and education path for the students, a different Job Corps center in Ottumwa, lowa, has become a strong partner. That program is delivered in conjunction with Indian Hills Community College in Ottumwa, and students who complete the JobCorps program receive an Associate's degree from Indian Hills as part of their program. The option is valuable not only as a strong program, but CityIncite has found that for a number of students, spending a year or so in a culturally different environment in the small rural community can help them avoid some of the community challenges that are barriers to their success, particularly gang involvement and other neighborhood problems. CityIncite annually takes a group of students there for a tour and introduction to the program, and several students have joined that program.

Training Details

Organization's Training Philosophy and Unique Value Proposition/ Best Practices

CityIncite is focused on developing the well-being of residents of Chicago's south side community. That process begins with promoting stable opportunities and alternatives for youth ages 16 to 24 through empowerment and training in occupational skills such as technology, entrepreneurship, financial literacy, workforce readiness, and college readiness. CityIncite delivers career discovery, project-based hands on learning, civic engagement, and mentorship training. The program is often considered a pre-pre-apprenticeship since some

students will need to go through additional post high-school training in order to be fully ready for apprenticeship.

Program's Progress Toward/Achievement of Elements of USDOL Pre-Apprenticeship Quality Framework

CityIncite's YouthBuild program is an alternative high school model in which the students' curriculum is split into three main areas:

- Basic education: GED preparation/ high school diploma completion in an individualized and group curriculum geared to provide each student with the skills they lack and need in order to secure their degree or GED (50% of time). This preparation is delivered during the morning and early part of the traditional workday, generally in conjunction with CityIncite's host institution, Olive-Harvey College (one of the City Colleges of Chicago), and its alternative high school or Adult Education programs.
- Leadership training activities including financial literacy training, career and workplace readiness, community engagement such as neighborhood clean-ups, managing and staffing community block parties, and other activities.
- Construction education including 500 hours of on-site, hands-on work conducting
 residential rehabilitations of foreclosed homes (which are then rented out to lowincome families). Job training includes electrical, plumbing, HVAC, and other skills, as
 well as 120 hours of the industry-recognized National Center for Construction Education
 & Research (NCCER) Core Carpentry curriculum delivered in nine (9) modules. These
 include:
 - o Basic Safety OSHA 10
 - Introduction to Construction
 - Math (focus on construction-related skills)
 - Introduction to Hand Tools
 - Introduction to Power Tools
 - Blueprints
 - Material Handling Procedures
 - o Communication Skills
 - Employability Skills
 - Your Role in the Green Environment

The curriculum is delivered in a combination of hands-on classroom and lab formats, and students must earn a score of 70% or greater on the examinations for each module in order to pass the program.

This curriculum results in the NCCER Core Carpentry certification, as well as the Office of Safety and Health Administration (OSHA) 10 safety certification. These activities are delivered during afternoons and evenings and during the summer session to help students maintain motivation and stay busy during the summer.

In addition to the NCCER curriculum, the hands-on component involves real-world activity building or renovating a property in the community, with students developing skills while they work on a variety of projects. For example, a recent home remodel project worked on by the students included the following activities:

- Mud/sand Walls and paint
- Install furnace and water heater
- Update plumbing and electrical
- Sand floors and stain
- New tile on the bathroom wall
- New toilet and tub
- Lay tile in kitchen and bathroom
- o Patch holes in the wall, mud, and sand
- Install new front and back door
- Pull up all carpet and sand and stain floors
- Drywall and tape bathroom ceiling
- Secure back stairs and make sure they meet city code
- Scrape peeling paint off of the house and repaint

Before students begin the program, they go through an interview process that mirrors a typical employment interview in one of the fields in which they are interested. This interview is concerned less about actual skills or experience (which will be taught in the program) and more about commitment, interest, and readiness to undertake a challenging and rigorous program of study. Students who are not accepted are redirected to other curricula at the college (including ABE/GED) and/or to partner workforce organizations for more remedial support as appropriate.

Upon preliminary admission, students go through a formal curriculum of "mental toughness" based on a standard model within YouthBuild programs nationally. This portion includes a program orientation, detailed introduction to the curriculum, tour of a construction worksite, team-building, overcoming barriers, introductory construction safety and first aid training, shop math, a day of work on-site at the construction worksite, community service activities, and several exercises that begin the group counseling curriculum that is part of each student's program throughout their year with the program.

The program targets students who are in their senior year of high school or can reasonably complete school during the one-year program period, but the program may also work with younger students, some of whom will have to continue into another school setting upon completion of YouthBuild. Wherever possible, CityIncite then picks back up with these students during the final phase of their schooling to support their job placement or transition to college, apprenticeship, or other training.

The program includes opportunities for youth to job shadow with partner employers and participate in internships where possible. While YouthBuild's main work is in construction, students may participate in other career paths as well, including CityIncite's B.U.I.L.D. programs

in business and hospitality/tourism. Internships may include several opportunities to work in conjunction with employer partners in order to try out several career paths. Within construction, this might include working for a general contractor, a smaller specialty firm, an apartment management firm, or a hardware/home construction store.

YouthBuild students receive a small stipend (\$80/week) which is part of CityIncite's national YouthBuild grant. The stipend provides a small motivation to continue as well as some resources for students to help address life issues and begin supporting themselves.

Strategies for Long-Term Success that Increase Opportunities for Disadvantaged, Lowincome, and Other Populations

The truly hands-on nature of the curriculum and CityIncite's deep connections to its communities set this program apart from many others. In many programs, students learn the course content in the classroom and in a simulated workshop setting. At CityIncite's YouthBuild program, the construction work is within the community, often in their own neighborhoods or Chicago community areas. Work is primarily residential construction, but some projects involve commercial rehabs as well. CityIncite has its own general contractor's license, so they are able to be the direct employer and training site for their students, providing training and work across the entire spectrum of activities and skills in residential construction. In this way, CityIncite also gains community commitment and buy-in by helping to produce affordable housing in the community.

CityIncite is proud that their training staff includes instructors who also serve as the project managers and site supervisors on the construction side, all of whom are seasoned professionals with decades of experience in the industry.

The program has partnered with the National Apartment Association around a curriculum that prepares students for positions in building management. The instruction includes the typical light maintenance and repairs commonly required by positions at rental companies. This training supplements the curriculum in residential construction and provides content on work in larger buildings

Supporting the core training curriculum at CityIncite is the broader YouthBuild training program, which includes the pre-training Mental Toughness curriculum (see the YouthBuild program summary for details), career readiness, job search preparation, financial readiness, and case management by the staff at CityIncite, along with a menu of wrap-around support services. The organization sees the case manager as critical, "holding hands and helping people with all the challenges that arise in their lives," says program director Aleta Garrett.

As recounted by Anna Roche from Greystar, a property management firm that has hired workers from CityIncite, "CityIncite's mentors and instructors truly care about the students' success. The program helps these young people achieve educational goals, teaches them necessary life skills such as managing a budget, living on their own for the first time, enrolling in school, and then helps them learn job skills. They help them build a strong foundation before

introducing them to companies, which definitely increases their ability to be successful when entering the workforce."²⁷

Business Outreach: Advocacy and Promotion of Registered Apprenticeship

CityIncite has built a strong set of employer partnerships that help drive the program. "We know that students really need an advocate to help guide them through the program," reports program director Aleta Garrett. The organization's close relationships with companies help ensure they are guiding their students toward successful entry into the construction industry, and that students will have the skills and expertise necessary to do the jobs for which they are training. Firms provide a range of supports including validating the curriculum and providing mentoring. The program is seeking to encourage further contributions from some of its partner employers, such as supplying tools or equipment and financial support.

CityIncite's YouthBuild program grant requires a 25% funding match from non-Federal sources. Their relationship with, and key contributions from, employer partners provide a significant portion of this match.

CityIncite links its students directly with a worker mentor in an occupation of interest to them. These mentors provide insights, support, technical know-how, and feedback, as well as a different perspective on the training each student is undertaking.

Employer partnerships include the following businesses.

- Greystar, mentioned above, is an apartment management company that has hired workers and provides feedback and guidance on curriculum and services.
- Clayco, a key mentorship partner, has linked students with company employees as mentors who contact students regularly, sit in on training and class activities, and support students in their job searches. Clayco has hired a number of students.
- Power Construction has given tours for students to their job sites, including major projects like their ongoing work at O'Hare airport.
- LiveWire is a black-owned general contractor that provides input on the electrical curriculum and conducts higher-level electrical work on CityIncite's renovation and construction projects.

Other employer partners include Method manufacturing, which is across the street from the Olive-Harvey campus. Finally, Home Depot and Lowes stores in the area serve a number of roles from being a main source where Citylncite purchases materials for the projects it undertakes, to hiring numerous students for part-time employment during and immediately after the program. These stores are always seeking workers who understand the industry and

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can be of real value to customers, and the CityIncite students have a real advantage over other workers seeking that level of retail employment.

Key Benefits

Partner employer Greystar reports that CityIncite's team members "work really hard to prepare their young professionals to enter the workforce and provide them not only work skills but life skills." The program is notable for its large array of employer partnerships. Success for the program is considered either full time employment, postsecondary school enrollment, or placement into an apprenticeship. The majority of participants currently go into post-secondary employment. Since only a limited number of students go directly into an apprenticeship after the program, CityIncite must maintain a diverse portfolio of employers including construction firms of various sizes, specialist firms like electricians and plumbers, manufacturers, and interim employers like the Lowes and Home Depot stores mentioned above in order to provide sufficient opportunities for the various paths their students will take after graduation. In general, the program is careful about its selection of employer partners, since simply securing workers minimum wage jobs does not move individuals out of poverty. The program currently has an average wage rate at placement above \$15/hour.

The program has been successful in maintain an 89% high school graduation rate and a 78% rate of students employed or in a training program after they leave CityIncite. The organization is most proud of this rate: 68% of graduates are enrolled in college. They believe that a critical role in a program like theirs is to build students' ability to see a larger future for themselves. Most students came to the program not believing they would ever go to college, so they consider college enrollment to be a major measure of their success.

The program is also unique among similar programs as they are deeply embedded in their community and contribute leadership and tangible outcomes for the community by creating new affordable housing options on Chicago's south side.

Key Challenges

The program finds that truly preparing its students for the nature of construction workplaces is a major challenge. "We need to work on helping the students deal with different foremen, with the disrespect and racism they are going to face. When we go on worksites with students, we will rarely see minorities," report staff of Citylncite. They also find fewer young people at the jobs. Consequently, staff members believe they need to work harder to provide more preparation for their students in understanding the culture of the typical construction firm and becoming comfortable working there. At the same time, they need to join the larger local and even national efforts to help educate the current workforce on cultural diversity and inclusion. Citylncite plans to enhance the mental toughness training that is provided at program entry and supplement it throughout the program with training that addresses the unique challenges of the industry and the problems new workers may face. Supplemental training on leadership, dealing with challenging coworkers, teamwork, and conflict resolution will all be valuable additions to the program, and Citylncite is working to add these elements to curriculum. They

have begun working with the Center for Conflict Resolution to provide conflict resolution tools and training.

The program recognizes that many of its students require additional basic skills and technological skills in order to be successful. Math skills in particular remain low, and students require additional support in getting their skills up to the level to pass the apprenticeship test and join an apprenticeship program. While the program is linked to the Adult Education offerings at Olive-Harvey College, they hope to better weave those services into the CityIncite program. Additionally, they are seeking funds to fund tutors who will be available during and after school hours for students requiring that support.

Conclusions

The YouthBuild model is comprehensive, offering a full menu of academics, occupational training, hands-on work, and wrap-around services all leading toward industry-recognized credentials as highlighted by USDOL as best practice in the field of pre-apprenticeship. As delivered by CityIncite, the concept of a comprehensive program is critical for youth. Such a program could also be beneficial to adult participants in pre-apprenticeship. Many pre-apprenticeships are less comprehensive and thus miss some of the critical wrap-around services that are available for YouthBuild students. The program's strong employer engagement provides solid opportunities for direct employment for those not seeking an apprenticeship path, though clearly the longer-term goal of enrolling in apprenticeship is likely to provide a more lucrative future with higher earning potential for the students who can make it onto that pathway.

General Conclusions and Implications for Pre-Apprenticeships and YouthBuild

The construction industry has made significant strides to move the composition of its workforce to better reflect the demographic characteristics of the general population. The State of Illinois, civic and philanthropic organizations, unions and contractors have made good faith efforts to move the needle to greater equity and equality in the industry. Pre-apprenticeship programs, as demonstrated by the programs highlighted in this study, can serve as important gateways for under-represented populations to embark on careers in the trades.

Our interviews with five well-regarded pre-apprentice programs, reviews of the programs' curricula and operations, and the existing literature on pre-apprenticeships reveal important elements that are tied to these programs' apparent successes.

- Training and Education Fundamentals: All of the programs offer good fundamentals, including basic skills training, education in math and reading, effective on-the-job training, and industry-accepted credentials.
- Career Readiness: They all prepare their trainees to meet the minimum thresholds for the next phase of their careers, including teaching them how to pass entry tests, prepare a resume where warranted, and to interview well.
- **Partnerships:** They all have strong partnerships with unions, contractors, or other employers with which these training programs have built trusted relationships.
- Support Services: Wraparound services are as fundamental as the training, education, and credentials their clients may receive. This point is a difference-maker. The long-standing culture of construction, while growing more equitable and equal, is expressed at the jobsite by their co-workers. While many contractors and unions will have the backs of women, minorities, and returning citizens, the pre-apprenticeship programs play an essential role in both preparing their clients for what they may encounter and providing needed support as they navigate the real world of job sites. In addition, the programs help their clients deal with daily-life crises such as childcare, transportation, and even homelessness. As CWIT participants describe it, they are part of a sisterhood.
- Funding: Funding, as for the workforce development world generally, is challenging. However, the need for financial support is especially pressing for pre-apprenticeship programs, which often must pay their instructors as adjuncts. This limitation restricts the time that instructors have to prepare for class and engage in peer-to-peer exchanges. While the programs that we studied are remarkable for the high quality of their instruction and operations, one cannot help but think that stable organizational support sufficient to underwrite ongoing operations would significantly improve already high-performing programs.

This study was designed to illustrate why the selected programs are standouts in preapprenticeship. The next question is whether these programs, or others like them, can achieve a scale to move the needle markedly in the participation of traditionally under-represented workers in construction. Our conversations with program leadership and our review of the literature leads us to believe that there are both capacity issues (supply) and demand-side concerns.

All of the programs in this study are designed to help workers who are traditionally under-represented overcome systemic barriers to entry and viable careers in the construction trades. Wraparound services, such as case management, CWIT's Barrier Reduction Fund, and RTP's relationship training programs, to name a few, are a critical part of the foundation for success for all pre-apprentices, but especially so for those who are under-represented in the trades. Workers who can rely on family and friends who precede them in construction have an informal network of supports that are very much like what these wraparound services are intended to replicate and formalize, thereby leveling the playing field for all. Unfortunately, the direct provision of such services adds considerably to the bottom line of programs aimed at opening the trades to under-represented groups. In a world of limited resources and tight silos, these extra costs, in effect, limit the scale and reach of such programs.

Drawing from our work in workforce development and from this project, we believe that critical wraparound services that are common to several training initiatives should be funded as a utility function that comprise the foundation for and a shared cost of these training initiatives. We acknowledge that this structure will require significant changes in how these programs are designed and funded, but there are examples of how this may work. For instance, it is similar to the funding model for corporate universities that play a central role in institutional memory and collective learning for the business. It is also similar to the design of our public education and training institutions such as community colleges. Tax dollars go into the basic educational infrastructure, and tuition and contract revenues cover some overhead as well as for training and education that may be more targeted.

We recognize that this idea creates special challenges. A reason for coupling wraparound services with training is that it assures the delivery of both to the intended recipients. It is also much easier to "sell" the idea of support services when they are tied to training. Therefore, a change like the one we are suggesting requires a commitment by policymakers to provide adequate funding for such services and to assess the adequacy of these programs by overall numbers of people who use them, with special attention given to the scale of participation of traditionally under-represented groups. This is in keeping with the general idea that wraparound services a utility function that especially benefits those who are presumed to need them the most in order to clear related barriers of entry in the trades.

Although this study was not designed to explore demand-side issues, we believe that they, too, warrants additional investigation. In particular, simply focusing on the supply of under-represented workers through pre-apprenticeships is insufficient to increasing their numbers in the trades. There has to be a sustained demand-side pull into the trades at long-term employment rates that substantially exceed historic levels. While some programs have either formal or informal relationships that give some advantage to their graduates with respect to

entry into apprenticeship programs, they still must compete with the general population for coveted apprenticeship slots.

A way forward to materially improving the demand-side is to further strengthen the articulation of qualified pre-apprenticeship programs with apprenticeships. In some states, such as New York that register pre-apprenticeship and apprenticeship programs, direct-entry agreements address this. In states such as Illinois where USDOL registers apprenticeships, connections between pre-apprenticeship and apprenticeship programs are achieved through voluntary negotiations. Clearly, agreements of this kind must necessarily include all stakeholders as well as respect their individual and collective interests.

Employers must also do their part by growing the number and overall percentage of historically under-represented populations on jobsites and in their businesses. Public agencies such as the Illinois State Tollway Highway Authority took such a step through its ConstructionWorks initiative a few years ago. The Chicago Transit Authority, the Metropolitan Pier and Exposition Authority, and the Chicago Department of Aviation are also working to expand opportunities for under-represented groups. Private developers and the construction contractors that they hire need to step up their efforts as well by establishing clear goals and measures of their progress.

One other note: we heard a great deal about what happens on the jobsite. Entry programs cannot solve these problems for contractors. Workers who already face obstacles because of longstanding traditions and the general culture of the industry cannot be expected to also carry the entire burden of fitting in. During our interview at RTP, we asked at what point is it incumbent on the contractor or the business hiring the contractor to address their behavior towards returning citizens. The master's thesis by Sasha Mae Bassett on workplace harassment in Oregon's construction trades is a tour-de-force on the challenges that women face and the consequences of those challenges.²⁸ The Mentorship Matters program offered by EJTC Enterprises, Inc., a subsidiary of the Electrical Joint Training Committee in British Columbia, is specifically designed to train journeypersons as mentors so as to improve the experience and successes of electrical worker apprenticeships.

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²⁸ Bassett, Sasha. "Inequality, Position, and Perception: Understanding and Addressing Workplace Harassment in Oregon's Construction Trades." Portland State University, January 1, 2000.

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