

# Pathways to Apprenticeship

## Profiles of YouthBuild Pre-Apprenticeship Programs

Prepared by YouthBuild USA for the U.S. Department of Labor YouthBuild Program • November 2015





## Table of Contents

<b>Background.....</b>	<b>4</b>
<b>Introduction.....</b>	<b>6</b>
Summary of Promising Practices .....	7
<b>Part I: Pathways to Apprenticeship .....</b>	<b>9</b>
Case Study 1: YouthBuild San Joaquin, Sponsored by San Joaquin County Office of Education, Stockton, CA — 2013 DOL YouthBuild Grantee .....	9
Case Study 2: Operation Fresh Start YouthBuild, Sponsored by Operation Fresh Start, Inc., Madison, WI — 2012 DOL YouthBuild Grantee .....	15
Case Study 3: Portland YouthBuilders, Portland, OR — 2013 DOL YouthBuild Grantee .....	21
Case Study 4: YouthBuild Spokane, Sponsored by NorthEast Washington Educational Service District 101, Spokane, WA — 2013 DOL YouthBuild Grantee .....	27
Case Study 5: EPCCC YouthBuild, Sponsored by El Paso County Community College, El Paso, TX — 2012 DOL YouthBuild Grantee .....	31
<b>Part II: Leveraging Section 3 for Placements .....</b>	<b>35</b>
Snapshot: Garfield Jubilee YouthBuild, Pittsburgh, PA — 2012 DOL YouthBuild Grantee.....	35
<b>Conclusions .....</b>	<b>37</b>
Partnerships .....	39
<b>Recommended Actions to Leverage Partnership Opportunities under the Workforce Innovation and Opportunity Act .....</b>	<b>40</b>
<b>Tool Box: A Collection of Documents .....</b>	<b>41</b>
Portland YouthBuilders Construction Training Documents A–C .....	42
San Joaquin YouthBuild Construction Competency Tests .....	47
Sample MOU Between Apprenticeship Sponsor and YouthBuild Organization.....	50
<b>References and Resources .....</b>	<b>53</b>
Curricula and credentialing resources.....	54
Directories of Apprenticeship Sponsors Featured in the Case Studies .....	55
Acknowledgements .....	56
Endnotes.....	57

# Pathways to Apprenticeship: Profiles of YouthBuild Pre-Apprenticeship Programs

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## Background

The career prospects for YouthBuild graduates entering the construction industry are fueled by steady growth in construction jobs. Through 2020, there will be an increasing need for new construction workers, with 11 percent growth across all construction crafts. At the same time, contractors will have increased difficulty finding qualified construction workers as an aging workforce retires.<sup>i</sup> Additionally, many employers realize the importance of diversifying the construction workforce by recruiting members from underrepresented groups, including women, young people of color, individuals re-entering society after incarceration, and others. With increasing labor-market demand in the construction sector and increasing awareness of the need to diversify the ranks of qualified construction workers, YouthBuild graduates are well-positioned for career growth in this field if they have proper training. Registered Apprenticeship programs can help YouthBuild graduates gain the skill sets required by this demanding industry.

According to the Aspen Institute, apprenticeships are typically sponsored by local employers, trade associations, and unions that assist apprentices with job placement. Apprenticeship provides entering apprentices with a clear career pathway and process through which they can advance. Apprenticeship involves a combination of structured classroom training and learning on the job, which ensures that apprentices obtain marketable, industry-recognized skills as they progress.<sup>ii</sup>

A number of YouthBuild programs have already created robust pathways into Registered Apprenticeship.<sup>iii</sup> Many are implementing curricula that align with the requirements of their Registered Apprenticeship partners and are providing support services to participants who qualify for apprenticeship training. Nearly all YouthBuild programs are implementing a comprehensive, integrated approach to education, hands-on construction training, counseling and case management, and leadership development. But relatively few YouthBuild programs have established formal partnership arrangements with apprenticeship sponsors, leaving large numbers of YouthBuild graduates—who might be interested in and highly motivated towards pursuing construction careers—with limited access to Registered Apprenticeship training.

The U.S. Department of Labor has created a framework for quality pre-apprenticeship programs in Training and Employment Notice (TEN) 13-12. The notice defines pre-apprenticeship as *“a program or set of strategies designed to prepare individuals to enter and succeed in a Registered Apprenticeship program and have a documented partnership with at least one, if not more, Registered Apprenticeship program(s).”*<sup>iv</sup>

TEN 13-12 describes the following elements as essential to preparing individuals to enter and succeed in a Registered Apprenticeship program:

- **Approved Training and Curriculum** based on industry standards, approved by a documented Registered Apprenticeship program that prepares individuals with the skills and competencies to enter Registered Apprenticeship;
- **Meaningful Hands-On Training** that does not displace employees but accurately simulates industry and occupational conditions with proper supervision and safety protocols;
- **Strategies for Long-Term Success** that create opportunities for underrepresented groups, or disadvantaged or low-skilled individuals, so that they will meet the entry requirements and are prepared for success in Registered Apprenticeship;
- **Access to Appropriate Support Services** during the pre-apprenticeship program and a significant portion of the Registered Apprenticeship program;
- **Greater Use of Registered Apprenticeship to Increase Future Opportunities** to support and sustain partnerships between pre-apprenticeship and Registered Apprenticeship sponsors;
- **Facilitated Entry or Articulation** through formalized agreements that allow individuals to earn advanced credit for skills and competencies already acquired.

In addition to TEN 13-12, President Obama in 2014 called on the U.S. Department of Labor to double the number of registered apprenticeships within five years, as well as to expand Registered Apprenticeships into additional industries beyond construction. Further, YouthBuild's authorizing legislation, the Workforce Innovation and Opportunity Act (WIOA), includes an emphasis on career pathways and apprenticeships, and a greater focus on serving out-of-school youth. WIOA indicates a clear need for increased opportunities for pre-apprenticeship and Registered Apprenticeship pathways and YouthBuild is perfectly positioned to help the workforce system meet this need.

## Introduction

This white paper describes the work of U.S. Department of Labor (DOL) YouthBuild grantees that have successfully engaged joint labor-management organizations, trade associations, and employers to create pathways into Registered Apprenticeships in construction. The goal of this paper is to connect YouthBuild grantees, workforce development organizations, community development organizations, housing authorities, joint labor-management organizations, trade associations, construction firms, and the broader Registered Apprenticeship community with the knowledge and resources needed to grow Registered Apprenticeship partnerships as a career pathway for YouthBuild participants. We hope these examples are instructive, providing ideas on how to connect YouthBuild graduates to recognized training pathways that will lead to rewarding careers in the construction industry.

This white paper also describes the HUD Section 3 program and examines the promising practices that DOL YouthBuild grantees have developed to engage contractors to place YouthBuild graduates in Registered Apprenticeship through this program.

*Part I: Pathways to Apprenticeship* includes five case studies. Each case highlights one YouthBuild grantee and begins with specific program features at a glance, continues with the history and structure of the partnership with Registered Apprenticeship program sponsors, and ends by mapping the pathways YouthBuild participants take from preparation to entry into Registered Apprenticeship. This last section will look at pathways to apprenticeship in terms of recruitment, transition, and partnerships, and explore the following questions:

- **Recruitment, preparation, and assessment.** How do programs recruit, orient, prepare, and assess participants who are likely to be successful in Registered Apprenticeship programs?
- **Transition.** How do graduates transition out of YouthBuild and into Registered Apprenticeship? What are the similarities and differences between these transition pathways? How do programs support students during these transitions? What other types of support services are offered to students before, during, and after entry into Registered Apprenticeship?
- **Partnerships.** How do programs initiate and sustain local partnerships with apprenticeship sponsors? What do local partnership arrangements look like? What are some of the challenges of initiating and sustaining these partnerships? How are these challenges managed?

*Part II: Leveraging Section 3 for Placements* features a snapshot of how one grantee leverages Section 3 as a pathway into construction careers. Section 3 is an underutilized tool to promote pathways into apprenticeship. The examples in Part II provide ideas about how this provision of the Housing and Community Development Act could be applied more broadly in the future. We will explore the following questions:

- **Section 3.** How are YouthBuild programs leveraging Section 3 to promote employment and apprenticeship pathways? What can be learned from these efforts about using Section 3 with contractors and Registered Apprenticeship sponsors to promote Registered Apprenticeship?

The Conclusion focuses on the promising practices that facilitate apprenticeship pathways and discusses openings that provide opportunities to partner under WIOA.

## Summary of Promising Practices

Each of the highlighted DOL YouthBuild grantees has implemented effective practices to increase the number of YouthBuild students engaged in pre-apprenticeship training, resulting in increased numbers of YouthBuild graduates who become Registered Apprentices in high-demand construction fields.

The following is an overview of the promising practices of the YouthBuild programs featured in this paper:

### *Promising Practices for Recruiting, Preparing, and Assessing Apprenticeship Candidates*

- Recruit YouthBuild students who are interested in construction careers.
- Organize student experiences that simulate industry conditions to identify participants with the aptitude to pursue careers in the construction industry.
- Develop specific and measurable benchmarks of knowledge, skills, and abilities that track to career success.
- Engage apprenticeship sponsors to assist with pre-apprenticeship training for YouthBuild students.
- Work with apprenticeship sponsors to adapt their pre-apprenticeship curricula for use in the YouthBuild classroom.
- Work with apprenticeship sponsors to implement assessment tools to evaluate readiness for entry into Registered Apprenticeship.
- Address the challenges that underrepresented groups such as women may face in the industry from day one.
- Establish advisory committees for ongoing program improvement.

### *Promising Practices for supporting successful transitions into apprenticeship*

- Offering consistent, goal-oriented case management services from day one
- Asking students to articulate their goals for the future
- Organizing regular interdepartmental conversations about students
- Co-enrolling students with workforce development agencies to provide access to follow-up services
- Partnering with agencies and businesses that can provide opportunities for students to earn driver's licenses
- Using AmeriCorps Education Awards as a resource to pay for tuition and tools required for apprenticeship

### *Promising Partnership Development Practices*

- Engage local employers, trade associations, and joint labor-management organizations that sponsor Registered Apprenticeships.
- Engage local workforce development agencies to assist with partnership development.
- Meet with partners on a regular basis.
- Clarify the purpose and responsibilities of each partner organization.
- Involve YouthBuild students and alumni in the partnership development process.
- Create multiple entry points for apprenticeship sponsors to engage with YouthBuild students.
- Establish a partnership table that includes multiple apprenticeship sponsors.

### *Promising Practices Using Section 3 as a Lever for Engaging Apprenticeship Sponsors*

- Build relationships with contractors on Section 3 projects.
- Enlist contractors to participate in job-shadowing experiences with YouthBuild students.
- Develop partnerships with employers and Registered Apprenticeship sponsors involved in Section 3 projects.
- Make certain your YouthBuild program is a part of the local job development strategy.
- Become designated as a Section 3 business.



## Part I: Pathways to Apprenticeship

Each of the cases that follow examines:

- The history and structure of partnerships the five featured DOL YouthBuild grantees have initiated to successfully establish pathways for YouthBuild graduates to enter apprenticeships and earn journeyworker status with local Registered Apprenticeship sponsoring organizations;
- The YouthBuild program's use of the partnership table—the constellation of partners who have a hand in creating the apprenticeship pathway;
- How YouthBuild participants experience the apprenticeship pathway from YouthBuild enrollment, through engagement at YouthBuild, while considering career choices, and after completing YouthBuild and transitioning into Registered Apprenticeship.

### Case Study 1:

#### YouthBuild San Joaquin, Sponsored by San Joaquin County Office of Education, Stockton, CA — 2013 DOL YouthBuild Grantee

#### The Program at a Glance

The Building Futures Academy of the San Joaquin County Office of Education creates a foundation for future success by embracing a diverse and innovative environment that recognizes individuality and promotes ethics, honesty, and integrity through everyday actions.

In YouthBuild San Joaquin (YBSJ), which is part of the Building Futures Academy, students receive close supervision and training in construction technology from certified construction instructors. Students engage in construction technology coursework through which they learn the basic skills necessary for succeeding in an apprenticeship program and gain the experience needed to secure high-paying, in-demand construction jobs.

#### Evidence of Success

YBSJ has placed 45 graduates in Registered Apprenticeship programs since 2009, including 13 under Department of Labor YouthBuild Grants. The Northern California Laborers Community Training Foundation honored YBSJ with *The Best Pre-Apprenticeship Program Award* in 2013.

#### Registered Apprenticeship Partners

Laborers and Carpenters Unions

#### Key Player

Sheilah Goulart, Executive Director, YouthBuild San Joaquin

#### Curricula and Other Program Features

YBSJ has an agreement with the Carpenters Union to use their nine-week pre-apprenticeship curriculum. The Northern California Laborers Union has signed on for the use of this curriculum to prepare YBSJ students for its Registered Apprenticeship program. In addition, YBSJ uses the Paxton Patterson Building Skills Construction curriculum and the Building Trades Multi-Craft Core Curriculum (MC3). YBSJ students alternate two weeks in the classroom and two weeks on the job site building houses for Habitat for Humanity throughout the program cycle. The Laborers Trust Fund in Northern California conducts safety certification courses in OSHA 10, First Aid/CPR, confined space, traffic control, and flagging. Safety certifications are offered at the beginning of each cohort. HAZWOPER

training is conducted later in the year. Successful completion of the YBSJ course leads to a Regional Occupational Program Certificate from the State of California. In June 2016, students will be able to earn a Building Trades MC3 credential.

## **History of YouthBuild San Joaquin's Partnership with the Laborers and Carpenters Unions**

When YBSJ received their 2009 DOL grant, the staff began their program with no knowledge of how to connect with potential partners in the construction trades. Their first step in developing a strategy for connecting youth to Registered Apprenticeship programs began with Executive Director Sheilah Goulart calling her colleagues at the San Joaquin County Office of Education to learn about existing vocational education training programs throughout the county. She also contacted local union halls and talked with their field representatives. She learned that the Carpenters Union had a community liaison and scheduled a time to meet with the liaison and exchange information about what each organization could offer the other. It was a valuable opportunity for YBSJ to network and to learn about the content areas they needed to include in their construction training curriculum to best prepare their students for entry into the Carpenters apprenticeship program. At the time of this initial meeting, the Carpenters Union had just received a Workforce Investment Act (WIA) grant to operate a boot camp to attract a pipeline of new workers. This initial meeting may have been part of a strategy that the Carpenters were using to reach out to local organizations for apprentice candidates.

In the early stages of her fact-finding work, Goulart reached out to construction trade member organizations, including the Builders Exchange (a construction industry association), the San Joaquin Building Trades Council, and the San Joaquin Area Apprenticeship Coordinators Association. She invited each organization's representatives to a meeting to learn about the entry requirements of all of the trades as well as local employment opportunities and local hiring agreements and ordinances. She attributes the success of this meeting to her approach of initially not asking for anything but their advice and expertise. She posed the question: *How can we work together to improve young people's lives?* She believes that this form of outreach was effective: "Who doesn't want to help young people?" Leading with this mission, in this case, provided an opening to encourage collaboration and a sense that the trades were in this together. Once the initial introductions to representatives of the trades were made, these relationships were nurtured by YouthBuild students themselves. Goulart says that she has heard these representatives make comments such as "YouthBuild students look me in the eye, shake my hand, and welcome me to the school. Kids at other schools just don't do that kind of thing."

However, it was the relationship with the Carpenters Union that turned out to be pivotal for YouthBuild. The community liaison from the Carpenters Union became a champion for YouthBuild. The liaison introduced YBSJ to the Laborers Union. This referral from one trade union to another was critical in establishing credibility, especially since YBSJ was relatively new and didn't have a well-established track record. At the time of the recession, the Carpenters Union had very few openings for apprentices and their entrance criteria were higher than those for the Laborers Union's apprenticeship program.

Goulart welcomed the Laborers Union's apprenticeship coordinator to the program and encouraged him to drop in and talk directly with the students about the high expectations that the Laborers had for apprentices, and then talk with them individually about whether or not they would be able to make the cut. In 2010 the first slot opened up with the Laborers Union. As Sheilah Goulart explained,

*"We handpicked our best kid—the hardest worker with a strong work ethic. The participant interviewed with the apprenticeship coordinator at a coffee shop on a Friday. But he arrived with long hair and*

*sagging jeans. The coordinator told the student that he wasn't going to bring him into the program unless he cleaned up his appearance. Over the weekend, the student got a haircut and a belt and resolved to impress the apprenticeship coordinator. He was hired and became the first indentured YouthBuild graduate in 2010."*

Over time, the apprenticeship coordinator and the participants developed a rapport and a level of trust that led to a steady supply of young people entering the Laborers Union.

From the Laborers Union's perspective, the partnership with YouthBuild works because it allows them to focus on the soft skills, which are a necessary foundation for apprenticeship. "Once I get someone from YouthBuild, my work is half done," according to Jeff Armstrong, Apprenticeship Director for the Northern California Laborers Joint Apprenticeship Training Committee.

The Laborers learned that it was very effective to recruit pre-apprentices from YouthBuild. At YouthBuild, the expectations are set and the support systems are in place to help young people manage through tough times and get to the other side. The partnership is beneficial for the Laborers Union because it allows them the opportunity to evaluate students before bringing them into the program. It also assists them in fulfilling their local hiring requirements (this is a huge incentive), and provides opportunities for them to tap into the local workforce development system thereby bringing in more grant money to their Laborers Training and Retraining Trust Fund. In addition, YBSJ has been able to fund safety training by the Laborers Union, thereby bringing in another revenue stream for them.

The Carpenters and Laborers Unions brought an additional key resource to YouthBuild's table: The State of California Public Utilities Commission (PUC). The PUC was spearheading the Hetch Hetchy Reservoir Pipeline project to fix the physical structure that transported water from Yosemite Valley to the San Francisco Bay Area. The construction project involved multiple counties and required local and diversity hires. In Stockton, a project labor agreement drove the Laborers Union to allow direct entry for qualified YouthBuild graduates into their apprenticeship program. YBSJ received a large grant (\$375,000) from the PUC to recruit and train 45 YouthBuild students for apprenticeship. Most of these apprenticeships landed with the Laborers Union.

### **Tips for Cultivating and Sustaining Relationships with Registered Apprenticeship Sponsors**

The deeper partnership between YBSJ and the Carpenters and Laborers Unions is part of a broader set of partnership arrangements that includes the local Workforce Development Board (formerly Workforce Investment Board), the San Joaquin Building Trades Council, the San Joaquin Area Apprenticeship Coordinators Association, the Builders Exchange, and others.

The table below was provided by YBSJ Executive Director Sheilah Goulart to describe the relationship development process with local Registered Apprenticeship sponsors:

**Figure 1: Relationship Development Process Table — YouthBuild San Joaquin, Stockton, California**

Partnership activities	<p>It is important for apprenticeship coordinators to have multiple opportunities to interact with YouthBuild participants. Some examples of activities that occur at YouthBuild San Joaquin that allow for interaction between Registered Apprenticeship programs and YouthBuild participants are:</p> <ul style="list-style-type: none"> <li>• <b>Annual Apprenticeship Career Fair.</b> Each September, the San Joaquin Area Apprenticeship Coordinators Association conducts a hands-on career fair. Each trade has a booth with a hands-on project that provides high school students and YouthBuild students exposure to their respective trades.</li> <li>• <b>Guest Speakers.</b> The coordinators from the Carpenters Training Committee for Northern California (CTCNC), the Northern California Laborers Joint Apprenticeship Training Committee (JATC), and the San Joaquin Building Trades Council (SJBTC) attend Mental Toughness Orientation to introduce potential YouthBuild participants to their respective trades and the prerequisites for becoming indentured as apprentices in these trades.</li> <li>• <b>Mock Interviews.</b> The coordinators from CTCNC, JATC, and the San Joaquin Building Trades Council conduct mock interviews to help train students in the art of interviewing.</li> <li>• <b>On-site Building Trades Fair.</b> Members of the SJBTC conduct a building trades fair each March at the school site to provide an opportunity for interested youth to learn more about a specific trade and how to apply for apprenticeship opportunities.</li> </ul>
Direct-entry agreements and MOUs	<p>YBSJ established a direct-entry agreement with CTCNC in July 2010. The agreement requires that the YBSJ training include random drug testing, a financial literacy component, and a daily exercise component. It also requires that YBSJ teach the construction curriculum provided by CTCNC that includes tool safety, construction math, and hands-on construction activities. In turn, CTCNC guarantees five direct placements each year, at least one of which must be a female.</p> <p>YBSJ established a direct-entry agreement with JATC in May 2011. The agreement requires that the YBSJ training include a minimum of eighty hours of hands-on training that covers tool and workplace safety, what to expect on a job site, following instructions, attitude, illegal discrimination and sexual harassment, construction math, team building, role and history of organized labor, role and expectations of a contractor, collective bargaining, overview of state and federal laws related to apprentices, and apprentice responsibilities related to recordkeeping.</p> <p>In addition, YBSJ developed a disciplinary policy and uses trainers from the Laborers Education Foundation to teach OSHA 10, First Aid/CPR, Traffic Control, Confined Space, and 40-hour Hazardous Waste Removal class. In turn, the Laborers Union guarantees three placements a year and gives all graduates from YBSJ credit for 600 hours of training, which places them on the second step of the apprenticeship salary schedule.</p> <p>YBSJ entered into a memorandum of understanding with SJBTC in March 2015. The agreement allows YBSJ to use and certify participants in the Multi-Craft Core curriculum (MC3), which is a national industry-recognized certificate. In addition, the BTC members agree to conduct a building trades fair each March to expose participants to a variety of trades and provide them an opportunity to meet with apprenticeship coordinators and learn more about those trades. YBSJ also has commitments from the union sisters to assist with facilitating the orientation lessons for female participants.</p>

## **Describing the Pathway to Apprenticeship**

At YBSJ, preparing participants for Registered Apprenticeship begins during Mental Toughness Orientation, when the apprenticeship coordinators from the Carpenters and the Laborers Unions introduce participants to the opportunities in the construction industry. This process continues throughout the year. As the year progresses, participants who are interested in and show an aptitude for the construction industry are identified and supported through entry into Registered Apprenticeship “indentured” status until they complete their apprenticeship training and achieve journeyworker status.

### ***Preparation through Early Exposure to Construction Careers***

Several annual events occur throughout the year to expose participants to apprenticeship opportunities. During Mental Toughness Orientation, the apprenticeship coordinators from the Carpenters and Laborers Unions introduce participants to the direct-entry process and the opportunities for employment available through the partnership. Female members of the Carpenters Union (“union sisters”) also conduct a workshop specifically targeting females, since the direct-entry agreement requires that one female be indentured before four males can be indentured.

Each September, the San Joaquin Area Apprenticeship Coordinators Association holds a career trades fair, at which close to 15 different apprenticeship programs have booths where students can experience hands-on mini-projects and learn about each particular trade. Each March, SJBTC holds a construction careers fair to provide participants with an opportunity to learn more specific information about the trades and the application process of each. Throughout the year, tradespeople from the unions serve as guest speakers and assist with mock interviews.

### ***Identifying and Placing Participants Who Demonstrate Interest and Likelihood of Success***

As the year progresses, YBSJ's career developer and placement/follow-up specialist works with the construction instructor to identify YBSJ participants who show interest and the most potential for being successful in a Registered Apprenticeship and begin to create a list of potential candidates to interview. Qualities or situations that demonstrate the potential for success include a positive attitude, excellent attendance, a good work ethic, and access to transportation, as well as continued interest in the construction fields. When the unions call for placements, they are provided with a list from this candidate pool and they conduct interviews at the YouthBuild program. Based on the results of these interviews, the unions create a ranked list from which they can pull as opportunities occur to indenture participants.

Indenturing into an apprenticeship program occurs at the end of the participant's training. The placement/follow-up specialist meets with Executive Director Sheilah Goulart to review participants' records and identify those that wish to pursue this career option. To begin the indenturing process, a formal letter is sent to each selected participant, referring him or her to the respective union.

The Carpenters Union Local 152 provides five placements per year, of which one must be a female. “This ratio presents a challenge for us because we cannot refer any males unless a female agrees to be indentured. Although we maintain nearly 33 percent female enrollment in YBSJ, few females wish to pursue construction as a career. This year, we are establishing a mentoring program with the Sisterhood of Carpenters so that our female students will be less afraid of this career choice,” says Goulart.

The Laborers Union Local 73 provides three placements per year and grants YBSJ participants 600 hours of credit for completing YouthBuild, which qualifies participants to begin on the second step of the Laborers Union's salary schedule.

### ***Providing Support Services and Tracking Graduates Placed in Registered Apprenticeship***

YBSJ provides support services throughout the indenturing process. This support includes paying for initial initiation fees, safety gear, tool belt, and basic tools required by the union. In addition, the placement/follow-up specialist works closely with the apprenticeship programs to track YBSJ graduates' progress in the apprenticeship program for a minimum of one year, though typically tracking continues until the apprentice reaches journeyworker status. The placement/follow-up specialist and union apprenticeship coordinators work together to address issues that interfere with participant success.

**Figure 2: YouthBuild San Joaquin, Stockton, California — Pathway to Apprenticeship**

Before Enrollment	While in YouthBuild	Exiting YouthBuild	Post-YouthBuild
<p>Student is introduced to direct-entry process during orientation.</p> <p>Carpenters Union provides workshop for prospective female participants.</p> <p>Assessment of construction readiness skills during Mental Toughness.</p>	<p>Construction instructor identifies participants with interest in construction and potential for success.</p> <p>Unions call for applicants and YBSJ candidates are interviewed by union sponsors.</p>	<p>Students earn OSHA 10 and MC3 credential</p> <p>Laborers Union provides 600 hours of credit toward apprenticeship for completing YouthBuild</p>	<p>Unions create a ranked list of candidates.</p> <p>Participants are accepted into apprenticeship by direct entry.</p> <p>YouthBuild graduates receive elevated standing as second-period apprentice Laborers.</p> <p>YBSJ supports apprentices for one year.</p>

### **Sustaining and Building upon Existing Partnerships**

Sheilah Goulart worked hard to build upon that first advisory board meeting where she introduced YouthBuild to construction trade member organizations. Her hard work has paid off. The Builders Exchange of Stockton, for example, provides participants job placement assistance, job shadowing, and internship opportunities, as well as construction training at a discounted rate. A member of the Builders Exchange has served on the YBSJ Advisory Council for nine years. SJBTC conducts annual building trades fairs at YBSJ and provides guest speakers for classes. Another organization, the San Joaquin County Area Apprenticeship Coordinators Association, provides outreach and recruitment activities on behalf of the trades, guest speakers, and on-site tours, and has helped YouthBuild with the pre-apprenticeship certification process. These key associations with a broad set of trade representatives provide the exposure to the full range of careers in the trades, which supports the more specific information offered by the Laborers and the Carpenters Unions.

The YBSJ–SJBTC partnership took another positive turn in early 2015 when YBSJ adopted the Building Trades Multi-Craft Core Curriculum (MC3). Now SJBTC is coming to YBSJ for training ideas. SJBTC is bringing employers to the table and is working with YBSJ and the employers to develop customized curricula. For example, the partners are

currently working together on a Heating, Ventilation, and Air Conditioning (HVAC) customer service training. The partnership is identifying what participants need to learn to meet industry standards and will provide a steady supply of successful YouthBuild graduates for jobs in this industry. The partners are beginning to look at the needs of businesses in the community beyond construction. According to Goulart, “YBSJ’s adoption of the MC3 standard curriculum is going to open doors to more of the trades, such as the sheet metal workers, plumbers, and electricians.”

For YBSJ, the most important message coming from employers is that they want to keep their employees local. Keeping their employees local cuts down on training costs, supports the local economy, and creates family-friendly workforce policies in the community.

## **Case Study 2:**

### **Operation Fresh Start YouthBuild, Sponsored by Operation Fresh Start, Inc., Madison, WI — 2012 DOL YouthBuild Grantee**

#### **The Program at a Glance**

Operation Fresh Start YouthBuild (OFSYB) was founded in 1970. It provides high school dropouts, youthful offenders, and others with a paid, 30-hour-per-week opportunity to learn basic work skills, prepare for the high school equivalency examination, secure and retain employment at the end of training, and contribute to the community by renovating substandard housing into safe, energy-efficient, affordable homes sold to low-income families.

#### **Evidence of Success**

OFSYB has placed 12 YouthBuild graduates in Registered Apprenticeship since 2010.

#### **Registered Apprenticeship Partners**

Carpenters, Electricians, Ironworkers, and Laborers Unions

J.H. Findorff & Son, Inc.

#### **Key Player**

Brian McMahon, Program Director, Operation Fresh Start YouthBuild

#### **Curricula and Other Program Features**

OFSYB uses the Home Builders Institute’s Pre-Apprenticeship Construction Training curriculum (HBI-PACT). Successful completion of modules in tool identification, construction math, safety, and employability skills leads to earning an HBI-PACT credential from the Home Builders Institute. Because the HBI-PACT curriculum focuses on the residential construction industry, program staff members use the Building Trades Multi-Craft Core Curriculum (MC3) as a supplement for the commercial construction industry.

Once students earn the HBI-PACT credential, most take advantage of a program offered by Construction Training Incorporated (CTI). The CTI program is a six-week apprenticeship preparation training program focused on the construction and utilities industries. It provides skills in blueprint reading, tools, math, and safety. In addition to providing technical skills, CTI provides students with detailed information about various trades and provides tutoring for the Accuplacer test, a common entry requirement for many trade apprenticeship programs that is required for entry into most trades in Wisconsin.



### **Operation Fresh Start YouthBuild Graduate Crew —“Grad Crew”**

OFSYB's main source of apprentices is its Graduate Crew (Grad Crew). The Grad Crew is an advanced construction crew consisting of a select four or five Operation Fresh Start graduates.

Grad Crew members work ten hours a day, four days a week in the field. OFSYB considers this program a boot camp for construction careers and sets high standards for attendance, team work, and skill development. After a great deal of effort, OFSYB has been designated as a Section 3 business that employs YouthBuild graduates (see *Part II. Leveraging Section 3 for Placements* for more information on Section 3). This Grad Crew is the business division that bids on affordable housing projects. It pays prevailing wages and provides full-time benefits. Individuals typically work on the Grad Crew for a year, although it is not uncommon for individuals to move into Registered Apprenticeships or be hired by a contractor directly before the year is up. Most individuals accumulate a minimum of 400 hours of construction experience before leaving the Grad Crew.

### **History of Operation Fresh Start YouthBuild's Partnerships**

OFSYB created a constellation of partnerships that has led to greater access to union Registered Apprenticeship program sponsors and signatory contractors. The Grad Crew provided the YouthBuild program the ability to leverage a number of key relationships including those with the Construction Training Institute, the Building and Construction Trades Council of South Central Wisconsin, J.H. Findorff & Son, Inc. ("Findorff" is one of the leading construction firms in the Midwest), and the Workforce Development Board of South Central Wisconsin.

#### ***The Construction Training Institute***

The Construction Workforce Diversity Alliance (CWDA) is a program of CTI. Its mission is to increase and improve access, recruitment, training, and retention of women and minorities in construction trade careers through state-approved apprenticeship programs.

In 2008, Program Director Brian McMahon first visited the CWDA program to meet other organization leaders seeking ways for their program participants to access the construction trades. Acknowledging their similar interests, OFSYB and CWDA signed a partnership agreement to uphold the goals of CWDA and work with other members to open up opportunities for underrepresented populations to enter well-paying jobs in construction. McMahon joined the outreach committee of CWDA to learn about construction jobs and to inform employers, trade representatives, and community organizations about OFSYB's construction training program.

Through participation at CWDA meetings, McMahon learned about CTI's Skills Trade Apprenticeship Readiness Training (START), a six-week apprenticeship preparation curriculum. This evening program was a perfect fit for YouthBuild students studying construction. It exposed students to the 17 apprenticeship trades available to them and included information about the specific work for each trade, entry requirements, the application and selection process, and the pathway to apprenticeship. Math and measurement, blueprint reading, résumé development, and personal finance were among other topics covered in the course. In addition, the class prepared students to pass the Accuplacer exam. All construction students were encouraged to enroll in START as a supplemental component of their construction training. Shortly after getting involved with CWDA, McMahon joined the board of CTI.

McMahon's involvement on the CTI board opened the door to the trades for him in a significant way. It provided him the opportunity to develop relationships with many decision makers in the field including the executive director of the Building Trades Council, the apprenticeship coordinators for the Laborers and the Ironworkers Unions, the training director of the IBEW (International Brotherhood of Electrical Workers), and a representative from Findorff. These



monthly board meetings allowed ample networking opportunities and were a primary source of information about construction projects coming online, job openings in construction, and apprenticeship activity.

As McMahon was developing a base of knowledge about the trades, OFSYB was searching for opportunities for young people to gain hands-on experience in the field. Like most cities during the economic downturn, Madison faced high unemployment, especially in construction. The American Recovery and Reinvestment Act of 2009 provided funding for training and job creation. The City of Madison awarded OFSYB a two-year stimulus grant to cover the costs of OFSYB student labor on affordable housing construction projects. It was the responsibility of OFSYB to identify the organizations working on affordable housing development, secure the building materials necessary for the project, and bid competitively. This funding was the foundation for the development of the Grad Crew model that was launched in 2010. With the sunset of the stimulus grant funding, the Grad Crew has been able to sustain itself as a Section 3 business. The Section 3 business designation required that OFSYB hire at least 30 percent of its full-time employees from Section 3 residents. YouthBuild graduates employed on the Grad Crew were considered Section 3 residents under this provision.<sup>v</sup>

Operation Fresh Start became certified as a Section 3 business after six months of conversations with the City of Madison. Operation Fresh Start was already doing a number of HUD-funded affordable housing projects under contract with nonprofit, private-sector and public-sector partners, and was operating a federally-funded YouthBuild program for a number of years. The Section 3 business designation provided an additional incentive for prospective contractors bidding on HUD-funded projects to partner with Operation Fresh Start. Under the joint venture clause of Section 3, OFSYB is responsible for carrying out and managing at least 25 percent of the work. The scope of work is clearly defined and managed by OFSYB. The joint venture compensates OFSYB for the work it performs.<sup>vi</sup> The Grad Crew enterprise has grown because of this Section 3 designation. For example, it was able to partner with a contractor who was building a six-story mixed-income construction project that was using HUD funds. As a Section 3 business, the Grad Crew was able to successfully bid on the project and wound up completing two of the units. “Utilizing this designation has generated work opportunities for the Grad Crew,” said McMahon. “The most important part of Grad Crew is it provides a professional work platform so that our students are being exposed to the reality of construction careers. Bidding on jobs and having to meet deadlines are important experiences for this group.”

The participants in the first Grad Crew classes were selected by the Grad Crew supervisor for their ability to successfully complete the START program, pass the Accuplacer, and demonstrate exceptional job readiness and leadership skills in addition to their technical building skills. Students addressed a multitude of personal and work-related issues at the same time they were logging 900 hours of hands-on construction training. At the end of their yearlong training period, Grad Crew members were more mature and focused than their counterparts, had their support systems in place, and had proven their skill level in construction by working successfully on the affordable housing projects. Not surprisingly, the members’ success in Grad Crew was a boost for the program overall. The project goal for the first year was to finish 25 residential construction projects. They completed 52.

The success of Grad Crew became the way in which “OFSYB proved their mettle to the community and the trades. The Grad Crew was a game changer,” McMahon observed. As the news of Grad Crew spread, McMahon knew that he had something valuable to offer key employers and union representatives he came to know from the CTI board.

### *The Building and Construction Trades of South Central Wisconsin*

In Wisconsin, all trades use the “letter of introduction” system. The applicant completes an application and takes the Accuplacer. The applicant may or may not have an interview. If the applicant passes the Accuplacer, he or she receives a letter from the apprenticeship committee and a list of employers and is instructed to find an employer to sponsor his or her apprenticeship. According to McMahon, even in this type of apprenticeship model it is important

that OFSYB has strong relationships with the local union halls. The apprenticeship coordinator knows the employers and can advocate on behalf of an organization's ability to train and prepare young people. The unions value the job readiness skills of team work, discipline, punctuality, and just "knowing how to go to work."

While OFSYB does not have an advisory board with representatives from the trades, MOUs, articulation agreements, or direct-entry agreements, they have established partnerships by being part of a network that includes employers, training organizations, and apprenticeship sponsors. Because it is coupled with local policies that promote apprenticeship utilization and workforce diversity, the network is just as effective as direct partnership arrangements. For example, OFSYB works with the City of Madison to leverage their resources under "Best Value Contracting." This local policy supports OFSYB as a talent source for new apprentices and incentivizes employers to provide opportunities for new apprentices to find work.

### *J.H. Findorff & Son, Inc.*

The connection with J.H. Findorff & Son was invaluable. The company is a signatory with the Carpenters, Electricians, and Ironworkers Unions and has a steady stream of openings for apprentices on large-scale construction projects throughout Madison. Findorff was voted "the best commercial contractor" by its peers in the industry for several consecutive years and has a reputation for quality building and commitment to the community.

McMahon developed his relationship with Findorff over a three-year period and made it a comprehensive partnership, in part through a State of Wisconsin Department of Workforce Development Fast Forward grant aimed at skill training in the construction, transportation, and manufacturing fields. Through this partnership, Findorff provided job-shadowing opportunities to OFSYB Grad Crew members. Findorff hired eight former OFSYB graduates, all of whom have either worked directly for Findorff or through a subcontractor on a Findorff job site. Moreover, Findorff committed to hiring ten qualified OFSYB graduates each year.

OFSYB retention records show that its students have a 100-percent retention rate on the job while earning a competitive wage. Findorff not only hires YouthBuild graduates; it has become a champion for OFSYB. According to Findorff's own website, it has "contributed as a supporter for OFSYB's mission by incorporating employee outreach and providing a path forward for disconnected youth. Findorff is looking forward to continuing our partnership with OFS in the years to come and we encourage our fellow business partners to consider joining this amazing organization's mission." Recently, a member of the Findorff management joined the OFSYB Board of Directors and Findorff made a \$200,000 grant to the organization.

"Because of Findorff's strong reputation, any Grad Crew member who worked on a Findorff construction site is branded with a gold seal of approval in the industry—a distinction that makes it easier to land another job in the construction industry," McMahon acknowledged. The Grad Crew provides a pathway into apprenticeship because it gives the company what it wants in terms of technical construction skills and proven dependability.

### *Workforce Development Board of South Central Wisconsin*

The Workforce Development Board of South Central Wisconsin funds the Foundations for the Trades Academy, which provides opportunities for OFSYB students preparing to enter the utilities industry. The Workforce Development Board brings together the expertise of partners within various areas of the construction industry and facilitates discussions among them at apprenticeship partnership tables and contractor job fairs. McMahon regards the Workforce Development Board as good feeder organization for relationships and networking.

**Figure 3: Partnership Table — Operation Fresh Start, Madison, Wisconsin**

<b>Name of partner</b>	<b>Role in apprenticeship placement</b>	<b>Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)</b>
Workforce Board of South Central Wisconsin	Funds the Foundations for the Trades Academy, a six-week apprenticeship preparation curriculum for the utilities industry and organizes the apprenticeship partnership table.	Holds regular collaborative meetings, is a grant funder/partner, organizes contractor job fairs.
Building and Construction Trades Council of South Central Wisconsin	BCTCSCW is a labor organization representing 19 individual Union Locals, and comprised of 17 different construction crafts that offer apprenticeships. Affiliated unions represent members who are involved with almost all aspects of building and construction.	Individual locals recruit apprentice candidates from Operation Fresh Start YouthBuild.
Construction Training Institute	Provides participants information on the trades, offers a six-week apprenticeship preparation curriculum, administers the Accuplacer exam to YouthBuild apprenticeship candidates.	Holds regular collaborative meetings, provides referrals, assists in case management of shared participants on their paths to apprenticeship.
Wisconsin Regional Training Partnership	As a workforce intermediary in Madison, W RTP/BIG STEP works with the public sector to develop resources, services, and processes for member companies to expand employment opportunities and meet their needs for new workers.	Holds regular collaborative meetings, is a partner in providing MC3 curriculum, organizes contractor/apprenticeship job fairs, acts as a liaison between industry and local training programs.
J.H. Findorff & Son, Inc.	Provides job-shadow opportunities for Grad Crew members.	Holds regular meetings, offers weeklong job shadowing opportunities for Grad Crew members on commercial sites each quarter, participates in collaborative meetings with the Workforce Board of South Central Wisconsin and other partners. They are employer-members of the apprenticeship placement partnership.
Four Lakes Driving School	Provides automobiles for driver's license exams.	Provides discounted services to Operation Fresh Start YouthBuild students.

## Describing the Pathway to Apprenticeship

### *Screening for “the Building Gene”*

OFSYB’s standard protocol is to accept targeted referrals from known and trusted sources such as social workers within human services departments, employees of the corrections system, and teachers from local school systems. The targeted recruitment method increases OFSYB’s applicant acceptance rate and influences program completion rates. Professionals who refer young people to OFSYB understand what it takes to succeed there. At the same time, potential applicants are given accurate information about the program before they go for an initial interview. Unlike large-scale recruitment fairs, broadcast recruiting, or word of mouth from family, friends, and acquaintances, this network recruiting system gives students a head start in thinking about career possibilities.

If the intake coordinator has a sense that the applicant is mature enough to succeed in apprenticeship, the coordinator will discuss the option of Grad Crew in the interview. Typically the intake coordinator looks for an applicant who is over 18 years of age and is responsive to the ideas of paid health care, pensions, and stability, and who has “the building gene.” The coordinator uses motivational interviewing techniques to assess the candidate’s interest in construction and motivation to succeed in the program.

### *From Gateways to Driver’s Licenses*

All services are provided through a framework called “Gateways,” a set of three sequentially organized modules, each with goals pertaining to the training, education, personal, and career-development needs of the student. Gateways are a series of benchmarks young people attain on their paths to self-sufficiency.

The goals identified at each Gateway require youth to increase their levels of skill and responsibility. For example, under “Job Site Goals” in Gateway 1, the student must have all required tools needed for the work site. In Gateway 2, the student must demonstrate tape-measure proficiency. In Gateway 3, the participant must be prepared for work 94 percent of the time. The Gateways are the basis for helping each participant move forward in the program. Gateway goal setting is a tool used by the case management coordinator, teacher, and supervisor to develop a service plan unique to each youth, and is incorporated into and updated during evaluations, which occur every eight weeks.

OFSYB also works with Four Lakes Driving School to help students obtain vehicles for their driver’s license tests. For many young people, lack of access to transportation is a barrier to employment. Assisting youth to get their driver’s licenses allows the youth to focus on eventually attaining their own transportation, leading to broader employment opportunities and greater reliability on the job. In the construction industry, workers must have their driver’s licenses and access to reliable transportation because the locations of work sites may be remote or removed from public transportation routes and workers are required to arrange their own transportation.

**Figure 4: Operation Fresh Start, Madison, Wisconsin — Pathway to Apprenticeship**

Before Enrollment	While in YouthBuild	Exiting YouthBuild	Post-YouthBuild
<p>Prospects are referred to YouthBuild by a network of organizational partners familiar with program expectations.</p> <p>At intake, the case management coordinator screens for interest in construction and level of maturity. Determines fit for Grad Crew.</p>	<p>Students pass through “Gateways” related to technical skills and work readiness.</p> <p>Students earn HBI-PACT and MC3 credentials.</p> <p>Students placed into CTI START or Foundations course for supplemental training.</p> <p>Students work with local driving school to obtain driver’s licenses.</p>	<p>Students are selected into Grad Crew for a maximum of one year; the Grad Crew features intensive construction training ten hours per day, four days per week.</p> <p>Students intern with contractors on construction projects.</p>	<p>In order to be hired by an employer and entered into Registered Apprenticeship, graduates participate in a rank list system for the Ironworkers and Electricians Unions or letter of intent (invitation) for other trades. Apprentices become indentured and upon successful completion move up to journeyworker status.</p>

### Case Study 3: Portland YouthBuilders, Portland, OR — 2013 DOL YouthBuild Grantee

#### The Program at Glance

Founded in 1995, Portland YouthBuilders (PYB) is committed to providing long-term support for low-income youth. Each year the organization provides education, vocational training, and leadership development services for approximately 100 young people who have not completed high school and who face significant barriers to success.

#### Evidence of Success

PYB has placed 15 graduates in Registered Apprenticeships since 2009.

#### Registered Apprenticeship Partners

Laborers, Carpenters, Roofers, Electricians, and Sheet Metal Workers Unions

PYB has direct-entry agreements with the Laborers and Carpenters Unions.

#### Key Player

Bill Kowalczyk, Construction Manager, Portland YouthBuilders

#### Curriculum and Other Program Features

PYB developed their own construction curriculum: *Intro to Construction and Tool Training*, *Construction Basics*, and *Job Site Training*. During the first term, students spend one work day per week on the job site and two to three days per week on construction basics in the classroom. During the second term, students’ hours in the classroom and on the job site are reversed. This curriculum includes 156 classroom hours and 450 hours on the job site.

Successful completion of the course leads to a Bureau of Labor and Industries for the State of Oregon (BOLI) pre-apprentice certification, which demonstrates overall competence in construction.

## **History of Portland YouthBuilders' Partnerships**

Building solid partnerships between PYB and union apprenticeship programs was a long-term process. According to Construction Manager Bill Kowalczyk, this work began with the assumption that easy access to apprenticeship was in the best interest of their construction-bound students:

"We kept our sights trained on union and open-shop apprenticeships because our experience indicated that our students have a higher success rate when sent to construction companies affiliated with the structured training provided by apprenticeship. Small, non-apprenticeship shops tend to rely on individual staff working independently without journeyworker-apprenticeship relationships. Our conclusion was that a more structured work environment with structured training provided by apprenticeship was most appropriate for our students who are still establishing dependable work patterns."

However, gaining access to apprenticeship turned out to be a challenge in the early years of the program. PYB's attempt to negotiate direct entry for their students came up against resistance from apprenticeship coordinators. Kowalczyk acknowledged that students were welcome to go through the standard application process and receive extra points for being certified pre-apprentices. Although PYB is a BOLI-certified pre-apprenticeship program, it was not trusted to provide direct-entry candidates. "We probed deeper, asking for frank feedback, and discovered that there was a general bias that pre-apprenticeship programs were 'entitlement programs' generating unprepared applicants who were expected to fail and deserved no special status." This stigma and PYB's reputation as a program for "hard-to-serve youth" were difficult challenges to overcome.

Rather than be discouraged by this roadblock, the PYB staff decided to develop an industry-culture approach to building their construction program. They dropped their aspirations of direct entry and instead focused on determining what skills a successful pre-apprentice needed to enter apprenticeship and what apprenticeship programs needed from them. They gained this information by attending monthly meetings held by apprenticeship coordinators from the trades and representatives from BOLI. What they learned is that apprenticeship programs wanted students with basic skills such as safety, tool usage, site organization, and following directions. Most importantly, they wanted apprentices who could come to work every day, on time, with a good attitude. They were told not to worry about advanced-skills training because that was the purpose of apprenticeship.

PYB moved its pre-apprenticeship training program in a new direction. It hired construction instructors with recent construction trade experience in both union and open-shop employment. The advantage to employing construction staff directly out of the field was that it allowed PYB to accurately assess a student's ability to succeed in an apprenticeship program. Instructors were now in a position to consider how many of their students they would hire onto their own crews. In those beginning years, the answer was "very few."

The next step was to recruit representatives from the trades onto a newly formed advisory committee. Trades union representatives from the initial committee included the Carpenters, Roofers, and the Sheet Metal Workers Unions. PYB identified allies in unions specifically interested in diversifying their ranks by adding more women and people of color. One of their first advisory committee members was a representative from the Electricians Union, who was, at that time, a member of the International Brotherhood of Electrical Workers (IBEW) in Portland and a person of color. This advisory committee met monthly and provided the PYB construction staff with valuable support, advice, and connections to the industry.

Staff from PYB carefully reassessed their curriculum and incorporated the feedback they received from apprenticeship leaders into their program. According to Kowalczyk, “They identified competencies specifically designed to prepare students for successful apprenticeship, as well as entry into the construction industry in general.”

Over time, the PYB staff became more focused and the construction staff felt confident about the skill level and maturity of their graduates. Although not a union member, Kowalczyk was a carpenter himself and approached the Carpenters Union about direct entry for PYB graduates based on the training the PYB staff had provided. At the time, it was difficult to gain direct-entry access to the Carpenters Union. As PYB’s relationship with the Pacific Northwest Carpenters Institute developed, they trusted that Kowalczyk would only send students he knew “would survive apprenticeship.” At the same time, the Carpenters Union became more interested in diversity among their members and they began to look to PYB for applicants. Over the course of three to five years, PYB gained direct-entry status with the Carpenters Union.

PYB then targeted the Laborers Union for direct entry. They found that the Laborers Union’s apprenticeship program was two years long and trained its apprentices in a diverse set of skills. It took one year to develop a direct-entry agreement with the Laborers Union but, over time, direct entry itself wasn’t meeting the needs of the union or PYB. “We realized that direct entry can be reasonable for older students. Entrants from YouthBuild—who are typically younger—need a social structure. They don’t fare well as individuals,” Kowalczyk explained. “When YouthBuild graduates meet apprenticeship training staff at the training center and then enter apprenticeship training as a cohort, they have a social structure that facilitates success. The magic is in the relationships with the training staff, who already know these graduates can be successful and know other apprentices who are going through the same experience.” And so PYB and the Laborers Union created an agreement that provided access for students to participate in cohort training at the union’s training center in Corvallis. The two organizations slowly began to integrate their programs with one another so that the union provided a portion of trade-specific pre-apprenticeship training in their Laborers 101 boot camp, and a seamless pipeline of candidates flowed from PYB to the union. “The value of direct entry was that it formalized our mutual commitment to the relationship. Both organizations wanted this effort to be successful,” Kowalczyk said.

Over time, the union realized that the students they were seeing from PYB had higher success rates than students from other pre-apprenticeship programs. According to Al Devita, Training Director for the Oregon and Southern Idaho Laborers-Employers Training Trust, “The people we get from Portland YouthBuilders have their transportation in place, [have] earned their diploma, have solid construction experience, and are motivated to work.”

PYB also has an established partnership with Oregon Tradeswomen Incorporated (OTI). When Kowalczyk first started with PYB, he met Connie Ashbrook, Director of OTI, at an apprenticeship coordinators meeting. They immediately recognized their shared agendas and program goals for increasing opportunities for women in construction. Ashbrook mentored Kowalczyk in working with young women in construction and provided an introduction to many apprenticeship coordinators with whom she had strong relationships. They worked together to recruit more women into the PYB program and to provide the supports the women needed to feel comfortable and to see themselves building a career in construction.

Construction Apprenticeship and Workforce Solutions, Inc. (CAWS) is a nonprofit member organization whose members include contractors and trade representatives working to improve opportunities for women and people of color in construction. Kowalczyk and Ashbrook became involved with CAWS in its early days to educate the organization about the experiences of community-based organizations that promote construction careers among incumbent workers and youth. PYB continues to work collaboratively with CAWS to gather information on large-scale construction projects and job opportunities. The representative from CAWS is also employed by the Workforce

Development Board and serves a key role with the Metropolitan Alliance for Workforce Equity (MAWE). According to Kowalczyk, MAWE is the force behind a community benefits agreement (CBA) passed in 2012. The agreement's purpose is to bring workforce equity to city contracts and promote the training and placement of women and people of color working on large city jobs. The CBA uses the pre-apprenticeship training programs to supply underrepresented apprentices for construction jobs.

**Figure 5: Partnership Table — Portland YouthBuilders, Portland, Oregon**

<b>Name of partner</b>	<b>Role in apprenticeship placement</b>	<b>Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)</b>
Oregon and Southern Idaho Laborers-Employers Training Trust	MOU for direct entry to qualified PYB applicants.	Referrals, regular communication on an informal basis, partner in funding proposals, guest speakers, direct training support, funding support.
Carpenters Union	Provides direct entry to qualified PYB applicants.	Referrals, regular communication on an informal basis, access to union training facility, funding support, presence on board and construction department advisory committee.
Oregon Tradeswomen, Inc.	Pre-apprenticeship training program (PATP): OTI promotes success for women in the trades.  Statewide and national advocacy work.	PYB hosts OTI training events, works in collaboration for funding.  Provides speakers and facility visits during four-day pre-program construction training for female PYB students interested in the trades. Collaborates on state PATP issues and strategies with BOLI and apprenticeship partnerships, consults regularly on PYB Women In Construction curriculum.
Constructing Hope	Pre-apprenticeship training program (PATP).	Works in collaboration for funding, collaboration on state (PATP) issues, and strategies with BOLI and apprenticeship partnerships.
Work Systems, Inc.	Provides workforce intermediary staffs and supports the local Workforce Development Board. Provides funding for training and networking opportunities.	Partner in negotiating community benefits agreement (CBA) that won funding and placement opportunities for PATPs.
Construction Apprenticeship and Workforce Solutions, Inc. (CAWS)	Nonprofit member organization made up of contractors, trade representatives, and community organizations working to improve opportunities for women and people of color in the construction trades.	Gather information on large-scale construction projects, referrals to construction jobs to create pipeline of women, people of color, and low-income youth into the apprenticeship workforce of member contractors.
Metropolitan Alliance for Workforce Equity	Negotiated community benefits agreement to create demand and use pre-apprenticeship training programs for supply of underrepresented apprentices.	Coalition organization that meets monthly with additional committee meetings to develop strategies to implement more CBAs and manage participation in existing CBA.
National Association of Minority Contractors	Participated in the development of the CBA.	<i>Due to a change in leadership, the group is no longer engaged in CBA activities.</i>



Name of partner	Role in apprenticeship placement	Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)
Bureau of Labor and Industries (BOLI) and Oregon Department of Transportation (ODOT)	BOLI-ODOT Heavy Highway Workforce Development Program releases requests for proposals for providing apprenticeship preparation for underrepresented apprenticeship applicants.	Quarterly meetings for reviewing progress on contracts to share best practices with other grantees.
Oregon Healthy Workforce Center and Oregon Institute of Occupational Health Sciences, Oregon Health & Science University	Total Worker Health program focuses on nutrition for young people working in construction.	Pilots nutrition curriculum for pre-apprenticeship participants. Collaborates with PYB staff in development of nutrition and garden curriculum as part of Total Worker Health program.

## The Pathway to Apprenticeship at Portland YouthBuilders

### *Assessment and Support*

PYB uses a construction-preparedness checklist to assess coordination, balance, physical strength, and mental acuity. This assessment is based on informal observation during the "Pre-Program Challenge." The "Pre-Program Challenge" is equivalent to Mental Toughness Orientation at many YouthBuild programs. A construction instructor at PYB coordinates activities that require applicants to safely move lumber to various areas of the building, carry and move tools, and walk on uneven ground. The challenge allows the instructor to perform informal assessments using the checklist. PYB is in the process of developing a tool to standardize this process.

PYB also provides special assessment and support for young women interested in careers in construction. PYB knows that very few women have been exposed to working with tools and that this puts these women at a disadvantage from the start of the construction program. In order to increase the female candidates' familiarity with construction, PYB invites women applicants to start the program one week before it officially begins. The apprenticeship placement career coach instructs the women on using hand tools and power tools and provides opportunities for them to use the tools themselves. The staff members coordinate panels and speakers from the National Association of Women in Construction to share their successes and challenges as females in the trades and to talk with the applicants about how women can excel in the unions. Some women learn early on that working in the construction field is not for them but this organization provides a safe space for women to discuss what it takes to succeed as a woman in construction.

Overall, the pre-program for women has been an effective addition to the assessment phase. At its conclusion, the participants often demonstrate more knowledge of tools than their male counterparts.

### *Portland YouthBuilders' Construction Tier System*

PYB has developed a construction-skills assessment and tier system to screen for apprenticeship readiness. This has created a common understanding between the PYB staff and the apprenticeship sponsors about a student's level of readiness. Students are placed into one of three tiers. For example, if a student is identified as Tier One, he or she will be approved for direct entry into the Laborers apprenticeship program without question. A Tier Two student would need some additional assistance before direct entry is viable. (See *Portland YouthBuilders*

Construction Training Document C: Construction Tier System in the Tool Box section for a complete list of each Tier's requirements.) This shared understanding of the demonstrated skills and knowledge takes the guesswork out of what the student brings and how likely he or she will be to succeed as an apprentice.

### ***Portland YouthBuilders' Career-Oriented Case Management***

PYB's case management and career development team model is centered on giving students the support they need not only to complete the YouthBuild program but to also move successfully towards a career path. They have developed a unique, effective approach to case management and have integrated it with their career development practices.

Early in the program, as students begin formulating their future goals, students meet with their case manager and instructors. These meetings enable students to work with staff members to mutually evaluate student needs, assess individual progress, and design program services to meet students' long-term career goals. This process is very different from many case management models in which students are "talked about" rather than empowered to address their own needs and plan their own futures with staff members who serve as partners.

As students transition out of the full-time YouthBuild program, they continue to receive support from PYB. Students who have been enrolled for at least six months and have achieved major benchmarks receive long-term support from their counselor or career coach. Every graduate is given a second-year contract, which outlines individual goals and action steps in the areas of career, education, and personal development. Graduates participate in monthly meetings with their counselors or coaches and receive stipends in addition to other incentives and support services as needed. Graduates who enter apprenticeships receive this same level of intensive support until they complete their credentials.

**Figure 6: Portland YouthBuilders, Portland, Oregon — Pathway to Apprenticeship**

Before Enrollment	While in YouthBuild	Exiting YouthBuild	Post-YouthBuild
<p>Female students interested in the trades participate in four-day pre-program construction training.</p> <p>All students attend the three-week "Pre-Program Challenge," which includes Introduction to Construction and Tool Training. Students are assessed for program readiness using a construction checklist and evaluated for entry into the program.</p>	<p>Students earn BOLI pre-apprenticeship certificate including 156 classroom hours and 450 training hours on the job site.</p>	<p>Graduates place into one of three tiers after YouthBuild training:</p> <p>Tier Three— BOLI-certified pre-apprentice: Student is eligible for entry-level work.</p> <p>Tier Two — BOLI-certified pre-apprentice and completion of Pre-Construction Training: Student is eligible for pre-apprenticeship.</p> <p>Tier One — Student is eligible for direct entry into the Laborers or Carpenters Unions or "preferred entry" to other trades.</p>	<p>Successful apprentices are indentured and reach journeyworker status.</p>

## **Case Study 4: YouthBuild Spokane, Sponsored by NorthEast Washington Educational Service District 101, Spokane, WA — 2013 DOL YouthBuild Grantee**

### **The Program at a Glance**

The NorthEast Washington Educational Service District 101 (NEWESD 101) has operated YouthBuild Spokane (YBS) since 2009. YBS students have the opportunity to earn high school diplomas or equivalency degrees, Segal AmeriCorps Education Awards, Residential Construction Academy Certificates, Certified Nursing Certificates, OSHA-10, First Aid, and driver's licenses.

#### **Evidence of Success**

YouthBuild Spokane has placed 17 graduates in the Residential Carpentry Apprenticeship program since 2009, including three recent YBS graduates. Two serve as full-time AmeriCorps crew leaders at YBS while attending classes through the Spokane Home Builders Association (SHBA) and the Community College of Spokane. The AmeriCorps positions enable the graduates to spend an additional year with YBS and gain full-time construction experience while attending apprenticeship classes.

#### **Registered Apprenticeship Partners**

SBHA and the Community College of Spokane

#### **Key Players**

Manda Edwards, Program Manager, YouthBuild Spokane

Jason Overdorff, Construction Trainer, YouthBuild Spokane

#### **Curricula and Other Program Features**

The YouthBuild Spokane construction training model uses the Building Trades Multi-Craft Core Curriculum (MC3) and the Residential Construction Academy: Basic Principles for Construction curriculum (RCA). Participants who pass a three-hour online exam proctored by SHBA earn a National Occupational Competency Training Institution (NOCTI) Certificate of Completion: Basic Principles of Construction credential.

The RCA curriculum was adopted after an intensive process with the NEWESD 101/YBS advisory board, which included residential construction employers and local apprenticeship coordinators. The advisory board reviewed the training and characteristics needed for individuals to be successful in employment or apprenticeship. The committee determined the RCA curriculum, used by SHBA, enabled YBS graduates who successfully completed it to enter its apprenticeship program as second-year students. The program design reflects characteristics emphasized by partners in the trades. YBS requires students to arrive by 7:30 a.m. each day; the program schedule includes at least one full day on the job site each week and incentivizes perfect attendance to help promote a work ethic reflective of what the trades are seeking. In addition, driver's licenses are emphasized as a supportive service as this is a top priority for workers in the construction field.

Recruitment fliers and other outreach efforts emphasize interest in construction, and a full day's work on a construction site is included in Mental Toughness Orientation. This enables YBS to identify youth with genuine interest in a career in the trades. YBS graduates interested in pursuing construction careers are recruited as full-time second-year AmeriCorps members and are construction crew leaders. Construction crew leaders enroll in the Registered Apprenticeship program sponsored by SHBA through the Community College of Spokane for the 8,000-hour Residential Carpentry Apprenticeship program.

## History of the Partnership

The partnership between SHBA and NEWESD began over ten years ago, prior to YouthBuild Spokane's founding. "Developing a partnership with a local home builders association is a process. It takes time, but it is well worth the effort," explained Manda Edwards. NEWESD 101 positioned itself as a volunteer resource to apprenticeship programs. "The Spokane Home Builders Association and other apprenticeship sponsors are frequently asked by community organizations to volunteer for community projects like cleaning the workers' memorial, building Make-A-Wish playhouses, and speaking at schools and community events. It is very difficult for apprenticeship coordinators to get enough apprentices together to meet the need during busy times of the year." NEWESD 101 took up the slack by helping to complete volunteer projects.

When NEWESD 101 decided to apply for a YouthBuild grant in 2009, Kim Waseca-Love, Education Director for SHBA, participated in the original community planning process for the grant application. She became a member of NEWESD 101's advisory board in 1999 and has since become an active supporter and champion:

"I embraced it for what it meant—providing opportunities for young people. It was also a great pipeline for my program as well as other apprenticeship programs. I was looking at it from what's valued by an apprenticeship coordinator. YouthBuild provides safety (OSHA), construction certifications, and First Aid."

SHBA became a partner on the YouthBuild application because the service projects focused on building housing as well as other community-based projects. According to Waseca-Love,

"As Training Director for the Spokane Home Builders Association, this is huge for me. Employers are more likely to bring YouthBuild graduates on as apprentices. Members of the Home Builders Association need people who are more knowledgeable and will make better workers. Because the apprenticeship model is dependent upon a job opening, it's important to be the best candidate possible. This is something YouthBuild graduates who go on to enter a Registered Apprenticeship program provide."

SHBA provides member employers who act as training agents. These employers have been approved by the sponsor of apprenticeship, such as the Spokane Home Builders Apprenticeship program, to train apprentices in accordance with a set of standards approved by the Washington State Apprenticeship and Training Council. Importantly, a training agent may only employ state-registered apprentices to perform work processes according to program standards. Training agents are employers committed to training and making training a key element of their companies' work culture. They agree to pay a progression of wages based on the increasing skills of the apprentice. "Once an apprentice is with an employer, it's rare that they let that apprentice go," explained Waseca-Love. SHBA's apprenticeship program takes apprentices on a first come, first served basis. As long as individuals currently in the training program are employed, the apprenticeship program is able to bring in new people. "We're not training people who can't get jobs."

In the state of Washington, most apprenticeship training is offered through community colleges. The Community College of Spokane cooperates with 19 apprenticeship training committees to make high-quality training classes available for apprentices in numerous trades. Depending on the size of the program, many apprenticeships are co-located at colleges or at their own independent campuses. To supplement their on-the-job training, apprentices must complete the number of related supplemental instruction (RSI) hours required for their trade. Such instruction may be given in a classroom, through correspondence courses or self-study, or through other means of approved classroom training. Apprentices in the SHBA program attend 20 to 24 hours of classes per month, September through April. Student-apprentices get reduced tuition for taking noncredit, journeyworker-track classes. YBS students can use their

AmeriCorps Education Awards to pay for tuition or to buy tools or other items needed for apprenticeship training. The 8,000-hour Residential Carpentry Apprenticeship program includes coursework at the training center as well as on-the-job training with an employer. Upon completion of the program, apprentices become credentialed journey-level workers. Student-apprentices are eligible to receive college credit and earn an Associate of Applied Science degree if they take an additional 15 credit hours of coursework. These dual accreditations can be incredibly useful in a young person's professional portfolio. The associate's degree is good for those who either want to go into business for themselves or want to be promoted within the home building industry. Based on industry needs, SHBA has modified its apprenticeship standards selection procedures to enable YouthBuild graduates, Job Corps graduates, and veterans to receive direct-entry status if they meet minimum qualifications. This allows YouthBuild graduates to apply for the Residential Carpentry Apprenticeship program if they have a driver's license and a high school diploma or its equivalent.

Edwards suggests that other programs use community service projects as a way to engage prospective apprenticeship sponsors. "Community service projects are a great way to partner with home builders associations and other professionals in the trades. Community service events introduce youth to the real world of work while helping to rebuild their communities. YouthBuild students can participate in trade-related career fairs (hands-on learning activities in over 18 construction trades) and serve as volunteers," she said.

The Washington State Apprenticeship Council is currently considering recognizing YBS as a pre-apprenticeship program. The application is endorsed both by SHBA and the Eastern Washington Apprenticeship Coordinators Council. If approved, this recognition will open new doors to YouthBuild graduates.

Below is a summary of the partnerships that support YouthBuild Spokane's apprenticeship pathway.

**Figure 7: Partnership Table — NEWESD YouthBuild, Spokane, Washington**

<b>Name of partner</b>	<b>Role in apprenticeship placement</b>	<b>Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)</b>
Spokane Home Builders Association (SHBA)	Apprenticeship sponsor, proctors Residential Construction Academy exam.	<p>Training Director of the SHBA advises staff on construction training.</p> <p>Members provide job shadowing and mentoring opportunities and participate in other events.</p> <p>Training Director of the SHBA serves on the program advisory board, which meets quarterly.</p> <p>Offers the 8,000-hour Residential Carpentry Apprenticeship program.</p>
Community College of Spokane (CCS)	<p>Offers supplementary coursework for the 8,000-hour Residential Carpentry Apprenticeship program, allows participants who fall short of the apprenticeship entry requirements to complete prerequisites.</p> <p>Offers customized tours of all CCS vocational programs to students interested in other vocational tracks.</p>	Quarterly, customized tours for students.

Name of partner	Role in apprenticeship placement	Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)
Eastern Washington Apprenticeship Coordinators Council	Sponsors construction career events.  Provides leadership-development opportunities to NEWESD YouthBuild participants.	Coordinates two local events: <i>Pizza, Pop and Power Tools</i> for young women and <i>Construction Career Day</i> .  Endorses the construction training curriculum used in the program; provides guest speakers, work site tours, job shadowing, and mentoring and apprenticeship opportunities to YouthBuild students.
Spokane Area Workforce Development Council	Provides wrap-around support services and connects students to additional apprenticeship opportunities.	WIOA employment specialist participates on the interview committee that vets prospective enrollees.  Co-enrolls participants to provide support services and apprenticeship opportunities when students exit the program.

## The Pathway to Apprenticeship at NEWESD YouthBuild Spokane

The pathway to apprenticeship begins when prospective YBS students develop long-term goals during Mental Toughness Orientation. It continues with pre-assessment of barriers to employment as well as career exploration marked by annual events by apprenticeship sponsors.

### *Assessment of Barriers to Employment*

YBS students develop plans for future development during Mental Toughness Orientation, including long-term goal setting and planning. They continue to refine these plans and work toward exit goals during the program through weekly goal-setting meetings with staff, journaling, and career exploration.

Students complete a pre-assessment that utilizes the comprehensive research-based assessment tool, *Barriers to Employment Success Inventory* (BESI). The BESI becomes the focus of action planning with each student. After students earn a high school diploma or its equivalent, transition becomes the primary focus, and visits from apprenticeship speakers, work site visits, job shadowing with contractors, college tours, and the development of résumés and portfolios are featured activities. Work readiness is assessed using BESI and Work Keys.

YBS staff members identify young women who are already involved in apprenticeship to act as informal mentors to current female students and encourage these students to pursue careers in construction. YBS students also volunteer for two annual events—*Construction Career Day* and *Pizza, Pop, and Power Tools*—sponsored by the Eastern Washington Apprenticeship Coordinators Council. These events introduce over 400 female youth per year to the trades. It is a leadership-development opportunity for YBS students.

### *Graduate Follow-up*

NEWESD 101/YBS provides comprehensive follow-up that includes communication and retention support for program alumni. Before students exit the program, the case manager obtains contact information for multiple parties, including the individual students who are exiting the program as well as mentors, family members, employers, and college counselors. Graduates are encouraged to become active alumni.

The YBS case manager helps students obtain driver's licenses and expunge criminal records, and provides additional support for 9 to 12 months after the program ends. The Spokane Area Workforce Development Council co-enrolls youth and provides wraparound support services such as connecting students to additional apprenticeship opportunities.

**Figure 9: NEWESD 101 YouthBuild Spokane, Spokane, Washington — Pathway to Apprenticeship**

Before Enrollment	While in YouthBuild	Exiting YouthBuild	Post-YouthBuild
Personal long-term planning  BESI pre-assessment of barriers to employment success  Selection interview process	Students complete Building Trades Multi-Craft Core Curriculum (120 hours)  Residential Construction Academy curriculum followed by a three-hour proctored exam.  Case managers work with participants on obtaining driver's licenses.	Graduates interested in careers in the residential construction industry work as full-time AmeriCorps members at NEWESD 101/ YBS.  Graduates wishing to enter apprenticeship opportunities offered by trades represented in the Eastern Washington Apprenticeship Coordinators Council referred to the Spokane Area Workforce Development Council.	Graduates interested in residential home building enroll in the 8,000-hour Residential Carpentry Apprenticeship program through the Community College of Spokane.

## Case Study 5: EPCCC YouthBuild, Sponsored by El Paso County Community College, El Paso, TX — 2012 DOL YouthBuild Grantee

### The Program at a Glance

EPCCC YouthBuild helps students develop the education, motivation, self-confidence, and work skills necessary to succeed in life. EPCCC YouthBuild students are guided by adult leaders who serve as mentors, role models, technical trainers, supervisors, and case managers. The program embodies teamwork, self-discipline, determination, commitment, dedication, ambition, and responsibility. Cohorts are provided 32 weeks of formal training that includes the following components: education (including Adult Basic Skills and high school equivalency preparation), on-site construction skills training, counseling, case management, and leadership development.

### Evidence of Success

EPCCC YouthBuild has placed five graduates in Registered Apprenticeship since 2012.

### Registered Apprenticeship Partner

Independent Electrical Contractors – El Paso



### **Key Players**

Sabrina Campbell, Coordinator for Customized Training and Apprenticeship, El Paso County Community College District

Delia Saldaña, Executive Director, Independent Electrical Contractors Registered Apprenticeship Program

Luz Taboada, Director of Workforce Development, El Paso County Community College District

Jose Cassolopez, Program Manager, EPCCC YouthBuild

### **Curricula and Other Program Features**

EPCCC YouthBuild provides students the opportunity to earn the national HBI-PACT credential. EPCCC partners with the Lower Valley Community Development Corporation to build affordable housing. The program has created a YouthBuild Workplace Success Council composed of local employers and young people from two EPCCC YouthBuild cohorts. Representatives from the Independent Electrical Contractors, an area trade association, and the local Workforce Development Board are members of the council.

### **History of the Partnership**

When El Paso County Community College (EPCCC) YouthBuild in El Paso, Texas, opened its doors in 2012, it faced the critical challenge of identifying participants who were ready for its program. But Sabrina Campbell, Coordinator for Customized Training and Apprenticeship at the college, saw an opportunity, as the Independent Electrical Contractors' (IEC) Registered Apprenticeship program was facing a similar issue. Explained Campbell,

"There was an issue with recruiting the right individuals for YouthBuild and the IEC Registered Apprenticeship program. YouthBuild was recruiting participants who were either not ready for the program or who wanted to pursue careers in construction and had no place to go. The IEC apprenticeship program had individuals who were not fully ready and who could benefit from pre-apprenticeship training. YouthBuild was like a pre-apprenticeship program for them."

Campbell connected Luz Taboada, who oversaw the YouthBuild program, with Delia Saldaña, Executive Director of IEC's Registered Apprenticeship program. Campbell thought they could help each other. Campbell's important role in making this connection was part of her job at the college, where she connects with businesses to determine their training needs. She explained,

"We work with a number of industry consortia that include employers, trade associations (like the Independent Electrical Contractors), and unions. Their link is accessing funds that are set aside to offset the cost of training for businesses. These are state funds authorized by the Texas legislature, administered through the Texas Workforce Commission, and funneled to local education agencies like community colleges."

IEC participates in the construction consortium. EPCCC provides classroom space, and State of Texas funds, mentioned above, are used to cover the cost of training. IEC is reimbursed on a contract hourly basis, which is calculated by the total number of apprentices times the number of hours in classroom and on-the-job training. Although these funds cannot be used to pay apprentices, they provide important training resources to the college and its industry partners, such as IEC-El Paso, which has 25 electrical contractors as members.

Saldaña explained, "Sabrina Campbell introduced me to Luz Taboada at the YouthBuild program. After we had a meeting, I met with the students. I talked about the opportunity for learning a profession and how we would take them in even if they had criminal records. We started our partnership after that."



IEC-El Paso became a member of EPCCC YouthBuild's Workplace Success Council. The council advises the YouthBuild staff on the necessary skills YouthBuild students need to be successful in their post-program placements. Based on this information, program staff members adjust the curriculum to emphasize what's required. The council also helps YouthBuild staff identify the types of supports participants need in order to be successful.

At IEC, most apprentices are sponsored by employers who make arrangements with the apprentices to ensure that their tuitions are covered during the four-year IEC apprenticeship. IEC supports the students' workplace success by sharing the YouthBuild graduates' résumés with contractors to help the graduates secure employer sponsors when they enroll.

Another member of the Workplace Success Council is the Upper Rio Grande Workforce Solutions Borderplex. It provides support services such as transportation and childcare assistance if students enroll in IEC-El Paso apprenticeship training. The Borderplex provides some eligible students up to two years of training tuition for the IEC-El Paso program.

**Figure 9: Partnership Table — El Paso County Community College YouthBuild, El Paso, Texas**

<b>Name of partner</b>	<b>Role in apprenticeship placement</b>	<b>Type(s) of engagement (regular meetings, collaborative meetings, referrals, other activities)</b>
El Paso Independent Electrical Contractors (IEC)	Apprenticeship sponsor	Participates on the YouthBuild Workplace Success Council.
Upper Rio Grande Workforce Solutions Borderplex (Workforce Dev. Agency)	Pays two years of tuition for YouthBuild participants who enter IEC apprenticeship.	Participates on the YouthBuild Workplace Success Council.
El Paso County Community College (EPCCC)	Brokered the partnership between EPCCC YouthBuild and IEC.	Provides classroom space for IEC and provides opportunities for trade association, union, and employer apprenticeship sponsors to access State of Texas funds.

## **The Pathway to Apprenticeship**

Like Operation Fresh Start YouthBuild, EPCC receives referrals from local community agencies. Prospective YouthBuild students are invited to participate in introductory construction training as part of a noncredit certificate program sponsored by the college. Students from this course are recruited into the EPCCC YouthBuild program; they visit the YouthBuild construction site and are invited to speak with YouthBuild students and instructors before enrolling in the program.

The program provides support services to YouthBuild students and their families. It also provides additional tutoring to help students pass the high school diploma equivalency exam.

Once students graduate, they apply to the IEC-El Paso apprenticeship program. Saldaña interviews the candidates who have their high school equivalency degrees. Once students are accepted into the IEC apprenticeship, they are referred to employers who are likely to sponsor them into the program. Saldaña sends out student résumés to employers who review them, interview likely candidates, and decide whether or not to sponsor them into the apprenticeship program.

**Figure 10: El Paso County Community College YouthBuild, El Paso, Texas — Pathway to Apprenticeship**

Before Enrollment	While in YouthBuild	Exiting YouthBuild	Post-YouthBuild
<p>Prospective students are recruited from other organizations and begin by taking a noncredit introductory course in construction at the EPCCC.</p> <p>Prospective students are invited to visit the YouthBuild construction site and to apply to the YouthBuild program.</p>	<p>Participants who complete the HBI-PACT Curriculum earn an HBI-PACT credential.</p> <p>Program staff members provide additional tutoring to help students pass their high school equivalency exams.</p>	<p>Students interested in construction careers co-enroll with the local workforce agency (Workforce Solutions) and apply to the IEC apprenticeship program.</p>	<p>The workforce agency may pay for up to two years of tuition with IEC Registered Apprenticeship; graduates become apprentices.</p> <p>IEC promotes graduates to employer sponsors.</p>

## Part II: Leveraging Section 3 for Placements

The Section 3 program, administered under the U.S. Department of Housing and Urban Development (HUD), aims to improve the economies of low-income communities by ensuring that residents (including YouthBuild graduates) can find job training and employment opportunities with local businesses and projects. HUD-financed organizations such as public housing authorities and others are required to provide job training and employment opportunities to low-income residents who qualify under Section 3. People qualify for Section 3 based solely on income, rather than racial or gender-based guidelines.<sup>vii</sup> YouthBuild students are identified in Section 3 guidelines as being eligible for preferential hiring.

The Operation Fresh Start case study describes how OFSYB is eligible as a Section 3 business. This designation is possible because at least 30 percent of the Grad Crew's full-time employees are YouthBuild graduates. Non-Section 3 contractors are incentivized to partner with the Grad Crew because a joint venture with a Section 3 business provides competitive advantage when bidding on HUD-funded projects. Establishing a Section 3 business using the business activities to refine the skills of prospective apprentices and engaging in joint ventures with contractors seeking work on HUD-funded projects is one strategy that leverages Section 3. It has the advantage of providing a bridge program to Registered Apprenticeship sustained by the activities of the business.

Another strategy focuses on individual YouthBuild graduates by promoting their eligibility as Section 3 residents to contractors working on existing HUD-funded projects. Garfield Jubilee YouthBuild, a 2012 DOL YouthBuild grantee, is implementing this approach.

### Snapshot: Garfield Jubilee YouthBuild, Pittsburgh, PA — 2012 DOL YouthBuild Grantee

Garfield Jubilee YouthBuild in Pittsburgh, Pennsylvania, is a 2012 YouthBuild DOL grantee. This YouthBuild program is managed by the Garfield Jubilee Association, a Christian-based nonprofit community development corporation established in 1983. The organization tracks housing projects in Pittsburgh and uses Section 3 as the basis for approaching developers and contractors about involving YouthBuild students and other low-income residents to ensure their access to on-site job opportunities. The local housing authority has been building replacement housing in the area in recent years. Garfield Jubilee placed graduates in jobs with the housing authority's contractors through its efforts to build partnerships with developers and general contractors. The organization's Executive Director, Joanne Monroe, emphasized the importance of having meetings with the housing authority and the developer early in the planning phase, rather than after construction began.

The structure of the Garfield Jubilee YouthBuild program affords students the opportunity to work side-by-side with contractors. These relationships, built over time, provide advantages during the hiring process. When a job opportunity opens up with a contractor, graduates who qualify for Section 3 placements undergo an orientation, screening, and application process. The contractor interviews the candidate before making the decision to hire. Monroe's advice: "Building relationships with both businesses and residents is as crucial as discussing employment opportunities early with contractors."

Bob Damewood, Development Services Attorney for Garfield Jubilee, elaborated on Monroe's advice. "You want to deliver something of value so it's not seen as a burden by these businesses or contractors. Let them see that your program is actually helping them by recommending good workers, building a better reputation for them in the community, and helping them meet their employment goals. Both strategies add value to the contractor-employers." In the case of OFSYB, the value comes with the opportunity for contractors to engage in a joint venture with the

Section 3 business, increasing the success of their bid. In the case of Garfield Jubilee, value is added because YouthBuild is recommending good workers and enhancing the contractor's reputation in the community. They differ in other respects.

The Operation Fresh Start strategy uses the Section 3 business as a bridge into Registered Apprenticeship. While graduates are hired as full-time employees and work under actual industry conditions, they are supported in moving on to a contractor who can sponsor them as apprentices. In this case, the contractor is not building affordable housing under HUD, but is actively working in the commercial construction space. The Garfield Jubilee strategy engages contractors at the beginning of Section 3 projects and provides a mechanism for them to achieve community hiring goals. YouthBuild is a source of qualified employees who are hired by contractors to work on these projects. They use internships and job shadowing experiences to allow contractors to observe prospective employees. If the individual demonstrates his or her value, he or she is hired by the contractor.

## Conclusions

The following questions were posed at the beginning of the paper:

- **Recruitment, preparation, and assessment.** How do programs recruit, orient, prepare, and assess participants who are likely to be successful in Registered Apprenticeship programs?
- **Transition.** How do graduates transition out of YouthBuild and into Registered Apprenticeship? What are the similarities and differences between these transition pathways? How do programs support students during these transitions? What other types of support services are offered to students before, during, and after entry into Registered Apprenticeship programs?
- **Partnerships.** How do programs initiate and sustain local partnerships with apprenticeship sponsors? What do local partnership arrangements look like? What are some of the challenges of initiating and sustaining these partnerships? How are these challenges managed?
- **Section 3.** How are YouthBuild programs leveraging Section 3 to promote employment and apprenticeship pathways? What can be learned from these efforts about using Section 3 with contractors and Registered Apprenticeship program sponsors to promote Registered Apprenticeship?

### Recruitment, Preparation, and Assessment

In all of the cases, the YouthBuild programs are intentional about recruiting students already interested in construction. Orientation into the industry is ongoing. In almost all cases, students are exposed to the prospect of Registered Apprenticeship early on. This includes Laborers and Carpenters Union representatives introducing participants to direct-entry opportunities in San Joaquin, early exposure to construction work at Portland and Spokane, drawing from non-credit construction courses at El Paso and testing interest in the economic benefits of construction careers, and Registered Apprenticeship training at Operation Fresh Start. Students who demonstrate interest in and aptitude for work in the construction industry are oriented again. Operation Fresh Start uses the Construction Training Institute to provide deeper industry exposure while Portland YouthBuilders uses the Laborers 101 boot camp. Hands-on experiences allow instructors to assess whether or not students are ready to enter Registered Apprenticeship. Preparation continues during the program with ongoing skills assessment and well-defined benchmarks that students must achieve in order to be recommended as apprentices or as candidates for another stage in the program, such as the Grad Crew at Operation Fresh Start. Assessment tools facilitate alignment between staff at the YouthBuild program and the staff representing apprenticeship sponsors. YouthBuild San Joaquin, for example, hardwired the requirements of apprenticeship coordinators from the Carpenters and the Laborers Unions into the program design to reflect memoranda of understanding leading to direct entry. In most cases—San Joaquin, Portland, and Spokane—apprenticeship sponsors are engaged in actually training YouthBuild students during their program experience. Additionally, many of these programs have undertaken extra effort to provide special support for underrepresented groups.

One of the most important ways these YouthBuild programs add value to their apprenticeship sponsors is by screening graduates who are most likely to be successful. This requires program leaders to be deeply knowledgeable and attuned to the requirements and expectations of apprenticeship sponsors and willing to adapt to their changing needs. Advisory structures seem to help this process along.

### *Promising Practices*

- Recruiting students who have an interest in construction
- Addressing the challenges that underrepresented groups, such as women, may face in the industry from day one
- Organizing experiences that simulate industry conditions early in the program (This is a good way to identify participants with the aptitude to pursue careers in the construction industry.)
- Developing specific and measurable benchmarks on important knowledge, skills, and abilities that track to career success
- Formulating assessment tools with apprenticeship sponsors to evaluate readiness for entry into Registered Apprenticeship
- Engaging apprenticeship sponsors in training YouthBuild students
- Establishing advisory structures for ongoing program improvement

### **Transitions**

In most of the case studies, programs described a robust case management practice that begins when students enroll in YouthBuild and continues as students move into Registered Apprenticeship. The practice begins by assessing barriers to employment and asking students to articulate their goals for the future. The programs also partner with other organizations to provide services if needed. Local workforce agencies provide additional services and resources after students exit the program. Programs ensure that students have the opportunity to obtain driver's licenses, have access to child care, and are able to pay for tuition and tools through their partnership arrangements.

NEWESD 101 YouthBuild Spokane's utilization of AmeriCorps resources to pay for training expenses should be examined for broader adaptation in other locations. According to the Corporation for National and Community Service, "An education award can be used at programs of education, apprenticeship, or on-the-job training that have been approved by the Secretary of Veterans Affairs under the Montgomery G.I. Bill and the Post 9/11 G.I. Bill. If the G.I. Bill-approved program is offered by a Title IV school, any AmeriCorps alumni can use their award to pay for current educational expenses."<sup>viii</sup>

### *Promising Practices*

- Offering consistent, goal-oriented case management services from day one
- Asking students to articulate their goals for the future
- Organizing regular interdepartmental conversations about students
- Co-enrolling students with workforce development agencies to provide access to follow-up services
- Partnering with agencies and businesses that can provide opportunities for students to earn driver's licenses
- Using AmeriCorps Education Awards as a resource to pay for tuition and tools required for apprenticeship

## Partnerships

A range of organizations participate in local partnership tables. One thing is clear: placing YouthBuild students in Registered Apprenticeship requires a group effort. If the YouthBuild program cannot act as a convener, it can look to a workforce development agency, construction industry consortia, industry associations, and apprenticeship coordinator committees for assistance. Representatives from apprenticeship sponsors, employers, workforce development agencies, and training organizations that have close ties to the construction industry must all be part of the partnership table. These tables can take years to bear fruit. Time on task and opportunities brought on by big construction projects or external pressures to promote diversity in the construction industry are important factors. In the Portland case, program leaders created some of these pressures by being involved in local coalitions.

In all cases, however, setting the table begins with inquiry and the spirit of discovery. YouthBuild program leaders must ask questions of apprenticeship sponsors to learn more about what is required to prepare the workforce for the next generation. It continues with creating value,—through shared community service, for example. In most of these cases, YouthBuild program leaders were very careful and systematic in understanding the requirements and perceptions of apprenticeship sponsors. Building trust took persistence and patience. Yet, with this in place, the partnerships came together once the opportunity emerged.

## Promising Practices

- Engaging local workforce development agencies in partnership development
- Meeting with partners on a regular basis
- Clarifying the purpose of each partnering organization
- Involving YouthBuild participants and alumni in partnership development
- Creating multiple entry points for apprenticeship sponsors to engage with YouthBuild participants
- Establishing a partnership table that includes more than one apprenticeship sponsor

## Using Section 3 as a Lever for Apprenticeship Sponsor Engagement

Garfield Jubilee YouthBuild and Operation Fresh Start are DOL YouthBuild grantees that have successfully engaged employers and secured placements using Section 3. They developed some important guideposts along the way. Garfield Jubilee YouthBuild demonstrated the importance of building relationships with contractors prior to the beginning of Section 3 projects. Positioning the Section 3 opportunity as a community job development strategy is also important. YouthBuild graduates represent a talent pool of individuals who can add immediate value to contractors. Enlisting contractors to cultivate the talent pool by providing job shadowing and internship experiences is one way to prepare graduates and build the necessary informal relationships that will lead to hiring. At Operation Fresh Start, they built a Section 3 business. The business is a means to sustain bridge programming that provides opportunities for graduates to work under actual industry conditions and hone their skills before being selected by a contractor who will sponsor them into joint labor-management Registered Apprenticeship training on commercial construction projects.

### *Promising Practices*

- Building relationships with contractors on Section 3 projects
- Including YouthBuild as part of a community job development strategy
- Enlisting contractors to participate in job-shadowing experiences with YouthBuild students
- Becoming designated as a Section 3 business while simultaneously working on partnerships with employers and Registered Apprenticeship program sponsors

### **Recommended Actions to Leverage Partnership Opportunities under the Workforce Innovation and Opportunity Act**

WIOA presents new opportunities to forge partnerships and connections that benefit the youth served by YouthBuild programs. In every community, WIOA requires a governance structure for the implementation and expenditure of federal workforce development funds. More importantly, the Workforce Development Boards set the policy priorities for the implementation of WIOA including the priority of establishing strong local apprenticeship programs. While each community has a slightly different organizational structure for its Workforce Development Board, each board has a mandate to implement the WIOA priorities. Every local YouthBuild program should establish an institutional relationship with the board and administering agency; under WIOA, YouthBuild is a required One-Stop partner. With WIOA, every workforce development agency must produce an annual plan for the local workforce area that is part of a larger regional workforce area plan. These plans outline the local area strategies and funding priorities. Local YouthBuild program leaders should make their voices heard through the community input process established under the plan. One way to begin is to set meetings with the workforce development agency executive director or administrator to discuss areas of collaboration.

In addition to funding opportunities, the boards have representation from labor management organizations, employers, and trade associations. Quite often, the boards already have representation from the construction industry. YouthBuild leaders should get to know these representatives and help set priorities within the plan for apprenticeships. Workforce development agencies are required to expend at least 75 percent of their youth employment and training funds on out-of-school youth who are 16 to 24 years old. Within this context, YouthBuild grantees are well-positioned to have a voice in setting priorities. YouthBuild has a long history of serving this population and YouthBuild organizations are well-positioned to assist local boards to develop policies and programs designed for this population.



## Tool Box: A Collection of Documents

In the case studies, YouthBuild leaders described a few documents they developed in collaboration with Registered Apprenticeship sponsors. This Tool Box section presents some of these documents. Readers should review these documents and adapt them to their own needs. A short list of the documents and how they are useful is below. The actual documents follow this brief introduction.

- **Portland YouthBuilders Construction Training Documents A–C**

Document A is a list of tasks for the “Pre-Program Challenge.” Document B is an overview of Portland YouthBuilders’s construction curriculum. Document C is a summary of Portland YouthBuilders’s Tier System, developed as a screening tool providing specific criteria for direct-entry candidates. Tier One, for example, represents individuals who meet all the criteria and would be recommended for direct entry without reservation. Tier Two and Three individuals are not ready to enter into registered apprenticeship immediately but could be ready with additional work experience in the industry.

- **YouthBuild San Joaquin Construction Competency Tests**

This document specifies the level of construction competence required for direct entry into the Carpenters and Laborers Unions. At YouthBuild San Joaquin, these are called “field competencies.” This is separate and distinct from school competencies, which are also required for consideration for direct entry.

- **Sample MOU Between Apprenticeship Sponsor and YouthBuild Organization**

This document is based on a sample MOU developed by the Laborers International Union of North America’s Training and Education Center and YouthBuild USA. It was designed to be used as a template for MOU’s between local Laborers Training and Education Centers and YouthBuild programs. This could be useful to those looking for language to include in a formal agreement between apprenticeship sponsors and YouthBuild programs.

## Portland YouthBuilders Construction Training Documents A-C

### Portland YouthBuilders Construction Training Document A: Pre-Program Challenge

- Introduction to the trades
  - Apprenticeships – field trips
  - Industry culture – construction dress signoff
  - Safety overview
  - Team building, confidence building
- Tool introduction and safety trainings
  - Hand tool identification – test
  - Basic hand tool use and practice (carpentry, hand excavation)
  - Introduction to power tools and safety - signoffs
  - Ladder safety – signoff
  - Proper lifting technique – signoff
  - Introduction to framing
  - Site organization
- Program Orientation
  - First Aid / CPR Training – certification
  - Material handling and identification
  - Jobsite visits
  - Apprenticeship visits
  - Orientation to sustainable building practices

### Competencies

Skills taught in tool training; professional competency demonstrated on PYB jobsites. Skill classes and tests may be conducted in shop.

**Labor skills:** Need all

Lumber packing
Ladder setting
Workstation setup
General cleanup

**Required tools:** Need these six

Skillsaw
Cordless drill
Nail guns

Tape measure - 1/16"
Speed square
Framing hammer

**Elective tools:** Need 2

Jigsaw
Electric drills
Table saw
Router
Builder's level
Laser
Finish hammer
Others:

**Required work processes:** Need all. Skills performed on PYB worksites - minimum 12 hours — or proficiency demonstrated in shop setting.

Concrete formwork and pour General framing	Framing layout
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**Elective work processes:** Need 3. Skills performed on PYB worksites — minimum 6 hours — or proficiency demonstrated in shop setting.

Building site layout	Door installation
Machine excavation	Window installation
Slab finishing	Drywall hanging
Stair framing	Drywall finishing
Roof trusses	Cabinet installation
Hand-cut trusses / rafters	Interior trim
Sheathing	Exterior trim
Scaffolding	Fencing
Roofing	Landscaping
Siding	Final clean

## Portland YouthBuilders Construction Training Document B: Vocational Education Curriculum Overview

**Construction Basics:** Successfully complete 12 hours of classroom / shop training in tool ID, power tool usage, lumber and fastener ID, material handling, setting grade.

**Applied Green Building:** Successfully complete 12 hours of classroom /shop training in sustainable design methods and materials for building healthy, efficient homes.

**Blueprint Reading Basics:** Successfully complete 12 hours of classroom training in fundamental skills for reading floor plans, elevations, sections, and details.

**Residential Carpentry:** Successfully complete 12 hours of classroom / shop training in essential concepts of residential construction – from foundation through siding.

**Apprenticeship survival:** Successfully complete 12 hours of classroom training in worksite communication, safety, looking the part, taking responsibility, budgeting.

**Habits for Success:** Students rate themselves and are rated by trainers as competent, not-yet-competent, or highly competent in these five categories:

- Self-management
- Accountability
- Resourcefulness
- Interpersonal skills
- Resilience

## Portland YouthBuilders Construction Training Document C: Construction Tier System

Participants in the construction program acquire tangible building trade skills through hands-on experience constructing and rehabilitating affordable housing. Students work under direct supervision of professional journey-level carpenters. The construction site experience is designed to closely replicate standard industry conditions, including time line commitments and working through adverse weather.\*

Motivated students in the construction program at PYB gain recognition for their achievements by reaching the benchmarks described in each tier below:

### Tier Three

Designates a PYB student or completer who is certified as a BOLI pre-apprentice. Tier three students are considered ready to work in an entry-level position.

## Requirements

- 90% attendance
- Three months jobsite experience (200 hours)
- 1<sup>st</sup> Aid / CPR training
- Weekly safety meetings
- OSHA training
- Three months classroom time
- All Hood/Tahoma\*\* competencies
- Complete Pre-Program Challenge
- Demonstrate competency in 4 labor skills
- Demonstrate competent use of with 6 required tools and 2 elective tools
- Demonstrate competency in 4 required work processes and 3 elective work processes
- Complete Vocational Education competencies
- Negative Urine Analysis (UA) last test
- Pass weekly evaluations in Habits for Success

## Tier Two

Designates a PYB student or completer interested in pursuing a construction career, but not going into an apprenticeship program immediately. Some Tier II students are prepared to enter select apprenticeship programs.

## Requirements

*All Tier Three requirements plus:*

- Professional application
- GED or high school diploma or its equivalent
- 95% attendance last 2 months
- Habits for Success ratings - competent or better last 2 months
- Total of 250 hours job site experience or demonstrated proficiency in jobsite skills
- Total of 8 required tools
- Total of 4 elective tools
- Total of 6 elective work processes
- Career prep classes complete
- McKinley\*\* competencies complete
- Job Lead - minimum one work site rotation
- Plan for obtaining driver's license
- Reliable vehicle plan
- Negative UA last three months of program
- Approval by construction trainer committee

## **Tier One**

Achievement designates a student seeking top recognition from the Construction Department. Achievement enhances entry and in some cases allows for direct entry into apprenticeship programs.

## **Requirements**

All Tier Two requirements plus:

- Professional application
- GED or high school diploma or its equivalent
- 95% attendance for last 3 months of program
- Habits for Success ratings - competent or better last 2 months
- Total of 250 hours job site experience
- Total of 9 required tools
- Total of 6 elective tools
- Total of 4 safety certifications
- Total of 12 safety meetings
- Total of 9 elective work processes
- Everest\*\* competencies complete
- Job lead experience – two rotations or more
- Valid driver's license + plan for reliable transportation
- Negative UA for last 3 months of program
- Apprenticeship pathway signed off by coach
- Approval by construction trainer committee

\*Participants primarily build new homes from the ground up, but have also constructed units for developmentally disabled adults, rehabilitated single family homes for home ownership, and participated in commercial tenant-improvement projects for non-profit agencies

\*\*Hood = 1<sup>st</sup> quarter, Tahoma = 2<sup>nd</sup> quarter, McKinley = 3<sup>rd</sup> quarter, Everest = 4<sup>th</sup> quarter

## San Joaquin YouthBuild Construction Competency Tests

B4-2

### Construction Competency Tests

A graduate of YouthBuild San Joaquin construction program must meet either the field competency or school competency.

#### Concrete and carpentry

##### Concrete Form

Field: spend 2 days setting any kind of concrete forms

School: build 2'x6'x8' form for 15" footing – lined and braced

##### Concrete Pour

Field: participate in one concrete pour

School: mix, pour and finish a 16" square stepping stone.

##### Lay Out a Wall

Field: lay out a simple wall (no windows or doors) without trainer assistance.

School: lay out a simple 8' wall 16" O.C. without trainer assistance.

##### Frame a Wall

Field: spend 2 days framing walls

School: frame, stand and plumb an 8'x8' wall without trainer assistance.

##### Cut Lumber to 1/16"

Field: consistently measures and cuts with Skilsaw within 1/16"

School: able to measure, make and cut with Skilsaw 3 out of 5 2x4s within 1/16". Cuts must be within 1/16" of square in both directions.

#### Labor Skills

##### Lumber Packing

Field: consistently packs lumber safely and efficiently, stacks it neatly

School: moves a pile of 12 2x4s safely. Stacks them on stickers square and straight. Moves 3 pieces of ½" plywood safely, stacks them against a wall – ends aligned and bottoms less than 12" from wall.

##### Ladder Setting

Field: consistently sets ladders properly

School: retrieves one 12' A-frame ladder from storage and sets properly, climbs to the top and sets a hammer on the top, climbs down, goes to the other sides, climbs to the top and retrieves the hammer, puts ladder away properly.

##### Workstation Setup

Field: takes the lead and successfully sets up a carpenter's workstation within 7 minutes at least twice.

School: takes the lead in setting up 2 sawhorses, 2 planks, a Skilsaw, miter saw and stand, compressor, nail gun, hose and cords – all plugged in and ready – within 7 minutes. May get help, but not from trainer.

### **General Cleanup**

Field: consistently participates in daily cleanup

School: no school test. Must demonstrate this skill on the job site.

## **Power Tools**

### **Skilsaw**

Field: uses the Skilsaw confidently. Adjusts for depth and bevel.

School: changes the blade, adjusts for depth, makes 2 straight and 2 bevel cuts, puts saw away properly.

### **Sawzall**

Field: uses the Sawzall confidently in a variety of conditions. Changes the blade.

School: changes the blade. Cuts 3 2x4s and 3 2x6s. Three of these cuts must be square within 1/8" both ways.

### **Cordless drill**

Field: Uses the cordless drill confidently. Drives a variety of screws without stripping the heads.

School: drives 10 1 5/8" drywall screws and 5 – 3" deck screws flush with surface of a fir 4x4 without stripping the heads.

### **Roto-hammer**

Field: Uses the roto-hammer confidently. Changes bits, cleans and stores roto-hammer.

School: Drills 3 – 1/2" holes into concrete with roto-hammer. At least one will be straight, measured by placing a 7/16" x 8" dowel in the hole and testing for square in two directions. Changes bits, cleans and stores properly.

### **Table saw**

Field: uses the table saw safely and confidently. Routinely rips material within 1/16" of accurate.

School: starting with a piece of 1/2" plywood 6"x48", adjusts saw and rips 2 pieces – 1 at 5 1/8" wide, 1 at 1 3/4" wide. Wears safety glasses. Keeps hands at least 4" away from the blade. Uses push stick for 1 3/4" rip (may use it for both).

### **Miter saw**

Field: uses the miter saw safely and confidently. Routinely cuts materials within 1/16" of accurate. Makes miter and bevel cuts without trainer assistance.

School: Starting with a 4' piece of 1x2, will cut a picture frame 7 7/8" x 11 3/8". Outside measurements will be within 1/8" of accurate.

### **Nail guns**

Field: Uses finish nailer or framing nailer safely and confidently. Loads and unloads the tool, rolls hoses, puts tool away properly.

School: Using finish nailer with 2" nails, fastens 1x2 butt-joint frame with 2 nails per corner. Uses safety glasses, keeps free hand at least 4" away from nose of tool. No shiners, no more than 2 splits.



## **Hand Tools**

### **Framing hammer**

Field: Uses the framing hammer safely and confidently.

School: Drives 12/16d sinkers into the nailing frame within two minutes: 3 left, 3 right, 3 up, 3 down. Nails must be flush.

### **Finish hammer**

Field: Knows purpose of finish hammer, uses the finish hammer appropriately.

School: Drives 6 out of 7 / 6d finish nails into cedar fencing without leaving tracks. May use a nail set.

### **Tape measure – 1/8"**

Field: Shows consistent understanding of 1/8" increments on the tape measure.

School: Given a written list of seven measurements (in eighths), can mark six on a board within 1/16" of accurate.

### **Tape measure – 1/16"**

Field: Shows consistent understanding of 1/16" increments on the tape measure.

School: Given a written list of seven measurements (in sixteenths), can mark six on a board within 1/32" of accurate.

### **Level**

Field: consistently uses the 2' and 4' level with confidence and accuracy.

School: Draws 2/4' level lines and 2/4' plumb lines on a sheet of plywood mounted vertically. At least two will be with 1/16" of accurate from end to end.

### **Speed square**

Field: Uses the speed square confidently and accurately to mark square cuts. Uses speed square properly for framing layout.

School: Uses speed square to meet "cuts accurately" competency, above. (Able to mark within 1/16" of square in both directions.)

## **Shop and Voc Ed Skills**

### **Blueprint reading**

Field: Is comfortable reading plans; locates features, transfers correct measurements.

School: Passes written post-test. Questions target ability to locate features, read measurements, understands views and specifications.

### **Lumber and fastener identification**

Field: Shows good understanding of the names and purposes of basic fasteners.

School: Passes written post-test. Must name 9 out of 12 fasteners, be able to match 9 out of 12 uses.

## Sample MOU Between Apprenticeship Sponsor and YouthBuild Organization

### MEMORANDUM OF UNDERSTANDING

#### BETWEEN

*[Apprenticeship Sponsor]*

#### AND

*[YouthBuild Organization Name]*

**Whereas** APPRENTICESHIP SPONSOR- NAME is a DOL Registered Apprenticeship sponsor in the state of \_\_\_\_\_, and actively operates in geographic area. The program provides a structured training program for apprentices

**Whereas** YB-NAME actively operates in geographic area and meets the criteria for a quality pre-apprenticeship program as stated in Training and Employment notice 13-12, distributed by the Federal Employment and Training Administration on November 30, 2012. The program provides job-readiness and pre-apprenticeship training to young people between the ages of 16 and 24.

**Insofar** as the APPRENTICESHIP SPONSOR Apprenticeship program (APPRENTICESHIP SPONSOR-NAME) and YouthBuild (YouthBuild-NAME) wish to promote mutual interest through cooperation in the area of workforce development and recognize that a formalized partnership can assist both organizations meet their respective program goals. And further, that successful results can also increase effectiveness of joint marketing and promotional activities to mutually beneficial stakeholders.

**Let it be resolved** that this Memorandum of Understanding establishes the guidelines for collaboration between APPRENTICESHIP SPONSOR-NAME and YouthBuild-NAME for the purpose of creating a mutually beneficial partnership; developing and implementing program criteria; establishing consistent and clear communications; and engaging in joint marketing and promotion of the partnership and programs.

APPRENTICESHIP SPONSOR-NAME and YB-NAME jointly agree to:

1. Designate a dedicated point of contact to promote clear, consistent communication and timely communication sharing.
2. Work together to educate and inform stakeholders about the benefits of pre-apprenticeship and the value of this partnership as appropriate.
3. Work together to expeditiously resolve any disagreement or conflict that arises over the life of the MOU.
4. Meet, at minimum, on a quarterly basis in person, by telephone, or in a virtual meeting. Minutes will be kept of each meeting and approved by each organization.

APPRENTICESHIP SPONSOR-NAME agrees to:

1. After receiving documentation that a YouthBuild candidate has satisfied criteria set forth in national guidelines, provide direct entry to the apprenticeship program. National guidelines are included as Appendix \_\_\_\_ to this document. Appendix \_\_\_\_ will be given to YouthBuild organization and program name as a guide to their training efforts.
2. Recognize the use of the Approved Curriculum as acceptable for pre-apprenticeship training.
3. Grant credit toward completion of the apprenticeship program to graduates of YB NAME as listed in the national guide established for training completed and previous work experience.
4. Provide technical expertise and advice to the staff or students of YouthBuild upon request.

YouthBuild program agrees to:

1. Nominate only candidates who meet, at a minimum, all program requirements for acceptance to the APPRENTICESHIP SPONSOR-NAME. Requirements are listed in Appendix \_\_\_\_.
2. Train students who wish to enter the APPRENTICESHIP SPONSOR-NAME using the approved curriculum and other industry related materials.
3. Provide opportunity for APPRENTICESHIP SPONSOR-NAME staff to interact with YouthBuild candidates for the purpose of providing:
  - a. orientation to APPRENTICESHIP SPONSOR
  - b. information on apprenticeship and career-long training opportunities
  - c. answers to questions related to APPRENTICESHIP SPONSOR and the construction industry.

Neither party bears any financial obligation to the other as the result of this agreement.

The Memorandum, once signed by authorized officials from each organization, will go into effect as of \_\_\_\_\_ and remain in effect until one or both parties decide to end the MOU. If either organization decides to withdraw from this partnership, it shall provide written notification to the partner organization at least 30 days before the termination is official. The MOU is at-will, and may be modified at any time with the mutual consent of each organization.

Signed for APPRENTICESHIP SPONSOR and Apprenticeship program name

Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Signed for YouthBuild organization and program name

Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

## APPENDIX \_\_\_\_

### Minimum Requirements for Acceptance into

#### **APPRENTICESHIP SPONSOR Apprenticeship program name**

All applicants to the APPRENTICESHIP SPONSOR Apprenticeship program name must meet the following minimum qualifications to be considered for acceptance into the program.

A. Applicants must be not less than \_\_\_\_ years of age. Age must be documented with use of acceptable identification. Acceptable forms of identification include (*passport, driver's license, birth certificate, state or county ID, Matricula Consular, other*)

B. Applicants must submit a properly completed application form. Application forms are available by (*write procedures for obtaining application here*)

C. Applicants must be physically capable of performing the essential functions of the craft, with or without reasonable accommodation, and without posing a threat to their own health and safety or to the health and safety of others.

D. Applicants must pass a drug test administered in compliance with current drug testing standards. (*List drug test specific information here if desired*)

E. Applicants must/must not provide a copy of a high school diploma or GED certificate.

F. Applicants must/must not be able to read and write the English language

G. Applicants must/must not pass \_\_\_\_\_ knowledge test(s), covering subjects.

H. Applicants must/must not possess a valid driver's license.

I. Applicants must/must not provide proof of vehicle ownership.

J. Other (*List any additional requirements for acceptance here*).

Upon acceptance into the program, applicants will be assessed using (interviews, documentation, knowledge tests, physical assessments).

## References and Resources

Associated General Contractors, Ready to Hire Again: The Construction Hiring and Business Outlook, 2015.

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

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Helmer, Matt; Blair, Amy; and Gerber, Allison. *A Solid Foundation: Key Capacities of Construction Pre-Apprenticeship Programs*. The Aspen Institute, 2012.

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United States Department of Housing and Community Development. HUD Section 3 Overview for Recipients of HUD Housing and Community Development Funding.

<http://portal.hud.gov/hudportal/documents/huddoc?id=12sec3overviewhcd.pdf>

United States Department of Labor, Employment and Training Administration. Training and Employment Notice 13-12, November 30, 2012, Subject: Defining a Quality Pre-Apprenticeship Program and Related Tools and Resources.

[http://wdr.doleta.gov/directives/attach/TEN/TEN\\_13-12\\_Acc.pdf](http://wdr.doleta.gov/directives/attach/TEN/TEN_13-12_Acc.pdf)

United States Department of Labor, Employment and Training Administration, Office of Apprenticeship. *Recommendations to Encourage Registered Apprenticeship-Community-Based Partnerships*. 2013.

<https://21stcenturyapprenticeship.workforce3one.org/view/2001331749029336432>

YouthBuild USA and the LIUNA Training and Education Fund. *Credit Guide for YouthBuild USA Graduate Entry into the LIUNA Apprenticeship Program*. 2014.

Available upon request from YouthBuild USA and LIUNA Training and Education Fund.

E-mail [dwright@youthbuild.org](mailto:dwright@youthbuild.org) for more information.

YouthBuild USA and United States Department of Labor, Employment and Training Administration. *YouthBuild Manual for Counseling, Case Management and Program Culture*. June 2010.

[https://my.youthbuild.org/sites/default/files/kb\\_item/2011/10/351/Counseling\\_Case\\_Management\\_0610.pdf](https://my.youthbuild.org/sites/default/files/kb_item/2011/10/351/Counseling_Case_Management_0610.pdf)

## Curricula and credentialing resources

There are several curricula and nationally recognized credentials that can be used to prepare YouthBuild participants for Registered Apprenticeship. This is a listing of some of the resources mentioned in this paper.

### *Barriers to Employment Success Inventory*

This assessment is used to identify the hurdles and obstacles that stand in the way of job success.

Liptak, John J. *Barriers to Employment Success Inventory*, 4<sup>th</sup> Edition. JIST Works, 2011.

<http://jist.emcp.com/barriers-to-employment-success-inventory.html>

### *Building Trades Multi-Craft Core Curriculum (MC3)*

This curriculum was developed by the Standing Committee on Apprenticeship of North America's Building Trades. This 120-hour curriculum is an apprenticeship preparation curriculum for individuals interested in participating in Registered Apprenticeship sponsored by Joint Labor-Management Organizations.

[http://www.efficiencycities.org/wp-content/uploads/062309/BCTD%20TriFold\\_v6.pdf](http://www.efficiencycities.org/wp-content/uploads/062309/BCTD%20TriFold_v6.pdf)

### *National Occupational Competency Testing Institute*

According to their website, NOCTI is the largest provider of industry-based credentials and partner industry certifications for career and technical education (CTE) programs across the nation. NOCTI provides validated and reliable technical skill assessment. NOCTI is a delivery partner for the Home Builders Institute and National Association of Home Builders Residential Carpentry Student Certification and Assessments. Current titles include Carpentry, Facilities Maintenance, House Wiring, HVAC, Plumbing and Principles of Construction, and the Home Builders Institute Pre-Apprenticeship Construction Training (HBI-PACT) Certification Assessments.

[www.NOCTI.org](http://www.NOCTI.org)

### *Online Resources for Women in Construction*

Occupational Safety and Health Administration <https://www.osha.gov/doc/topics/women/index.html>

Oregon Tradeswomen, Inc. <http://www.tradeswomen.net/>

## Directories of Apprenticeship Sponsors Featured in the Case Studies

### *Independent Electrical Contractors Apprenticeship Training*

The Independent Electrical Contractors (IEC) is a national trade association for merit shop electrical systems contractors. It has 3,000 member companies in 51 chapters throughout the United States. IEC has more than 50 chapter apprenticeship training centers nationwide.

Go to <http://www.ieci.org/apprenticeship/training-opportunities> for a list of chapters.

### *Laborers International Union of North America Training and Education Funds*

The Laborers International Union of North America has about 500,000 members and more than 70 affiliated training centers.

Go to [http://www.liunatraining.org/about\\_us/whoweare.cfm](http://www.liunatraining.org/about_us/whoweare.cfm) for a list of training center locations.

### *National Association of Home Builders*

The National Home Builders Association is a federation of 800 state and local associations. More than 140,000 of its members are home builders or remodelers. The educational arm of the National Home Builders Association is the Home Builders Institute, which provides students the skills they need for successful careers through pre-apprenticeship training, job placement services, mentoring, certification programs, textbooks, and curricula.

Go to <http://www.hbi.org> for more information.

### *North America's Building Trades Unions*

North America's Building Trades Unions provides essential coordination and support to the work of 13 affiliated craft union organizations. Its apprenticeship programs include Boilermakers, Bricklayers Masonry Institute, Elevator Constructors Nation Elevator Industry Educational Program, Heat and Frost Insulators, Ironworkers, Laborers Training and Education Funds, Painters and Allied Finishing Trades Institute, Plasterers and Cement Masons, Sheet Metal Workers, United Union of Roofers and Waterproofers, and Operating Engineers. Each apprenticeship training program is under the umbrella of a local Joint Apprenticeship Training Committee (JATC) within a local Building and Construction Trades Council.

Go to <http://www.bctd.org/Official-Directory.aspx> for a directory of local Building and Construction Trades Councils.

### *United Brotherhood of Carpenters*

The United Brotherhood of Carpenters is one of North America's largest building trades unions, with nearly half a million members in construction and woods products industries. It has 200 affiliated training centers in North America.

Go to [https://www.carpenters.org/Todays\\_UCB\\_Top\\_Nav/Ops\\_Locations/ITC\\_Main.aspx](https://www.carpenters.org/Todays_UCB_Top_Nav/Ops_Locations/ITC_Main.aspx) for a list of affiliated training center locations.

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## Endnotes

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<sup>i</sup> The Associated General Contractors of America, Ready to Hire Again: The Construction Hiring and Business Outlook, 2015.

<sup>ii</sup> Conway, Maureen and Gerber, Allison. Construction Pre-Apprenticeship Programs: Results from a National Survey. The Aspen Institute, July 2009. Pg.5. <http://www.aspeninstitute.org/publications/construction-pre-apprenticeship-programs-results-nationalsurvey>.

<sup>iii</sup> The Registered Apprenticeship system dates back to 1937 with the passage of the Fitzgerald Act or National Apprenticeship Act. This Act gives the U.S. Secretary of Labor authority over apprenticeship programs, established and Office of Apprenticeship and provided for the recognition of state agencies to register and administer apprenticeship programs. Go to <http://www.doleta.gov/oa/apprenticeship.cfm> for more information.

<sup>iv</sup> Training and Employment Notice 13-12, November 30, 2012 Subject: Defining a Quality Pre-Apprenticeship Program and Related Tools and Resources. [http://wdr.doleta.gov/directives/attach/TEN/TEN\\_13-12\\_Acc.pdf](http://wdr.doleta.gov/directives/attach/TEN/TEN_13-12_Acc.pdf)

<sup>v</sup>In 1992, changes were implemented in the Housing and Community Development Act of 1968. Including YouthBuild participants as Section 3 residents was among the changes. 24 CFR § 135.34 and § 135.36 outline the Preference for Section 3 residents in training and employment opportunities and Preference for Section 3 business concerns in contracting opportunities. This was the legal basis for Operation Fresh Start's designation as a Section 3 business.

<sup>vi</sup> 24 CFR § 135.40

<sup>vii</sup> United States Department of Housing and Community Development HUD Section 3 overview for Recipients of HUD Housing and Community Development Funding <http://portal.hud.gov/hudportal/documents/huddoc?id=12sec3overviewhcd.pdf>

<sup>viii</sup> See <http://www.nationalservice.gov/programs/amicorps/segal-amicorps-education-award/using-your-segal-education-award>