Written by YouthBuild USA under contract with the U.S. Department of Labor

Preface

Construction Training at a YouthBuild Program is one of a series of handbooks developed by YouthBuild USA under contract with the U.S. Department of Labor (DOL) to assist individuals and organizations in operating YouthBuild programs in their communities. These handbooks, covering education, counseling, construction, leadership development, and graduate resources, are thematically linked so that, taken together, they provide a detailed and comprehensive guide to implementing an effective YouthBuild program. The handbooks supplement the YouthBuild Program Manual, which provides an overview of the YouthBuild program and its components. A compilation of YouthBuild handbooks and other resources can be found on the DOL YouthBuild Community of Practice at https://youthbuild.workforcegps.org.

Construction Training at a YouthBuild Program represents the compilation and distillation of over 35 years of YouthBuild experience in the field. Input from YouthBuild graduates and staff has brought together the best practices we have to offer to date.

This handbook was originally written under contract with the U.S. Department of Housing and Urban Development by Getz Obstfeld with major contributions by Jackie Gelb, John Andrew Gallery, David Burch, and a host of YouthBuild program directors, staff, construction managers, and trainers, including Bob Brandhorst, David Coolidge, Tom Devine, Tracy Harris, Mark Mason, Jack McCullough, Neal Meltzer, Terry Moran, Richard Morgan, Sheila Neville, and Don Pinkney.

The current edition of this handbook was updated under contract with DOL by a team including YouthBuild USA staff Ted Roan, Director of Green Construction, and Eva Blake, Senior Director of the Green Initiative, together with DOL staff Jenn Smith, National YouthBuild Director; Toni Wilson, Workforce Analyst/YouthBuild COR; and Mark W. Smith, Workforce Analyst. Important work site and worker safety information was updated with assistance from Tina Jones, the Director of DOL's Office of Outreach Services and Alliances, Occupational Safety and Health Administration.

YouthBuild USA

58 Day Street

Somerville, MA 02144

Tel: (617) 623-9900

Fax: (617) 623-4331

info@youthbuild.org

www.youthbuild.org

Table of Contents

Introduction to Construction Training at a YouthBuild Program

Why Construction Training?

YouthBuild is designed to help young people complete their education, learn job skills, develop leadership abilities, and contribute to their communities. YouthBuild focuses on construction training as an area in which to develop job skills because it offers the following benefits:

- It provides marketable skills that young people can learn in a limited period of time, in an industry with increasing labor-market demand and an increasing need to diversify and replace an aging workforce. It is also a forgiving industry for youth with criminal records.
- Through registered apprenticeship programs, it can help YouthBuild graduates gain the skill sets required by this demanding industry.
- It provides participants with a hands-on environment in which teamwork is emphasized to practice using academic and leadership skills in a practical context.
- It presents a symbol of the need for a strong foundation and framework to help youth rebuild and transform their lives.
- It offers program trainers and instructors the opportunity to conduct youth development work through a practicum of discipline and hard work.
- It yields tangible, visible products and lasting community transformation, which gives young people a sense of personal accomplishment and value.
- It offers a meaningful way for young people to contribute to rebuilding their communities and earn the respect of their families and neighbors.
- It provides a source of community service hours for participants and increases the supply of affordable housing for homeless individuals and low-income families.

The Purpose of this Handbook

The YouthBuild program model requires hands-on construction training that increases the supply of affordable housing within the communities that YouthBuild serves. The purpose of this handbook is to provide information on how to plan, organize, and implement the construction component of a YouthBuild program. It is directed to three audiences: YouthBuild program directors, construction managers, and construction trainers. For YouthBuild directors, the handbook provides an overview of the key issues and decisions that must be considered in planning the construction component of a YouthBuild program. For YouthBuild construction managers, it provides both an overview of planning issues and the details of how to run the construction training component. For construction trainers, it provides an introduction and orientation to their role in a YouthBuild program and how to best meet the training needs of the specific populations of youth served by YouthBuild.

How This Handbook Is Organized

Construction Training at a YouthBuild Program has four parts.

Part 1: Planning the Construction Component	An overview of the key issues that must be considered and the key decisions that need to be made by the director and senior staff before the program begins. It includes information on selecting a construction site, developing housing partners, and the responsibilities of construction staff. It is directed to program directors and construction managers.
Part 2: Organizing the Construction Component	Describes the elements of the construction program that must be completed before training of young people can begin. It is directed toward the construction manager and construction trainers
Part 3: Implementing the Construction Component	Provides specific ideas for conducting day-to-day activities on the site and ensuring work site safety. This section is primarily addressed to the construction trainers.
Appendix A	Construction Trainer Orientation Handbook
Appendix B	Materials and resources useful in implementing these aspects of a YouthBuild program. The title for each item included in the Appendix is listed at the end of each chapter.

These materials were developed by YouthBuild USA, under a contract with the U.S. Department of Labor. The materials contain suggested resources and organizations that the authors believe participants may find useful in conducting YouthBuild programs and activities. However, the suggested resources are not intended to be an exhaustive list of all resources, and their inclusion in the materials does not imply their endorsement by the U.S. Department of Labor.

Part I:
Planning the Construction Component

Even before staff have been hired and young people have been recruited, many decisions have to be made about the construction component. These include the type of role the YouthBuild organization will play in the construction process, the selection of a housing work site for construction training, and the selection of a housing development partner. This first part of the handbook describes the key issues to be considered in the planning stage.

Chapter 1: Selecting YouthBuild's Role in the Construction Project

Overview

One of the most critical decisions to be made in starting up a YouthBuild program is defining the role that the program will play in the construction process. A variety of roles are possible. These roles have been successfully demonstrated by various YouthBuild programs across the country. The role that the program selects will shape the young people's experiences on the work site, the type of qualifications required of staff, and the types of partnerships or collaborations that are needed.

In determining an initial role in the construction process, one must consider:

1. The experience of the program, or its senior leadership, in construction and development of housing
2. The availability of quality, reputable development and construction partners in the area, their enthusiasm for training young people on their construction sites, and consideration for hiring graduates
3. The types of construction projects available in the community
4. The YouthBuild program's capacity to take on financial risk

Chapter 1 outlines the various construction roles that are possible for a YouthBuild program, along with the advantages and disadvantages of each.

The Natural Tension Between Training and Production

The YouthBuild program's goal is to train and develop young people and to build quality, affordable housing. It is difficult to create affordable housing on a timeline and within a tight budget under any circumstances. The inexperience of participants can compromise the efficiency and speed of a construction project, while the normal construction process can test the patience and perseverance needed for effective training. Combining this goal with a training program—and one that has education, life skills, and leadership development objectives as well—creates a tension between "training" and "production" and a tension between construction and other aspects of the program. It is necessary for all staff of the YouthBuild program to understand these tensions and for the YouthBuild program director to be aware of the need to create a balance between the demands of the different program components.

It is important to acknowledge up front that training young people on a construction site is a slower and less efficient way to build housing. Every day, decisions will be made at the site concerning the youth training and the production requirements that must be met and how these two goals will be balanced.

The program will provide participants with a "real world" environment that includes production deadlines but is also realistically based on the participants' skills and the program's training goals.

Some construction trainers will want to keep the YouthBuild site as close as possible to "real world" construction timetables and deadlines so that participants learn what it's like to work on a real construction site. Others will want to take extra time to ensure that the participants really understand what they're doing—knowing the vocabulary of the work site, reading plans on the site, and, in general, getting the most out of the experience. The challenge of the YouthBuild program is to find the appropriate balance between these two goals. This balance will be affected by a number of variables. These variables include:

- Participant retention—some participants will drop out during the course of the program
- Participant attendance—not all participants will attend every day
- Sufficient academic and vocational preparation and practice for participants before they attempt activities requiring new skills
- Intentional and well-planned integration between the academic classroom curricula and the construction work site production schedule
- The irregular pace of the work that is affected by weather, the pace of other subcontractors' work, and other unforeseen events
- Uncertainty about the rate of waste; that is, the materials that will be wasted due to error and will have to be purchased again as a result
- Uncertainty about the time required to redo work that was done incorrectly by participants
- Participants or staff getting drawn off the site for retreats, counseling, and community service projects
- Completion deadlines required by other housing partners

All of the above variables are likely to occur and should therefore be anticipated and planned for in advance.

VOICES FROM THE FIELD

"We always have to struggle with and balance the conflict between production and teaching—and it is a conflict. The project ends up directing the teaching and not the other way around."

"We have a little healthy competition going between the four or five crews. The competition partly comes from the imposed deadlines, but it helps us meet those deadlines."

Possible Construction Roles for a YouthBuild Program

The central issue in defining the construction role for a YouthBuild program revolves around the issue of control, both over the pace of the job and of participant roles on the job. The more control the YouthBuild program has, the better the project will meet the needs of the participants. However, greater control is usually accompanied by greater responsibility and often by greater financial risk. YouthBuild programs have developed a wide range of strategies for maximizing the control that they have on a job while minimizing their risk. In addition, many programs start with one role and then move on to others as the program gains experience.

Regardless of its construction role, a YouthBuild program must have access to a work site that provides substantial hands-on training opportunities for its participants. For guidance in determining whether a work site meets this criteria refer to TEGL_06-15 Qualifying Work Sites and Construction Projects for YouthBuild Grantees in Appendix B.

The YouthBuild program must understand and take responsibility for ensuring its participants are protected from accidents or injuries on work sites, as required by Occupational Safety and Health Administration (OSHA) safe worker practices, regardless of the nature of its relationship with the work site partners.

Also, regardless of what role the program undertakes, the YouthBuild program will usually need to provide and pay for:

- Safety training for participants
- Safety equipment for participants, including all required personal protective equipment – hard hats; boots; and eye, breathing, and hearing protection
- Stipends or wages for participants
- Construction trainers
- Workers compensation and disability insurance for participants and trainers
- Hand and power tools for participants

There are four basic roles to consider undertaking as a YouthBuild program. Some programs take on a combination of these roles. Going from least to most complex, these roles are:

Subcontractor (generally carpentry and labor)	Construction Manager	General Contractor	Developer and General Contractor

Minimally, YouthBuild programs usually serve as subcontractors, with the participants completing a specific scope of work on a given project. However, many YouthBuild programs take on a broader role in the construction process. Some of the reasons for taking on these additional responsibilities include:

- The desire to have more control over the construction schedule and to avoid the tension of trying to fit a YouthBuild subcontract within the time pressures of a general contractor
- The desire to provide a wider range of training opportunities for the participants, and to have leverage over all the subcontractors on the job to ensure that they work with participants

- The need to ensure that projects are available on the YouthBuild schedule, i.e., when a new class of participants is starting the program
- The desire to generate revenue for the program

The following is a discussion of the advantages and disadvantages of the four roles. An overview of the advantages and disadvantages of the four roles is provided in a chart at the end of this chapter.

Subcontractor Role

The most common role for a beginning YouthBuild program is that of a subcontractor. In YouthBuild programs, the word subcontractor is used broadly to mean that the program undertakes a specific scope of work on the job but does not take on the responsibility of managing the entire job, ordering materials, or selecting and supervising other subcontractors. A subcontracting role may be in the form of a formalized agreement including arrangements for compensation to the YouthBuild program in exchange for its services (paid subcontractor arrangement), or it may be a memorandum of understanding with the housing partner that does not include financial or other compensation (free labor arrangement). Usually the work undertaken by YouthBuild programs as subcontractors includes demolition, carpentry, and interior finishing and painting. The work the program undertakes is required to provide the participants with substantial hands-on experience in multiple skill areas and modules to qualify the work site with DOL (see TEGL 06-15).

The Advantages and Disadvantages of Subcontracting

Advantages

- As a subcontractor, the program has limited responsibility for construction management roles, so there is nothing to distract from the program's focus on the participants
- Subcontracting requires less experience of construction staff
- The program assumes only limited financial risk

Disadvantages

- The program has little or no control over the timing and pace of the job
- Training opportunities for participants are generally limited to those trades within the scope of the subcontract
- The scope of the work is usually so small that the acquiring, scheduling, and completing of several jobs is necessary to ensure continuity throughout the program cycle so that every participant has the opportunity for adequate work experience on the construction work site

As the list above indicates, there are some definite advantages and disadvantages to the subcontractor role. On the one hand, it is simpler for a beginning program, particularly one with no construction experience. On the other hand, it limits the range of training opportunities.

One temptation of working among a group of subcontractors is the urge to distribute the participants among all the subcontractors. This seems like an ideal way to broaden participants' exposure to the construction trades but can result in the YouthBuild program's maintaining little or no control over the training that takes place on the job or its integration with other aspects of the YouthBuild program. This can result in a situation where participants serve in an observational or assistant role rather than actually being taught the skills or learning how to do the work. In defining the subcontractor role, there are three principal issues to consider:

1	2	3
Scope of the subcontract	Time allocated to complete the job	Financial arrangements

1. Scope of the Subcontract

YouthBuild programs are generally more successful when they have a large enough subcontract to provide the participants with a wide variety of experiences. However, it may be preferable to limit the range of work undertaken as a subcontractor, particularly at the beginning of the program, until there is a better sense of what participants can do and what staff can accomplish in a training context.

In determining what scope of work to undertake as a subcontractor, it is important to think about the type of work participants are likely to be able to handle. For example:

- **How physically risky is the work?** A program may choose to rule out roofing work because it requires good safety procedures and close supervision of participants. Additionally, based on guidance from the National Institute for Occupational Safety and Health (NIOSH), youth younger than eighteen should not engage in work involving heights or large equipment/power tools.
- **How quickly can the participants do the work?** Rough framing and hanging sheet rock tend to move quickly, whereas taping and floating can often be a very slow process for a participant to learn and complete quickly.

If the program will be working as a paid subcontractor, how much risk does the scope of work create for losing money through wasted materials or damage? Painting is often seen as an easy job for participants, but depending upon the conditions, a poor or messy paint job can be costly to correct.

To avoid misunderstandings, the scope of work should be written out clearly in a contract or memorandum of agreement, even if there are no financial arrangements between the YouthBuild program and general contractor or developer. The agreement must carefully define where the YouthBuild subcontract ends and someone else's begins. A sample Memorandum of Agreement between Subcontractor (YouthBuild) and General Contractor (Housing Partner) is provided in Appendix B.

2. Time Allocated to Complete the Job

YouthBuild programs usually take roughly twice as long to complete as a job done by a professional subcontractor. Therefore, an important consideration in a subcontracting arrangement is whether it will be possible to pace the project with consideration for the training needs of the participants.

If YouthBuild is the primary subcontractor and can exert a substantial amount of control over the pace of the job, and if the developer or general contractor agrees to allow enough time to provide quality training, then the construction staff can work to balance the need for production with the need to slow down and train the young people. However, if YouthBuild is one subcontractor among many and needs to keep to a pace established by a general contractor who is juggling many other subcontracts, the program may find itself in a situation in which it is difficult to provide quality training and at the same time meet the expectations of the general contractor. Under this circumstance, it may be necessary to provide more vocational education training in a classroom to practice and develop skills, rather than having all training dependent on the construction site.

Time arrangements should also be reflected in the contract or memorandum of agreement, which should include any specific deadlines that are agreed upon and any penalties that may be involved with failure to meet those deadlines.

3. Financial Arrangements

Financial arrangements among YouthBuild programs working as subcontractors usually fall into two broad categories: a free labor arrangement and a paid subcontractor arrangement.

VOICES FROM THE FIELD

"Light rehab or make-ready is much less effective [than taking on major construction]. With major construction, the youth bond with the site—it brings out their pride and builds self-esteem."

"Run the construction site as if it were a regular job site. Make and stick to a schedule, do safety meetings and other aspects of a professional workplace."

"The need for teaching basic math was much heavier than expected. We had to backtrack—even for those who tested at high-school level—to teach basic math skills."

"We had to consistently relate the math to the actual construction."

"If the participants don't do something right, our trainers make them take it apart and do it over again. This teaches them the proper way to do something, and to be more conscientious the next time around."

"At on-site meetings you can encourage participant participation by going around and having everyone say something."

Free Labor Arrangement

Some new YouthBuild programs choose to provide supervised labor at no cost to the host (owner, developer, or general contractor) of the site. The host, in turn, provides access to the site, all materials needed to perform the work, and the subcontractors needed to complete any work not performed by the participants. This is referred to as a free-labor option because there is no financial payment by the general contractor or developer for the labor of the participants. The cost of participant labor, in the form of participant stipends and construction staff salaries, is covered by the DOL YouthBuild grant.

The advantage of this arrangement to the YouthBuild program is that it provides a construction training experience without any management responsibilities and without any financial risks. Under this arrangement, the community partner provides and pays for:

- Access to the site
- Scope of work, plans, specifications, and permits
- Materials, delivery of materials, and specialty tools for the site
- Hiring and supervising of subcontractors, architect, and engineer
- Liability and property insurance

Paid Subcontractor Arrangement

The alternative to a “free labor” arrangement is an arrangement in which the YouthBuild program receives payment for the work done on a project. In general, a paid subcontractor arrangement means that YouthBuild takes on a specific scope of work for a fixed price to be completed by a pre-established deadline. The YouthBuild program takes on the risk of completing a part of the job for a specific sum of money.

The financial agreements that YouthBuild programs make as subcontractors vary, as does the level of risk involved. Some programs agree to simply receive compensation for the cost of materials. Others arrange to receive some of the funds that a professional subcontractor would normally use to cover labor and overhead costs. Some YouthBuild programs try to earn sufficient income as a subcontractor to cover a part of the cost of the construction manager’s or construction trainer’s salaries, thereby allowing some of the DOL YouthBuild grant to be used for other program needs. However, income received as a subcontractor on DOL YouthBuild work sites must be used as a source of supplemental funds to the DOL grant for allowable program activities including construction staff, participant stipends, workers compensation, construction insurance costs, vehicles, overhead, or other related program costs.

Construction Manager and Subcontractor

YouthBuild programs that are seeking to have more control over the schedule of their construction projects may consider taking on the construction manager role, in addition to continuing their role as a subcontractor. Many sites view this as an ideal role for a YouthBuild program to work toward if a suitable development partner can be found.

The construction manager is an individual or firm who works on behalf of the developer to coordinate all the subcontractors on the project. The construction manager takes the place of a general contractor. A construction manager typically does not take on any risk or reap any reward for completing the job within a certain budget or timeline. The risk remains with the developer. The construction manager simply provides the coordination function for a fee. The construction manager may also be provided with the funds to pay the subcontractors, depending upon the arrangements made with the developer.

The responsibilities of a construction manager may include all or some of the following:

- Coordinating safety and health training
- Securing a general construction permit
- Coordinating the activities of architects, engineers, inspectors, and other professionals on the job
- Estimating the job scope
- Preparing bid packages and bidding the job
- Hiring, coordinating, and supervising subcontractors
- Preparing and adhering to a construction timetable
- Reviewing and processing invoices from subcontractors and vendors
- Preparing requisitions to funders
- Providing regular reports to the developer on progress based on budget and schedule
- Preparing and completing a punch list at substantial completion of the job
- Securing a certificate of occupancy/completion
- Submitting shop drawings and catalogue cuts for approval
- Preparing change orders when appropriate

To take on this role, the program must have someone on the staff who:

- Has successfully completed a similar project in size, type, and scope as construction manager or general contractor
- Has a minimum of five years of experience in increasingly responsible positions in the construction field
- Is licensed to secure a general construction permit, depending on the local building department requirements

The Advantages and Disadvantages of Construction Management

Taking on the role of construction manager has advantages and disadvantages. On the positive side, it gives the program more control over the schedule and scope of work that the participants can do. It allows the program to choose which work the participants will do directly and to negotiate with subcontractors to provide the maximum training opportunities to the young people. It allows the program to manage the time schedule of the job and therefore to take time out on the job for training-related activities when necessary. To make use of the role of construction manager, it is important for the developer to agree to a longer development timeline for the job as a whole. On the other hand, it requires YouthBuild to take on more responsibility for the job as a whole; it requires the staff to take on supervision of other subcontractors as well as the participants. For these reasons, it requires a more experienced construction staff at the YouthBuild program.

Advantages

- The YouthBuild program is able to control the pace of the job so that it meshes with the speed at which participants can realistically work
- The YouthBuild program is able to control the scope of work that the participants undertake, either as a subcontractor or as free labor, thus maximizing the training opportunities for the young people and providing greater continuity for the training program
- The YouthBuild program has leverage with other subcontractors on the job to ensure that they offer training opportunities for young people
- The YouthBuild program gets most of the advantages of serving as a general contractor without the increased responsibility and risk
- The YouthBuild program can schedule and integrate the various phases of the work with other YouthBuild program activities
- The YouthBuild program can influence the general tenor and attitudes on the construction site to create greater mutual respect, teamwork, and group cohesion

Disadvantages

- The additional role requires more highly-skilled staff with an increased level of responsibility
- The developer may want a general contractor who assumes the risk for the project, rather than assuming the risk himself/herself
- The YouthBuild program still needs the developer's support for a longer timeline for training purposes
- The YouthBuild program is generally doing the same work as a general contractor but does not get the same potential to generate income for the program that general contracting may provide

As a construction manager, the YouthBuild program should have a contract or memorandum of understanding that defines responsibilities, fees, and whatever arrangements are also included as a subcontractor on the construction project.

General Contractor

YouthBuild programs that are seeking greater control over their construction projects, are prepared to take on added risk, and wish to increase income to their program, may choose to take on the general contractor role.

The general contractor is an entity that takes on the full responsibility for the construction project by committing to a developer that the project will be completed within a specific cost and by a specific deadline. It is generally a fixed price/lump sum arrangement in which the general contractor signs a contract to complete the job within a certain price, regardless of what the job actually costs to complete. The general contractor can lose a great deal of money if its estimating, money management, time management, and construction management skills are not excellent.

The general contractor role involves all the responsibilities of the construction manager listed in the previous section. In addition, a general contractor must hire, supervise, and pay laborers and other employees, and, upon completion, the general contractor must also provide a guarantee (usually one year) on all work.

The Advantages and Disadvantages of General Contracting

Advantages

- The YouthBuild program is able to control the pace of the job so that it meshes with the speed at which participants can work
- The YouthBuild program is able to control the scope of work that the participants undertake, either as a subcontract or as free labor, thus maximizing the training opportunities for the young people and providing greater continuity for the training program
- The YouthBuild program has leverage with other subcontractors on the job to ensure that they offer training opportunities for the young people
- There is a greater opportunity to earn income for the program, assuming the YouthBuild program can manage the construction process well

Disadvantages

- The YouthBuild program needs a sophisticated fiscal infrastructure to track construction projects effectively and pay bills to multiple vendors in a timely manner
- The YouthBuild program may need cash reserves (i.e. working capital) or a line of credit to manage the flow of funds for the costs of a construction project
- The general contractor role requires highly skilled, experienced staff
- The YouthBuild program still needs the developer's support for a longer timeline for training purposes
- The YouthBuild program can lose a substantial amount of money if its construction staff is not skilled in all aspects of general contracting
- The additional financial demands on the program can increase the pressure and ramifications of production/trainer tension

As indicated in this list, the training advantages for a general contractor are similar to those of a construction manager—it gives the program more control over the schedule and scope of work that the participants can do. It allows the program to choose which work the participants will do directly and to negotiate with subcontractors to provide the maximum training opportunities for the young people. It also allows the program to take time out on the job for training-related activities when necessary.

There are, however, disadvantages and special requirements. The program will require a staff person with the same experience and skills described previously in the construction manager section. In addition, YouthBuild will be responsible for ordering materials and paying subcontractors. This may require a line of credit or reserve fund to make advance payments while the program is awaiting payments from the developer.

The program will need a contract with the developer for its role as a general contractor. There are standard industry contracts that you can obtain and adapt to your YouthBuild project. NAHB (National Association of Home Builders) publishes a book of contract forms developed and used by its members, called Home Builder Contracts & Construction Management Forms. AIA (American Institute of Architects) publishes a wide range of contracts for small, medium, and large projects and for a variety of contract types (www.aiacontracts.org).

However, AIA contracts tend to be very favorable towards the owner's interests. The AGC (Associated General Contractors of America) is a founding endorsing organization to ConsensusDocs (a coalition of 40 leading construction organizations that created a catalog of more than 100 standard construction contracts. AGC-endorsed contracts tend to favor the contractor's interests. Comparing several contracts from both sources would give a more balanced approach to identifying key clauses that will need to be included in the contract ultimately used or developed with the program's partner.

Developer and General Contractor

The most difficult construction roles for a YouthBuild program are that of housing developer and general contractor. Some YouthBuild programs are sponsored by agencies that are already housing developers. For several reasons, other YouthBuild programs may choose to take on this role after a few years of experience as a general contractor. The program may wish to gain control over the timing of projects in relation to their training program. Or it may wish to gain even greater control over the pace of the job in order to maximize the training opportunities for the young people. The program may decide that the financial benefits of serving as developer are worth the extra work and additional financial risks. The program's sponsoring agency may even realize that there is a need for increased housing development and find that expansion into this role is a way to fill multiple needs through one effort.

The developer's role is to obtain a site and oversee all aspects of the development of that site. The developer takes on the responsibility for the full project, from property acquisition to arranging financing to construction and ultimate sale or management of the property. The developer also takes the ultimate risk in ensuring that the funds available for the project match or exceed the costs of the project. The developer often receives a developer's fee for this role, over and above fees paid to the general contractor or construction manager. For certain types and sizes of low-income housing projects, this fee can be substantial. This fee is usually included as an expense in the total project financing. The specific roles of a developer include:

- Acquiring a site (land or a building)
- Working with an architect to develop a plan for the building
- Putting together a development budget for the building
- Securing construction financing for the development of the building
- Hiring a general contractor or construction manager to build on the land or renovate the building
- Dealing with all legal issues regarding the development of the site
- Securing permanent financing for the completed housing, unless sold upon completion
- Marketing or managing the completed housing

Since YouthBuild programs provide construction training, the role of a developer must be combined with that of general contractor or subcontractor for training purposes. Usually, if a program assumes the added responsibilities of being the developer, it is likely to assume the role of general contractor, or at least construction manager, as well, to ensure training opportunities.

The Advantages and Disadvantages of a Developer Role

Advantages

- As a developer, the YouthBuild program has maximum control over ensuring that projects are available and ready to begin in time for the training program
- As a developer, the YouthBuild program maximizes control in balancing the tension of training vs. production
- If done successfully, the YouthBuild program can maximize the income generated for its program

Disadvantages

- Serving as a developer requires extensive organizational and staff capacity to fulfill all required functions
- The financial risk and liability of development are significant
- If the capacity for development is not in place, the housing development work could overshadow YouthBuild's mission of developing young people

As the above list indicates, the developer role gives a YouthBuild program the maximum amount of control in balancing the tension between training and production. The trade-offs between training and production still remain; however, as developer, a YouthBuild program is able to control the decisions and weigh the costs of slowing down production for the sake of training. It can use some of its developer's fee to compensate for the carrying costs of a slower project, if necessary.

Taking on the role of housing developer requires such specialized skills, involves such a significant commitment of staff time and energy, and entails such financial risks that YouthBuild programs should consider this decision carefully. Serving as developer will require a staff dedicated to the development functions and will require very different financial arrangements with banks and other funders. In addition to the staff skills outlined under the construction manager role, a YouthBuild program must have staff capacity to identify and acquire property and to obtain permits for construction, and in some instances, permanent financing for the project. The program must also have the ability to market the project, which could involve additional holding costs until the property is sold, or the ability to manage permanent ownership. Organizing a project for development is very time consuming and requires significant lead time. All of these tasks have the potential for overwhelming the fundamental mission of the YouthBuild program.

YouthBuild programs with no housing development experience have generally found it easier to become the developer of smaller projects (one or two units) for sale to low-income home buyers, rather than take on larger projects or rental projects requiring permanent ownership and management.

Summary

In selecting a construction role for a YouthBuild program, the following must be fully evaluated:

- The experience of the program and its senior leadership in construction and development of residential housing
- The availability of quality, reputable development and construction partners in the area, and their enthusiasm for training young people on their construction sites
- The program's capacity to take on financial risk
- The variety of affordable housing construction projects that are available in the community

As a new DOL YouthBuild grantee, it is probably preferable to start with a subcontractor role and move up to general contractor after a few years of construction training experience and experience integrating the construction role with the other program components of education and leadership development. On the following page is a chart that summarizes the advantages and disadvantages of the different roles described in this chapter.

Role	Advantages	Disadvantages
Subcontracting Free Labor Arrangement: Provides supervised, participant labor at no cost to the developer	• No financial risk • No liability for missing deadlines • More flexibility in participant schedule	• No income for work • May have little control over training environment or participant assignments • May be dependent on others for YouthBuild schedule
Subcontracting Paid Arrangement: Completes a specific "scope of work" on a single or several trades. Work is done for a fixed price to be completed by a pre-established deadline.	• Program receives some income • Less risk than construction management roles • Does not require complex construction management skills or logistics	• Liability of completing work within a specified deadline • Risk of not estimating materials cost correctly • May not provide for steady work for participants throughout training year • Depending on subcontract, may not provide broad enough learning experience

Role	Advantages	Disadvantages
Construction Management: Works on behalf of the developer to coordinate all subcontractors on the project, in place of a general contractor. Developer assumes all risks and rewards. Coordination work is done for a fee.	• No financial risk or liability • Provides control over the pace of the job • Provides control over scope of work that participants undertake • Provides leverage with other subcontractors on the job to use participants effectively • More job placement opportunities	• Requires highly experienced staff with construction management skills • Does not provide same potential for generating program income as general contracting • Hard to find willing development partner
General Contracting: Coordinates all aspects of the actual construction work, including all subcontractors, for a fixed price/lump sum. General contractor agrees to complete the job within a certain price, regardless of the final cost, and assumes all risks and rewards.	• Provides control over scope of work that participants undertake • Provides leverage with other subcontractors on the job to use participants effectively • Potential to generate more income for program than Construction Management • More job placement opportunities	• Requires highly experienced staff with construction management and estimating skills • Can lose a substantial amount of money if estimates are incorrect • Requires a sophisticated financial infrastructure • Requires cash reserves (working capital) or a line of credit
Development: Obtains a site and oversees all aspects of the development of that site. Assumes the ultimate risk of ensuring that funds available match or exceed project costs. Often receives a developer's fee for this role.	• Provides maximum control over ensuring that projects are available on time for training • Maximizes control in balancing tension of "training vs. production" • Can generate program income to support the construction training and other program services • More job placement opportunities	• Requires extensive organizational and staff capacity to fulfill all functions • Financial risk and liability are significant • Extra workload could cause housing development to overshadow mission of youth development

Chapter 1 Resources in Appendix

APPENDIX B

- Memorandum of Agreement between Subcontractor (YouthBuild) and General Contractor (Housing Partner)

Chapter 2: Selecting Construction Projects and Partners

Overview

The type of construction project a YouthBuild program selects can have a significant influence on the type and level of training that the youth will receive in the program. Some projects offer a great variety of training opportunities. Others offer too much repetition of the same activity over and over again with little room for varied experiences.

Selecting a partner can also have an impact on the program. Integrating construction training and production is difficult under the best circumstances. The choice in partners can make the difference in whether a project is a viable training project or not. Some partners will be very committed to the goals of the YouthBuild program and will be more flexible with the program to provide the best possible training opportunity for the young people. Others, while very experienced in housing production, may not be committed to the mission of YouthBuild and may be at odds with the program for the duration of the project.

It is helpful to define the criteria for selecting a project in advance, so that potential projects can be evaluated based on the needs of the program, and so that potential partners can understand those needs before the partnership is finalized. It is important to look for projects and partners that are able to meet the criteria.

Which Comes First: The Project or The Partner?

If the YouthBuild program has already been awarded a DOL grant, it should reference the Work Site Description form (ETA-9143) it submitted to DOL to ensure that it is still consistent with the scope of work as anticipated by the partner. If the YouthBuild program is in the process of applying for a DOL grant, then it has the opportunity to select a partner and negotiate the scope of work.

All work sites must be approved by both the regional Federal Project Officer and the national DOL YouthBuild program office before any grant funds can be spent on the work site and before it can be used for construction training. Training youth on an unapproved work site may result in unallowable costs and grant funds that must be paid back to the government during grant closeout. If the work site originally approved with the YouthBuild DOL grant becomes unavailable, the YouthBuild program must locate an alternate work site and must submit a new Work Site Description form (ETA-9143) for approval. The ETA-9143 Work Site Description Form is included in Appendix B.

Some programs have a strong housing partner and work with that partner to identify a project that meets the criteria for a good YouthBuild construction site. Other programs that do not already have an established housing partner may identify a project first and then look for a developer or general contractor to partner with. Some programs talk simultaneously with several potential partners, considering various projects to determine which will best suit the training needs of the program. Then they negotiate their role on the job.

All of these methods can work. The key to successful training is an appropriate project and an effective partnership. All options must be considered before making a decision that will ultimately shape the success of the program. A list of the primary considerations in selecting a housing project and partner, Selecting a Construction Project Checklist is available in Appendix B.

Selecting a Construction Project: Qualifications, Criteria and Types of Projects

The following considerations should help the program select projects that make the best training experience for young people:

DOL Qualifying Work Sites

DOL has outlined several criteria that determine whether a work site qualifies as appropriate for construction skills training at a YouthBuild program. Complete guidelines are contained in the TEGL_06-15 Qualifying Work Sites and Construction Projects for YouthBuild Grantees in Appendix B.

1. **Low-income**

   The work site must meet the threshold for low-income, as defined by the United States Housing Act of 1937. For this reason, all properties rehabilitated or constructed using DOL YouthBuild grant funds require a restrictive covenant clause that ensures that for a period of at least five years, all residential housing that is constructed or rehabilitated with DOL YouthBuild funds will be rented or sold to low-income or homeless individuals or families. For further information on the restrictive covenant requirements, see 20 CFR 688.730.

2. **Substantial Hands-on Experience**

   DOL YouthBuild work sites must provide the opportunity for participants to have hands-on training and experience of both breadth and depth in order to qualify. Any work site that does not include exposure to multiple modules and skill areas will not be considered a qualifying work site.

   Both rehabilitation and new construction can offer the substantial hands-on experience that is required. However, depending upon the scope of work set aside for YouthBuild participants, there is a chance that neither type of experience will qualify. For example, painting alone or painting in addition to landscaping would not qualify as substantial hands-on experience.

   The term rehabilitation is very broad by definition. Examples of substantial rehabilitation might include demolishing existing walls and rebuilding new ones with framing and drywall, completely gutting a kitchen or bathroom and installing new flooring, cabinetry, upgraded plumbing, upgraded electrical, and installation of new appliances to increase energy and water efficiency. Smaller scopes of work in rehabilitation may not include enough variety to meet DOL's criteria for providing substantial hands-on experience, or may not satisfy the number of modules and skill areas that will provide the necessary scope of hands-on experience to enable a YouthBuild participant to earn an industry-recognized construction credential.

While it may be allowable for participants to do general rehabilitation work, such as deconstruction, light energy- and water-efficiency upgrades, landscaping, fence building, or smaller home repairs, none of these activities qualifies without also including experience in two or more modules within two or more skill areas.

3. **Age Restricted Activities**

   There are limitations on the activities in which youth who are under 18 years old are allowed to engage. Roofing, demolition and the use of certain power-driven machines and saws, for example, are not allowable activities for youth younger than eighteen based on the Fair Labor Standards Act (see http://www.cdc.gov/niosh/docs/2004-113/).

Scope of Work

YouthBuild programs have consistently found that the ideal project is one in which the participants can move through all aspects of the construction work during their year of training. For example, the project should include carpentry, sheet rocking, painting, finish work, exterior work, and landscaping, so that participants will receive the widest possible range of skills. Projects that are too large tend to have participants doing the same skill over and over again, e.g. all painting or all framing for most of the year. The program director must consider whether the project will teach those skills which are most transferable to construction jobs available in the community.

Project Size

All projects can provide hands-on work experiences, but some projects are too large or too small to be an ideal training project. As a rule of thumb, keep it small. At the same time, it is important to have enough work to keep the participants active throughout the year and provide the necessary scope of work to meet the DOL requirements. The groups should be divided in a way that allows all participants to have the opportunity to demonstrate what they are learning. For example, a program with 30 participants might separate them into two crews of 15 participants, working alternating weeks on the work site with the appropriate staff ratio for each crew.

There are two key issues to consider in evaluating the size of a project:

1. Can the participants start and complete this project during their year of training? An ideal project allows the participants to complete the project within one program cycle, which is usually 6-12 months. This project may be the first time a participant has actually started and completed anything. If the community has the type of projects that can be done within a year, the participants will have the opportunity to see the results of their work.
2. Can the site accommodate the appropriate number of participants? On a site that is too small, participants could get in each other's way, which could create safety hazards. A site that is too small may also not have enough work to provide the comprehensive training required by DOL. It is critical that all the participants on the site stay busy and engaged at all times. Also, it must be kept in mind that it is much more difficult to manage several small, scattered sites than one larger project that allows participants to all work at the same work site or on several projects in the same vicinity.

Location

There are many issues to consider regarding the location of the project:

- Is the work site in an area that is accessible by public transportation, or will the program provide transportation for the participants?
- The location of the work site may influence the structuring of alternating groups of participants between the work site and the classroom.
- Is the work site in an area that is relatively safe for participants from different parts of the community?
- Will the participants need access to food for lunch?
- Are toilets accessible?
- How accessible is the program site to the work site? For example, how will participants get access to the counseling staff or to the classroom, if needed?
- Where will materials and equipment be stored?

Impact, Visibility, and Neighborhood Support

How will this renovation impact the immediate neighborhood? How much support will be generated from the surrounding neighborhood? Is there support both in terms of moral support and a willingness to keep an eye on the site when YouthBuild staff are not around? How visible and important is this project to the broader community? One way to increase the visibility and neighborhood support of the project is to utilize signage. Signs that display the names of community partners will help inform residents about the purpose of the project and its positive impact on the community and the youth involved.

Availability

Will the project be ready and available when YouthBuild plans to start the program? The DOL YouthBuild program requires YouthBuild organizations to have an identified construction work site—meaning an agreement with a development partner, documentation of site access, and financing—at the time of the YouthBuild application. This may be as long as three to four months before the grant award announcement and execution of the grant award, and several more months before the beginning of construction. Many programs find that holding a property or developer that long in advance is difficult and that the housing project in their application is no longer available when it is time for construction to begin. Finding and substituting another project is feasible but time consuming and can result in delays in the start of the overall program. Therefore, it is important to understand the time schedules involved and to be realistic in selecting a project that will be available on these schedules.

Keep in mind that despite best abilities, planned partnerships sometimes fall through, or the proposed work site loses funding. It is important to plan ahead for potential work site loss by having a second or even third alternative in mind, should the proposed work site fall through and/or not qualify to DOL YouthBuild standards.

Types of Projects

There are three major types of residential affordable housing construction projects that YouthBuild programs can undertake: new construction, substantial (gut) rehabilitation, and moderate rehabilitation. The chart on the following page compares the advantages and disadvantages of each of these types of projects.

Repairs and alterations do not generally qualify as a DOL YouthBuild work site because the participants are not gaining the required level of construction skills across multiple modules and skill areas. However, YouthBuild programs may find these small-scale projects useful as supplementary projects when the work on the site has slowed down due to subcontracting schedules, bad weather, or other delays. Often these are community service projects for other nonprofit organizations in the community on which youth can still practice basic construction skills. The importance of supplementary projects is discussed in Part II of the handbook.

Green Building

Green building is quickly becoming the new global standard for building design, construction and maintenance. Because developers of affordable housing have greater limitations on cost considerations, it is important to know that some green building practices may include somewhat higher upfront costs while others are just as economical, or even less expensive than conventional building.

Research studies on the costs and benefits of green affordable housing are very encouraging with regard to financial viability. Getting students and construction staff involved in researching greener options will help a YouthBuild program find affordable opportunities to build healthier, greener housing with lower operating costs for the occupants. Green building practices are always beneficial to the occupant and the environment, reduce utility bills, and oftentimes can result in tax incentives or rebates for the builder that make it even more than affordable in the long run.

The U.S. green building market grew from two percent in 2005 to 44 percent in 2012 according to research by McGraw-Hill Construction (World Green Building Trends, 2013). Research by Dodge Data & Analytics (DD&A) and the National Association of Home Builders (NAHB) reported in 2015 that over half (51 percent) of home builders expect that more than 60 percent of the homes that they build will be green by 2020, and over one-third (36 percent) of remodelers expect the same level of green in their projects (http://www.nahb.org/~/media/Sites/NAHB/Research/Priorities/green-building-remodeling-development/Green-and-Healthier-Homes%202015.ashx).

As the size of the green building industry grows, so has the demand for a knowledgeable and trained workforce. The U.S. Green Building Council and Booz Allen Hamilton's Green Building Economic Impact Study, completed in September 2015, predicts that from 2015-2018, green construction will support 3.9 million jobs and provide $268.4 billion in labor earnings (https://kapost-files-prod.s3.amazonaws.com/published/56438d353dab34e8a1000061/green-building-economic-impact-study.pdf?kui=ntZxSELuij0YNSwkwEO_Kw).

Whether or not the YouthBuild program intentionally seeks partners and projects on green construction work sites, its staff should have a basic understanding of the main elements of green building and the main drivers of its demand during the process of partnership and project selection.

Main elements Include:

- Whole building as a system design process
- Location and community linkages
- Land stewardship, surface water management, landscaping
- Water efficiency
- Energy efficiency and renewable energy
- Materials and product selection
- Waste reduction and recycling
- Indoor air and environmental quality
- Building operations and maintenance

Main benefits Include:

- Lower utility bills/operating costs for occupants
- Healthier indoor environments for occupants
- Increased productivity for occupants (especially in offices and schools)
- Branding and public relations for builders
- Higher building values and occupancy rates for builders
- Significantly reduced environmental impacts such as lower carbon emissions

Main drivers Include:

- Client and market demand
- Increased water- and energy-efficiency building code standards
- Increased local, state, and national legislative regulations
- Social and environmental responsibility concerns
- Local and global competition

Weatherization

Weatherization activities are allowable for DOL YouthBuild programs, and are included in its definition of housing rehabilitation. Typical weatherization measures needed in substantial housing rehabilitation jobs include the replacement or installation of insulation, extensive air sealing, window and door replacement, and the replacement of electrical and mechanical systems and appliances.

Visit the Department of Energy's Office of Energy Efficiency & Renewable Energy website for more information on the definition and scope of weatherization work: https://energy.gov/eere/wipo/weatherization-assistance-program-measures.

The term weatherization as defined by the industry is not limited to energy-efficiency upgrades, instead referencing a whole house systems approach to protecting a home or building from the elements, and thus in addition to improving energy efficiency includes increasing water efficiency, ensuring effective moisture control, improving indoor air quality, and ensuring combustion safety and carbon monoxide protection. A qualified energy auditor performs a series of systematic tests and thorough analysis and then uses those results to determine a prioritized list of weatherization measures needed for the home or building.

Less extensive retrofits that are more limited in scope may not require a full audit but instead a more informal housing assessment. Retrofits in this category may be limited to only energy and/or water efficiency upgrades such as showerhead and light bulb replacement, basic air sealing methods such as caulking and weather stripping, and other less intensive work.

Because weatherization work in housing rehabilitation can be more or less extensive depending on the funding source, time available, and assessed needs of the building, a DOL YouthBuild program must determine whether or not the weatherization work available to its participants will provide them with a variety of skills, knowledge, and abilities to meet the DOL requirements for depth and breadth of construction skills across at least two modules of construction. Since weatherization is a module in the most widely used construction credentialing curricula used by DOL YouthBuild grantees, and because most gut rehabilitation by nature, and in many cases as mandated by local code, must include the work of installing or replacing insulation, protecting the building from moisture and air infiltration, and installing energy- and water-efficient appliances, it is likely that the DOL threshold can be met.

However, a YouthBuild work site where participants are only installing new light bulbs, showerheads, and/or minimal air sealing will not qualify. In this case, the limited weatherization work would fall into the category of repairs and alterations, which can supplement a DOL work site but will not qualify as a sufficient level of work for a work site on its own.

Single Site vs. Scattered Sites

It is always easier for management, supervision and logistics to have all the participants working in close proximity to one another at any given time. Depending upon the housing stock in the community, the program may or may not be able to find one site that provides enough work to keep the crews working all year. Programs have tried to keep all the participants within one area through a variety of strategies:

- Some programs have been able to work on several single family homes on the same street or within the same vicinity
- Some programs have found buildings that contain two to four units of housing on which they can work simultaneously
- Some programs have taken on a few units within a larger residential construction project
- Some programs with multiple sites have all the participants work together on one site and then move to another site when the first site is completed

Some programs have not been able to find enough work in one location and are forced to have participants working in more than one location at a given time. If the program is faced with that situation, it is important to think through the following logistical considerations:

Selecting a Construction Project

Option	Advantages	Disadvantages
New Construction	• Provides clean work with no environmental hazards • Assures no surprises behind walls, which can stall a project • Provides wide range of learning—all phases of construction can be taught • Provides experience with production, which may match employment opportunities in your area • Excellent vocational education tool and learning opportunity due to systematic steps, repetition, and straight-forward nature • Provides an opportunity to introduce and train participants in green building skills, knowledge, and abilities representing a high growth industry in America	• Excavation and foundation must be done by others prior to participants coming onto site. Excavation and foundations cannot be done in winter in Northern climates. • Until building envelope is up, participants can only work in good weather. • Availability and cost of sites in urban areas may not be as compelling and fundable as renovating existing housing stock.

Option	Advantages	Disadvantages
Substantial (gut) Rehabilitation	• Provides wide range of learning—all phases of construction can be taught • Provides an opportunity to introduce participants to weatherization and green building skills, knowledge, and abilities representing a high growth industry in America • Interior demolition/rubbish removal phase at start of project is excellent way to channel unskilled participant energy • Provides excellent problem-solving experience • Can usually start participants immediately • Can usually work in all seasons • Usually readily available at discount price	• Environmental hazards, such as lead paint and asbestos, must be dealt with prior to participants entering the site, or through specialized participant training • Interior demolition phase can be dangerous • Hidden problems can create delays and involve extensive change orders • Requires higher level of construction management skill to make adjustments for unexpected conditions • Range of work and skills necessary can be so diverse that it hinders vocational training possibilities • May run into issues securing the required five-year restrictive covenant
Moderate Rehabilitation	• Can achieve a finished product in a shorter time period • Usually involves a safer site than gut rehabilitation • If functioning as developer, financing package may be easier to assemble • Provides an opportunity to introduce participants to weatherization and green building skills, knowledge, and abilities representing a high growth industry in America	• Not all phases of construction can be taught • Difficult to predict scope of work - often involves extensive change orders due to field conditions • May run into issues securing the required five-year restrictive covenant
Repairs, Alterations and Specialty Projects	• May serve as good “back-up projects” during delays in major construction • Skills learned can be useful for entrepreneurial training • Projects can be finished quickly • Provide useful “community service” for other non-profit organizations or low-income individuals or families	• Not allowable as DOL YouthBuild work site project so can only be worked on as community service project, which limits use of grant funds that can be spent on the project to 15% • Higher level of problem-solving skills, requiring high trainer/participant ratio (1:2) • Tool and material needs may be unpredictable, requiring multiple trips to hardware store and suppliers

- How will the program ensure appropriate participant and staff supervision on each site?
- What kind of transportation is needed to allow the construction manager and others to move back and forth between sites?
- Does the program have enough equipment and tools to run multiple sites simultaneously?
- How will the program keep track of equipment and tools as they are moved from site to site?

Occupied Housing

YouthBuild programs do not always undertake construction in vacant buildings or on vacant land for their training projects. All other options must be very carefully considered before putting participants to work in occupied housing. Working in occupied housing opens the program to complaints and accusations of theft and damage to personal property. The risk and liability can be a serious challenge.

If the program does select a work site that is occupied, it will be noted on the required DOL Work Site Description form (ETA-9143) as will the need for relocation of occupants. In the event that relocation is necessary, the program will complete and submit the ETA-9143 Attachment 1B containing a narrative that identifies the person(s), the business, or others occupying the property on the date of submission of the YouthBuild application; the estimated cost of relocation; the funding source for relocation; and who will be providing the relocation assistance, along with the contact person's name and phone number.

Home Ownership vs. Rental Housing

Housing projects for home ownership are often undertaken in small numbers. It is possible to construct a single house or several houses simultaneously. Many nonprofit community-based housing organizations that would be suitable partners for a YouthBuild program, including such organizations as Habitat for Humanity, frequently undertake small home ownership projects ranging from one to eight units. Home ownership projects are often appropriate in scope for YouthBuild, can be completed during the program cycle, and offer a diversity of construction tasks. However, single-family housing projects are often small, and it can be useful to have at least two houses to work on simultaneously. Existing housing stock in some areas includes three-unit multifamily buildings that can also provide home ownership and an opportunity to produce income for the program.

In general, rental housing projects must be larger to be economically feasible. Many rental housing projects for the homeless or for low-income tenants are dependent on financing from low-income housing tax credits or from special grants. These rental projects may take longer to organize.

Site Inspection

Before committing YouthBuild to work on a housing site, it is important to conduct an initial inspection to ensure that the site is appropriate for training young people. The site visit is essentially a field double-check by the construction staff of a housing site that has already been identified with the housing partner. It is important that the construction staff evaluate the site since they will be the ones responsible for training and production. What might look appropriate to the program director may present difficulties from a construction point of view. The site inspection will also help the program identify unique conditions or special problems that will need to be considered in planning the budget or the work schedule. This should include an assessment of types of hazards to which participants may be exposed.

Sample YouthBuild Housing Projects

YouthBuild programs have historically completed a variety of housing projects. On the following pages are some examples of the types of housing partners most often selected by YouthBuild programs as collaborators on the construction project.

YouthBuild Programs Develop, Build, and Rehab Housing

1. Prologue YouthBuild, Chicago, IL

The participants from Prologue YouthBuild undertook the task of transforming a nineteenth century 3-story brick building into a home for low-income veterans transitioning into the community.

The participants conducted extensive deconstruction on the structure and then installed a thermal barrier to the masonry building shell to increase energy efficiency and demonstrate building science principles. Participants then started on the interior of the structure where they observed and assisted a variety of professionals in updating the mechanical and electrical systems before going on to install new framing and flooring, with all new drywall to replace the original plaster.

This project included many aspects of renovation and new construction that were beneficial to the participants' learning about construction in a turn-of-the-century home and how the occupants can benefit from the science and strategies of green building.

2. YouthBuild Austin, Austin TX

YouthBuild Austin, a program of American YouthWorks, is a proud supporter of Mobile Loaves & Fishes at Community First! Village. Community First! Village is a 27-acre master planned community that provides affordable, permanent housing and support for people who are disabled and chronically homeless in the area. Their value of empowering people into a lifestyle of service is what made this project a perfect fit for YouthBuild participants.

Volunteers assemble tiny "kit home" walls and roofs, and the participants are taught to install rigid insulation, metal siding, roofing, interior/exterior trim, and other items to make the homes ready for living. They also learn from journeyman electricians how to run wiring and hook up outlets and switches.

YouthBuild Austin has completed 24 tiny kit homes and 1 tiny custom home in the Community First! Village over the course of 18 months and will complete the final 9 units by the end of 2017.

3. LA CAUSA YouthBuild, East Los Angeles, CA

LA CAUSA YouthBuild teamed up with construction manager Walton Construction and a Community Housing Development Organization (CHDO) developer named East Los Angeles Community Corporation to build a 25-unit apartment complex from the ground up. Housing partnership agreements made by the general contractor and developer required all subcontractors to allow LA CAUSA YouthBuild participants to work alongside and be trained by their employees.

Due to the timing of the program year and project, trainees were able to learn plumbing, drywall, electrical and HVAC.

The partnership was a great success and led to two more new low-income housing projects, including a 54-unit apartment complex and 25 more units at the Whittier Place Apartment complex.

4. Project REBUILD, Canton, OH

Project REBUILD took over ownership from the city of a 3-story single-family historic home. The YouthBuild participants performed a full gut rehab on the home to restore it to a jewel of the neighborhood. The benefits of the rehab project are that the participants were able to see older building styles and compare them to the preplacement method of construction. Participants of Project REBUILD completed a 2-day green design charrette facilitated by YouthBuild USA to incorporate green building strategies and materials into the whole house. It was determined that the house would be built to qualify for LEED certification from the U.S. Green Building Council. The trainees then met with a LEED professional and through their knowledge and insight made critical changes to the house to better serve the occupant. They then completed the many phases of carpentry work on the project, including framing, drywall, paint, and trim.

National partnerships through YouthBuild USA with CertainTeed and Benjamin Moore have brought in-kind donations of green building materials and non-toxic paints to the project while cultivating volunteer relationships with employees.

As a result of the hands-on and classroom education and training in Green Building, the participants earned an industry-recognized credential in green building to enhance their construction career opportunities. The curriculum and exams they took to earn that credential make up the NCCER module titled “Your Role in the Green Environment.”

5. YouthBuild San Joaquin, Stockton, CA

YouthBuild San Joaquin has a strong partnership with the local Habitat for Humanity affiliate, and through the commitment and knowledge of Habitat staff and YouthBuild San Joaquin, the program is contributing to the building of a whole community of affordable green homes. The participants are introduced to a strategy that saves materials and energy through optimum value engineering while also using other techniques to build a safe, healthy, durable, and resource-efficient home.

San Joaquin YouthBuild has made a concerted effort to partner with the local unions to be able to have direct placement into the union for qualified graduates.

6. OWATC YouthBuild, Ogden, UT

Ogden-Weber Applied Technology College YouthBuild participants worked with the Homeless Veterans Fellowship (HVF) in Ogden, Utah on completing the gut rehab of 12 apartments, 2 houses, and 1 duplex. The units that the participants completed are for veterans who have come in off the street and who work with the staff at the Homeless Veterans Fellowship to get them back on their feet and reintegrated into society.

Units at the HVF included "row houses" that were built at the turn of the 19th century to house railroad workers who worked for the Union Pacific Railroad. These units have undergone several renovations and were in a serious state of disrepair. Participants stripped the units down to the framing and completed framing, drywall, tile, and the installation of new sub-flooring,

hardwood and carpet. They repaired and restored lath and plaster, hardwood flooring, built-ins, original trim, cabinets and brick. Repairs and restorations were completed to maintain the look of the building and to practice green construction techniques.

Participants also crafted high quality and durable oak nightstands and dressers in the college's carpentry shop as gifts for the veterans housed at the HVF. The veterans are given the furniture when they are ready to transition from the HVF to independent living.

During the course of construction, OWATC YouthBuild participants hosted periodic service days where they worked alongside members of the community, including members of the Chamber of Commerce, Rotarians, caseworkers from the local Workforce Development Board, members of the staff from the Ogden-Weber Tech College, the veterans they served, and various other members of the community.

7. Operation Fresh Start YouthBuild, Madison, WI

Operation Fresh Start YouthBuild participants built two single-family homes implementing multiple innovative framing and insulation techniques that result in high-efficiency homes.

Participants built the exterior walls as "double stud," 12-inch thick walls with 2x4 studs spaced two feet on center. The two-foot stud spacing utilizes fewer studs and allows for most of the windows to be placed in between existing studs, so that headers and trim studs become unnecessary. This saves money on lumber and allows insulation to replace the framing in those areas. When these narrower windows are installed in a combination of two or three, they give the feel and visual effect of larger picture windows.

The participants filled the 12-inch thick walls with dense-pack cellulose insulation with an R-value of 44. This choice is a huge improvement over the conventional and more common single 2x4 wall insulated with batt insulation and one-inch rigid foam built in this area, which has an R-value of only 18. This "double stud" wall construction also has a very low environmental impact because it uses all cellulose-based materials as opposed to other fiberglass and foam-intensive wall constructions. The attics are insulated to an R-value of 60 instead of the R-value of 38 required by the building code.

These features altogether allowed Operation Fresh Start YouthBuild to build a super-insulated home without costly and environmentally unfriendly exotic materials while using low-tech building techniques that participants are able to become proficient in quickly.

8. YouthBuild Schenectady @ SEAT, Schenectady, NY

Participants of Schenectady YouthBuild rehabilitated a single family home that, upon completion, received a Leadership in Energy and Environmental Design (LEED) Gold certification from the U.S. Green Building Council. More than 80 young adults worked on the project, turning a run-down building into an energy-efficient showcase. The property is owned and maintained by Northeast Parent and Child Society, which was the YouthBuild program sponsoring agency at the time, and is being rented to a low-income family.

"In just the first few months of living in the home, we realized the advantages of living in a healthy, energy-efficient and air-tight home," said Tonia Thomas, the resident. "Even during the especially frigid winter we had this year, we experienced dramatically lower energy bills and increased comfort due to fewer variations in temperature from room to room. It means a lot to me to know that my home is healthy and that my children are breathing clean air and are not being exposed to mold and pollutants."

Participants learned green job skills and worked closely with technical assistance partners including the Saint-Gobain Corporation and subsidiary CertainTeed, YouthBuild USA's Green Initiative, and the U.S. Department of Housing and Urban Development's "Options in Green Program" to learn many of the best practices in constructing a LEED home.

Selecting a Housing Partner

Unless the program decides to take on the role of developer, it must find a housing developer with whom to collaborate. It should not be assumed that just because an organization or company has been in the business of developing housing for a long time that they are good partners for a YouthBuild program.

In selecting a housing developer for collaboration, the program director must consider the following issues:

1. **What is the organization's reputation and track record in the development of housing?** Even longstanding developers go through ups and downs. The YouthBuild program will want to find out about the developer's reputation regarding its ability to deliver on the timelines, its commitment to quality, its ability to assemble needed funds, and its follow through.
2. **Will the developer have an appropriate project available on the program's timeline?** A developer may want to work with YouthBuild, but may not have a project that will be ready by the time that YouthBuild is ready to start the program. Or it may not be able to wait until the program is up and running to start the project. It is important to discuss in detail the program's schedule, when the participant Mental Toughness orientation will be completed, and when the program will actually have participants ready for the work site.
3. **Does the developer have a commitment to supporting the training needs of a YouthBuild program?** While recognizing the pressures of the development process, it is critical that the partner be flexible and committed to working with the YouthBuild program to resolve the natural tensions between training and production.
4. **Is the developer considering this partnership partially because he or she expects to save money on the job?** Housing developers often have a very unrealistic concept of how much money they will save by working with YouthBuild. In fact, the savings are only modest. At best, savings include carpenters' and laborers' labor costs. At worst, delays and waste generated from the training process can offset the savings or even result in a greater total development cost. For example, if dry wall was damaged during installation by the participants, then the developer would incur additional costs to replace the dry wall.
5. **Does the developer have a long history of OSHA citations?** You can check for a company's safety records on the OSHA website: https://www.osha.gov/pls/imis/establishment.html

It is important to find a housing developer who wants to work with YouthBuild because it is committed to the mission of training young people and supports the need to expand the supply of low-income housing, not primarily because the developer hopes to save a lot of money. At the same time, it is important to remember that housing developers cannot afford to pay more for working with YouthBuild than they would have to pay otherwise. The following are the types of housing partners most often selected by YouthBuild programs as collaborators on the construction project.

Sponsoring Agency as Housing Partner

Some YouthBuild programs are housed within larger nonprofit organizations and public agencies that have a history of developing affordable housing. This built-in partnership does not ensure that the YouthBuild program will have an easier relationship than with an outside entity. Housing development departments within nonprofit organizations or public agencies face the same economic constraints as any other housing developer and may be no more sympathetic to the YouthBuild program's training needs than anyone else. In fact, additional difficulties can arise if the housing staff of the parent agency does not fully understand and support the training mission of the YouthBuild program because the YouthBuild program generally is not in a position to choose a different partner from its parent agency. Issues of training and production should be discussed with the agency's executive director and housing development department as candidly as possible and the information in this handbook shared with them. The most critical point is that they need to know the job may take twice as long as it normally would. They must be reassured that the quality will be as good or better; it is only the length of time that is the issue.

Community Development Corporations

Community Development Corporations (CDCs) can be good housing partners for YouthBuild programs. They are community-based, often do rehabilitation and new construction projects on a scale that is ideal for construction training, and they may be more sympathetic to the schedule of a training program that is enrolling neighborhood youth. But not all CDCs are alike, and the reputation of the organization for quality, timeliness, and commitment to the program's mission should be checked.

Habitat for Humanity

YouthBuild programs have long worked successfully with Habitat for Humanity organizations. Here again, every Habitat for Humanity operates as an independent organization. It must be determined if the organization in the community is an appropriate partner. The advantage of working with Habitat is that they provide the building and materials for free. The disadvantage, in some instances, is that they may want to involve other community volunteers, which may be difficult to coordinate with the participants, or they may want to operate on a schedule that is not appropriate for training.

Habitat for Humanity builds durable, healthy and sustainable houses at the lowest possible cost (green building). Habitat for Humanity's practice of building green affordable homes offers YouthBuild programs the opportunity to provide their participants with hands-on training in increasingly sought-after qualifications in the construction industry, where local and national codes in addition to consumer demand have greatly transformed buildings to higher levels of green standards.

Public Housing Authorities

Some YouthBuild programs are operated out of housing authorities and automatically take on housing authority projects. But some nonprofit YouthBuild programs may also consider a partnership with a housing authority. Housing authorities that may be good partners for a YouthBuild program are those that are able to operate with flexibility and efficiency on development projects. The advantage of a housing authority partner is that the financing is generally available and they focus solely on building low-income housing that meets the requirements for YouthBuild.

However, some housing authorities tend to function as large bureaucratic organizations. In these cases, YouthBuild projects may find themselves bogged down with red tape, especially in receiving payments or obtaining approvals or even access to properties. This can slow down or delay projects, creating a lot of down time for the participants and leaving the programs scrambling for back-up projects. Another disadvantage to housing authority partnerships is when they can offer YouthBuild programs only the work of making apartments ready for new occupants, which usually entails a very limited scope of work, including painting and carpeting and so does not fulfill DOL's work site requirement of providing substantial hands-on experience.

An additional benefit of partnering with housing authorities occurs after participant exit. Public Housing Authorities are required by HUD to meet Section 3 guidelines that give priority for hiring on-construction projects to housing authority residents or YouthBuild participants. Section 3 is a starting point for YouthBuild programs to obtain job training, employment, and contracting opportunities for their participants after exit.

In 2015, DOL and HUD issued a joint letter to DOL YouthBuild grantees, recipients of HUD funding, contractors, and registered apprenticeship sponsors to alert these programs to a partnership between the two agencies in order to 1) strengthen local registered apprenticeship opportunities for graduates from DOL's YouthBuild program, and 2) connect contractors working on the Housing and Urban Development Act of 1968, Section 3-covered HUD-funded projects with Registered Apprenticeship sponsors and local YouthBuild programs. The joint letter can be read in its entirety at https://www.doleta.gov/youth_services/pdf/HUDDOL_FinalJointLetter.pdf.

For-Profit Developers

For-profit developers may be interested in partnering with a YouthBuild program, but it is important to assess how much their motivation is anticipated cost-savings vs. a sincere desire to train young people. The pressures of for-profit affordable housing development are substantial, and the training goals can easily be overlooked due to the needs of the production schedule of a for-profit company. Additionally, because for-profit developers are interested in the bottom line of making a profit, they may not be willing to limit the sale of housing to the required low-income individuals with the required inclusion of a restrictive covenant.

Establishing a Clear Understanding with the Housing Partner

To avoid conflict with a housing partner down the line, the program director must have and sign a written agreement that defines the respective rules and responsibilities.

The following items should be included in a written agreement with the housing partner:

1. Acknowledgement of the requirement for a restrictive covenant to be placed on the deed at the time the certificate of occupancy is issued that requires the owner to restrict the sale and rental of homes built by YouthBuild programs to low-income individuals or families for a minimum of five years from the point of occupancy
2. Scope of work or plans and specifications of work to be done by the YouthBuild program
3. Total compensation, if any
4. A timetable for completion that allows for sufficient time to finish the job
5. A statement of understanding on how the Davis Bacon Act may apply per local Wage and Hour office regulations. For additional guidance. review TEGL 11-16, "YouthBuild Compliance with Davis-Bacon and Related Acts (DBRA)" found at https://wdr.doleta.gov/directives/corr_doc.cfm?docn=6026.
6. A statement of who has liability for cost overruns and time delays
7. A statement of who has responsibility for ordering/storing/replacing lost or stolen tools and materials
8. Insurance to be provided by each party (property, liability, and workers compensation)
9. A statement of security provisions
10. A formal procedure for communications between YouthBuild and the General Contractor
11. A statement of which party is responsible for obtaining permits
12. A payment schedule
13. The warranties provided
14. Contingency plans

A sample Memorandum of Agreement between Subcontractor (YouthBuild) and General Contractor (Housing Partner) is in Appendix B.

Chapter 2 Resources in Appendix

APPENDIX B

- DOL YouthBuild Construction-Related TEGLs
- ETA-9143 Work Site Description Form
- Memorandum of Agreement between Subcontractor (YouthBuild) and General Contractor (Housing Partner)
- Selecting a Construction Project Checklist

Chapter 3: Hiring and Training Construction Staff

Overview

The construction component is a complicated aspect of the YouthBuild program. It requires not only a technically qualified staff familiar with housing construction, but also one that is committed to the development of young people, capable of fostering personal growth, and able to build in opportunities for leadership development.

This chapter discusses the following issues:

- The role of the YouthBuild director
- Composition and size of construction staff
- General staff qualifications and finding candidates
- Staff orientation and training

The Role of the YouthBuild Director

The YouthBuild director plays an important role at the start of the construction program and is the key person responsible for providing overall balance between the demands of housing construction and the demands of other program components. In order to organize a YouthBuild program, it is necessary to identify housing construction work site and, usually, housing partners before key staff are hired or very early in the planning process. It is the director's responsibility to set the framework for the construction component by determining what type of housing the program will undertake and by locating and making arrangements with housing partners. Ideally, this should be done with the assistance of the construction manager, but that is not always possible.

The YouthBuild director is also the person with overall responsibility for balancing the demands of housing production with the needs of training, education, counseling, and leadership development. In order to do this, the director needs to have a clear understanding of the overall schedule of housing construction and balance those needs with other program needs, such as community service and staff development.

Staff Composition and Size

The construction component of a YouthBuild program requires an adequate level of staffing to ensure both quality training for the participants and a quality construction job. The size of the staff will depend on the construction role selected, the size and type of the project, the construction schedule, the number of program participants, and the amount of DOL funding awarded.

Most programs will need to hire:

- **A construction manager** to manage all aspects of YouthBuild's participation in the construction process and supervise the construction staff.
- **A construction trainer** or trainers to instruct and supervise participants on the construction site. There should be one construction trainer for every six or seven participants on the construction site, so the program may need to hire more than one trainer. YouthBuild programs may operate on a schedule that has half of the participants in the classroom and half on the construction site each week, or they may have participants alternate locations based on a half-day or daily schedule. For example, a program with 30 participants might have 15 on the construction site each week, ideally necessitating two construction trainers.
- **A vocational education instructor** to provide classroom instruction to supplement the training on the construction work site. Ideally, this teacher will also serve as a construction trainer, or math teacher, depending on the skills of your staff and the schedule of the program. This allows for more contextualized and project-based learning to occur so that skills learned in the academic classroom are naturally applied on the work site. In general, a construction manager does not have time to serve as vocational education instructor.

Sample Job Descriptions for each of these positions are included in Appendix B.

If a YouthBuild program decides to take on the role of developer, it will probably need additional staff depending on the program size, availability of property, and funding. Depending upon the strengths of the construction manager, the program might choose to structure development staff in a variety of ways—by adding a development consultant, an assistant project manager, a senior site superintendent, a full-time housing development staff person, or a board member with housing development expertise. Hiring union journeymen for the construction staff can bring many benefits to the program including credibility for the construction operation, a high level of skill training, and links to apprenticeships and jobs in the trades.

VOICES FROM THE FIELD

On Hiring Good Construction Staff

"Hire people who have a good working knowledge of their trade and who can work well with youth—both are essential to the success of the program."

"Site trainers have to know what they're doing. They can't earn the students' respect if they are trying to figure out how to do something in front of the participants. They also have to be flexible and be able to work with young people."

"Site trainers must have a good mix of knowledge, patience and ability to instill good habits and teach real skills. All staff must have the same vision of doing what's best for the youth."

"Not only are you an instructor . . . but you're a parent, a big brother, a big sister, a father confessor, a warden, a referee, you name it."

"Instructors must lead by example, model the behavior they are trying to create. For example, you can't expect the participants to wear their safety gear if the trainers aren't wearing their own."

Qualities to Seek in Hiring Staff

The construction component of a YouthBuild project acts as both a training program and a construction company. Although construction staff are often selected for their construction skills first, it is their training and counseling skills that are often most severely tested. YouthBuild construction staff members usually find themselves performing roles they never expected when applying for the job, especially if their prior experience is in construction rather than training. As a result, the ideal YouthBuild construction staff member possesses a combination of technical, managerial, and interpersonal skills. Perhaps most importantly, a YouthBuild construction staff member must like working with young people.

Finding and Interviewing Qualified Candidates

Finding construction staff with the right mix of construction skills, training experience, and commitment to youth development, within the salary limitations generally available to YouthBuild organizations, can be very challenging. One good source of candidates is semi-retired carpenters. Another potential source is vocational school faculty. A third source may be a local construction trade association. Since the majority of the work done by participants is likely to be carpentry, drywall, weatherization, and interior and exterior finishing, it is preferable to select construction trainers with backgrounds in those trades rather than the more technical trades of plumbing and electrical work. Whatever the source, it is important to take time to find out just how skilled they are in their craft, how prepared they are for a YouthBuild training environment, and how committed they are to YouthBuild's mission.

Tips on Assessing Candidates for the Construction Trainer Position

When exploring the issues below with potential candidates for the construction trainer position, it is important to include some young people in the second round of interviews, in order to gain insight into the way the candidate relates to participants.

- Does the candidate have sufficient safety training such as the OSHA 10 or 30 hour? Is the candidate certified in first aid/CPR?
- What is the candidate's construction skill level? Does the candidate have well-rounded construction experience in a variety of trade areas? How many years of experience in each trade area does the candidate have? How much of that experience is in residential construction, similar to the work that will be done by the YouthBuild program?
- What is the candidate's experience in supervising crews?
- What is the candidate's philosophy of youth development and leadership development? What are his or her ideas about discipline?
- Does the candidate understand the conditions facing young people in the program and the construction trainer's role as counselor, mentor, and teacher?
- Does the candidate have any teaching or mentoring experience with young people?

Supplementing the Program's Full-time, Paid Staff

It is challenging to run all aspects of the construction component effectively with the limited staffing previously described—a construction staff often feels stretched to the limit by its multiple roles. Many programs supplement their construction staff by:

- Establishing relationships with expert volunteer advisors or mentors from the construction and real estate industry
- Reaching out to local businesses and organizations for volunteer training opportunities such as the Building Owners and Managers Association International (BOMA), community colleges, or businesses like The Home Depot that value employee engagement in local nonprofits
- Making use of consultants
- Collaborating with the staff of other local housing organizations

Perhaps even more importantly, the construction department can strengthen its effectiveness by working closely with other members of the program staff, drawing on their strengths to supplement the work of the construction staff. The knowledge and skills of counseling and teaching staff may be especially useful both in providing information about participants and in offering insights about methods to address various problems and create an integrated learning environment.

Staff Orientation and Training

While it should not be necessary to provide training for the construction staff on technical construction skills, a strong orientation and training for new construction staff concerning the YouthBuild program and their non-construction roles can have a powerful, long-term impact on the quality of a program. The Construction Trainers Orientation Handbook, which can be distributed during the new staff training, is in Appendix A. It offers helpful information for new construction staff on working with youth in a YouthBuild program.

A good orientation program might include the following components:

1. An overview of the YouthBuild program, staff structure, history, and philosophy
2. An in-depth look at the role of the construction staff in:
   - Preparing participants for career pathways
   - Teaching construction skills
   - Providing leadership development opportunities
   - Integrating construction training with the academic program

3. A discussion of the construction project to be undertaken
4. Information about program mechanics, including forms and schedules that will be used in running the construction component of the program
5. Case studies or problem-solving exercises of the types of problems likely to develop on the construction work site, including case studies related to safety and health in the residential construction business

A sample Construction Staff Training and Orientation Outline, in Appendix B, is a series of problem-solving exercises that can be used in the construction staff orientation and training.

Construction Staff Evaluation

Construction staff need and deserve feedback about their performance on the job from both supervisors and participants. Staff evaluations should be built into the program at the end of the probationary period and at least annually, as an opportunity for structured, objective feedback. A sample Construction Staff Evaluation Form is in Appendix B.

Chapter 3 Resources in Appendices

APPENDIX A

- Construction Trainers Orientation Handbook

APPENDIX B

- Construction Staff Evaluation Form
- Construction Staff Training and Orientation Outline
- Job Descriptions
- Problem-Solving Exercises

Chapter 4: Construction Issues in Participant Selection and Orientation

Participant Selection

A number of construction-related issues must be taken into consideration when selecting participants for the program. Many programs include members of the construction staff in the interview process to address these concerns. Others provide a "construction issues" briefing to the program manager, counselors, or others who are interviewing candidates for the program.

- **Realities of construction work:** Candidates must understand that they will generally be expected to work on a construction work site (except in instances when participants in a Construction Plus YouthBuild program go directly into a separate in-demand industry training for a field other than construction). What is necessary with any YouthBuild program training is the right attitude, not the experience level or physical stature of a candidate. Candidates should know that the work is dirty and hard and that it is subject to outdoor conditions and weather and should be asked what makes them prepared to take on this challenge. Some programs have applicants work on a small construction project for a day as part of the application or mental toughness process. Also, candidates should be informed that there are positive aspects of construction work such as learning new skills and growing strong physically and mentally. Using one's hands, learning how to use tools, and creating a tangible product are empowering experiences.
- **Health issues:** It is crucial that potential health problems are addressed with candidates, especially concerns about asthma, heart problems, or other medical conditions that may be incompatible with construction. A medical release must be obtained from a doctor for anyone with potential health issues prior to a candidate's arrival on site. It is highly recommended for all final candidates to take a physical and receive an eye exam. This is because there are definitive requirements for medical exams in OSHA standards related to the use of respiratory protection and use of and/or exposure to hazardous chemicals. For pregnant women, it is important to note that dust, chemicals, or accidents at a construction work site could present a serious health risk to an unborn baby. These types of health risks can create complications for the program and therefore, accommodations might need to be made. It is, however, illegal to exclude women from construction jobs because of pregnancy. It is essential that female candidates are aware of their rights and protections.

- **Drug and alcohol issues:** There must be nobody under the influence on the work site—period. Candidates with substance abuse problems are clearly a hazard to themselves and others on the site. Programs should have a written drug policy, and candidates should be informed of that policy. While it is difficult to do, programs should include questions that attempt to identify candidates with substance abuse problems. Some programs require random drug tests as part of the application or orientation process. If the program decides to do this, participants must be informed during the interview process, verbally and in writing, that they will be subjected to random drug testing. Since drug tests will not identify alcohol problems, participants should be warned during their interviews that the effects of uncontrolled use of alcohol are a safety risk and will cause a participant to be terminated from the program if discovered.
- **Age issues:** Young adults 16-17 years old may work in the construction industry, or on construction sites, but in limited capacities. DOL's Employment Standards Administration's Wage and Hour Division oversees the Fair Labor Standards Act's (FLSA) child labor provisions, which specify the hours young workers can work, the jobs they may perform, and the jobs that are designated as being too hazardous for them to perform. YouthBuild Grantees must comply with applicable Federal and State health and safety standards related to the working conditions under WIOA-funded projects and programs. These health and safety standards include ‘‘hazardous orders’’ governing child labor at 29 CFR part 570.

  In addition, many state and federal laws require people to be a certain age in order to operate power equipment on a construction work site. The program will need to establish its age requirements with this consideration in mind. Some programs require participants to meet the state’s age requirements. Others make accommodations in the work assignments for participants under age. Participants should be certified on tools prior to use; this protects participants and the program.
- **Learn more by going to DOL’s YouthRules!** (www.youthrules.gov/index.htm).YouthRules! is an initiative to promote positive and safe work experiences for teens by distributing information about young workers to youth, parents, employers and educators. The initiative includes a website, printed materials, outreach events, training seminars and partnering activities.
- **Women in construction:** Because women have often not been encouraged to consider construction as a field of employment, many programs actively recruit women to consider joining YouthBuild. In fact, in areas of the country with affirmative action policies for construction contracts, women are often in demand as construction workers. Interviewers should be very explicit about expectations and conditions on a work site while encouraging women to explore this career option.

VOICES FROM THE FIELD

On Selecting and Preparing Participants for the Program

“You can’t reach everyone. You have to try with everyone, but ultimately you have to accept that not everyone will make it.”

“Attendance gets worse in the cold weather. We have to prep participants ahead of time to prepare them for that.”

“If you realize that someone isn’t working out, deal with the situation quickly so that the whole program doesn’t end up getting messed up.”

Mental Toughness Orientation

The program should include a construction component for the overall orientation of new participants during Mental Toughness. The following are some ideas for workshops based on what other sites have included in their orientation:

- **Team work:** Some programs include a simple hands-on project involving teamwork in their orientation program. This may be a simple community service project, or a game with building blocks, or it may be a city-wide treasure hunt in which participants have to go to City Hall and the building inspector's office to research the history of the land or the building they will be working on.
- **Construction safety:** It is never too early to begin emphasizing construction safety. Some orientation programs include simple hands-on safety training activities such as climbing ladders or lifting plywood. This is a good time to conduct a tool orientation and introduction as well. The training program should be focused on the hazards specific to the type of work that they will be doing and include demonstrations as well as information about the importance of a Job Safety Analysis, which is a procedure which helps integrate accepted safety and health principles into a particular task or job operation.
- **The construction work site:** Programs may include an introduction to the YouthBuild construction project as part of their Mental Toughness orientation program. This could include a site visit or showing pictures or slides of the site. It might include a brief talk by the project's developer on the purpose and the plans for the project, the sources of financing, and information on who will live there upon completion. It might include a brief talk by a representative from the neighborhood on the importance of the project to the surrounding community. Participants cannot perform work on the site until safety training has been completed.

  It is helpful to visit a recently completed construction project or another construction work site; by visiting projects in different stages of construction, it is possible to visibly demonstrate that progress can be made.
- **Practical issues:** Mental Toughness is a good time to introduce some practical information regarding the construction component of the program. Orientation may include an introduction to the work schedule and to the construction rules, as well as key information about transportation, expectations, and requirements for proper dress on the site.
- **Interaction with residents:** Some programs include a discussion about expectations regarding interaction with residents and other passersby while working on the construction site. Include in that discussion the idea of representing the program through appropriate behavior. Participants must be informed that while they are representing the program, they need to also have respect for and an understanding of the community's role in supporting the program.
- **Distribution of participant tool belts:** Many YouthBuild programs end their orientation with a ceremony presenting participants with their tool belts, hardhats, and required safety equipment such as safety glasses, ear protection, and dust masks as a way of recognizing participant commitment in entering the YouthBuild program.

Programs should review TEGL 14-09, Mental Toughness/Orientation Allowable Costs in a YouthBuild Program in Appendix B, to ensure that grant funds are not being spent on unallowable costs prior to participant enrollment. Programs may need to use leveraged funding for the mental toughness component, depending on the planned activities and costs.

Part II:
Organizing the Construction Component

Even once the construction project and partner have been identified and the construction staff hired, there is still substantial work remaining to organize the project before the program begins. This work includes organizing the construction process itself as well as developing a training program that is integrated with the academic and vocational education components. This part of the handbook describes the tasks in organizing the construction component.

Chapter 5: Organizing the Work Site

The items listed below must be in place to ensure that the YouthBuild construction work site is ready to open for participants. Each one of these items is discussed in this chapter. Depending on the construction role selected for the program, not all of these items may be YouthBuild's responsibility, but all of them must be completed or construction site work cannot begin. The Youthbuild Construction Work Site Checklist covers these items and is in Appendix B.

Following are several forms that can help with many of the items individually.

1. Scope of work/plans/specifications
2. Materials list
3. Budget
4. Timeline
5. Purchasing procedures
6. Materials delivery plan
7. Tools and equipment
8. Permits and insurance
9. Work site access in writing
10. Written Safety plan
11. Security
12. Subcontractors
13. Transportation
14. Communication Policies and Procedures
15. Reporting
16. Construction competency checklist and participant evaluation forms
17. Case management plans
18. Backup plans

1. Scope of Work/Plans/Specifications

DOL's Work Site Description Form 9143 contains information about the scope of work, plans, and specifications that must be completed accurately and submitted to DOL as part of the DOL YouthBuild grant application. Construction staff should have read the approved DOL Work Site Description form (ETA-9143) and have a complete description of the scope of work that YouthBuild will be expected to perform based on the construction role selected.

The scope of work may include a written description of the work to be performed as well as architect's plans and specifications. Specifications describe the quality of the work and the materials required, as well as the "means and methods" for completing the work. All projects should have written specifications, even if architectural plans are provided.

Some YouthBuild sites have mistakenly begun work without a written scope of work and specifications. Inevitably, this has caused misunderstandings and conflicts between the YouthBuild program and the general contractor or developer.

2. Materials List

Based on the scope of work and specifications, a list should be developed of all the materials that will be needed for the job, including program tools, participant tools, uniforms and personal protective equipment, and another list of all the materials and supplies that will be needed for training purposes, whether that training occurs on the work site or in a vocational space such as a training lab. This will serve as a foundation for the budget.

VOICES FROM THE FIELD

On Running the Work Site

"Run the construction site as if it were a regular job site; make and stick to a schedule, conduct safety meetings, and so on."

"Every minute has to be treated like a job site. You have to be ready to move on time first thing in the morning, every morning, with no idle time."

"The participants have to be acclimated to a real work lifestyle. The routine has to be regimented. The only way the participants will understand how to prepare for their future jobs is if it is run as if it were a real construction site."

3. Budget

Depending on the construction role selected, the construction staff may have to help the YouthBuild organization prepare a budget to finalize agreements with the developer or general contractor. The Housing Construction Budget for a One-Unit YouthBuild Project contains a timeline showing the cost of a gut rehab of a one-unit project with a YouthBuild organization functioning as a general contractor. The budget and budget format will vary depending on the role.

Many successful programs have established relationships with local businesses to subsidize tools, gear, and other construction materials. There are some additional issues to consider when assembling a YouthBuild project budget:

Materials

DOL defines those materials costs that are allowed to be covered by DOL YouthBuild grant funds in TEGL 05-10 Match and Allowable Construction and Other Capital Asset Costs for the YouthBuild Program, located in Appendix B.

Depending on the quality of the program's training and supervision, materials costs can be similar to a normal construction job, or there can be a tremendous amount of waste and loss of tools and materials. On the first few projects, it is wise to estimate conservatively to protect against unnecessary surprises later on, anticipating a minimum of 10-20 percent extra for materials and tools wasted, stolen, or ruined.

Labor

YouthBuild's true labor costs bear no relationship to the normal labor costs that a subcontractor would incur, since the work is being done by unskilled participants and construction trainers instead of skilled craftsmen. Since all the true labor costs (participant stipends, construction trainers' salaries, and workers compensation) may be paid by the DOL YouthBuild grant, it would be inappropriate to include the full cost of labor in a budget agreement with a general contractor or developer. Moreover, if the true costs of participant stipends and construction trainers are included in the budget, they are likely to be higher than the normal construction costs because they include the cost of training as well as construction labor.

The process of deciding who will benefit from the participant labor and therefore how to handle this in a budget when the YouthBuild program is a subcontractor or general contractor, is a negotiated process between the YouthBuild program and the developer or general contractor. Some programs budget their work to obtain a portion of their construction staff salaries from the construction contract, with participant stipends and the remainder of salaries coming from the DOL grant. Other programs develop their budgets based on what it would cost for a professional subcontractor to do the work with a small number of skilled craftsmen and then reduce this figure by a negotiated amount to account for the contributed value of participant labor.

In negotiating with a developer or general contractor about who will benefit from participant labor, it is important to keep in mind that it does take a YouthBuild program longer to complete most work than it would take a crew of skilled craftsmen. The general rule of thumb is twice as long, but projects have been known to take even longer if unforeseen problems arise. The developer or general contractor will probably be concerned about the extra time it will take and the extra "carrying costs" that will be incurred because the job will take longer to complete. Typical carrying costs may include: extra interest on an extended bank loan; extra insurance coverage, taxes and utilities for extra months of construction; extra project management staff time for running the job longer; and extra security costs if a watchman is on the site.

The program may want to ask the developer to identify the extra carrying costs associated with working with a YouthBuild project and cover these extra costs with some donated participant labor.

Contingency

Always be sure to put a contingency of at least ten percent on any project. If labor costs have not been included in the budget, include a higher contingency in case more work must be subcontracted than anticipated.

4. Timeline

A timeline should be created that includes the start date and finish date for each activity in the construction process, noting which activities can be done simultaneously and which activities can't start until another activity is completed.

A timeline can be a critical tool for ensuring that the participants stay working at all times and for meeting construction deadlines. It will help in identifying times when backup projects for the participants will be needed. If the program is a subcontractor, the timeline should be created in conjunction with the general contractor, so that effective planning is possible.

Materials requiring a long lead time should be identified on the timeline so that they can be ordered on time. These may include custom-made items, materials shipped from far away, materials not readily available, or large shipments. Often this includes such items as doors, windows, cabinets, elevators, boilers, burners, and tile.

Permits should be included on the timeline, so that they are secured enough in advance to start the project on schedule.

The timeline will also be helpful in coordinating construction activities with academic projects and vocational education. By seeing the phasing of the construction process, teachers can consider how to include information in the classroom that is relevant to the different stages of learning on the construction work site. Conversely, construction trainers can reinforce on the work site what the participants are learning in the classroom.

See the timeline template in Appendix B, Housing Construction Budget for a One-Unit Project.

5. Purchasing Procedures

Most organizations that have not had previous housing experience do not have purchasing systems designed to accommodate the volume, speed, or time sensitivity with which materials must be obtained for the construction work site. YouthBuild programs often run into problems if their parent organization hasn't been frequently involved with purchasing large volumes of material for large sums of money. The organization will need a purchasing procedure that is appropriate for a construction program, while including the appropriate checks and balances. Generally, this involves:

- Securing credit at several key suppliers—this process often takes several weeks to set up
- An internal purchase order and approval system
- A system for tracking expenses against budget
- A billing procedure to ensure that income is received on schedule
- Working capital and a realistic money management system to manage cash flow, allowing for flexibility in cutting checks, and to provide adequate communication with vendors and contractors—this may require a line of credit
- An "emergency" procedure for securing funds either through petty cash or quick check writing on a limited basis

See the Bookkeeping, Purchasing, and Contracting Procedures included in Appendix B.

6. Materials Delivery Plan

YouthBuild programs need to plan ahead regarding materials delivery. Effective programs must have enough materials available to keep all the participants working; however, due to the risk of theft or spoilage, storing a large amount of material on site should be avoided. Arrangements can be negotiated with vendors for frequent, small deliveries. The construction manager should assign a foreman, senior construction trainer, or someone on the site to be responsible for inventory and to anticipate when deliveries will be needed. Some YouthBuild programs rotate this responsibility among participants as a leadership training opportunity; participants for this opportunity can be selected based on their readiness for increased leadership responsibility.

7. Tools and Equipment

There are four issues to consider regarding tools and equipment:

1. Tool kits for participants
2. Program tools and equipment
3. Tool and equipment storage
4. Tool and equipment inventory

Tool Kits for Participants

All participants should be provided with a basic set of hand tools and safety equipment for their personal use. OSHA can provide more information on the list of safety equipment that is required to be provided for a specific job, but purchasers should note that safety glasses, full body harnesses and vests come in a variety of sizes and there is no one size fits all. All participant tools and safety equipment need to be purchased, delivered, and given to participants before the construction work starts.

Participants should be held responsible for their personal tools and safety equipment, just as they would be on any construction job. They can be provided with a safe place to store their tools overnight and on weekends or trusted to take their tools home with them at the end of the day. However, participants should be held accountable for any tools that they lose or damage through neglect. Many sites have a policy requiring participants to replace lost or damaged personal tools by deducting replacement costs from their paycheck.

Many YouthBuild sites have a policy under which the tool belt is presented to the participants at the end of Mental Toughness. If the participant drops out of the program midyear, the tool kit must be returned to the YouthBuild program. If the participant completes the program, he or she is allowed to keep the tools and the personal safety equipment, taking them along to his or her job placement.

Program Tools and Equipment

In addition to tools for the participants, the program will need to purchase and maintain its own inventory of tools.

Tools and equipment should be chosen with an eye to economy, safety and durability. Inferior or low-cost tools designed for household use are not suitable for heavy duty construction. Construction participants do not need top-of-the-line equipment; however, they do need equipment that will survive the wear and tear of the project. They do need excellent safety materials, however, or they may feel devalued. Cheap goggles and dust masks cause resentment.

It is wise not to skimp on equipment by devising makeshift methods for performing a job. Doing so compromises learning the proper use and care of conventional tools and may create safety hazards. When costs are prohibitive, equipment needed for only a short-term job can be rented.

While it is important to introduce newer, more mechanized industry tools and methods (especially to speed up the construction process), this should not be done at the expense of learning conventional methods and working with tools that are still widely used. For example, participants should not use a pneumatic nailer before learning the proper technique of hammering by hand.

Tool and Equipment Storage

The program should identify a safe place to store tools and equipment overnight. To protect against theft, many programs transport all tools and equipment to and from the site every day. Secure storage, equipment inventory systems, and personal accountability must be maintained to guard against theft. The best protection comes from engendering a sense of community responsibility for the program and its equipment, giving everyone involved with the YouthBuild project a stake in its success.

Tool and Equipment Inventory

Before the program starts, an inventory sheet of all tools and equipment should be created, with all equipment conspicuously labeled with the YouthBuild name. Also important are a sign-out sheet for equipment and a staff person assigned to oversee the inventory process. A tool inventory monitor is a good opportunity for leadership development for participants.

The Tool Inventory Sheet can be used to keep track of tools and equipment on a daily basis and is included in Appendix B.

YouthBuild Program Tools and Equipment List

Mandatory equipment for participants includes:

Required safety equipment will depend on construction project activities. Reference OSHA CFR 1926 for more details.

- Safety glasses
- Work boots
- Job-specific breathing protection (dust mask and respirator)
- Job-specific personal protective equipment (PPE)
- A Personal Fall Protection system with a harness, anchor and connecting devices Hearing protection
- Job-specific hard hat

Participant tool kits often include:

- Work gloves
- 20 oz. rip claw hammer
- Metal snips
- Four-in-one screw driver
- Ear covers for under hardhat (if in a northern climate)
- Tool belt
- 25’ tape measure
- Retractable utility knife
- Speed square
- Chalk line
- Carpenter’s pencil
- Rain gear or coveralls

Suggested Tools and Equipment for a Typical Site with 15 Participants

Quantities will vary depending on program size and scope of work.

- Portable generator
- Multiple cordless drills
- One 1/2” drill
- Hammer drill
- First aid kit
- Tool lock box
- Wheelbarrows
- Crowbars and picks
- Framing squares
- Miscellaneous hand tools (such as chisels, trowels, and wrenches)
- Multiple flat bars
- Nail pullers
- Drywall T-square
- 7 1/4” circular saws
- Reciprocating saw
- Jig saw
- Compound miter saw
- Extension cords, including 3-way cords
- Fire extinguisher
- A variety of step ladder sizes (fiberglass)
- Shovels and brooms
- 2’, 4’, 6’ spirit levels
- Multiple sets of saw horses
- Extension ladder
- Keyhole saw
- Hand saw
- Drywall saw

8. Permits and Insurance

When YouthBuild programs are working with partner organizations, there is a tendency to rely on good will and trust, rather than documenting key items. For the protection of the program, the partners should be informed that the program needs a copy of all permits on file to ensure that the participants are not working on a site without a permit.

The program should also have copies of the insurance certificates (proof of insurance) for all parties with legal responsibility for the site (i.e., developer, general contractor). Partners should also ask YouthBuild for a copy of YouthBuild's insurance certificate. The following is a general summary of the types of insurance coverage usually found on a construction project:

Construction-Related Insurance

There are several types of construction-related insurance that will be required of various parties for the YouthBuild program to be protected appropriately. The importance of adequate protection from liability cannot be overemphasized, and it is advised that the YouthBuild director discuss appropriate insurance coverage with both the program's attorney and its insurance provider. The YouthBuild participants, program staff, subcontractors, and board of directors all must be adequately protected.

Property Insurance (also called Builder's and Owner's Risk Insurance)

This insurance is purchased by the building's owner or developer and is protection for the building and its contents in case of theft or damage.

Comprehensive General Liability Insurance

This insurance provides protection in case there is an injury to a visitor on the site or to a passerby (non-employee). Every entity that has a role in the construction process must have liability insurance (i.e., owner, developer, general contractor, and subcontractors). It is important to get the insurance binders of all relevant parties.

General liability insurance rates are based either on the square footage of the building or on the payroll; the program should ascertain that the program is only paying for YouthBuild's share.

Workers Compensation

This insurance is mandatory for all workers to protect them in the event that they are injured or incapacitated on the job. Charges are based on the payroll and rates are calculated for each employee based on the risk assigned to the job functions.

All staff members must be classified appropriately as the rates on construction workers are much higher than on construction supervisors, construction managers, or office workers. Construction trainers should be classified as supervisors, not as workers. Construction managers can often be classified as office workers if they spend most of their time in an office.

Participants must also be classified appropriately. YouthBuild programs need to pay workers compensation insurance on participant stipends. In most YouthBuild programs, participants are on the site half of the time and in the classroom the other half of the time. But in many states, insurance law requires the "employer," i.e., YouthBuild, to pay the highest rate on all of an employee's income. So, instead of paying a construction rate for half of the stipends (about 17 percent) and an office rate for the other half (less than one percent), the program may be required to pay the construction rate on the entire stipend. Some YouthBuild programs have successfully applied for a waiver to this policy and have saved their programs over $10,000 per year in workers compensation costs. In this case, the program's insurance broker should be consulted about filing an appeal.

Disability Insurance

Some states require disability insurance policies for all employees. Be sure to check state laws.

9. Access to the Site in Writing

If the YouthBuild program is not the owner of the work site, written documentation should be obtained of the date when YouthBuild will have access to the work site from the owner. This is required as part of the ETA-9143 work site form for approval of the work site. This documentation of access is important liability protection in case of an accident and avoids potential misunderstandings about when the program will be able to start working on the site.

10. Written Safety Plan

YouthBuild Grantees must comply with applicable Federal and State health and safety standards to the working conditions under WIOA-funded projects and programs. These health and safety standards include ''hazardous orders'' governing child labor at 29 CFR part 570.

YouthBuild grantees are required to:

- Provide comprehensive safety training for youth working on YouthBuild construction projects
- Have written, job site-specific safety plans overseen by an on-site supervisor with authority to enforce safety procedures
- Provide necessary personal protective equipment to youth working on YouthBuild projects
- Submit required injury incident reports

A written safety plan is mandatory for all DOL YouthBuild grantees. In many states, a written safety plan can be filed with the employer's group insurance plans to save the organization thousands of dollars in workers compensation insurance.

There are seven components based on new OSHA safety and health management guidelines (https://www.osha.gov/shpmguidelines/SHPM_guidelines.pdf). The elements are:

1. Management Leadership
2. Worker (Participant) Participation
3. Hazard Identification and Assessment
4. Hazard Prevention and Control
5. Education and Training
6. Program Evaluation and Improvement
7. Coordination and Communication on Multiemployer Work Sites

OSHA's On-site Consultation Program also offers free and confidential safety and health services. On-site Consultation services are separate from enforcement and do not result in penalties or citations. Consultants from state agencies or universities work with employers to identify workplace hazards, provide advice on compliance with OSHA standards, and help establish and improve their safety and health programs. To locate the OSHA On-site Consultation Program nearest you, call 1-800-321-6742 (OSHA) or visit: www.osha.gov/ dcsp/smallbusiness/consult.html.

Participant Training in Safe Construction Techniques

The best way to teach participants safe construction techniques is through hands-on demonstration and practice. This can be done in Mental Toughness, as part of morning meeting demonstrations, or in vocational education classes. Creating a schedule will ensure that participants receive safety instruction in each of the following areas:

- Hazard analysis (identifying hazards)
- Work site hazards (such as environmental, chemical, and fire hazards)
- Elevated work and fall prevention (such as climbing ladders and scaffolding)
- Being struck by and caught between hazards (such as flying objects)
- Using personal protection equipment (PPE)
- Using hand and power tools
- Material handling (lifting, stacking, transporting and unloading)
- Energy release hazards (such as working around electricity and pressurized systems)
- Accident prevention
- CPR and first aid

Construction Work Site Safety

All DOL YouthBuild Grantees are required to comply with NIOSH and OSHA safety standards. All DOL YouthBuild participants are required to complete a comprehensive safety training. It is strongly recommended that participants attend the OSHA 10-hour safety training. At the end of the training, participants receive a certificate stating that they are OSHA-certified. This is a valuable certification to include on a résumé when looking for construction jobs. If OSHA training is not possible, then the safety modules in the industry-recognized credential curriculum being used on site are required at a minimum.

If one of the program's staff members is, or becomes, an OSHA-authorized instructor, OSHA training can be provided for free in-house. This way, the authorized instructor can break up the 10-hour training into smaller sessions as long as the entire ten hours is delivered within the appropriate timeframe. In addition to the OSHA 10-hour training, an OSHA-authorized instructor can deliver the OSHA 30-hour training to participants who have expressed an interest in pursuing employment in construction.

Having an OSHA-authorized instructor on staff gives the program more flexibility in terms of its training timeline and offers the opportunity for that instructor to perform training for community partners in exchange for a fee or other service. For example, several programs arrange for their OSHA-authorized instructor to train partners with the understanding that, in return, that partner will hire YouthBuild graduates.

All participants and construction staff should be provided with a list of construction site rules, which should be posted around the site. Some programs have participants make posters illustrating each of the rules to post around the site. A copy of Construction Work Site Safety Rules is in Appendix B.

Some programs also provide certificate programs in first aid or CPR as part of their Mental Toughness orientation. The American Red Cross can help provide this type of training and will often come to the program for a modest fee.

VOICES FROM THE FIELD

On Safety

"Keep the site clean. A clean site is a safe site. We stop 20 to 30 minutes early every day to do cleanup."

"It's important to conduct safety meetings—you can do them during breaks without making a big deal about them. We have them every Wednesday during break."

"Everyone should be encouraged to get OSHA Safety Training. It's good training and our participants really enjoyed it."

Safety Monitoring

At least one member of the construction staff should be assigned to conduct regular safety inspections and provide reports to the construction manager, as well as submit necessary injury reports to DOL. Many sites include participants in addition to staff as safety monitors as a leadership development practice. A sample YouthBuild Safety Program, available in Appendix B, describes roles for both staff and participants in monitoring site safety.

Accident Policies and Procedures

The YouthBuild program needs to be familiar with OSHA's accident policies and procedures that explain how to handle an injury or illness on the work site. It also needs to know the process of reviewing accidents to identify safety hazards that may need attention on the work site and the process for reporting accidents to the appropriate authorities and to the workers compensation board, if necessary.

If an accident or incident occurs, DOL YouthBuild grantees are responsible for submitting to DOL a copy of OSHA's Log of Work-Related Injuries and Illnesses (Form 300), which can be downloaded at www.osha.gov/recordkeeping/RKforms.html and is also described in Appendix B.

Accident Procedures on a YouthBuild Construction Site is available in Appendix B.

11. Security

If security is needed on the work site, it must be arranged in advance. Security options include:

- Sealing the building
- Building a shed or using a shipping container for storage (with theft protection)
- Making an arrangement with neighbors
- Hiring a security guard

12. Subcontractors

If the program is operating as construction manager or general contractor, the program is responsible for identifying and hiring subcontractors. All subcontractors should be lined up and under contract prior to beginning the job. This is the only way to ensure that the budget is accurate and that subcontractors will be available when needed and will not delay the construction schedule.

13. Transportation

Some YouthBuild programs have participants report directly to the construction site. Others provide transportation to the construction site from the classroom or administrative office location. Some programs transport participants from the site back to the main office for counseling sessions, while other programs have counselors come to the site. If participants are allowed to drive themselves to the construction site or to any other location during program hours, it's important to know whether or not they are covered by the program's liability coverage while driving. Some programs arrange their overall schedule to minimize transportation issues. The program will need to make transportation decisions based on the conditions in the community and the structure of the program. It is necessary to make sure that a transportation plan is in place before the program begins.

Many programs find that a construction vehicle is essential for transporting materials, tools, and equipment to and from the site. Construction vehicles can be leased, purchased, or donated. If the program has a construction vehicle, arrangements need to be made for overnight parking, and the program needs to be aware of safety concerns with larger model passenger vans to ensure they are in compliance with safety rules for youth.

If the program does own or lease a vehicle for transportation, it will also need to have a plan in place for its maintenance, mileage tracking, fuel purchasing, and other considerations that may affect the program's budget and administrative and fiscal procedures.

14. Communication Policies and Procedures

The YouthBuild program will need to decide if it will provide work site staff with cell phones or other handheld communication devices, such as two-way radios (walkie talkies) and if these require any special practices, procedures, or policies. The program will also need a policy for participant use of communication devices during program hours on the work site and in the training lab, regardless of how such devices are supplied.

15. Reporting

The YouthBuild program should set clear expectations on reporting procedures for construction staff. Are daily reports required? Who is expected to write and submit them? Who receives and reviews them? What are they used for, by whom, and where are they filed? How will the work site reports include information about safety training, accidents, illnesses and injuries as required?

16. Construction Competency Checklist and Participant Evaluation Forms

As is discussed more thoroughly in the next chapter, the program should identify a list of construction skills or competencies that all participants will learn during their time in the program. These skills may be taught on the work site or in vocational education labs or both.

The program's construction competency checklist should be developed before the program begins operation and should be shared with all construction trainers as part of their orientation. Construction trainers, along with the vocational education instructor, should be responsible for periodically assessing participants' skills through observation and verbal quizzes, which may be contained in the construction curriculum. Trainers must document the skills attained on a checklist for each participant.

For more information, see the next chapter, "What Are Participants Expected To Learn?"

16. Case Management Plans

The program should have a clear system in place for construction staff to know their responsibilities related to case management. This includes instructions on documentation practices, how to work with case managers, and what they are expected to provide to case managers in terms of both data and case notes.

17. Backup Plans

At various times throughout the year, the construction component may be facing down time on the construction site due to bad weather, delays in the schedule, or other unexpected (or expected) circumstances. Backup plans should be identified in advance to provide other training and learning opportunities when these delays occur. YouthBuild should also make sure that the down time does not affect matching funds to the grant.

YouthBuild sites tend to rely on three different types of activities to make the best use of this down time:

Backup projects

Backup projects are generally community service projects with a construction emphasis. The projects can be simple (e.g. painting a community center room) or complex (e.g. repairing a porch of a library, building a handicapped access ramp for a senior citizens' group, or building playground equipment for an afterschool program). Usually, the community organization provides the materials and YouthBuild provides the labor. These projects should be identified and planned in advance, and put on hold until it is necessary to use them.

It is important to remember that, per WIOA, no more than 15 percent of the DOL YouthBuild grant funds can be used to support construction projects in community and public use buildings.

VOICES FROM THE FIELD

On Planning for Problems

"Creating a successful program requires a lot of work. You have to plan ahead."

"Delays and changes in schedules cause a lot of frustration. You have to have a backup plan."

"You can't just set things up one way and expect to stick with it for the entire time, given things like weather, job conditions and scheduling. Make Plan A, but also Plan B, C, D, E and F."

Vocational education projects

Some programs that have the space use down time to build items that can be used by the program, such as saw horses, tool boxes, and bookshelves. Some use the time to reinforce learning in areas such as reading architectural plans and specifications.

Field visits

Down time can be used to take field trips to major construction sites, architects' offices, developers' offices or to a union apprenticeship training center to learn about different careers within the construction industry. If the program develops strong relationships with people in the industry in advance, it may be possible to arrange one of these field trips at the last minute. Field trips should be structured as intentional learning opportunities with intentional takeaways.

Chapter 5 Resources in Appendix

APPENDIX B

- Accident Procedures on a YouthBuild Construction Site
- OSHA's Log of Work-Related Injuries and Illnesses (Form 300)
- Bookkeeping, Purchasing, and Contracting Procedures
- YouthBuild Construction Work Site Checklist
- Construction Work Site Safety Rules
- Housing Construction Budget for a One-Unit YouthBuild Project
- Tool Inventory Sheet
- YouthBuild Daily Construction Training Report
- YouthBuild Safety Program

Chapter 6: What Are Participants Expected to Learn?

Overview

The depth of participant learning on the construction site depends greatly on the philosophy and attitude of the construction manager and on the level of attention paid to participant learning.

On the construction site, participants have the opportunity to learn four different types of skills, all of which are critical to their ability to succeed after they leave the YouthBuild program. In order to teach these skills on the construction site, the construction staff and other program staff should identify what participants are expected to learn before the construction process starts. The staff should then plan how those skills will be taught on the construction site and how they will be implemented in the classroom. The four different types of skills are:

1	2	3	4
Work readiness skills	Leadership skills	Construction skills (competencies)	Applied academic skills

1. Work Readiness Skills

Many YouthBuild participants have never had a job or have not been able to keep a job for very long. The construction site provides an opportunity for participants to learn the skills it takes to keep a job and to be successful in a work environment. A key part of the construction staff 's role is to teach participants positive work habits including:

- Attendance and punctuality
- Preparedness (coming to work in proper dress, with tools, awake, sober, and ready to work)
- Understanding of and respect for safety requirements and work rules
- Accepting supervision and following directions
- Taking initiative and asking questions when necessary
- Learning to complete assigned tasks
- Cooperating with co-workers and treating co-workers with respect
- Resolving conflicts constructively
- Using the proper trade vocabulary

The construction department's role is to help participants change their habits so that they are able to keep a job and perform successfully. Three keys to teaching work readiness skills include:

- Running the work site professionally
- Setting clear expectations for participant behavior and basic work performance
- Being prepared for behavior problems and planning strategies to address them

VOICES FROM THE FIELD

On Preparing Participants for a Job

"Have your main emphasis on basic work skills, not just on carpentry. This enables the graduates to have a better chance at succeeding on a job."

"It is important to understand that not all participants will want to or will go into the construction trades. We need to deal with those who will and those who won't."

"Bad language, poor work habits and being unprepared on the site are all likely to be problems that you have to deal with."

"Be fair but firm. You have to be consistent and stick with the rules you've made—no exceptions. If you say that we start at 7:30 a.m. and someone shows up at 7:45 a.m., they have to know that it is not acceptable."

"We had each participant sign a participant contract and terminated a lot of participants at the beginning, based on that signed contract."

Running the Work Site Professionally

In order to effectively teach work readiness skills, the construction site must be run in a professional manner. Staff should set the tone by setting an example - showing up early, being organized, and having all the needed materials ready in advance. Keeping a consistent schedule is important to student success.

Setting Expectations Consistent with Expectations on a "Real Job"

The program should set clear and consistent standards. Comprehensive policies and procedures let participants know what an employer would expect on a job in terms of attendance, promptness, and motivation. It must be made clear that the staff will hold participants to those standards.

Being Prepared for Behavior Problems and Planning Strategies to Address Them

If participants could all perform appropriately on a job from the start, some of them might not need to be in YouthBuild. Excuses are to be expected, and the staff should be ready to teach, coach, and discipline participants so that they learn work readiness skills. It is important to establish a strong working relationship with the counseling department and a plan for dealing with work performance problems. The construction and counseling staff should agree on expected participant behavior and communicate a consistent message clearly to the participants about work site standards. Often this is done in the form of a participant contract. It must be decided how the construction staff will communicate problems to the counseling staff (in writing, at weekly meetings about participants, or in other ways) and how the counseling staff will communicate to the construction staff about any actions taken to address the problem.

If the program has a participant contract with consequences for absences, lateness and other behavior, this contract should be given out to the construction staff. Along with the contract, many programs have an infraction sheet that construction staff can fill out to document contract violations on the work site. A copy of this infraction sheet should be turned in to the program manager or counselor, as designated, for appropriate action. The YouthBuild Infraction Sheet is located in Appendix B.

2. Leadership Development on the Work Site

One important part of the YouthBuild program is teaching young people to develop their leadership skills and take responsibility for themselves and their community. In fact, at YouthBuild, leadership is defined as “taking responsibility to make sure things go right for your life, for your family, for the program and for the community.” Through leadership development, participants begin to see how they can affect the world around them. Instead of seeing themselves as victims, they begin to see themselves as people who can shape society. They begin to take themselves more seriously.

Leadership development should take place in every part of the program, including on the construction site. The construction site provides tremendous opportunities to teach participants to take responsibility for themselves, those around them, and the project as a whole. This means giving participants opportunities to take responsibility and not just directions.

Part of the construction manager’s role is to see that participants have opportunities to develop their leadership skills on the construction site. A leadership development plan for all components of the YouthBuild program should be developed by the entire staff at the very beginning of the program. This will identify leadership development opportunities for the construction site.

Examples of leadership development activities for the construction site can be found in Chapter 10: Site Activities.

VOICES FROM THE FIELD

On Leadership Development

"Giving real roles and responsibilities gives the participants ownership over the project."

"The more the youth feel a part of it, the more they get out of it. Have them involved in planning, in taking leadership roles in the different phases. Give them practical opportunities to use what they are learning."

"What works well for us is having specific youth leadership roles such as:

- *Crew chiefs (who do daily recordkeeping)*
- *A steward (who sets break times, calls clean-up times, maintains the cooler and does store runs)*
- *A safety coordinator (who maintains the first aid kit, prepares for safety meetings and sometimes runs the safety meetings)*
- *A photographer (who documents the work in progress), and a tool manager."*

3. Construction Skills

The construction site provides an opportunity to teach real construction skills that will be valuable on a construction job. Part of the construction manager's role is to decide which skills are important to teach the participants and to make sure that the participants are actually learning the skills rather than just going through the motions.

The YouthBuild program should develop a list of construction skills (also known as competencies) that participants are expected to learn. This may include certain vocabulary, proper tool use, and construction methods. These competencies should be included in all of the curricula supported by DOL and YouthBuild USA as well as in other industry-recognized curricula. Many programs develop a construction competency checklist for each participant, so that the construction trainers or the vocational education teacher can check off when a participant can demonstrate a certain skill. A Construction Skills Competency Checklist is included in Appendix B. The Biweekly Participant Performance Evaluation and Biweekly Performance Self-Evaluation, to be completed by instructors and a self-evaluation to be completed by participants, is included in Appendix B.

In general, the construction competencies should include skills in each of the following areas:

- Work site safety and first aid
- Safe and skilled use of hand and power tools
- Specific trade skills, knowledge and abilities within at least two modules and skill areas (e.g. green building, carpentry, electrical, plumbing, masonry, landscaping, painting & finishing, facilities maintenance, weatherization)
- Material and tool identification
- Construction terminology and vocabulary
- Construction math
- Blueprint reading
- Cost estimating

Broader construction trade sensibilities include:

- Logical sequencing of work
- Acceptable standards of work quality
- Understanding of basic structural and mechanical systems
- Employability and career pathways

Transferable competencies can include:

- Leadership
- Attitude
- Effort
- Work ethic (hard work)
- Punctuality
- Communication skills
- Teamwork

VOICES FROM THE FIELD

On Teaching Construction Skills

"On site, participants are really learning how to do things and are gaining marketable skills."

"Hands-on learning in the field is the most exciting for the youth. When we first began the program, I went out and bought 20 copies of Modern Carpentry and the corresponding workbooks, attempting to do a lot of teaching classroom style. This was not successful. Participants were bored within a week and it turned out to be much more productive to do the majority of teaching on site."

"Be sure to include specific training for trades and jobs that are going to be available; for those trades, the training must include the math involved, the terminology, and the methods."

"Youth must receive training in plan reading. If you are not teaching how to read plans, you're not giving a solid foundation and a potential for upward mobility in the construction trades."

4. Applied Academic Skills and the Construction Site

Participants gain the most out of YouthBuild if their experience on the construction work site is linked to their experience in the classroom. The closer the coordination between the construction staff and the teaching staff, the stronger the overall program will be.

Many YouthBuild participants learn best in a hands-on situation. When participants use math or reading or writing skills on the construction site, they usually learn more and learn faster. When a participant measures a board or uses fractions to cut a 2'x 4', he or she is applying classroom (academic) skills in the work world.

Construction trainers and classroom teachers need to communicate and work together towards intentional integration of classroom and construction site skills so that the participants get the most out of both the work site and the classroom. Math that participants learn in the classroom can be taught in a way that helps them on the construction site, especially as math is an ongoing challenge for participants to learn. The construction staff can then reinforce the math skills through activities on the site. This coordination requires planning among members of the staff.

In some YouthBuild programs, even the reading and writing activities in the classroom are coordinated with the construction site. Writing and construction skills can be linked by having participants keep daily journals of their activities and the skills they are learning on the work site. Reading skills can be reinforced by asking participants to read and follow directions for mixing cement, installation instructions or looking up information in supply catalogs or other activities. For more ideas on linking construction site activity with academic learning, see Chapter Seven: Vocational Education.

VOICES FROM THE FIELD

On Linking Construction and Academics

"Everything you teach needs to be relevant."

"Wherever possible, integrate the work experience with the classroom experience. When it works, they feed off each other."

"The need for teaching basic math was much heavier than expected. We had to backtrack—even for those who were supposedly at high school level—to teach basic math skills."

"Constantly relate the math to actual construction."

Chapter 6 Resources in Appendix

APPENDIX B

- Biweekly Participant Performance Evaluation and Biweekly Performance Self-Evaluation
- Construction Skills Competency Checklist
- YouthBuild Infraction Sheet

Chapter 7: Vocational Education

Overview

Vocational education is an integral and necessary part of the training that should be offered by a YouthBuild program. As the classroom side of the construction site, the vocational education class provides the format where the fundamentals of construction and theory of design are introduced and taught to the participants. Vocational education may take place on the work site, in a construction lab, or in other training space. It may even be delivered on site with training partners at community colleges, trade unions, and through other sources of learning.

The subject areas covered can include safety awareness and hazard analysis, tool use, measurement, material identification and application, introduction to green building, introduction to other trades, blueprint reading, drafting, and in some cases, historic restoration. While the basic goal of vocational education is to provide participants with the information and training they need in order to be safe, successful, and productive at the work site, a vocational education class can also serve as the bridge that connects and integrates the academic, classroom environment with the hands-on construction work site.

Vocational education is also a necessary part of career development and placement, including preparation for post-secondary education and apprenticeships.

Provision of Instruction

The manner in which vocational education will be provided is dependent on the resources available to the YouthBuild program. Usually it will be provided in one of following ways:

- A contracted training program from a vocational technical school
- A vocational education teacher as a member of the YouthBuild staff
- A construction trainer on the YouthBuild staff who will serve as a vocational education teacher

There are advantages and disadvantages to each of these arrangements that each YouthBuild program must weigh. The table on the following page outlines some of the major advantages and disadvantages of each means of instruction.

Regardless of which arrangement is selected, a skilled vocational instructor will be required (see Chapter Three: Hiring and Training Construction Staff). A job description for a vocational education instructor is included with other staff job descriptions in the Job Descriptions document in Appendix B. This job description can also be used to evaluate the skills of an instructor assigned by a vocational technical school.

Type of Construction Classroom Instruction	Advantages	Disadvantages
Vocational Technical School	• Fully equipped classroom and woodshop space available and provided by others • Certified instructors and pre-existing curriculum, does not have to be created • YouthBuild participants should be able to receive "credits for classes taken	• Classroom not readily available • Timing of classes may cause scheduling issues with the rest of the YouthBuild program • "Outside" instructors may have difficulty responding to some of the participants' issues
YouthBuild Vocational Education Instructor	• Scheduling classes can be coordinated with other program activities • Curriculum can directly address program requirements • Content and methods of instruction can be integrated with and enforced by other program components	• May require additional classroom and woodshop space • Requires an additional staff person with specific training
Construction Trainer/ Vocational Education Instructor	• Understands what the participants need to know to be successful on the work site • Established rapport with participants and program objectives • Scheduling of classes can be coordinated with other program activities • Content and methods of instruction can be integrated with and reinforced by other program components	• Requires skills to create and implement a curriculum that trainers may not have • Time spent in vocational class may conflict with trainer's time on work site • May require additional classroom and woodshop space

Scheduling

Many YouthBuild programs have a weekly vocational education class as part of the regular classroom schedule, while others have a more concentrated approach at the beginning of the program year. While it is important for the participants to have enough information before they go to the work site, it is equally important that the lessons they are exposed to have a context base. When the vocational curriculum is coordinated with the work that the participants will be doing in the near future, the participants can apply and reinforce what they have just learned. This is easier to accomplish when the vocational education class is held on a regular basis throughout the program cycle.

Objectives

Regardless of the format or scheduling of instruction, some of the specific objectives that the YouthBuild participants should achieve in a vocational education class include:

- Recognizing potential work site hazards and appropriate responses to injuries in accordance with OSHA and Red Cross training standards
- Demonstrating competencies in two or more modules within two or more skill areas to meet the requirement for participants to have substantial hands-on experience
- Some examples well suited to the training space include:
  - Green building theory and practice
  - Drywall installation and painting
  - The use and maintenance of hand and power tools that are common to carpentry and light construction, in compliance with manufacturer's specifications
  - Selecting appropriate sizes and types of lumber, fastenings, and other materials necessary for typical house construction, as specified in local and national building codes
  - Identifying attributes of different door and window styles and sizes, in relation to operation, energy efficiency, egress, and other code requirements
  - Recognizing the requirements of electrical, plumbing, and heating/ventilation systems in their relation to carpentry and light construction
- Delivering instruction using an industry-recognized curriculum that prepares participants to obtain relevant employer-supported credentials such as those from the National Center for Construction Education and Research (NCCER), North America's Building Trades Unions (NABTU), the Home Builders Institute (HBI), and the Building Performance Institute (BPI)
- Identifying work habits and attitudes that will lead to successful employment in construction and other fields
- Reinforcing academic instruction in math, writing, public speaking, and research that will lead to successful post-secondary placements including apprenticeships
- Identifying career possibilities in construction and related fields

VOICES FROM THE FIELD

On Classroom Vocational Education

"You have to start from day one teaching construction terminology and construction math basics. We spend two hours every week in the classroom on it."

"To fit with the construction site, the vocational education classes must be well-structured and based on a routine."

"Offsite, we gear the vocational education toward theory, giving demonstrations and showing films of things the participants will be doing within the week."

"What has helped our vocational education a lot is having a great teacher who has a lot of teaching experience and can coordinate what's being taught with what needs to be applied on site."

"Make sure the skills the participants are learning are applied immediately. We teach in vocational education what will soon be done on the work site, whether it is that day or sometime that week."

Organizing the Vocational Education Program

Whether the YouthBuild organization provides vocational education or obtains such services from another organization, the program should have similar characteristics. These would include the following:

Assessment of Participant Skills

Many participants entering YouthBuild think they have a basic knowledge of construction work even if they have no experience. For example, most people think they know how to use a hammer or a saw, climb a ladder, or lift heavy objects. However, there are specific skills involved in each of these tasks that are essential to successful construction safety and employment In order to examine this issue, it is useful to do an assessment of participants' construction skills before beginning the vocational education class. This can be accomplished in several ways:

- By discussion in class in which participants describe prior construction experience of any type
- By delivering a pre-test of construction knowledge that when given as a post-test can demonstrate knowledge and skill gain while in the program
- By written evaluation that asks participants to identify basic construction tools or describe construction procedures
- By observing participants' performance while they undertake simple construction tasks such as hammering a nail into a block of wood

Hands-on Vocational Education Experience

The vocational education program should provide the opportunity to teach skills through hands-on practice. While budget and space constraints may make it difficult to order all the materials needed for hands-on practice, as many in-class experiential activities should be organized as possible. In limited space and with limited materials, participants can:

- Frame and wire a dummy wall
- Demonstrate measuring and cutting skills
- Frame a portion of a stud wall and apply sheet rock and install a door and/or window
- Practice the use of power tools

Several YouthBuild programs have incorporated the construction of scale model houses in their construction program as a way to introduce the construction skills needed on a real construction site. For example, prior to beginning work on the construction site, one YouthBuild program's participants construct scale homes that are built to code and inspected just like real homes. The homes are four to five feet in height—the size of a small playhouse. Construction tasks include carpentry, electrical and plumbing work, roofing, floor covering, and insulation. YouthBuild construction staff teach the skills needed to complete the projects, which take about two months to finish, in the program's vocational education classroom. Each participant completes an entire house, giving participants a sense of accomplishment early in the program and a chance to practice construction skills before they are needed on the construction site. Once completed, scale homes can be sold or donated and can be used as garden sheds or playhouses.

The classroom setting allows for practice with tools and materials in an environment that is safe, comfortable and potentially more supportive than the work site. Hands-on practice in class allows for time to focus on accuracy rather than speed, for mistakes, and for more focused concentration. Hands-on experiences in the classroom also allow for the expression of a wide variety of learning strengths. Participants who have difficulty reading or understanding written directions may have well-developed visual ability and good eye-hand coordination.

Demonstration of Skills

Demonstration is a powerful teaching tool that ensures that participants see how to do a task, hear an explanation of how to do it, and practice what they've learned. In demonstrations, the instructor should follow these guidelines:

- Present participants with a problem. For example: "We have to nail this vertical stud to a horizontal stud that is already nailed to the floor. How do we do it?"
- Ask for suggestions on how to solve a problem. Participants may or may not succeed but should attempt some of these suggestions and discuss what worked, what didn't, and why.
- Demonstrate how to perform the task correctly, describing the task as it is being demonstrated. Draw a picture on the blackboard if it is helpful. Explain when to use a technique and in what situations it works best.
- Review what has been taught by asking participants to describe the skill demonstrated and when it would be used.
- Have participants practice the skill until they get it right. Work with individuals who are doing it incorrectly until they get it. Ask participants who have mastered the skill to help others.

Work in Small, Mixed-Ability Groups

Participants should work in small, mixed-ability groups or teams in the classroom just as they will work in teams on the work site, solving problems together and having team competitions. Small groups help participants learn to communicate and foster leadership and mutual responsibility. Mixing students of different abilities allows participants to learn from and teach one another.

The Vocational Education Curriculum

The vocational education program should be guided by an industry-recognized vocational education curriculum.

A vocational education curriculum should cover the following subjects in sequential order, following the general order in which participants are likely to encounter these tasks on the construction site:

- Safety (including first aid and OSHA training)
- Architectural design
- Construction math
- Tools and construction materials
- Demolition (including safety procedures)
- Rough and finish carpentry (including use of tools)
- Electrical systems
- Plumbing and heating
- Masonry
- Landscaping
- Painting & finishing
- Facilities maintenance
- Green building
- Weatherization

Some vocational education programs include components on architectural design and drafting to enable participants to understand how housing design and construction documents are produced and to introduce participants to architecture as a career interest.

The vocational education curriculum should include a series of well-organized units of instruction, covering specific topics within each of the areas above. For example, the curriculum subjects listed above include safety. This is an aspect of the construction project on which participants might spend a significant amount of time and one that includes a number of issues. Thus, this subject area might be taught in a series of instructional units extending over several weeks. Instructional units for safety might address:

- Staying safe - attitude, behavior, plan, and identification of risk
- Safety rules
- Reading instructions and warning signs
- Safety gear

- Using tools safely
- Safety role plays
- Checking for safety hazards at the site
- Dealing with emergencies—the first aid kit
- Reporting near misses and accidents

Each unit itself should clearly describe the purpose of the lesson, specific skills or knowledge participants will acquire, materials needed to carry out the lesson, a guide to activities for the lesson, and relevant handouts. The Vocational Education Curriculum Unit: Safety Rules is in Appendix B. This provides a model format that can be used to create other unit plans. The curriculum should also include a method of measuring and tracking the participants' progress.

The success of the vocational education program will be dependent on its integration with both the on-site construction work and the academic program. All three should be planned together so that vocational education provides instruction on construction techniques before they need to be used on the work site and incorporates and demonstrates the practical application of academic skills after they have been introduced in the classroom. Ensuring that skills are introduced and practiced in the right sequence will require good communication between the vocational education instructor, academic teachers, and construction staff. One way to coordinate this integration and make certain that planning, regular communication, and curriculum evaluation take place is to have one staff person serve as curriculum coordinator.

Reinforcing and Integrating Academic Instruction

The vocational education class can reinforce and provide a practical application for many of the social and academic disciplines that are also a part of the YouthBuild program. Math, reading, writing, history, sociology, public speaking, and research are a few of the areas that can be integrated into the vocational education class and presented in a way that is relevant to the participants. Each vocational instructor has the opportunity to present this information in a meaningful and dynamic way. Working with the program's teachers, trainers, and counselors, vocational instructors can use project-based or theme-based learning techniques to develop comprehensive, interdisciplinary lessons that connect classroom work with activity on the work site. The following examples are just a few of the ways that these principles can be applied.

Math

Math is fundamental to most construction tasks. For example, fractions need to be understood in order to read a tape measure and accurately mark stud length, drywall dimensions, and the sizes of other materials. Construction workers use math to accurately determine the areas of floors, walls, and roofs and the volume of foundations. Multiplication and division are used in estimating the total number of materials and supplies needed; diagonal measurements of walls and floors need to be compared and adjusted to be square; and the cost of the job in materials and labor needs to be monitored and compared to a budget.

Delivering math lessons that incorporate various methods of presentation (lecture, hands-on identification, videos, handouts) and visits to construction sites in progress can help the participants understand these concepts.

Reading and Writing

Reading comprehension and composition are critical skills that are not only necessary but also transferable. Selecting a "dream house" from various periodicals and describing why it was selected and what design principles it incorporates, following a lesson on the nature and function of design, can motivate and provide a realistic application of design principles in a particular climate zone. Vocational lessons that incorporate handouts can be used to generate vocabulary lists and additional questions that are based on real applications. Opportunities to read can be incorporated by:

- Having participants read diagrams, instructions, ingredients, and narrative descriptions
- Using participant writing as text for the class
- Having participants refer to wall charts, posters, or reference books to get information

Opportunities to write can be incorporated by having participants:

- Write instructions, ingredients, and narrative descriptions
- Create wall charts and posters to use for reference
- Use online resources to create crossword puzzles and other learning tools with construction themes
- Write quizzes and tests for other participants
- Interview construction workers about their jobs and write a report on their findings

Writing in personal journals can be an excellent way for participants to integrate and reflect on their learning. Many programs establish a time each day for participants to write entries in their personal journals about the day's activities and events. Journals can assist participants in documenting the skills they are learning on the construction site and can also provide raw material to develop further in a classroom writing class. Teachers and counselors can work with participants to use journal entries as information for self-evaluation, and many programs use personal journals as a log of individual development, which gives participants a record of their achievements.

History and Sociology

Studying the history of a neighborhood or a building the participants are working on is an excellent way to use project-based learning techniques. For example, with effective planning, the entire staff can develop lesson plans that relate to the history of the construction site and integrate skills from many different disciplines. Participants can begin by conducting a historical "inventory" of the neighborhood, counting and categorizing buildings, businesses, inhabitants and systems, and reading about the history of the area. At the same time, the construction trainers can work with students on analyzing the architectural elements of the neighborhood's buildings and how the occupants dealt with environmental elements without modern technology.

The program's job developer can help participants to identify what types of industries and career pathways are available in the area. As the construction planning progresses, the participants can learn the elements of project management that involve budgeting, proposal writing, real estate financing, and negotiation. A local history professor can be brought into the program as a

guest speaker to discuss with the students how their rehabilitation of the building is playing a role in the history of the neighborhood. With project-based learning, individual participants and groups of participants can create multi-media exhibits using photos, writings, drawings, models of buildings, maps, performances, and videos that incorporate and document their learning across several disciplines.

Public Speaking

Visiting construction sites can provide a tremendous learning opportunity if the interests and views of the YouthBuild participants are focused. Dividing a large group into smaller groups of three or four participants and having them be responsible for finding the answers to questions that are specific to the site visit can provide clear direction. Having the groups present their findings to the larger group for verification can reinforce their findings and build oral presentation skills.

Learning Games

A less formal way of integrating the academic and vocational components is to use learning games such as trivia quizzes, riddles, math puzzles, ethical dilemmas, spelling competitions, physics demonstrations, guessing games, and stories. These games can become an important teaching tool because they convey different kinds of information simultaneously. Games teach participants that hard work can be fun while helping to keep the atmosphere in the program lighthearted. They also enable the staff to present information repeatedly and in different ways to reinforce the participants' learning. From a theoretical standpoint, games allow instructors to teach participants who have different learning styles. Most importantly, learning games teach that learning can be fun.

Excellent Game Resource for Hazard Identification: OSHA Hazard Identification Training Tool https://www.osha.gov/hazfinder/

Research

Looking into deeds, obtaining permits, and getting zoning variances are all projects that are related to the construction site and the vocational education class. In some instances, if the project site is a historic building, there is an opportunity to present the basic principles of historic restoration. For projects, the participants can do timelines of the construction of the building, and different architectural elements of the structure can be identified, photographed, categorized, and compared to other buildings of that era.

Conclusion

Each YouthBuild program should evaluate what resources it has available and how the vocational education class fits into the overall program design. In doing so, the value and relevance of the class should be taken into consideration. It is clear that while vocational education was once thought of as simply job training or preparation, it is now recognized as a complex synthesis of hands-on skills training and cognitive problem solving. The vocational education class can successfully integrate academic training with applied learning principles in a relevant, dynamic, and interactive way.

Chapter 7 Resources in Appendix

APPENDIX B

- Vocational Education Curriculum Unit: Safety Rule

Part III:
Implementing the Construction Component

The focus of implementation of the construction component is the actual teaching of construction skills and techniques. This handbook does not attempt to provide training techniques or directions for teaching actual construction skills such as how to hammer, cut two by fours, hang sheet rock, or similar skills. It does provide suggestions for a framework within that teaching and ideas for incorporating other learning during the construction process. This part of the handbook describes how to implement the construction component as a learning environment.

Chapter 8: Creating the Environment for Training and Production

A key to effective training, learning, and production on the construction site is the environment created by the construction manager and construction trainers as well as the relationships they establish with the participants. The following suggestions will help create a positive learning and production environment.

Know the Participants

To teach effectively, it is important to pay careful attention to the audience. The following are some of the things to keep in mind about YouthBuild participants:

- Most have had negative experiences with formal education and teachers
- Most will have had little or no construction or work experience
- Many are challenged by weaknesses in basic academic skills such as reading and math
- Some may have learning disabilities
- Some will have little aptitude for construction work
- Many have had few caring adults in their lives

It is often helpful to try to find out something about them as individuals during the course of the program from teachers and counselors. What are their other interests? What do teachers know about the level of their learning skills? Participants can differ considerably in their learning styles. Some like to see what's being taught, while others prefer to hear it. Some like to ask questions first, whereas others like to plunge right into a task. The important thing to remember is that there are many ways to take in information, so it is crucial to present all information in a blended teaching approach that incorporates visual, auditory and tactile learning methods. Most people have a few methods that they favor and others that they find ineffective.

Create Motivation

Knowing the participants is essential to motivating them, and motivating them is essential to their ability to learn. Motivating participants means giving them reasons to listen and exert themselves. Some suggested ways to motivate participants on the construction site are to:

- Be enthusiastic about what is being done and taught, and convey that enthusiasm to the participants
- Have outside professionals talk to participants about pathways to success
- Have graduates speak to current participants about the rewards of the YouthBuild program
- See the participants not as who they are, but as who they can be, and hold that picture out to them
- Put their work in the broad context of the construction project, the job, the educational opportunities it will enhance, and their role in contributing to their community

- Provide opportunities for participants to demonstrate leadership skills
- Give participants the responsibility to teach each other
- Set high standards for workmanship and acknowledge and reward it when those standards are achieved
- Give and ask for feedback

Engaging participants and motivating them is usually harder than effectively managing the construction process. Forming a relevant relationship is essential for construction trainers to have the credibility needed to motivate the participants and the empathy to deal with the issues the participants bring as young people. A relevant relationship is one that fosters growth and learning in the participant. To help with building such relationships, staff should make efforts to:

- Build trust by being dependable and consistent; respect confidentiality and be mature and aware of feelings.
- Communicate in a way that is not ambiguous. Saying one thing but sending a different message through tone of voice, facial expression or other nonverbal communication is confusing and creates distrust.
- Let the participants be themselves. Do not expect them to be just like staff. Accept them without judgement while providing empathy.
- See each participant as an individual in the process of transformation and think about how the staff can contribute to the transformation.

YouthBuild staff are role models for youth in the program whether they want to be or not. The example they set should be conducive to both the participant's personal growth and the development of the participant's skills.

Foster Cooperation and Interdependence

A construction project is a team experience. Learning to work as a member of a team is a critical aspect of the YouthBuild construction experience and one that may be difficult for some participants. However, it is important to learn that cooperation is much more expedient, safe, and productive than working as competitive, autonomous individuals. The construction process can demonstrate how different trades and stages of construction are dependent on one another and the mishaps that can occur when cooperation is lacking.

In order to facilitate cooperation and interdependence, construction trainers can structure group activities that give participants practice in developing teamwork skills.

Cooperative learning can also be encouraged by having participants:

- Demonstrate skills to each other for review
- Write instructions for each other to follow
- Make videotaped demonstrations for other participants to study
- Make suggestions for improving teamwork
- Assess each week's work in terms of teamwork displayed by group and individuals

Create a Problem-Solving Atmosphere

The construction site can either have a problem-solving atmosphere which enhances learning or an atmosphere in which the participants feel that the staff have all the answers. Creating a problem-solving atmosphere depends on the way construction trainers introduce information and how they create opportunities for participant involvement in the construction process. A problem-solving atmosphere is fostered by creating opportunities for generating questions, by encouraging participants to come up with their own ideas for solving problems, and by creating opportunities for participants to act on and experiment with problems and solutions they have posed.

Construction staff can help the participants develop problem-solving skills on the work site by:

- Frequently posing problems and asking participants to solve them
- Setting up problems that have multiple answers to encourage creative thinking and to emphasize that there is often more than one right answer to a problem
- Asking questions such as:
  - What do we need to know to do this?
  - How are we going to do this?
  - What other tools could be used?
  - What other methods or techniques could we use?
  - Why isn't this working?
- Halting work when it is not going well and asking the participants as a group to find a solution

Establish Conditions for Production

In addition to creating an environment for training and learning, construction trainers must also create an environment that allows production to be achieved within the time available. The keys to creating an environment for production are clear and consistent structure and instructions.

Chapter 9: Managing Participants on the Construction Site

There are several basic management techniques that construction trainers can use to effectively supervise participants on the work site:

1. Take attendance and emphasize the importance of getting to the site on time
2. Have an organized daily work schedule
3. Create leadership development opportunities
4. Keep track of tools participants will need to learn construction skills
5. Keep a daily log of accomplishments
6. Evaluate learning on the construction site regularly
7. Be consistent in enforcement of the participant contract and infractions

Participant Attendance

It is important that the construction site have a list of participants who are supposed to be on the site each day. This list can be used as an attendance sheet as well. Attendance should be taken first thing every day, with a staff person monitoring the attendance sheet so that participants don't sign in for one another. It is also necessary to mark the time that participants sign in so that there is a clear record of participant tardiness. Some programs use a timecard approach so participants punch in and out for accurate timekeeping. Construction trainers have found that consistent emphasis on participants attending every day on time is essential for teaching appropriate work ethics that will help young people get and keep a job once they complete the YouthBuild program. You will find the YouthBuild Construction Site Daily Attendance Sheet in Appendix B.

There should be specific procedures for communication between the program manager, counselors, and construction staff regarding participant attendance in the program as a whole. The construction site will need to be notified in writing when any student needs to leave the site for part of the day (for counseling, court appearances, etc.) or when a participant permanently leaves the program.

Daily Work Schedule

A routine on the work site helps to make it a more effective learning environment. While the majority of each day is dedicated to production, many programs have found that a small amount of time for scheduled activities on the work site provides the structure that allows for focus and consistency. It also dramatically improves the learning process. Have a clear plan for the day and communicate it to all participants. At the beginning of each day, it is important to review the daily work schedule and explain the construction work to be accomplished as well as review how the day's work fits in with the broader construction schedule.

Many YouthBuild programs follow a daily schedule that includes the following elements:

- **Morning meeting:** This is a brief time at the beginning of each workday to gather participants together and plan the day. By focusing the participants on the work of the day, regular morning meetings can dramatically affect the tone of the work site. This time can be used to take attendance, assign tasks, assign tools and materials, and write briefly in journals about expectations for the day or skills learned the day before. Staff should give participants a picture of the work over the next few weeks and how their work today fits into a larger plan. This is also a good opportunity to review issues of site safety by the student safety monitor. Programs with a student pledge also recite the pledge at morning meetings.
- **Demonstrations:** At the end of the morning meeting, participants can observe the site instructors demonstrating a new skill or a new aspect of an old skill. For example, participants might observe and then practice correct hammering technique or learn how to lay out a wall before performing the task. Demonstrations help everyone remember that most skills on the work site are new to participants and need to be explained if participants are to learn them correctly.
- **Time for performing assigned tasks:** Every day teams of participants should be assigned to specific tasks and enough tasks so that participants are doing meaningful work without any idle time. Participants should have the opportunity to work diligently for an extended period of time in order to practice the skills and develop competence. They should know who their supervisor and co-workers will be for the day, whether to expect interruption to unload a scheduled delivery of materials, or any other relevant information. In assigning teams of participants, factors to consider are:

  - Which participants haven't yet had an opportunity to work in a certain area?
  - Which participants need practice on a particular skill?
  - Is there one participant who can effectively mentor another participant?
  - Which participants work best together?
  - Which participants need to learn to work together?
  - How critical to the rest of the schedule is the completion of that task?
  - What is the rapport between particular participants and supervisors?
  - What skill level or expertise is required to complete the task?

  Instructors should move from team to team, observing participant performance while advising and instructing. As much as possible, instructors should avoid doing the work themselves. They may need to work alongside participants for short periods of time to illustrate how to perform a task. The construction manager should periodically observe construction trainers and give feedback on how to improve supervision of participants.

  It is not easy supervising a large group of inexperienced workers, so it is important to keep all participants active and make sure to break out the tasks so that everyone has something to do at all times.

- **Regular skills assessment:** Allow time or regular assessment of participant skills. In collaboration with the vocational education instructor, construction trainers can observe and test each participant as they perform each skill, and then use the competency checklist to record skill acquisition. Consider recognizing participants for skill attainment in a meaningful way, such as by displaying a wall chart on which they earn checks for correctly performed skills.
- **Clean-up:** Ensure that participants do a thorough clean-up of the site every day. Too often, instructors and a few participants do all of the clean-up work while others hang around and do nothing. Participants need to learn that proper clean-up and storage of materials is an essential part of a safe work site and doing the job well. They should be instructed in correct and safe clean-up procedures and should not be allowed to leave the site until everyone has finished clean-up.
- **Afternoon meeting:** After the site has been cleaned, participants will feel a sense of accomplishment. A brief meeting should be held to review the tasks that were performed and discuss problems that came up and ways to do things differently the next day. A safety review should include a discussion of clear cases of safety violations, illnesses, injuries and near misses. Acknowledgement and praise of the day's accomplishments will boost morale, recognizing participants who worked hard, took initiative, listened well, or worked well in teams. A brief announcement should be given of the plans for the next day and reminders for everyone to be at work on time. Participants should sign out when they leave.

  In addition to this daily schedule, some YouthBuild programs have a weekly schedule to include structured time for safety meetings and review of accomplishments versus objectives for the week.

Create Leadership Development Opportunities

An important factor in managing participants on the site is sustaining their interest in what they are doing and learning. This can be enhanced by creating leadership development opportunities on the construction site. Examples of leadership development opportunities are included in the next chapter on site activities.

Keep Track of Tools

It is important to keep a running inventory of the location of all program tools and equipment with an equipment sign-out sheet to ensure that participants will be able to find the proper tool when they need it. Someone should ensure that each tool has been returned to its proper storage location and is in good working condition or any lock-out-tag-out at the end of each day. The job of tracking and monitoring tools can be rotated among the participants as a leadership training opportunity.

Daily Construction Training Report

A daily log, or construction training report, serves as a record of the work that was accomplished on a given day, problems that arose, or any accidents that may have occurred. It is important to fill out the report each day, rather than relying on memory to fill it out at the end of the week. It is helpful to have a senior construction trainer or site supervisor keep track of the major events of each day. Daily records should document attendance, work performed, problems that emerged relating to the construction or to the participants, special accomplishments, and new tasks or procedures begun on the site. Participants can contribute to the report by describing the accomplishments from their perspective. This will give them a sense of progress and help

maintain motivation on the site. It is also useful to include pictures of the work site at different stages of construction.

The YouthBuild Daily Construction Training Report is included in Appendix B.

Evaluate Learning on the Construction Site Regularly

It is very important that participants receive feedback from the construction staff about how they are doing. Evaluations are a formal way to give students feedback about their progress, the skills they need to work on, and their overall performance.

The construction manager has several key responsibilities regarding participant evaluation. These are to:

- Schedule regular, formal evaluations of participants on the work site. Many programs do this about every two months in conjunction with academic evaluations. Many programs require a positive performance evaluation on work habits in order for a participant to receive a raise.
- Develop forms for construction staff to use for evaluations. The Construction Competency Checklist can serve as a format for documenting skills. Also needed is an evaluation form for giving feedback on work habits and overall performance. A Biweekly Participant Performance Evaluation and Biweekly Performance Self-Evaluation is available in Appendix B.
- Make sure that the construction trainers meet individually with each participant to personally give them feedback and go over their evaluation forms.
- Utilize weekly group meetings as a time for publicly recognizing achievement, and plan award ceremonies at least every two months.
- At daily wrap up, give YouthBuild "appreciations," or public acknowledgment of specific accomplishments, good deeds, and valiant efforts of individual participants and staff.

Be Consistent in the Enforcement of Participant Contract and Infractions

If the program has a participant contract which spells out standards for participant behavior regarding attendance, lateness, fighting, and other issues that may emerge on the site, it is useful to have a copy of the contract at the construction site so staff can reference it if problems arise. It is essential to be consistent both in the enforcement of the contract with all participants and in citing infractions. It is helpful to have a form on which construction trainers can record violations of the contract that can be passed on to the counseling or case management staff. The YouthBuild Infraction Sheet is included in Appendix B.

Chapter 9 Resources in Appendix

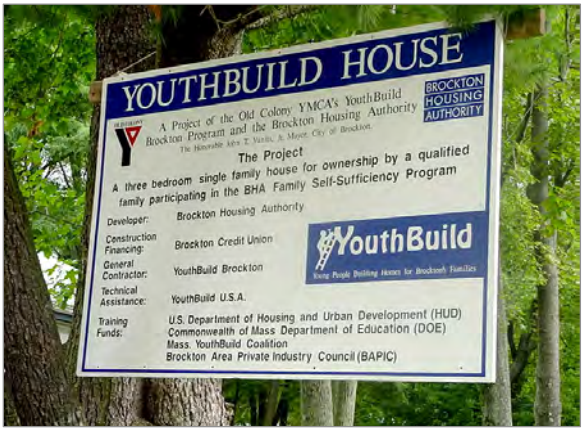
APPENDIX B

- Biweekly Participant Performance Evaluation and Biweekly Performance Self-Evaluation
- YouthBuild Construction Site Daily Attendance Sheet
- YouthBuild Infraction Sheet

Chapter 10: Site Activities

On a YouthBuild site, construction trainers are involved with a variety of activities beyond those that take place on a regular construction site. Those activities include:

- Work site safety
- Leadership development on the construction site
- Using each construction phase as a learning opportunity
- Teaching effectively
- Linking participants with sub- contractors
- Running an open house
- Evaluating learning on the work site



Work Site Safety

Work site safety must be a primary concern for both construction trainers and participants. It must be remembered that participants will be undertaking work they have never done before, using tools they are unfamiliar with, and engaging in physical activities that could easily lead to injury if not done properly. Safety is not just about accidents; it is about how to recognize and eliminate hazards, how to identify possible solutions for hazards (including ensuring that engineering and administrative controls are in place first before allowing any PPE on site), how to lift, how to work, and how to work together as a team. As discussed earlier, staff and participants should be provided with formal training in OSHA safety requirements, CPR, and first aid procedures.

Training at the Start of Construction

The best way to teach participants safe construction techniques is through hands- on demonstrations, modeling, and practice. This can be done in orientation, as part of morning meeting demonstrations, or in vocational education classes. A schedule should be created to ensure that participants receive safety instruction in each of the following areas:

- Use of hand tools
- Lifting heavy materials
- Carrying large materials
- Climbing ladders and scaffolding free of tripping hazards
- Fall prevention
- Use of power tools (several sessions)
- Working around electricity
- First aid
- General workplace safety

Safety Meetings and Rules

Safety meetings should consist of brief weekly meetings as part of the morning or afternoon meeting on the construction site. Safety meetings don't have to be long, and they can be done daily or weekly. OSHA prefers to use the term "Job Safety Analysis" (JSA) rather than "safety meetings" when working with young participants. The JSA is a procedure which helps integrate accepted safety and health principles and practices into a particular task or job operation and is a good learning tool for youth who are on their first work sites. JSAs are used to describe how to perform a task step-by-step, identify any hazards associated with a task, and determine the necessary controls to mitigate these hazards. In the work site context, safety meetings or JSAs are designed to:

- Review and reinforce safety practices on the site
- Discuss any new safety concerns that have emerged
- Teach specific safety techniques related to a new part of the job
- Point out any unsafe practices or problems with keeping the site safe and clean

Construction staff should prepare a list of construction site rules that will be made available to all participants as well as posted around the site. Some programs have participants make posters illustrating each of the rules to post around the site. The following is a sample list of construction site rules:

Sample Site Safety Rules

- Everyone, including visitors, must wear hard hats—no exceptions
- Safety equipment must be kept in good repair and broken items reported immediately
- Proper work boots must be worn at all times
- Approved safety glasses must be worn when using power tools or when exposed to eye hazards. In general, it is an accepted safety practice to wear safety glasses throughout the workday.
- Smoking is not allowed on the site
- Alcohol and drugs are prohibited on the site
- People under the influence of drugs and alcohol are prohibited on the site
- The site must be kept well-lit and neat, free of tripping hazards
- Tools cannot be touched until participants are trained in how to use them
- All tools must be in good condition
- Throwing items out of windows is prohibited
- Horseplay on the site is prohibited

Safety Monitoring

At least one member of the construction staff should be assigned to conduct regular safety inspections and provide reports to the construction manager. Many sites include participants as safety monitors in addition to staff. A sample YouthBuild Safety Program policy statement describes the roles of staff and participants in monitoring site safety and can be found in Appendix B.

A cluttered work environment promotes cluttered thinking and haphazard teaching; it is therefore essential that tools be returned immediately after their use, dropped nails and screws be picked up, materials be stacked properly and that work stop fifteen minutes early each day to ensure that the floors are swept and that everything is put in its proper place. Participants should be assigned responsibility for their particular work areas and for the equipment they have used. This responsibility should be monitored diligently by staff, and safety concerns should be brought up and discussed at safety meetings.

Leadership Development on the Work Site

The construction site provides tremendous opportunities to teach participants to take responsibility for themselves, for those around them, and for the project as a whole. This means giving participants opportunities to take responsibility and not just directions. Below are ten examples of ways to incorporate leadership development into the construction site:

1. Give all the participants an overview of the entire construction process and timetable, the sources of funding and costs, and the subcontracting process. Teach them how to read the plans and explain what will happen to the building when it's finished.
2. Create official jobs for participants to serve in leadership roles, such as:
   - Crew chiefs who help coordinate the work of a crew of participants (under professional supervision) and ensure that the work area is cleaned up at end of the day
   - A steward who is responsible for taking attendance, calling breaks, calling clean up, maintaining the water cooler, and running errands with staff
   - A first aid and safety coordinator who monitors work site safety and reports problems or violations, maintains the first aid kit, prepares for and helps run safety meetings, and may serve on a safety committee of the organization
   - An environmental impact assessor who ensures that the work site is managed in an environmentally responsible manner, such as coordinating waste management, recycling, and other green building practices that the program has committed to doing
   - A photographer who documents the work in progress
   - A journalist who reports on the work for use both internally and for program partners via the website, social media, blogs, public relations, press releases and other communications
   - A tool manager who signs out tools to participants and conducts tool inventory
   - Some programs rotate participant crew chiefs every week, giving all students an opportunity to lead the crew. At one YouthBuild program, after all participants have had the opportunity to serve as crew chief once, the crew elects a permanent crew chief.
3. Take a participant to construction meetings with the general contractor or developer or to contract negotiations.
4. Take a participant to City Hall when permits are being obtained or expose participants to other opportunities to learn how the system works.
5. Involve participants in planning, including purchasing materials or scheduling. Have them explain the process to other participants.
6. Have a participant help to run morning or afternoon meetings on the work site.

7. Ask participants to come up with a solution to a particular problem on the site (such as meeting a deadline, keeping the site cleaner, improving attendance, or improving teamwork).
8. Have participants give tours to visitors who come to the site.
9. Have participants work on estimating and doing take-offs on parts of the project. This can double as a math assignment.
10. Ask participants to evaluate the construction staff, the training process, and each other.

Teaching Construction Skills Effectively

When teaching construction skills on the work site, many of the same techniques described in Chapter Seven: Vocational Education in a YouthBuild Program can be used. The following suggestions will help to ensure that the participants understand what is being taught:

1. **Explain the purpose of each lesson.** Always tell participants what will be taught and why it is important that they understand this information. Give examples from real work situations.
2. **Use and teach correct vocabulary.** Participants will learn construction terms by hearing them over and over again.
3. **Encourage information sharing.** Before teaching anything, find out what participants already know. Ask them questions about the topic, and ask them to describe other experiences they have had with the topic.
5. **Give clear, step-by-step instructions.** When explaining something new, use language that the participants will understand. Give the information a little at a time. Give step-by-step instructions, repeat them frequently, and ask participants to repeat them. Asking participants to explain how something is to be done is often a more effective way to ensure learning than just having them do the task.
6. **Demonstrate skills.** Demonstration is essential to teaching construction skills because it requires the participant to recall the instructions given verbally and/or visually in order to actively do the task. Reading, watching, and listening are passive forms of learning, while demonstration is an active application of knowledge. Participants are more likely to retain the information if they have engaged in demonstrating and practicing the skills that they have read about, heard through verbal instruction, and watched another person perform correctly. Chapter Seven: Vocational Education in a YouthBuild Program has a few specific suggestions and guidelines for implementing effective demonstrations.

7. **Encourage peer teaching.** Participants themselves are an excellent source of knowledge and experience. Participants are often most effective at explaining things to their peers. By asking participants to help each other, the learner gets extra help and the participant teacher has the chance to reinforce his or her skills through demonstration and explanation. Encourage peer teaching by having participants:
   - Demonstrate skills to each other as a review
   - Write instructions for others to follow
   - Make videotapes of demonstrations
8. **Rotate participant responsibilities.** Make sure that everyone has a chance to learn all aspects of the job.
9. **Rotate instructors.** Different instructors have different teaching styles and different strengths. Although participants may initially complain, they will learn more if they have the opportunity to experience different instructors.
10. **Incorporate reading and writing whenever possible.** Participants can be shown the relationship between construction and academics in a variety of subtle ways, both on the work site and in the vocational education class. Incorporate reading by having participants:
    - Read instructions
    - Read diagrams
    - Read ingredients
    - Refer to information on wall charts, posters, or reference books to get information
    - Write descriptions or instructions of construction techniques
    - Read the written descriptions or instructions of other participants
    - Read trade magazines such as *Fine Homebuilding*, select articles and present to the group for discussion
11. **Assign problem-solving activities.** Problem solving is an important skill in construction. The work site and vocational education class provide many opportunities for participants to learn this skill. Ask students to come up with solutions to real problems that the staff are grappling with (such as deadlines, materials shortages, inadequate workmanship, safety problems, etc.) Have a group of participants brainstorm possible solutions. When staff arrive at a final solution, explain to the participants how staff came to that solution.
12. **Regularly assess participant progress.** Do it informally every day as part of the supervision of students. Observe and make mental notes about who needs help with certain skills. Formally, ask participants to demonstrate skills that they learned that day, after they have had time to practice. When formally assessing participant skills, remember to:
    - Give participants adequate notice of assessment and time for review
    - Assess only skills that have been fully taught
    - Test for skill knowledge, not for reading ability, and use demonstrations more than written tests
    - Use the results to plan future teaching—continue to work with participants who need more help
    - Use the results to give participants feedback, not to grade them
    - Recognize even small achievements

- Make it fun and relevant
- Meet participants where they are

Participants Working with Subcontractors

Many YouthBuild sites have been able to arrange for participants to work as assistants to electrical, plumbing, and other subcontractors on the YouthBuild project in order to gain additional experience beyond carpentry trades. Working with a subcontractor can be a reward for outstanding performance, motivating other participants to improve their attendance and initiative on the job. Arrangements for participants to be assigned in this manner must be made with the subcontractor at the time of contract execution. When the subcontractor arrives on the site, the participant(s) who will be assigned should be introduced by the construction staff. The construction staff and subcontractor should review the subcontracting work that will be done, the role the participant will play in assisting with the work, and the objective of creating a learning experience. Construction staff cannot just assume that a sub-contractor will take the time to provide training and information to the participant and must be sure to check in on this process regularly.

Successful experiences on the construction site will often make it possible to place a participant as an intern with a subcontractor before graduation or to line up jobs with subcontractors for participants after exit.

Running an Open House

Holding an open house is a good way of introducing the YouthBuild program to funders, politicians, the media, the local community, and other potential supporters. It is also a good way to publicly acknowledge and celebrate participants' accomplishments. Open houses are terrific opportunities for leadership development with the young people. Open houses may be held at the beginning of a project, during the project, or upon completion of a project.

In preparing for an open house, consider the following steps:

- Make sure the site is completely clear and safe for visitors.
- Assign specific participants to serve as tour guides. Depending on the number of visitors and the size of the building, it may be necessary to have several different tour guides simultaneously take groups to different floors, since space may be cramped.
- Prepare participants for questions from visitors. Participants should know what the building will be used for once it is completed and should be able to identify each of the rooms. They should also be able to use proper vocabulary in explaining the work that they have done so far. They should be able to show architectural plans to the visitors and explain the plans to them.
- Television stations like to get visual pictures of the participants at work. It takes some thought and planning to figure out how to provide those visual images while protecting the visitors from the danger of work on a construction site. Some YouthBuild programs set aside a

specific time during the open house for a group of participants to work on a small project in a specific area of the building to provide television crews with photo opportunities. One YouthBuild site actually constructed a wall in advance and simply assembled it as part of the open house ceremony. Be creative, but most of all, be safe.

Evaluating Learning on the Work Site

Regular times should be built into the schedule to observe and assess participant skills. Informal observation is often the best way to assess participant skills. In addition, during a morning meeting, demonstration time, or afternoon meeting, instructors can give participants opportunities to demonstrate their skills.

In collaboration with the vocational instructor, construction trainers can observe or test participants as they perform each skill, then use the Construction Competency Checklist to record the skill that has been learned. Only those skills that participants can repeatedly perform successfully should be checked.

Participant skills can be recognized in a visual way, such as by displaying a chart on the wall in which participants are given checks when they perform a skill correctly. Another way is to create merit stickers or badges that participants can put on their hardhats, signifying their ability to perform skills or certifying them to use power tools. Participants will eagerly anticipate assessments if they feel they will be recognized for real achievement, and they will develop a sense of confidence in their ability to learn new skills.

The program may want to conduct formal, bimonthly written evaluations of all participants, providing them with feedback about their work habits and their skills. Written evaluations should follow a consistent format for all participants, and trainers should coordinate their evaluations so that participants are evaluated by all staff on the same standards.

Conclusion

Housing construction offers YouthBuild participants a rare opportunity to work in service to their communities while building their own skills, knowledge, and sense of self-worth. It is this dual purpose—the development of self and the development of the community—in YouthBuild construction that gives meaning to each participant's efforts on the building site and provides the entire program with a sense of purpose and tangible achievement.

On an individual level, the construction site is a place for participants to learn useful and marketable skills that will serve them throughout their lives. At the same time, while on a construction crew, participants learn the intricacies of teamwork and experience the thrill of group success, which is magnified throughout the program with the completion of the construction projects.

Underlying the construction process are powerful metaphors of tearing down the old and building the new, which can be applied easily to the processes of youth development. It is the role of the YouthBuild staff to facilitate these processes and then to identify and draw from the relevant metaphors provided by the construction process. This handbook offers YouthBuild staff the practical tools for planning and managing an authentic construction operation. However, it is the inspiration, compassion, creativity, and commitment of the staff that imbue the YouthBuild construction work with meaning and opportunities for training young people.

Resources

Apprenticeship and Pre-apprenticeship Resources

DOL/HUD Joint Letter on Apprenticeship:
http://www.doleta.gov/Youth_services/pdf/YouthBuild_DOL-HUD_Joint_Letter.pdf

HUD Section 3 Website: www.hud.gov/section3

HUD-DOL Fact Sheet on Registered Apprenticeships for YouthBuild Graduates:
http://portal.hud.gov/hudportal/documents/huddoc?id=HUD-DOL_Factsheet.pdf

U.S. Department of Labor – Apprenticeship Program Website: http://www.doleta.gov/oa/

21st Century Apprenticeship Community of Practice:
https://21stcenturyapprenticeship.workforce3one.org/

American Apprenticeship Initiative: http://doleta.gov/oa/aag.cfm

New Apprenticeship Website: www.dol.gov/apprenticeship

Apprenticeship Toolkit: http://www.doleta.gov/oa/employers/apprenticeship_toolkit.pdf

Construction Management

National Association of Home Builders (NAHB) Home Builder Contracts & Construction Management Forms: https://www.nahbcontracts.com/contract.php

American Institute of Architects (AIA) sample contracts: https://www.aiacontracts.org/

Consensus Docs: http://www.consensusdocs.org/

DOL

YouthBuild Community of Practice: https://youthbuild.workforcegps.org

Green Building and Renewable Energy

U.S. Bureau of Labor Statistics Careers in Green Construction:
https://www.bls.gov/green/construction/construction.pdf

ENERGY STAR for Affordable Housing and Low-income Housing Communities:
https://www.energystar.gov/index.cfm?c=affordable_housing.affordable_housing_low_income

U.S. Department of Energy (DOE) Building America Program:
https://energy.gov/eere/buildings/building-america-bringing-building-innovations-market

U.S. Green Building Council (USGBC) Guiding Principles for Green Affordable Housing:
http://www.usgbc.org/resources/guiding-principles-green-affordable-housing

Enterprise Green Communities Program: http://www.enterprisecommunity.org/solutions-and-innovation/green-communities

The Impact of Green Affordable Housing; A Report by Southface and the Virginia Center for Housing Research: http://www.southface.org/wp-content/uploads/2016/07/impact-of-green-affordable-housing-executive-summary-1.pdf

The Costs and Benefits of Green Affordable Housing; A Publication of New Ecology & The Green CDCs Initiative: http://www.dcat.net/workshoptoolkit/Workshop_Toolkit/Affordable_Housing_files/green_affordable_housing.pdf

Rural and Tribal

HUD's Office of Native American Programs (ONAP): https://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/ih

Enterprise Rural and Native American Housing Program: http://www.enterprisecommunity.org/solutions-and-innovation/rural-and-native-american-housing

Work Site Safety

OSHA Recommended Practices for Safety and Health Programs: https://www.osha.gov/shpguidelines/

OSHA Job Hazard Analysis: https://www.osha.gov/Publications/osha3071.pdf

Training Requirements in OSHA Standards: https://www.osha.gov/shpmguidelines/SHPM_guidelines.pdf

Construction Hazards (Top Four) QuickCard™: https://www.osha.gov/Publications/3216-6N-06-english-06-27-2007.html

OSHA Construction PPE QuickCard™: https://www.osha.gov/Publications/construction_ppe.html

Falling Off Ladders Can Kill: Use Them Safely (OSHA 3625-2015): https://www.osha.gov/Publications/OSHA3625.pdf

DOL's YouthRules! Website: https://www.youthrules.gov/index.htm

OSHA's Young Workers in Construction Website: https://www.osha.gov/SLTC/teenworkers/residentialconstruction/general.html

Vocational Resources

National Association of Home Builders (NAHB) Home Builders Institute (HBI)'s Pre-Apprenticeship Certificate Training (PACT): http://www.hbi.org/Programs/Training-Programs/PACT-Programs

National Center for Construction Education and Research (NCCER): https://www.nccer.org/

North America's Building Trades Unions' Multi-Craft Core Curriculum (MC3): https://nabtu.org/multi-craft-core-curriculum/

Building Performance Institute (BPI)'s Certified Professionals: http://www.bpi.org/certified-professionals

Working Hands, Working Minds – Unit 1: Teamwork and Leadership in Construction: https://youthbuild.workforcegps.org/resources/2017/04/06/10/47/Working_Hands-_Working_Minds_Curriculum-_Teamwork_and_Leadership

Working Hands, Working Minds – Unit 2: Construction Health and Safety: https://youthbuild.workforcegps.org/resources/2017/04/12/14/53/Working_Hands-_Working_Minds-Unit_2-_Health_and_Safety

Working Hands, Working Minds - Unit 3: Tools, Trades and Technology in Construction: https://youthbuild.workforcegps.org/resources/2017/04/14/13/23/Working_Hands_Working_Minds-Unit_3-Tools_Trades_and_-Technology

Working Hands, Working Minds - Unit 4: Construction Related Math and Measurement: https://youthbuild.workforcegps.org/resources/2017/04/14/13/51/Working_Hands_Working_Minds-Unit_4-Construction_Related_Math_and_-Measurement

Working Hands, Working Minds – Unit 5: Housing and Community: https://youthbuild.workforcegps.org/resources/2017/04/14/14/28/Working_Hands_Working_Minds_Unit_-5-_Housing_and_Community

KQED Green Jobs + Green Tech Resources: https://ww2.kqed.org/learning/green-jobs-green-tech-resources/

ROOTS OF SUCCESS Environmental Literacy & Work Readiness Curriculum: https://rootsofsuccess.org/

Appendix A:
Construction Trainer Orientation Handbook

Construction Trainer Orientation Handbook

Welcome to YouthBuild!

You are now part of a network of hundreds of organizations across the United States and around the world that are working to help young people transform their lives through YouthBuild programs. As a YouthBuild construction trainer, this may be the most challenging job you have ever had—but it can also be the most rewarding.

YouthBuild construction trainers have three competing goals to accomplish:

1. **The Work:** One goal is to produce high-quality work on the construction site within the deadlines established by the project.
2. **The Participants' Personal Development:** A second goal is to help participants learn to overcome obstacles in their personal lives and to take responsibility for themselves in a work environment.
3. **The Participants' Learning:** A third goal is to ensure that the participants leave YouthBuild with the knowledge and skills they need to become economically independent and to play a leadership role in their community.

You will always be juggling these three goals. All three are equally important to the success of the YouthBuild program and to the success of the participants served by the program.

This handbook is designed to give you an idea of some of the issues you will be facing on your job and to share the experience of construction staff members from other YouthBuild programs across the country.

VOICES FROM THE FIELD

What Makes a Good YouthBuild Construction Trainer?

"Hire people who have a good working knowledge of their trade and who can work well with youth—both are essential to the success of the program."

"Site trainers have to know what they're doing. They can't earn the students' respect if they are trying to figure out how to do something in front of the participants. They also have to be flexible and be able to work with young people."

"Site trainers must have a good mix of knowledge, patience, and ability to instill good habits and teach real skills. All staff must have the same vision of doing what's best for the youth."

"The staff have to have experience in the trade, a commitment to youth, and a sincere desire to see people uplifted while they're in the program and after."

"Expect to deal with salary shock when trying to recruit construction staff from the private sector into the non-profit sector. The staff you recruit must be committed."

1. The Work

Balancing Training and Production

Within all YouthBuild programs, there is a natural tension between effectively training young people and getting the job done on time. YouthBuild's goal is to train and develop young people and to build quality affordable housing. Your program will have to account for the progress of the work on the site to developers, other contractors, and funders. At the same time, if you race through the production process at the speed of a commercial construction site, the participants will not learn the skills and gain the full experience that they need from the program.

YouthBuild construction trainers across the country have identified six keys that have helped them to maintain a successful balance between training and production:

1. Organize the construction site like a real construction site
2. Quality counts—be willing to do the work twice
3. Keep everyone busy
4. Have a good safety program
5. Use deadlines to your advantage
6. Meet regularly to keep the flow of communication open and to engage participants in solving problems and assessing progress

The rest of this section will address each of these six points.

Keep the Construction Site Real

1. **Be Organized**
   If you as staff are prepared and organized, you will keep your site operating as efficiently as possible. An organized site is also the best learning environment in which to teach participants about a real work site.
2. **Establish Routines**
   Both participants and instructors benefit from routines. Routines help participants develop positive work habits. Aside from minimizing misbehavior, routines help to establish independence. If participants do not have to wait for instructors to tell them what to do, they can begin developing patterns of responsibility.
3. **Maintain a Work-Oriented Atmosphere**
   Complaints, personal problems, and anecdotes should be saved for breaks, lunch time and non-work hours except when a supervisor feels that a situation warrants immediate attention. There is always time for appropriate humor and good cheer, but clowning and horseplay cannot be tolerated during work hours.
4. **Plan Ahead**
   Make sure materials are on the site in advance of when you need them. Have a plan for how you are going to assign participants to different tasks. Have backup plans in case a task is completed faster or slower than you expected.

VOICES FROM THE FIELD

Make the Construction Site Experience Real

"The participants have to be acclimated to a real work lifestyle; the routine has to be regimented...the only way the participants will understand how to prepare for their future job is if the site is run as if it were a real construction site."

"Run the construction site as if it were a regular job site; make and stick to a schedule, do safety meetings and so on..."

"Every minute has to be treated like a job site. You have to be ready to move on time first thing in the morning, every morning with no idle time."

"Make the whole experience real! Explain what's what and put it into a real context. Teach the jargon, how the industry works, the hierarchy, how money flows, and what drives the industry.

"Delays and changes in schedules cause a lot of frustration: you have to have a backup plan."

Quality Counts

Standards of performance on the work site should be high. Do not accept poor or sloppy work. Poor quality gives your program a bad reputation and is not useful training for the participants. If participants make a mistake, have them do the work again. This can involve a waste of materials. Your program needs to assume some waste as part of the cost of training.

At the same time, you cannot expect quality work before its time. The process of learning new skills can be frustrating to everyone. Time should be allotted for participants to practice new skills and techniques. Repetition is key. Give participants time to do manageable projects so they can learn from their mistakes in a safe environment.

VOICES FROM THE FIELD

Quality Counts

"If the participants don't do something right, our trainers make them take it apart and do it over. This teaches them the proper way to do something and to be more conscientious the next time around."

"We find the process is much slower than with skilled workers, but the final product is of higher quality, because we took the time to do it right."

Keep Everyone Busy

One of your key responsibilities and biggest challenges is to make sure that all the participants are kept busy at the same time. When participants do not have enough to do, or when they do not feel that their work is important, they tend to drift off or get into trouble. Make sure you have enough work and enough materials to keep everyone busy.

It is easy to focus on a few participants and forget about the others. It is especially easy to spend time with the participants who are most eager to learn, or the ones who are always asking questions or seeking out new opportunities. Be sure to give equal attention to all the participants on your crew—both the males and the females, both the loud ones and the quiet ones. Sometimes your best workers will come from the least expected places!

Have a Good Safety Program

A good safety program has several parts:

1. It trains the participants to work safely on the site
2. It means keeping your work site clean and your tools in good working order at all times
3. It includes regular monitoring, safety meetings and other mechanisms to keep safety in the consciousness of everyone on the site
4. It includes a plan for dealing with and reporting accidents promptly

Safety makes for a productive work environment. It is an important part of the learning process for the participants. And safety is critical to protecting your program from disaster.

VOICES FROM THE FIELD

Safety Counts

"Keep the site clean. A clean site is a safe site. We stop early every day to do clean up."

"It's important to do the safety meeting—you can do them during breaks without making a big deal about them. We do them every Wednesday during break."

"Everyone should be encouraged to get OSHA Safety Training. It's good training and our participants really took well to it."

Use Deadlines to Your Advantage

Deadlines are an unavoidable part of a construction project. But there's also value to the participants in learning about deadlines. Deadlines help keep participants motivated. Understanding the importance of deadlines helps them to understand how the different parts of the construction process fit together. And it helps prepare them for the job market.

Participants can help you meet deadlines if they understand what needs to be done by what deadline. Teach them about the schedule and requirements of your project.

VOICES FROM THE FIELD

Deadlines

"We have a little healthy competition going between four or five crews. The competition comes partly from the imposed deadlines, but it helps to meet those deadlines."

"Look for solutions from within the participants…they'll then own those solutions."

Keep the Lines of Communication Open

There are a lot of details to making a YouthBuild program run well. Not only must you keep track of all the details of a regular construction project, but you have to coordinate with the other components of the program, and you must keep on top of what is happening with every participant. The key to success in running a YouthBuild program is keeping communication flowing—within your department, between departments, and with the participants. The more everyone is informed, the more cooperative everyone will be. One of the best ways to do this is by setting aside time for regular meetings, including meetings of staff and meetings of participants.

VOICES FROM THE FIELD

Keep the Lines of Communication Open

"Time needs to be set aside every day when the staff can meet—once a week is not good enough."

"We all get together before the participants arrive and again after they leave."

"We do site meetings with the participants every week. You can encourage participation by going around and having everyone say something."

"It's important to set time to deal with participants individually: to address weaknesses and advancements and to keep everyone on the same level."

2. The Participants' Personal Development

Overview

YouthBuild is about helping young people transform their lives. As a construction trainer, you will wear many hats, and your role will include much more than teaching construction. It will also involve helping participants learn how to overcome obstacles in their personal lives and take responsibility for themselves in a work environment. For many construction trainers, this is the first time that they have taken on this kind of role. Here are a few tips from your peers around the country for working successfully with your participants:

1. Build strong relationships with the youth
2. You can't avoid dealing with personal problems
3. Counseling doesn't only happen with a counselor in an office
4. Be a role model
5. Deal with poor attendance promptly
6. Know that not everyone will make it through the program
7. Keep in mind that it's not just a job

VOICES FROM THE FIELD

Helping Young People Transform Their Lives

"Not only are you an instructor or a teacher, but you're a parent, a big brother, a big sister, a father confessor, a warden, a referee, you name it."

Build Strong Relationships with Youth

The creation of mentoring relationships between staff and participants is one of the most powerful tools in helping them to make changes in their lives. Successful mentorship requires an atmosphere of trust and respect.

Young people often come into the program doubting any adult's sincerity and commitment. Staff need to work hard to earn the participants' trust. Staff should expect to be tested. Trust comes from staying consistent in what you say and do, modeling the behavior that you expect from participants, and treating everyone equally.

But it is not enough for staff to be respectful of participants. Staff must also be firm in not allowing participants to disrespect one another or staff. Participants need to know that cursing, name-calling, put-downs, and sexist or racist comments have no place on the work site.

VOICES FROM THE FIELD

Build Strong Relationships with the Youth

"We operate under what we call the "Bond Theory"—that is, in order to effect change, there has to be a significant person in the youth's life. So the site supervisor is expected to form a relationship with the participants based on trust and respect."

The Participants' Personal Development: Construction Staff Are Role Models and Counselors

All young people are guided in their development by adults around them who can give them guidance and helpful advice—parents, older relatives, and teachers. Many YouthBuild participants haven't had enough positive adult mentors and role models to help them in their growth and development. In addition, young people in YouthBuild programs have to deal with a lot of outside pressures. The relationships that you develop through your work with the young people will be very important to them. They may share things with you that they won't share with anyone else, including their counselor. They will look to you for guidance and advice as they are trying to make profound changes in their lives and take on the responsibilities of adulthood.

VOICES FROM THE FIELD

Construction Staff Are Role Models and Counselors

"Counseling is being done on the work site throughout the day, and done by the construction site staff—the youth don't even know they're being counseled and take better to it, building real relationships with the trainers."

"Counselors and construction field staff need to recognize the differences between them that create tension when dealing with the youth. They really have the same goals, just different approaches to achieving those goals."

You Can't Avoid Personal Problems

You will learn more about the participants' personal lives than you ever wanted to know. Since this may be a new role for you, keep in mind the importance of always respecting your participants' right to confidentiality with their peers, community members, and parents. If participants lose trust in staff with regard to their personal concerns, it will undermine their confidence in the program.

At the same time, if a participant talks to you about a situation that places him or herself, another participant or staff member, or the program in danger, it is your responsibility to share that information with the program manager. The program should have a policy on confidentiality so that the participants are aware that some things have to be handled differently from others.

VOICES FROM THE FIELD

Helping Participants with Personal Problems

"We stress to the participants from the beginning that this is not just a job to make money—it's about bettering themselves as a whole."

"The site supervisor has to be a lot more than just a foreman. He can't just deal with people's problems by passing them off to a counselor."

"You have to have solutions to their problems. If someone comes to you and says they're on drugs or that they got their girlfriend pregnant, you have to be able to offer solutions or help. You have to earn their trust."

"We deal with ongoing problems: men and women pairing up, pregnancy, families sabotaging the women's participation in the program. We talk a lot about what is not appropriate on the work site."

Be a Role Model

The way you interact with the young people in the program will influence your effectiveness in helping them mature. You need to model the behavior that you are trying to pass on to the participants. It is also important to maintain proper boundaries, as in any participant/teacher relationship.

There is often a temptation to "hang out" with the participants. This includes everything from socializing after hours, telling jokes, drinking together, or sharing confidences. Staff members need to act as strong mentors rather than as friends. Be yourself, have fun, but always show mature adult behavior and never drink with students. Of course, adult staff are expected to be drug-free and to never engage in romantic relationship with participants, regardless of their age.

There is also a temptation to lend money to participants. It is sometimes difficult to see participants in financial need and say "no" to them. But when individual staff members lend money to participants, it creates an atmosphere of secrecy, dependency, favoritism, and mistrust. Instead, teach participants how to manage the money they receive from YouthBuild as a stipend, including bringing lunches from home and limiting some of their more costly social activities. If a participant is having a serious financial emergency, work with the counselor and program manager to see if the program has an emergency assistance policy.

One program budgeted over $10,000 for emergency assistance to participants, which the participants emphasized as critical in their very high attendance rate. However, loans to participants from the program with the expectation of repayment are a bad idea for participants because they do not have the capacity to pay them back, and it distorts the relationship to have them in debt to the program.

VOICES FROM THE FIELD

Be a Role Model

"It's more than just building houses...it's about improving their lives. You have to surround the youth with morally upright people."

"The problems are the same in every city. The difference is the quality of the people who operate the program."

"Instructors must lead by example, model the behavior they are trying to create. For example, you can't expect the participants to wear their safety gear if the trainers aren't wearing their own."

Deal with Poor Attendance Promptly

Training cannot take place if the participant perceives a personal problem as more important than the day's work schedule. Be prepared to confront the problems that obstruct the growth of individual participants.

Latecomers and stragglers should not be overlooked; it is not helpful to the participant or fair to the rest of the group. Participants should receive whatever consequences or assistance the program policy and particular circumstances demand, whether it is a stern warning, dock of pay, counseling or other consequence. Do not assign menial or unappealing jobs such as clean up or moving of material as punishment. These jobs ought to be shared by everyone as part of their common training experience.

The counseling staff will be important partners in dealing with attendance and other behavior problems. At many YouthBuild programs, participants are required to sign a contract which spells out what is expected of them. If your program has a participant contract, make sure you have a copy of that contract, and an official way to report infractions to the program manager or counseling staff.

As a trainer, you will need to distinguish common excuses from real problems that need professional attention. When a participant has a serious problem that interferes with his or her training, the information should be shared with the counseling staff and discussed for supportive action.

Many programs have a policy of providing bonuses of $25-50 per pay period for perfect attendance. This incentive is important for teaching that the person who is there all the time is actually more valuable to the project than the one who is not 100% reliable.

VOICES FROM THE FIELD

Deal with Poor Attendance Promptly

"Poor attendance was a huge problem in the beginning. What helped was going over rules and expectations, reinforcing them on a regular basis, and enforcing disciplinary measures—in some cases leading to termination."

"We had each participant sign a participant contract and terminated a lot of people at the beginning based on that signed contract."

"When we realized attendance was the foundation of success, we put in place lots of incentives in the form of bonuses for perfect attendance every pay period and raises for cumulative good performance every two months."

Not Every Participant Will Make it Through the Program

Working with participants can be frustrating. It is difficult to watch self-destructive behavior and to accept the fact that not all participants are ready to change their lives right now.

Try to take the long view. It is helpful to remember that change takes a long time. As many YouthBuild programs have discovered, the impact of your work may show up years from now when the participant who leaves the program internalizes how YouthBuild affected his life and makes better life choices. Sometimes a participant who left the program or was dismissed will come back at a later time, ready to make a positive change.

Whatever happens, don't vent your frustrations with the participants. Sometimes it is tempting to share your frustration with participants, but don't do it. Venting about other participants, other staff, or other aspects of the program will undermine its success.

VOICES FROM THE FIELD

Not Every Participant Will Make it through the Program

"You can't reach everyone. You have to try with everyone, but ultimately you have to accept that not everyone will make it."

"When we pinpoint problems, we try to direct the right staff person to help deal with that problem. We try counseling. Still we lose some."

"If you do realize that someone is not working out, deal with the situation quickly so that it does not affect the whole program."

Quote from a participant: "Some people have never even been in a positive environment with people who care. Even if they drop out, they have gotten a glimpse of a different way of life that will help them decide to change. They have to start somewhere."

It's Not Just a Job!

Working at a YouthBuild program is more than just a job. It requires deep dedication and commitment from the staff. You can be sure that the participants notice and appreciate the investment that you make in their lives.

VOICES FROM THE FIELD

It's Not Just a Job!

"The trainers have to care about the participants. You can't look at your role as a punch in-punch out job."

"You can't look at this as if it's only a job...You have to give a lot. You have to go inside yourself and find things that are deep inside. This is the most rewarding work I've ever done... and the hardest."

"Keep at it. It's worth it."

3. The Participants' Learning

What Are Participants Expected to Learn?

While you are constructing a building and mentoring participants, you will also be teaching them. As a construction trainer, one of your goals is to ensure that your participants leave YouthBuild with the knowledge and skills that they will need to become economically independent and play leadership roles in their community.

On the construction site, participants are expected to learn five different types of skills:

1. Proper work habits
2. Leadership skills
3. Construction skills
4. Practical application of classroom learning
5. Safe work practices

Proper Work Habits

Many YouthBuild participants have never had a job or have not been able to keep a job for very long. The construction site provides a chance for them to learn the skills it takes to keep a job and to be successful in a job. As a construction trainer, part of your role is to teach participants positive work habits such as how to follow directions, how to take initiative, and how to follow through on an assignment.

Positive work habits should include:

- Preparedness (coming to work in proper dress, with tools, awake and ready to function well)
- Attendance and punctuality
- Understanding of and respect for safety requirements and work rules
- Accepting supervision and following directions
- Taking initiative and asking questions when necessary
- Learning to complete assigned tasks
- Cooperating with co-workers and treating co-workers with respect
- Resolving conflicts constructively
- Using the proper trade vocabulary

VOICES FROM THE FIELD

Proper Work Habits

"Have your main emphasis on basic work skills, not just on carpentry. This enables the graduates to have a better chance at succeeding on a job."

"Bad language, poor work habits and being unprepared on the site are all likely to be problems that you have to deal with."

"We've had to teach the participants to call when they're going to be late or absent."

"I had to implement a dress code: come prepared, no jewelry on site, no holes in clothing bigger than a quarter, and clothes have to be fairly clean."

"Be fair but firm. You have to be consistent and stick with the rules you've made—no exceptions. If you say that we start at 7:30 a.m. and someone shows up at 7:45 a.m., they have to know that it is not acceptable."

"Rotating instructors every quarter helps youth in job readiness. Since they will be changing bosses in real jobs, this gives them experience in working with different people. The youth rebel at first, but then they end up liking each new person they have to work with."

Leadership Skills

A central part of the YouthBuild program is teaching young people to develop their leadership skills and take responsibility for themselves and their community. At YouthBuild, good leadership is defined as "taking responsibility to make things go right for your life, for your family, for the program, and for the community."

The construction site provides tremendous opportunities to teach participants to take responsibility for themselves, those around them, and the project as a whole. This means giving them opportunities to take responsibility and not just directions.

As a construction trainer, part of your role is to provide leadership development opportunities for your participants. One way to foster trust among the participants is to encourage them to give and receive feedback. Encouraging them to give feedback to you about the construction program teaches them that their opinions matter. Teaching them to receive feedback maturely is essential to their future success in the job market. Another way is to assign leadership roles to participants, such as tool manager, safety inspector, and crew chief, and to decide on specific job responsibilities for each leadership role. Another way is to have a participant help you solve a problem, demonstrate a skill, or help run a meeting.

VOICES FROM THE FIELD

Leadership Skills

"Giving real roles and real responsibilities gives the participants ownership over the project."

"The more the youth feel a part of it, the more they'll get out of it. Have them involved in planning and in taking leadership roles in the different phases. Give them practical opportunities to use what they are learning."

"What works well for us is having specific youth leadership roles: Crew Chiefs (who do daily recordkeeping), a Steward (who's responsible for setting break times, calling clean up times, maintaining the cooler, and doing store runs), a First Aid and Safety Coordinator (who maintains the first aid kit, prepares for safety meetings and runs the meeting sometimes), a Photographer (to document the work in progress), and a Tool Manager."

Construction Skills

The construction site provides an opportunity to teach real construction skills. Your program should have a list of construction competencies. These are the skills that all participants are expected to learn. This may include certain vocabulary, proper tool use and construction methods. These competencies can be modified as necessary for your program. As a construction trainer, part of your role is to demonstrate and teach these skills to your participants and to make sure that they are actually learning the skills, rather than just going through the motions.

VOICES FROM THE FIELD

Construction Skills

"On site, participants are really learning how to do things and gaining marketable skills."

"Be sure to include specific training for trades or jobs that are going to be available; for those trades, the training must include the math involved, the terminology, and the methods."

"Hands-on learning in the field is the most exciting for the youth and attendance is better as a result."

"When we first began the program, I went out and bought 20 copies of Modern Carpentry and the corresponding workbooks, attempting to do a lot of teaching classroom style. This was not successful. Participants were bored within a week and it turned out to be much more productive to do the majority of teaching on site.

"Youth must receive training in reading plans. If you are not teaching how to read plans, you're not giving a solid foundation and a potential for upward mobility in the construction trades."

"Repetition of demonstrations, our relationships with the youth, and articulating and breaking down what needs to be done - all have contributed to the success of our site training."

"We have to give everyone a chance to learn the basics. Then if they want to learn more (specialized skills), we can hook them up with the subcontractors."

Practical Application of Classroom Learning

Participants gain the most from YouthBuild if their experience on the construction site is linked to their experience in the classroom. Vocational education classes will need to be coordinated with what's happening on the work site. In addition, the math that students learn in the classroom should help them on the construction site. These math skills will need to be reinforced on the construction site. In some YouthBuild programs, even the reading and writing activities in the classroom tie into construction. The closer the coordination between the construction staff and the teaching staff, the better your program will be.

VOICES FROM THE FIELD

Practical Application of Classroom Learning

"Whenever possible, integrate the vocational experience with the classroom experience. When it works, they feed off of each other.

"You have to start from day one teaching construction terminology and construction math basics. We spend two hours every week in the classroom on it."

"To fit with the construction site, the vocational education classes must be well structured and based on a routine."

"Offsite, we gear the vocational education toward theory, giving demonstrations and showing films of things the participants will be doing within the week."

"We spent two weeks on the front end before going out to the sites doing tests, assessing math skills and focusing on the basics so participants would have an understanding of the math before doing any construction work."

"Make sure the skills the participants are learning are applied immediately. In vocational education we teach what will soon be done on the work site, whether it is that day or sometime that week."

Appendix B: Resources

Accident Procedures on a YouthBuild Construction Site

Biweekly Participant Performance Evaluation

Bookkeeping, Purchasing, and Contracting Procedures

Construction Skills Competency Checklist

Construction Staff Evaluation Forms

Construction Staff Training and Orientation Outline

Construction Work Site Safety Rules

ETA-9143 Work Site Description Form

Housing Construction Budget: One-Unit YouthBuild Project

Job Descriptions (Construction Manager, Construction Trainer, Vocational Education Instructor)

Memorandum of Agreement between Subcontractor and General Contractor

Memorandum of Agreement with a Housing Partner

OSHA Forms 300, 300A and 301

Problem-Solving Exercise

Selecting a Construction Project Checklist

Tool Inventory Sheet

Vocational Education Curriculum Unit: Safety Rules

YouthBuild Construction-Related Training & Employment Guidance Letters (TEGLs) and Training & Employment Notices (TENs)

YouthBuild Construction Site Daily Attendance Sheet

YouthBuild Construction Work Site Checklist

YouthBuild Daily Construction Training Report

YouthBuild Infraction Sheet

YouthBuild Safety Program

Accident Procedures on a YouthBuild Construction Site

Introduction

Due to the nature of the work, there is always the potential for injury on a construction site. These injuries usually range from eye irritations to cuts, abrasions, and sprains. However, more serious injuries can occur. Since a YouthBuild construction site also serves as the training area where there may be numerous people not familiar with construction safety or practices, it is even more important that there be an accident procedure section in the program's safety plan. The accident procedure section should include information on pre-accident measures, first aid, accident reporting, and accident follow up. Proper accident reporting is required for Workers Compensation insurance.

Pre Accident Measures

Each construction site should establish a first aid area where a fully stocked first aid kit, Material Safety and Data Sheets, and emergency telephone numbers (rescue, hospital, and program offices) are located. A medical sheet for each participant including information on any medical condition, allergies, and emergency contact person should also be available. Many times this area can be set up near the site office or tool area where there is a telephone. If a specific area is not established, portable first aid kits, files, and a cellular phone can also suffice. Additionally, at least one of the construction trainers should have completed and be certified in basic first aid. This qualified person will be the responsible party who makes initial medical decisions following an injury.

First Aid

Following an accident or injury, even a cut requiring only minor medical attention, the staff member supervising the construction site should be immediately notified. This staff member will determine what first aid to administer and whether or not it is necessary to seek further medical attention. If further medical attention is necessary, the participant should be accompanied to the medical provider by a YouthBuild staff person.

Reporting

If an accident or injury occurs, DOL YouthBuild grantees are responsible for submitting to DOL a copy of OSHA's injury report form (Form 300 and 301) that can be downloaded at www.osha.gov/recordkeeping/RKforms.html and is included in Appendix B.

Program accident reports should be filled out and filed within 24 hours of any accident. The accident report can become a legal document if, for example, the incident becomes an insurance claim or suit. For this reason, the report should be accurate and factual, describing the incident clearly, honestly and without blaming individuals for their decisions or actions that led to the accident. Any accident that requires first aid should be recorded. If medical attention other than that performed on the site is required or if there are one or more days of lost time from work, the First Report of Injury should be filed with the Workers Compensation provider. Larger YouthBuild programs may need to maintain OSHA Form 300, the Log and Summary of Occupational Injuries and Illnesses.

Follow-Up

Prior to returning to the work site, a medical release from the attending physician should be obtained. Work assignments should be adjusted, according to doctor's recommendations, so that the injury is not aggravated. Additionally, any accident provides a learning opportunity for the rest of the program. The specific accident, its causes, and how it could have been prevented should be discussed with the rest of the participants.

Biweekly Participant Performance Evaluation (Instructor)

Participant Name: _____

Evaluator: _____

Period Ending: _____

Participant's Initials: _____

Motivation/Work Attitude	Always	Often	Seldom	Never
a. Does he or she care about the quality of work?				
b. Is he or she easy to supervise?				
c. Does he or she show interest in jobsite and classroom activities?				
d. Is the participant a team player?				

Comments:

Performance	Always	Often	Seldom	Never
a. Does participant show respect for fellow participants and instructors?				
b. Does participant come prepared?				
c. Does participant have good work habits?				
d. Does participant work well on his or her own?				
e. Does participant complete assignments?				
f. Does participant learn new concepts quickly?				
g. Does participant take initiative?				
h. Does participant pay attention?				
i. Does participant show good safety habits?				
j. Does participant clean up the work site?				

Comments:

Biweekly Participant Performance Evaluation (Instructor) continued

Attendance	Always	Often	Seldom	Never
a. Does participant come on time?				
b. Does participant come regularly?				
c. Does participant phone to report absence or lateness?				
d. Does participant return on time from breaks?				
e. Does participant return on time from lunch?				
f. Does participant leave no earlier than dismissal time?				

Skills attained during this evaluation period/assessment:

Date:	Skill:	Assessment:

Comments

Note areas where participant needs improvement or has shown improvement:

Overall Evaluation

- ❑ Unsatisfactory
- ❑ Needs improvement
- ❑ Almost job ready
- ❑ Job ready

Biweekly Performance Self-Evaluation (Participant)

Participant Name: _____

Period Ending: _____

Instructor's Initials: _____

Participant's Signature: _____

Motivation/Work Attitude	Always	Often	Seldom	Never
a. Do I care about the quality of work?				
b. Am I easy to supervise?				
c. Do I show interest in jobsite and classroom activities?				
d. Am I a team player?				

Comments:

Performance	Always	Often	Seldom	Never
a. Do I show respect for fellow participants and instructors?				
b. Do I come prepared?				
c. Do I have good work habits?				
d. Do I work well on my own?				
e. Do I complete assignments?				
f. Do I learn new concepts quickly?				
g. Do I take initiative?				
h. Do I pay attention?				
i. Do I show good safety habits?				
j. Do I clean up the work site?				

Comments:

Biweekly Performance Self-Evaluation (Participant) continued

Attendance	Always	Often	Seldom	Never
a. Do I come on time?				
b. Do I come regularly?				
c. Do I phone to report absence or lateness?				
d. Do I return on time from breaks?				
e. Do I return on time from lunch?				
f. Do I leave no earlier than dismissal time?				

Skills attained during this evaluation period/assessment:

Date:	Skill:	Assessment:

Comments

Note areas where participant needs improvement or has shown improvement:

Overall Evaluation

- ❑ Unsatisfactory
- ❑ Needs improvement
- ❑ Almost job ready
- ❑ Job ready

These sample evaluations were adapted from YouthBuild Addison, Corning, NY and Operation Fresh Start, Madison WI.

Bookkeeping, Purchasing, and Contracting Procedures

A. Bookkeeping Procedures

Cash disbursements must be approved by the appropriate program director, the controller, and the executive director, as described in more detail in the Purchase Order Procedures. Checks must be signed by the executive director and one other signatory. Every effort will be made to have the second signatory be a consistent signer. A Cash Disbursement page is prepared, showing check date, payee, check numbers, General Ledger account # and name, and amount. Bank statements are reconciled and a trial balance is prepared monthly. All accounting functions are performed in accordance with Generally Accepted Accounting Principles (GAAP).

B. Purchasing Procedures

The following shall be the purchasing procedures for purchasing any goods or services on behalf of the agency.

1. Purchase Orders

No purchase of goods or services may be made without a properly filled out and executed purchase order. Pre-numbered purchase orders will be kept under lock and key in the fiscal office.

The following program directors are authorized to request purchase orders and fill them out for approval:

Director of _____

Director of _____

In the absence of the program director, the executive director may, at his or her discretion, appoint another staff person, such as the construction manager, to prepare purchase orders. However, under no circumstances may any individual be authorized to sign a purchase order without specific written authorization from the executive director. A properly filled out purchase order will have the following information on it, at a minimum:

- Name of the vendor, including address and phone number
- Detailed description of the material or services being ordered
- The cost per unit for each item/service being ordered, and the total cost
- The building address (and the unit, if applicable) to charge the purchases to. In the case where more than one account is being charged, the specific account and the amount to be charged to each account should be written on the purchase order.
- The Chart of Accounts line item name to charge the expense
- The name of the person filling out the P.O.

The P.O. will then be presented to the executive director for his or her authorizing signature.

The P.O. will then be presented to the fiscal office for logging. Fiscal will log the purchase order in numerical order, recording the information as per the attached sample log form. Fiscal will review the purchase order for completeness and to make sure that funds are available in the budget for the purchase. No invoice shall be paid without an accompanying signed purchase order and, if appropriate, receiving document.

Once the authorizing signatures are obtained, the P.O. shall be considered approved. A copy shall be kept by the fiscal office, a copy will go to the vendor, and a copy will be kept by the program manager or construction manager.

2. Bidding Procedures

Bidding procedures may need to be updated according to current auditing standards. The following bidding procedures, at a minimum, are to be followed for the purchase of all goods and services. In the event that the contract governing the use of the funds being used to make the purchase is more stringent, the governing contract's bidding procedures will apply. For purchases:

- Under $500: No bid required
- Over $500 but under $2,500: Three phone bids
- Over $2,500 but under $10,000: Three written bids
- Over $10,000: Bid procedure to be approved by executive director

The purpose of bidding is to secure the best possible product at the lowest price. Splitting up a purchase to avoid bidding is not permitted. The executive director may, at his or her discretion, choose not to select a low bidder to support local and minority firms or if he or she feels that the quality of service of the low bidder may not be acceptable.

3. Purchasing Materials

If materials are being ordered, the packing slip/receiving document is to be returned immediately to fiscal by the person receiving the merchandise. Vendors should mail invoices directly to the fiscal office. Invoices should not be handed to the person picking up the merchandise.

4. Purchasing Services

If services are being purchased, managers should take care to adhere to the bidding procedures contained in these guidelines and any other bidding procedures that may be required by the relevant contract.

Any P.O. for services of over $500 shall be accompanied by a contract itemizing the scope of services, the amount and the schedule for payment, and shall be signed by the executive director. The original executed copy shall be kept by fiscal, with a copy to be kept by the program director or the construction manager.

5. Emergency P.O.'s

In the event of an emergency, when the program director or other authorized employees are not available for authorizing P.O.'s, the _____may authorize P.O.'s of up to $250. No more than one emergency P.O. may be written per month.

The Purchase Order Log as a Control Tool

The purchase order log will be the main means of keeping track of all purchases of goods and services made. All P.O.'s must be accounted for. Voided P.O.'s should be recorded as such, with the voided P.O. kept in a file. The P.O. log will also be used to record and verify the receipt of a receiving ticket and an invoice.

C. Contracting Procedures

A written scope of work and cost estimate is prepared by the program director or construction manager. If the job is over $5,000 and four or more trades are involved, a trade payment breakdown is prepared. The scope and estimate are given to the fiscal office, which verifies the availability of funds.

Upon approval of a contractor, a purchase order is prepared and a contract is drafted. The contract is signed by the executive director, with a copy to be forwarded to fiscal and to the program director.

When work is completed, and an invoice is received from the contractor, the invoice is stamped, the work is inspected, and the invoice is approved by the program director. If the job is over $2,500, a ten percent retainer is withheld. A check is prepared, documentation is attached to the check, and it is signed by the program director and the executive director. When work is completed, a final invoice is received and stamped. The work is inspected and approved, and a check is prepared for the balance due, signed, and dispatched. The invoice and contract are filed by check number and by month.

Construction Skills Competency Checklist

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Safety Skills							
Identify safety rules	❑	❑	❑	❑			
Identify safety equipment	❑	❑	❑	❑			
Use safety equipment	❑	❑	❑	❑			
Lift objects safely	❑	❑	❑	❑			
Use basic first aid procedures	❑	❑	❑	❑			
Use hand tools safely	❑	❑	❑	❑			
Use power tools safely	❑	❑	❑	❑			
Use building materials safely	❑	❑	❑	❑			
General Construction Skills							
Identify and use measurement tools	❑	❑	❑	❑			
Identify and use hand tools	❑	❑	❑	❑			
Select correct tool for job	❑	❑	❑	❑			
Identify nails and fasteners	❑	❑	❑	❑			
Use nails and fasteners	❑	❑	❑	❑			
Identify grades of lumber	❑	❑	❑	❑			
Identify grades of plywood	❑	❑	❑	❑			
Identify actual and nominal dimensions of surfaced lumber	❑	❑	❑	❑			
Identify common lumber defects	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
General Construction Skills							
Use correct nailing techniques Estimate square feet	❑	❑	❑	❑			
Estimate linear feet	❑	❑	❑	❑			
Estimate cubic feet	❑	❑	❑	❑			
Consult scaffolding	❑	❑	❑	❑			
Identify purposes of building codes, zoning laws, permits	❑	❑	❑	❑			
Portable Power Tools							
Identify power tools	❑	❑	❑	❑			
Determine use of power tools	❑	❑	❑	❑			
Select correct tool for job	❑	❑	❑	❑			
Operate circular saw	❑	❑	❑	❑			
Operate electric drill	❑	❑	❑	❑			
Identify drill bits	❑	❑	❑	❑			
Operate portable router	❑	❑	❑	❑			
Operate miter saw	❑	❑	❑	❑			
Operate power sander	❑	❑	❑	❑			
Operate screw shooter	❑	❑	❑	❑			
Operate portable table saw	❑	❑	❑	❑			
Operate saber saw	❑	❑	❑	❑			
Stationary Machine Skills							
Operate planer	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Operate joiner	❑	❑	❑	❑			
Operate bench saw	❑	❑	❑	❑			
Operate radial saw	❑	❑	❑	❑			
Operate scroll saw	❑	❑	❑	❑			
Operate drill press	❑	❑	❑	❑			
Operate rip saw	❑	❑	❑	❑			
Construction Planning Skills							
Read architect's scale	❑	❑	❑	❑			
Read and interpret drawings	❑	❑	❑	❑			
Interpret blueprint symbols	❑	❑	❑	❑			
Interpret specifications	❑	❑	❑	❑			
Identify steps of the building process	❑	❑	❑	❑			
Estimate labor costs	❑	❑	❑	❑			
Identify materials costs	❑	❑	❑	❑			
Organize building materials	❑	❑	❑	❑			
Preparing the Building Site							
Use builder's level	❑	❑	❑	❑			
Establish elevation	❑	❑	❑	❑			
Reference points	❑	❑	❑	❑			
Layout building	❑	❑	❑	❑			
Square building using 6-8-1 method and diagonal	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Demolition Skills							
Use hand demolition skills	❑	❑	❑	❑			
Use correct demo procedures	❑	❑	❑	❑			
Use safe demo procedures	❑	❑	❑	❑			
Construct ramps	❑	❑	❑	❑			
Construct chutes	❑	❑	❑	❑			
Correctly place dumpsters	❑	❑	❑	❑			
Pack dumpsters	❑	❑	❑	❑			
Shoring	❑	❑	❑	❑			
Use shoring post	❑	❑	❑	❑			
Use screw jacks	❑	❑	❑	❑			
Make and use A-frames	❑	❑	❑	❑			
Building and Installing Forms							
Construct footing forms	❑	❑	❑	❑			
Place and make keys for footing and foundation	❑	❑	❑	❑			
Make plywood forms	❑	❑	❑	❑			
Make concrete forms	❑	❑	❑	❑			
Assemble pre-made forms	❑	❑	❑	❑			
Brace concrete forms	❑	❑	❑	❑			
Set grades	❑	❑	❑	❑			
Pour concrete	❑	❑	❑	❑			
Strip forms	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Place anchor bolts	❑	❑	❑	❑			
Floor Framing Skills							
Snap lines	❑	❑	❑	❑			
Square foundations	❑	❑	❑	❑			
Frame sills	❑	❑	❑	❑			
Frame girders	❑	❑	❑	❑			
Install steel columns	❑	❑	❑	❑			
Layout, cut, and install joint	❑	❑	❑	❑			
Frame stair openings	❑	❑	❑	❑			
Frame chimney openings	❑	❑	❑	❑			
Install subfloor	❑	❑	❑	❑			
Install firestop	❑	❑	❑	❑			
Install joist hangers	❑	❑	❑	❑			
Install steel bridging	❑	❑	❑	❑			
Install cross bridging	❑	❑	❑	❑			
Install solid bridging	❑	❑	❑	❑			
Cut stair ringers	❑	❑	❑	❑			
Exterior Wall Framing Skills							
Layout shoes and plates	❑	❑	❑	❑			
Layout partitions	❑	❑	❑	❑			
Frame window openings	❑	❑	❑	❑			
Frame door openings	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Frame fireplace wall openings	❑	❑	❑	❑			
Pre-cut studs	❑	❑	❑	❑			
Layout dimensions for studs	❑	❑	❑	❑			
Sheath exterior walls	❑	❑	❑	❑			
Install double plates	❑	❑	❑	❑			
Hang exterior doors	❑	❑	❑	❑			
Install windows	❑	❑	❑	❑			
Interior Wall Framing Skills							
Identify parts of framed wall	❑	❑	❑	❑			
Install strapping	❑	❑	❑	❑			
Layout interior walls	❑	❑	❑	❑			
Construct partition backers	❑	❑	❑	❑			
Construct comers and headers	❑	❑	❑	❑			
Layout shoes and plates	❑	❑	❑	❑			
Frame bearing partitions	❑	❑	❑	❑			
Frame non-bearing partition	❑	❑	❑	❑			
Install blocking	❑	❑	❑	❑			
Install bracing	❑	❑	❑	❑			
Framing Ceilings and Roofs							
Layout ceiling joist and rafters	❑	❑	❑	❑			
Install ceiling joints	❑	❑	❑	❑			
Frame fireplace openings	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Layout common rafter patterns	❑	❑	❑	❑			
Figure rafter lengths	❑	❑	❑	❑			
Cut rafters	❑	❑	❑	❑			
Crow foot	❑	❑	❑	❑			
Layout ridge	❑	❑	❑	❑			
Install common rafters	❑	❑	❑	❑			
Install gable studs	❑	❑	❑	❑			
Install sheathing on roof	❑	❑	❑	❑			
Install fascia	❑	❑	❑	❑			
Install rakes	❑	❑	❑	❑			
Install soffits	❑	❑	❑	❑			
Install drip edge	❑	❑	❑	❑			
Apply roofing paper	❑	❑	❑	❑			
Install shingles	❑	❑	❑	❑			
Exterior Finishing Skills							
Erect corner boards	❑	❑	❑	❑			
Install wood shingles	❑	❑	❑	❑			
Install clapboards	❑	❑	❑	❑			
Install tongue and groove siding	❑	❑	❑	❑			
Install plywood siding	❑	❑	❑	❑			
Install composition siding	❑	❑	❑	❑			
Install aluminum siding	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Install vinyl siding	❑	❑	❑	❑			
Install shake shingles	❑	❑	❑	❑			
Install cornice trim	❑	❑	❑	❑			
Install aluminum gutters	❑	❑	❑	❑			
Install wood gutters	❑	❑	❑	❑			
Interior Finishing Skills							
Install insulation	❑	❑	❑	❑			
Identify different R-values	❑	❑	❑	❑			
Install vapor barriers	❑	❑	❑	❑			
Install drywall	❑	❑	❑	❑			
Install furo-rock	❑	❑	❑	❑			
Install blue board	❑	❑	❑	❑			
Tape drywall	❑	❑	❑	❑			
Apply joint compound	❑	❑	❑	❑			
Plaster	❑	❑	❑	❑			
Install underlayment	❑	❑	❑	❑			
Install bifold doors	❑	❑	❑	❑			
Install finish trim	❑	❑	❑	❑			
Install baseboards	❑	❑	❑	❑			
Install closet shelves and poles	❑	❑	❑	❑			
Install hardwood floors	❑	❑	❑	❑			
Install and build stairs	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Install banisters and railing	❑	❑	❑	❑			
Install vinyl flooring	❑	❑	❑	❑			
Flash patch wooden floors	❑	❑	❑	❑			
Install stock cabinets	❑	❑	❑	❑			
Install counter tops	❑	❑	❑	❑			
Erecting Staging							
Use extension ladder	❑	❑	❑	❑			
Use step ladder	❑	❑	❑	❑			
Use ladder brackets	❑	❑	❑	❑			
Use pump jacks	❑	❑	❑	❑			
Use wall brackets	❑	❑	❑	❑			
Use roof brackets	❑	❑	❑	❑			
Use pipe staging	❑	❑	❑	❑			
Work Habits/ Career Readiness							
Identify career opportunities	❑	❑	❑	❑			
Punctuality	❑	❑	❑	❑			
Attendance	❑	❑	❑	❑			
Positive attitude	❑	❑	❑	❑			
Effectively manage difference and conflict	❑	❑	❑	❑			
Support team effort	❑	❑	❑	❑			

Skills/Competencies	Job Ready	Almost Job Ready	Needs Improvement	Unsatisfactory	Instructor Initials	Participant Initials	Date
Other Skills							
1.	❑	❑	❑	❑			
2.	❑	❑	❑	❑			
3.	❑	❑	❑	❑			

Attach comments if needed.

This construction skills competency list was adapted from YouthBuild Boston, Boston, MA.

Construction Staff Evaluation Forms

Performance Evaluation: Construction Manager

Name: _____

Date: _____

Supervisor: _____

_____ 3 month evaluation _____ 6 month evaluation _____ Annual evaluation

Program Management	**Excellent**	**Good**	**Fair**	**Poor**
a. Quality of craftsmanship	1	2	3	4
b. Estimates cost	1	2	3	4
c. Negotiates prices with vendors and subs	1	2	3	4
d. Submits and collects on requisitions in a timely way	1	2	3	4
e. Keeps within pre-established	1	2	3	4
f. Ensures prompt delivery of materials	1	2	3	4
g. Ensures work site safety	1	2	3	4
f. Ensures necessary and proper equipment and tools are acquired for use on site	1	2	3	4

Comments:

Overall Leadership	**Excellent**	**Good**	**Fair**	**Poor**
a. Contributes to vision and direction of organization	1	2	3	4
b. Sets example for staff through behavior, speech, and attitude	1	2	3	4
c. Represents YouthBuild effectively in the broader community	1	2	3	4
d. Takes initiative to innovate and improve the program	1	2	3	4
e. Coordinates with academic, counseling, and leadership development components	1	2	3	4

Comments:

Performance Evaluation: Construction Manager continued

Overall Leadership	Excellent	Good	Fair	Poor
a. Contributes to vision and direction of organization	1	2	3	4
b. Sets example for staff through behavior, speech, and attitude	1	2	3	4
c. Represents YouthBuild effectively in the broader community	1	2	3	4
d. Takes initiative to innovate and improve the program	1	2	3	4
e. Coordinates with academic, counseling, and leadership development components	1	2	3	4

Comments:

Overall Management	Excellent	Good	Fair	Poor
a. Sets priorities effectively	1	2	3	4
b. Plans effectively	1	2	3	4
c. Follows through effectively	1	2	3	4
d. Contributes to management team	1	2	3	4

Comments:

Knowledge of Construction Techniques	Excellent	Good	Fair	Poor
a. Keeps current on new methods and techniques	1	2	3	4
b. Recognizes quality craftsmanship	1	2	3	4

Comments:

Quality of Relationship with Participants	Excellent	Good	Fair	Poor
a. Communicates effectively	1	2	3	4
b. Listens and shows respect	1	2	3	4
c. Sets an example through dress, behavior, speech, and attitude	1	2	3	4
d. Uses good judgement in handling problem situations	1	2	3	4
e. Supports and arranges opportunities for leadership development	1	2	3	4

Performance Evaluation: Construction Manager continued

f. Ensures participants' ongoing awareness of construction plans, community relations, learning all aspects of the business	1	2	3	4

Comments:

Productivity	**Excellent**	**Good**	**Fair**	**Poor**
a. Ensures project goals are met	1	2	3	4
b. Resolves problems that are slowing down project completion	1	2	3	4

Comments:

Staff Supervision	**Excellent**	**Good**	**Fair**	**Poor**
a. Effectively monitors trainers' performance	1	2	3	4
b. Holds weekly supervision meetings	1	2	3	4
c. Provides guidance and support to trainers	1	2	3	4

Comments:

Contributes to the Overall Program	**Excellent**	**Good**	**Fair**	**Poor**
a. Offers creative suggestions for improving the program	1	2	3	4
b. Offers constructive resolution of conflicts	1	2	3	4
c. Takes initiative beyond the limits of the job	1	2	3	4

Comments:

Quality of Relationships with Supervisors	**Excellent**	**Good**	**Fair**	**Poor**
a. Accepts suggestions and direction	1	2	3	4
b. Shares information and thinking toward a positive relationship	1	2	3	4
c. Acknowledges weaknesses and seeks help	1	2	3	4

Comments:

Performance Evaluation: Construction Trainer

Name: _____

Position: _____

Date: _____

Supervisor: _____

_____ 3 month evaluation _____ 6 month evaluation _____ Annual evaluation

Dependability	**Excellent**	**Good**	**Fair**	**Poor**
a. Attendance	1	2	3	4
b. Promptness	1	2	3	4
c. Follows through on assignments and commitments	1	2	3	4
d. Follows procedures without being reminded (injury report, attendance sheets, sign-in)	1	2	3	4

Comments:

Teaching Ability	**Excellent**	**Good**	**Fair**	**Poor**
a. Uses various teaching strategies to fit different learning styles	1	2	3	4
b. Encourages participants to think through and solve construction problems	1	2	3	4
c. Takes initiative to resolve problems	1	2	3	4
d. Conveys high standards of quality construction	1	2	3	4
e. Shows patience in communicating	1	2	3	4
f. Conveys enthusiasm for subject	1	2	3	4
g. Is thorough in explanations	1	2	3	4
h. Takes opportunity to teach the bigger picture: blueprints, plans, community impact, etc.	1	2	3	4

Comments:

Performance Evaluation: Construction Trainer continued

Knowledge of Construction Techniques	Excellent	Good	Fair	Poor
a. Knowledge of Construction	1	2	3	4
b. Keeps current on new methods	1	2	3	4
c. Recognizes quality craftsmanship	1	2	3	4
d. Brings necessary and proper tools	1	2	3	4

Comments:

Quality of Relationships with Participants	Excellent	Good	Fair	Poor
a. Communicates effectively	1	2	3	4
b. Listens and shows respect	1	2	3	4
c. Sets an example through dress, behavior, speech, and attitude	1	2	3	4
d. Sets high standard for participant performance	1	2	3	4
e. Uses good judgment in handling problem situations	1	2	3	4
f. Supports and arranges leadership opportunities	1	2	3	4

Comments:

Productivity	Excellent	Good	Fair	Poor
a. Meets goals as set by supervisor	1	2	3	4
b. Motivates participants to produce	1	2	3	4

Comments:

Quality of Relationship with Supervisors	Excellent	Good	Fair	Poor
a. Accepts suggestions and direction	1	2	3	4
b. Shares information and thinking toward a positive relationship	1	2	3	4
c. Acknowledges weaknesses and seeks help	1	2	3	4

Comments:

Performance Evaluation: Construction Trainer continued

Ensures Safety on the Work Site	Excellent	Good	Fair	Poor
a. Makes sure participants clean up site and put away tools	1	2	3	4
b. Ensures proper use of tools	1	2	3	4
c. Ensures proper erection of equipment	1	2	3	4
d. Holds sessions on safety procedures	1	2	3	4
e. Ensures first aid kit is stocked and available	1	2	3	4
f. Ensures that safety equipment is worn when needed	1	2	3	4

Comments:

Contributes to the Overall Program	Excellent	Good	Fair	Poor
a. Offers creative suggestions for improving the program	1	2	3	4
b. Offers constructive resolution of conflict	1	2	3	4
c. Takes initiative beyond the limits of the job	1	2	3	4

Comments:

Construction Staff Training and Orientation Outline

Day 1

The goal of this day's training is to explore the many roles that the construction staff will play within the YouthBuild program.

The morning will start with an overview of where the construction staff fits into the overall YouthBuild program. It will then look at the construction project and the first goal of the construction staff: "Getting the work done."

In the afternoon, the training will look at the other two roles of the construction staff: "Participants' Personal Development" and "What Participants are Expected to Learn."

The topics follow the outline in the Construction Trainers' Orientation Handbook. The day before the training, the handbook should be given to all construction and vocational education staff and to anyone else who will be attending the training. Staff should be asked to read the handbook in advance and to bring it with them to the training.

8:30-10:15	**Introduction**
8:30-8:45	**Introductions** Review Training Agenda and Goals (above)
8:45-9:30	**Overview of the YouthBuild Program, Staff Structure, History, and Philosophy** The YouthBuild director presents this part of the training. Hand out a copy of the YouthBuild organizational chart so staff can see where they fit in.
9:30-10:15	**The Role of Construction Staff** Give staff 15 minutes to re-read Construction Trainers' Orientation Handbook, if needed. Discussion: What are the most important qualities and responsibilities of a construction trainer? Brainstorm a list on chart paper.
10:15-11:45	**Handbook Part I: The Work**
10:15-11:00	**Presentation of Construction Project** Construction manager goes over blueprint and hands out construction timeline.
11:00-11:45	**Safety Plan** Discuss plans for training participants in construction safety. Distribute Construction Work Site Safety Rules and ask staff to suggest any changes. Brainstorm ways to keep safety a top priority on the work site. Make a list of ideas on chart paper. Decide on system for monitoring safety and a time for weekly safety meetings with participants.
11:45-12:45pm	**Lunch**

12:45-2:00	**Handbook Part II: Participants' Personal Development** Have all non-construction staff join this part of the training for a full staff discussion. Presentation/Brainstorm: What are likely issues to come up on the work site? How will the work site and program work together? Review the YouthBuild Infraction Sheet and agree on a process for communication between counseling staff and construction staff.
2:00-2:15	**Break** *(Counseling staff can leave)*
2:15-4:30	**Handbook Part III: What Are Participants Expected to Learn?**
2:15-3:00	**Types of Learning on the Work Site** Ask staff to identify the four types of learning that should take place on the construction work site, as described in the handbook. Discussion: How can the construction staff make sure that participants are learning in all four of these areas? Hand out the Construction Skills Competency Checklist and Biweekly Participant Performance Evaluation and Biweekly Performance Self-Evaluation. Ask staff for input in making any changes.
3:00-3:45	**Integrating Construction Work Site and Academic Learning** Have program manager and teachers join this part of the training. Discussion: How can the construction staff and academic teachers work together to teach math skills used on a construction work site? Reading and writing skills?
3:45-4:30	**Planning Activity on Leadership Development** Have staff brainstorm leadership development opportunities on the construction work site. Choose three ideas that will be implemented this year. Note: Check with your director or program manager to see if this activity is scheduled to be done with the entire staff. If so, you should skip it during this training.

Day 2

The purpose of this day's training is to give staff the nuts-and-bolts information, schedules and forms that will be used to run the construction component, and to identify any staff questions or concerns.

8:30-9:30	**Feedback on Yesterday's Training Session** Go around the group. Ask staff to share what was most useful about yesterday's discussion and what would have improved the session.
9:30-10:30	**The Day-to-Day Construction Schedule** Distribute and review a copy of the work site's daily/weekly work schedule. Inform staff about plans for participant transportation to the work site. Decide on a system for taking attendance on the work site. Distribute sample YouthBuild Construction Site Daily Attendance Sheet. Distribute a sample of the YouthBuild Daily Construction Training Report and establish the process for completing and submitting it.
10:30-12:00	**Staff Questions and Concerns** On a sheet of chart paper, ask staff to brainstorm the questions that they have regarding the program. Do not address any of the questions until all the questions are listed on the wall. Go through and answer as many questions as possible. Mark those questions that can't be answered on the spot, and set a time when those questions will be answered.
12:00-1:00	**Lunch**
1:00-3:00	**Procedures and Forms** Review the following procedures with staff. These forms are included in the Appendix. 1. Ordering supplies and materials (Distribute any written purchasing procedures) 2. Tool and Equipment Storage and Inventory (Distribute Tool Inventory Sheet) 3. Accident Policies and Procedures (Distribute OSHA's Log of Work-Related Injuries and Illnesses Form 300) 4. Staff Evaluations (Distribute and review Construction Staff Evaluation Forms) 5. Participant Evaluations (Distribute Biweekly Participant Evaluation)

Construction Work Site Safety Rules

- All unsafe conditions, accidents, and injuries will be reported immediately to a staff member.
- Everyone, including visitors, must wear hard hats and other necessary personal protective equipment—no exceptions.
- Safety equipment must be kept in good condition; something that is not should be reported immediately.
- Proper work boots must be worn at all times.
- Eye protection must be worn when using power tools.
- Smoking is prohibited on the site.
- Alcohol and drugs are prohibited on the site.
- People under the influence of alcohol and drugs are prohibited on the site.
- The site must be kept well lit and neat.
- Participants should be under adequate supervision at all times.
- Participants must be thoroughly trained on how to use the tools before using them.
- All tools must be in good repair.
- Throwing any item out of windows is prohibited.
- Cell phone use is restricted.
- Horseplay on the site is prohibited.

Work Site Description

(A WorkSite Description is required for each property)

YouthBuild (YB) GRANT

ATTACHMENT 1 **OMB No.** 1205-0464

ETA - 9143 **Expires:** 08/31/2018

APPLICANT IDENTIFYING INFORMATION (Complete All Sections)

Applicant Name:

Program/Project Name & Address:

1. Work Site Identification (Address/Parcel #))

2. Number of Housing Units Planned to be Produced or Renovated:

3. Type of housing to be produced (Check all that apply)
☐ Residential/rental ☐ Homeownership ☐ Transitional housing for the homeless

4. Will all housing produced be provided for homeless, low-income, or very-low income persons?
☐ Yes ☐ No

5. Individual Housing Project Site Estimate and Documentation of Resources: Complete Attachment 1A for each work site to be used in conjunction with the YouthBuild program. Attach documentation of resources behind each Attachment 1A.

6. The on-site training site consists of (Check all that apply) : ☐ New Construction ☐ Rehabilitation

7. Are any of the units currently occupied? ☐ Yes ☐ No (If yes, attach a relocation narrative that identifies the number of persons, the business or others occupying the property on the date of submission of this application, the number of displaced, the number to be temporarily relocated but not displaced, the estimated cost of relocation services payments and services, the source of funds for relocation, and the organization that will provide relocation assistance to occupants and the contact person's name and phone number. Label this Attachment 1B.)

8. Name of the current owner:

9. Documentation of Access: Attach required evidence of work site access (Letter from the owner identified in No. 8). Label this Attachment 1C.

10. Describe the participant role and responsibilities for the work site housing construction or rehabilitation work. Label this Attachment 1D.

11. Name of entity which will own and manage the property after the construction or rehabilitation work is completed:

OMB No.: 1205-0464 OMB Expiration Date: 08/31/2018 Average Response Time: 30 minutes

Applicant Signature:

Printed Name: _____ Signature: _____

Title: _____ Date: _____

Organization: _____

Housing Construction Budget: One-Unit YouthBuild Project

Description & Breakdown	Cost
General Requirements	
Mobilization	$675.00
Security	1,105.00
Temporary Facilities	150.00
Supervision	—
Permits	—
Equipment	—
TOTAL	**$1,930.00**
Site Work	
Demolition	$8,000.00
Earthwork	1,500.00
Site Utilities	400.00
Site Improvements	—
Area Paving	—
Walks & Curbs	—
Landscaping	—
Fence	1,500.00
TOTAL	**$11,400.00**
Concrete	
Foundation	$1,300.00
Sidewalks/Yards	3,200.00
Steps/Footing	1,650.00
Basements	3,950.00
TOTAL	**$10,100.00**

Description & Breakdown	Cost
Masonry	
Block	$4,760.00
Brick Pointing	800.00
Brickwork	500.00
Stucco	3,800.00
Restoration/Cleaning	1,650.00
TOTAL	**$11,510.00**
Metals	
Structural	—
Ornamental/Guards	$859.00
Railings	650.00
TOTAL	**$1,509.00**
Carpentry	
Joist	$7,867.00
Sheathing	3,555.00
Window/Door/Frames	2,875.00
Trim/Shelves	875.00
Underlayment	2,370.00
Partitions/Ceilings	6,323.00
TOTAL	**$23,865.00**
Finishes	
Drywall	$ 6,370.00
Ceramic Tile Work	1,100.00
Carpet	2,652.00
Painting	2,500.00
Floor Tile or Rugs	2,250.00
Windows/Doors	7,692.00
Kitchen Cabinet	5,557.00
Appliances	1,170.00
TOTAL	**$29,291.00**

Description & Breakdown	Cost
Moisture Protection	
Roofing	$3,800.00
Siding	750.00
Insulation	1,100.00
TOTAL	**$5,650.00**
Systems	
Plumbing	$5,100.00
Heating	4,000.00
Electrical	4,300.00
TOTAL	**$13,400.00**

TOTAL CONSTRUCTION COST	**$108,655.00**

Job Description: Construction Manager

Purpose

To manage the renovation, rehabilitation, or construction of affordable housing units and the on-site construction training of young people, including the supervision of the construction trainers or crew leaders

Responsibilities

Depending on the construction period and organizational relationships, these duties would be carried out either in cooperation with the general contractor, or if YouthBuild is the general contractor, in cooperation with the architect and other members of the development team:

1. Develop detailed construction plan and schedule
2. Coordinate and monitor the progress and quality of work
3. Develop construction budget and monitor costs
4. Manage bid process and coordinate subcontractors
5. Order supplies and materials
6. Define weekly work assignments and priorities for construction trainers and participants
7. Provide oversight of the on-site construction training by:

   Ensuring that participants get consistent and adequate skills training

   Helping to set standards for appropriate behavior and ways to handle problems on the construction site

   Ensuring work site safety and training in safety procedures and proper construction techniques while adhering to all applicable OSHA requirements
8. Supervise and evaluate the construction trainers
9. Identify private contractors or developers who are willing to work with young people and who might be interested in collaborative partnerships with YouthBuild
10. Participate as part of the management team in program planning and decision making, keeping the director informed of the progress, problems, and needs of the on-site construction work and training
11. Assist in the development of job opportunities for participants in conjunction with other members of YouthBuild and where appropriate, assist participants in setting career goals
12. Participate in negotiations with unions, contractors, or other individuals on construction-related matters
13. Assess potential construction sites
14. Support the leadership development and counseling goals of the program through appropriate site activities and processes

Qualifications

1. Licensed contractor with demonstrated experience in construction management
2. Ability to work in an enthusiastic and encouraging way with young people who have not completed high school
3. Understanding of the issues facing young people who have not completed high school
4. Experience or interest in training young people in the building trades and a strong commitment to helping young people succeed in an innovative training program to reorient their lives and promote leadership skills
5. Experience in supervising and training staff

6. Team-oriented approach
7. Strong communication skills
8. Positive relationships with local trade unions

Salary and Benefits

Vary depending on location.

Job Description: Construction Trainer

Purpose

Teach youth the skills necessary to do gut rehabilitation or new construction of a house, and provide supportive guidance and encourage the development of youth leadership skills

Responsibilities

1. Oversight of multiple construction work sites
2. Scheduling, implementing, and assigning of tasks and timelines for projects
3. Direct supervision of foreman/instructor
4. Acting as construction safety officer to conduct and document safety meetings
5. Interface with subcontractors and inspectors on-site
6. Job site reports, i.e., daily, accident, tool check list, job attendance, change orders, and back charge documentation
7. Material needs of job site
8. Management of all tools and equipment for job site
9. Teaching of carpentry skills (including demolition, rough framing, roofing, drywall, finish carpentry, etc.) to YouthBuild participants
10. Teaching of the proper use and handling of all hand tools, power tools, and equipment to YouthBuild participants
11. Assistance in the teaching of vocational education
12. Participation in community service projects
13. Assistance in personal and vocational counseling and development of participants' leadership skills in conjunction with other YouthBuild staff
14. Oversight monitoring of participants' time on the construction work site
15. Oversight of the productivity of participant skills in construction
16. Attendance at meetings as required by construction program manager
17. Attendance at retreats, workshops, and conferences as required

Qualifications

1. At least three years of professional construction experience working with all elements of housing construction
2. Experience managing work crews and construction work sites
3. Experience working in a team setting
4. Ability to work enthusiastically with young people who have not completed high school
5. Strong communication skills

Salary and Benefits

Commensurate with experience

Job Description: Vocational Education Instructor

Purpose

The vocational education instructor is required to teach basic vocational education (primarily carpentry), modifying the curriculum and materials as required to meet individual and program needs; to coordinate the planning and integration of the curriculum between basic skill and construction; and to encourage the development of the participants' personal and leadership skills

Responsibilities

1. Develop and coordinate a vocational (construction) curriculum and plans for implementation
2. In collaboration with the academic instructor and work site trainers, provide vocational education classes which teach construction-related skills, including but not limited to:

   Demolition, framing, interior work, and blueprint reading

   Safe procedures for use and handling of tools

   Appropriate ways to handle technical construction problems that arise at the building site
3. Observe and evaluate participants at the work site and provide hands-on assistance in training at the work site
4. Coordinate testing and evaluation of participant skills with the site trainers and provide regular assessment of participant performance. Document participant skill attainment, in coordination with the academic instructor and work site trainers
5. Keep counselor and other staff informed about issues and needs of the participants and participate in regular team reviews of participant progress
6. Assist in informal personal and vocational counseling and development of participants' leadership skills in conjunction with other YouthBuild staff
7. Provide informal crisis intervention

Qualifications

1. Bachelor's degree in education or related field
2. Two years' experience teaching vocational education to adults or young adults
3. Experience in creative curriculum planning and development
4. Deep respect for the ideas and intelligence of young adults
5. Strong commitment to helping young people succeed in an innovative training program, to reorient their lives, nurture their leadership skills and enable them to make a difference in their communities
6. Ability to relate sensitively to multi-racial and multi-cultural groups of young people
7. Excellent oral and written communication skills
8. Ability to team teach and work as part of team

Salary and Benefits

Vary depending on location.

Memorandum of Agreement between Subcontractor (YouthBuild) and General Contractor (Housing Partner)

AGREEMENT made this _____ day of _____ by and between _____

(YouthBuild organization) and _____ (Developer/Owner/ General Contractor) as follows:

WHEREAS, Developer/Owner/General Contractor proposes to construct/renovate the property located at _____(Site), and has secured site control and financing in order to complete the project; and

WHEREAS, YouthBuild organization is a training program for youth between the ages of 16 and 24 and desires to provide on the job training to its participants in construction at the Site.

THEREFORE, the following is agreed to:

Joint Responsibilities of Developer/Owner/General Contractor (DOGC) and YouthBuild Organization (YO)

1. The DOGC shall prepare, in coordination with the YO, a construction schedule describing all the phases of construction, setting the timetable for completing each construction phase, and assigning responsibility between the YO and the DOGC's employees and subcontractors.
2. The DOGC and the YO shall be responsible for establishing and enforcing all safety precautions and OSHA regulations at the Site. The Site shall be maintained in a clean, safe, and secure manner at all times. The DOGC shall appoint a Chief Safety Officer whose responsibility will be to monitor and enforce all safety regulations on the Site.
3. The DOGC and YO shall each appoint a lead contact person at the Site through whom all communication concerning the Site shall flow. The DOGC and YO shall keep each other informed on a regular basis of any changes in the project, including financing, scheduling, scope of work, etc.
4. The DOGC and the YO shall hold each other harmless for any liability related to this Agreement.

Responsibilities of Developer/Owner/General Contractor (DOGC)

1. The DOGC shall make the Site available for training purposes for the YouthBuild organization during normal working hours from _____ AM to _____ PM, Monday through Friday.
2. The DOGC shall provide, at no cost to YO, all materials and all tools (including replacement parts, bits, blades and other items in need of replacement due to normal wear and tear), other than the basic set of hand tools described in this Agreement, necessary for participants to perform the work assigned to them in the building. The YO will be responsible for preparing requisition for tools and materials and submitting the requisitions to the DOGC at least one week prior to the date that they are needed at the Site. The DOGC shall be responsible for purchasing and arranging for delivery to the Site and paying for all tools and materials.
3. The DOGC shall be responsible for securing all permits, controlled inspections, certificates of occupancy, preparation of change orders, shop drawings and other submittals, preparation of requisitions for payment, and coordination of the construction with the architect, engineer (if any), Building Department, and the funding source(s).
4. The DOGC shall be responsible for Site security during all non-working hours. The DOGC shall maintain adequate insurance coverage including builder's risk, comprehensive general liability, and workers compensation.
5. The DOGC shall be responsible for supervising all its employees and subcontractors at the Site and for coordinating the work of its employees and subcontractors with the work of the YO.

6. The DOGC shall use its best efforts to arrange for its subcontractors to hire and supervise, as unpaid interns, participants of the YO while work is performed at the site. (Alternate language: The DOGC shall arrange for its subcontractors to hire and supervise, as unpaid interns, participants of the YO while work is performed at the Site at a ratio of one participant for each journeyman mechanic.)

Responsibilities of the YouthBuild Organization (YO)

1. The YO is an independent agency, not an employee or agent of the DOGC.
2. The YO shall maintain adequate insurance coverage for its participants and staff including worker's compensation.
3. The YO shall supervise the participants at the Site using qualified construction training personnel at a ratio of not less than one trainer for seven participants.
4. The YO shall be responsible for ensuring that its staff and participants are properly clothed and equipped for the Site, including wearing hard hats and construction boots in addition to all necessary personal protective equipment at all times. The YO shall provide to its participants the basic set of hand tools.
5. The YO shall perform all the work assigned to it in a good, workmanlike manner and as described in the plans and specifications dated _____ .

This Agreement may not be modified or amended except in writing and when signed by the parties to the Agreement.

Developer/Owner/General Contractor	YouthBuild Organization

Memorandum of Agreement with Housing Partner

This agreement is entered into by and between the (Name of YouthBuild Program) hereinafter referred to as (abbreviation, if applicable) and (Name of Housing Partner), hereinafter referred to as (abbreviation, if applicable).

Whereas (Name of YouthBuild Program) wishes to provide training in job skills, education, and community service to disadvantaged young people of the (location) area through its YouthBuild program, which includes training on affordable housing construction sites, and

WHEREAS (Name of Housing Partner) is the legal owner of (Address of location site)

WHEREAS (Name of Housing Partner) can provide opportunities for young people to learn construction and build affordable housing for low-income and disabled individuals at the aforementioned site;

THEREFORE, in consideration of the above, the parties hereto agree as follows:

A. (Name of Housing Partner) and/or its designee understands and agrees to:

1. Provide overall construction management of the site, including:
    - Coordinate all contractors/subcontractors as necessary to the degree feasible to enable (Name of YouthBuild Program) to complete its work training.
    - In collaboration with (Name of YouthBuild Program)'s designee, establish a scope of work and construction schedule to be performed by (Name of YouthBuild Program)'s participants that will provide a meaningful training experience. Any proposed change to the scope of the work or construction schedule affecting the work of the participants should be brought to the attention of (Name of YouthBuild Program)'s designee with a minimum of three (3) days advance notice.
    - Secure all permits required by law.
    - Provide a safe environment in accordance with industry safety standards and guidelines in accordance with OSHA requirements.
    - Secure all financing, less that which is necessary for the training and incorporation of YouthBuild participants on the construction site, for the successful completion of the project, including acquisition, architectural and engineering fees, construction financing and permanent financing.
2. Provide training opportunities for (Name of YouthBuild Program)'s participants, and at the same time:
    - Understand that participants are at pre-apprenticeship level of skill in construction, requiring patience and understanding. All problems that develop with individual participants should be brought to the attention of (Name of YouthBuild Program)'s designee immediately.
    - Understand that the YouthBuild participants are placed in crews that work and study on alternating weeks, resulting in a different crew on site each week.
    - Provide reasonably clear instructions to (Name of YouthBuild Program)'s designee and participants, including all details required to fully accomplish the assigned tasks. This includes, but is not limited to, project schedule and project specifications and drawings.
    - Make the general subcontractor, subcontractors, and architect aware of the participants' involvement in the project and use its best efforts to cause such parties to adhere to the terms of this agreement.

B. (Name of YouthBuild Program) understands and agrees to:

1. Provide proper preparation to the participants in order to complete their scope of work including:
    - Providing a crew of up to 30 participants to perform an agreed-upon scope of work, with no more than 15 participants on site at any time
    - Providing participants with an alternating week of basic skills and adequate on-site performance

- Supplying each participant with a uniform, personal protective equipment, hand tools, and basic power tools
- Providing participants with comprehensive safety training to enhance safe working conditions on the site and adhere to all applicable OSHA requirements
- Providing all tools required by (Name of YouthBuild Program) to complete the scope of work, delivered to the site in a timely manner; providing all specialty tools items, including scaffolding and ladders

2. Provide proper supervision and benefits to the participants, including:
   - An experienced construction manager who will coordinate the overall training and work of the participants and collaborate with the general contractor and all subcontractors to integrate the participants into various phases of the construction schedule
   - At least one additional onsite trainer who is knowledgeable in construction trades for every seven (7) on-site participants
   - Transportation for participants to and from site
   - To the extent possible, three (3) days notice to the (Name of Housing Partner) and/or its designee in instances when the participants will not be able to show up on the site or complete the agreed upon work as scheduled
   - A training stipend and workers' compensation insurance and appropriately maintained liability insurance
3. (Name of YouthBuild Program) shall execute a subcontract for a specifically defined scope of work for the (Name of Project). To the maximum extent feasible, as determined by (Name of Housing Partner) this scope shall include a wide variety in the distribution of work for which the participants are responsible, including demolition, rough and finish carpentry, framing, masonry, mechanical trades, plaster/paint, tile work, and finish work. To the maximum extent feasible, as determined by (Name of Housing Partner), no more than 20% of the work shall consist of labor and clean-up tasks. Emphasis shall be on non-critical path tasks, as determined by (Name of Housing Partner).
4. (Name of YouthBuild Program) guarantees, to the maximum extent possible, that the participants shall perform and complete all work in accordance with the project specifications and drawings, which shall be provided to (Name of YouthBuild Program) by (Name of Housing Partner).
5. (Name of YouthBuild Program) shall be liable for, and hereby agree to indemnify and hold (Name of Housing Partner) and its constituent partners, agents and affiliates, harmless against, any and all costs that may be incurred as a result of the participants' work and presence on the site, including, without limitation, costs incurred due to the following, when and only when these costs would otherwise not have been incurred if (Name of YouthBuild Program) were not working on the site:
   - Time delays which adversely affect the project
   - General contract and subcontractor bid differentials
   - Increased architectural costs
   - Increased material costs

C. (Name of Housing Partner) shall provide no compensation to (Name of YouthBuild Program) or to individual participants for the work performed, unless otherwise agreed to in writing by both parties.

D. All agreements relating to the construction or operation of the project, including those executed following the completion of the project, shall contain a clause prohibiting discrimination against any employee or employee applicant engaged in project operations on the basis of race, religion, gender, ancestry, age, sexual orientation, physical handicap, or national origin. This agreement shall include full compliance with all applicable non-discrimination regulations including the Americans with Disabilities Act. Such clause shall include all aspects of employee and employee-employer applicant relations.

E. Subject to the provisions herein, all remedies allowed by law are available to either party for enforcement of this agreement. Any waiver or rights by either party or any matter relating to this contract shall be deemed to be a waiver on any other matter relating to this agreement.

F. If any part of this agreement is found to be invalid the remainder of the contract will continue to be in effect.

G. This agreement may be modified only by mutual written agreement of both parties.

H. This agreement will remain in effect from _____ through _____ .

I. This agreement will be terminated by either party within fourteen (14) days written notice to the other party.

J. Any dispute between the parties to this agreement that cannot be resolved by the parties alone will be brought to binding arbitration consisting of three persons, including one person selected by (Name of Housing Partner), one person selected by (Name of YouthBuild Program), and a third person acceptable to both parties. Both parties agree to abide by the decision of this arbitration panel.

Effective date of agreement: _____

IN WITNESS WHEREOF the parties have agreed to the conditions of this agreement as of the last date written below:

Date: _____	Date: _____
For: (Name of YouthBuild Program)	For: (Name of Housing Partner)
By: _____	By: _____
Title:	Title:

This sample memorandum of agreement is adapted from the Pacific Asian Consortium in Employment (PACE), Los Angeles, CA.

OSHA Forms for Recording Work-Related Injuries and Illnesses

The **OSHA Forms for Recording Work-Related Injuries and illnesses booklet** includes the forms needed for maintaining occupational injury and illness records. It includes general instructions for filling out the forms, as well as definitions of terms you should use when you classify your cases as injuries or illnesses.

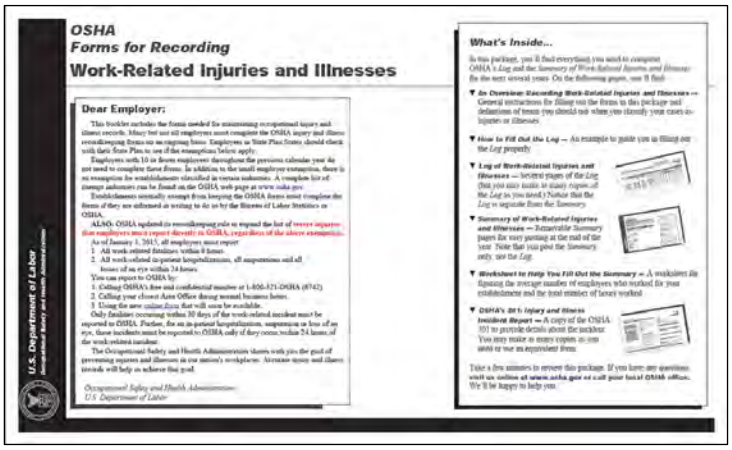
You can access **all** the links for the forms at: https://www.osha.gov/recordkeeping/RKforms.html

---

Instructions for Form 300, 300A, 301 (pdf)

https://www.osha.gov/recordkeeping/RKform300pkg-InstruxOnly.pdf

The instruction booklet contains an overview of the forms, instructions to fill out, how to calculate injury and illness incidence rates, and a helpful worksheet to fill out the summary.



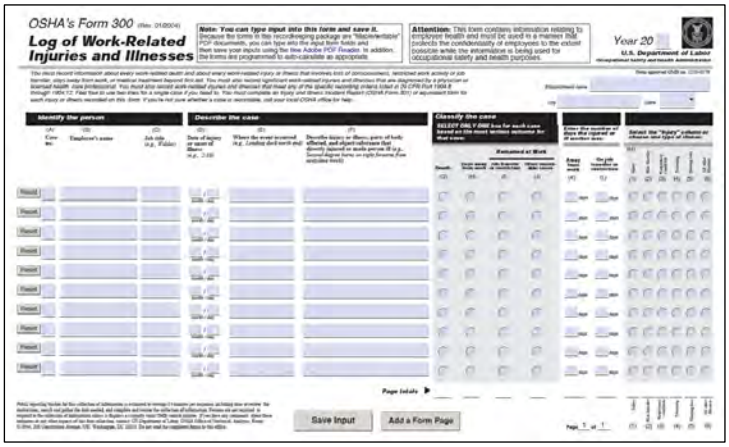
Forms 300, 300A, 301 (Forms only) - PDF fillable format

https://www.osha.gov/recordkeeping/RKform300pkg-fillable-enabled_FormOnly.pdf

These three forms are contained in this pdf document:

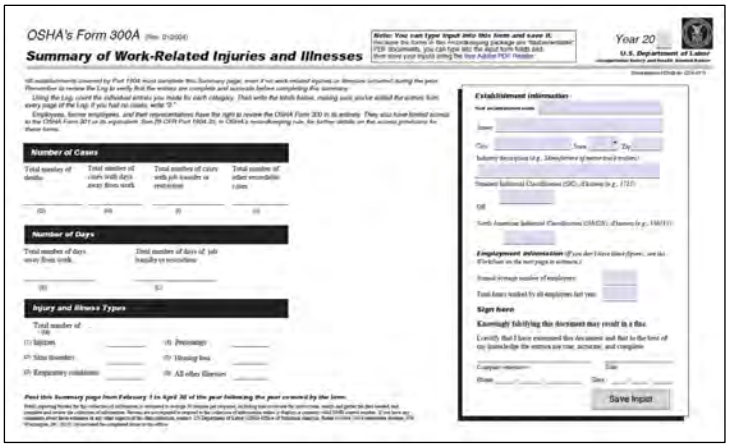
OSHA's Form 300
Log of Work-Related Injuries and Illnesses

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid.



OSHA's Form 300A
Summary of Work-Related Injuries and Illnesses

You must complete this Summary page, even if no work-related injuries or illnesses occurred during the year.


OSHA's Form 300A

Summary of Work-Related Injuries and Illnesses

Year 20

U.S. Department of Labor

Number of Cases

Number of Days

Injury and Illness Types

Establishment information

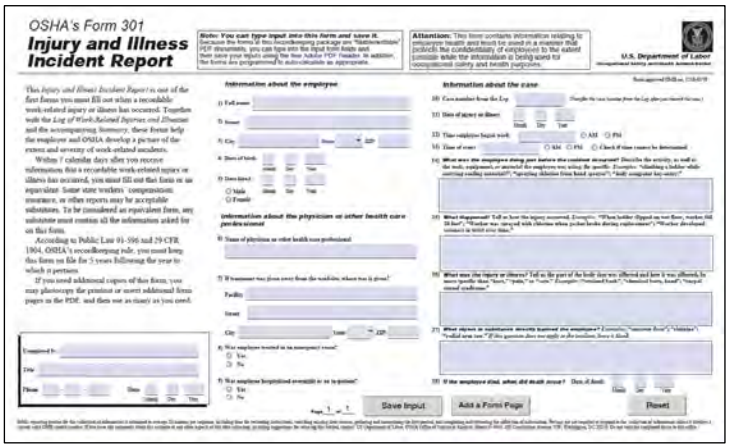
Employment information

Sign here

Save Input

OSHA's Form 301
Injury and Illness Incident Report

This is one of the first forms you must fill out when a recordable work-related injury or illness has occurred.


OSHA's Form 301

Injury and Illness Incident Report

U.S. Department of Labor

Information about the employee

Information about the physician or other health care professional

Information about the case

Save Input

Add a Form Page

Reset

Problem-Solving Exercises

We Need Materials

You are informed by the project director that the construction materials orders you have in for the work site have been put on hold. The community development organization that sponsors the program uses federal funds to finance the construction costs for the project. The organization is currently being required to account for funds it received for housing prior to operating a YouthBuild program and cannot receive additional funding before an accounting is made. It appears that many of the invoices needed for accounting are missing. Until this issue is settled, no materials can be ordered nor can any subcontract work be done on the work site.

1. How can you keep the project moving forward?
2. What types of activities can be done to keep the participants occupied until the issue is resolved and you can get materials?
3. What are some of the things you can do to be prepared for these types of situations in the future?

Stolen Tools

While preparing for another workday at your work site, you discover that your alarm system was disabled over the weekend and your tool room was broken into. Power tools, hand tools, and participant tool belts and tools have been stolen. You are informed by the project director that the executive director of the parent agency says there is no current funding available to purchase more tools and there is an uncertainty as to whether there is coverage in the insurance policy for tools. You explain to the project director that there is no way to continue construction on the project without tools. The director responds by saying it was your responsibility to maintain tool security, and there are no funds available for more tools. You have a deadline to meet to install floors and drywall in the kitchen and bath. You also have to hire a plumber to set fixtures in kitchen counter and bath vanity. All the work that needs to be done requires hand or power tools.

Late in the day you hear that the tools were taken to a drug house located on the next street at the rear of the work site project. It has been rumored that one of the participants has been frequenting the drug house and has a history of theft. You also hear that one of the subs is in financial trouble and is suspected of stealing from another construction site.

1. What do you do to keep the project moving and meet your deadlines?
2. What do you do about the suspicions of who may have stolen the tools?
3. What future security measures do you take?

Balancing Conflicting Needs

You and your staff have grown fond of a participant who, in the beginning of the program, expressed a strong desire to gain an education, get off welfare, stay off drugs, and become a better parent. This participant has demonstrated a willingness to work hard, and learn new skills with good humor and enthusiasm. The staff see the participant as an asset to the program, helping to keep the other participants engaged in the activities of the program. In the past several weeks, however, this participant's attendance rate has dropped dramatically. The participant blames childcare problems and illness for the absences, but you suspect substance abuse is a factor. You also notice that the participant's attitude has worsened and now other participants have begun to complain about this participant's negativity. Some participants claim this student is just lazy and is trying to avoid the hard physical work of the construction site. You suspect the participant is going through a crisis and needs particularly strong support and compassion from the program staff.

At the same time, you are in the construction phase of peak production and every effort must be made to meet a tight construction deadline for a housing partner who already is upset at the slow pace of construction. The project needs all participants and staff working at full capacity but you don't want to ignore the pressing needs of this individual participant.

1. How can you effectively respond to this participant?
2. How can you ensure the other participants maintain the pace of production?
3. How might this situation create conflict within the construction staff?
4. What are your priorities in this situation?

Selecting a Construction Project Checklist

	YES	NO
DOL Qualifying Criteria		
Does the work site meet the threshold for low-income?		
Can the work site be subject to the required 5-year restrictive covenant?		
Does the work site provide for substantial hands-on experience?		
Has an ETA-9143 Work Site Description form been submitted and approved by DOL?		
Project Size		
Can participants start and complete the project during their year of training?		
Can the site accommodate the appropriate number of participants?		
Is the project an appropriate size for a YouthBuild program (2-4 units for 30-40 participants)?		
Location		
Is it accessible by public transportation?		
Is it safe for participants from different sections of the community?		
Does it provide access to lunch and toilets?		
Is there a place to store materials and equipment?		
Impact, Visibility, and Neighborhood Support		
Does it have an impact on the immediate neighborhood?		
Will it generate support?		
Is this project important?		
Partner		
Is the partner committed to YouthBuild's training mission?		
Is the partner experienced and effective in housing production?		
Does the partner really have the whole idea in place (i.e., site control, financing, architectural plan)?		
Is the partner willing to work with a YouthBuild time schedule?		
Does the partner have an extensive history of OSHA violations or citations?		

Tool Inventory Sheet

Date	Quantity	Item	Mfg./Model/Vendor	Participant Name	Unit/Crew

Vocational Education Curriculum Unit: Safety Rules

From “Working Hands, Working Minds,” Construction Training Curriculum by Anne Meisenzahl and David Greene

Aim

Participants examine scenarios depicting unsafe situations on the work site in order to explore how these problems could have been avoided. In this lesson they will:

- Discuss experiences they have had with safety problems, and ways those problems could have been avoided
- Propose rational solutions to safety problems in the form of rules
- Compare the rules they created with the program’s rules
- Create posters of safety rules for reinforcement

Timeframe

Allow an hour or more for discussion and poster making.

Note to the Instructor

If participants have not yet been exposed to the program’s work site safety rules, this lesson can provide an exploratory introduction. If participants are familiar with the work site’s safety rules, this lesson can be used for review. In either case, plan to have copies of the program’s safety rules available for comparison.

Materials and Tools

- Handout, “Avoiding Safety Problems on the Site”
- Copies of your program’s safety rules
- Poster board
- Markers

Activity Guide

Personal Experience

In the large group, ask participants the following questions:

- Have you or has someone you know ever been in a situation at home, work or school that was not safe?
- What happened?
- What were the long-term consequences of the situation?
- Ask participants to describe their experiences. Briefly discuss each of the stories, raising questions about why the incidents happened, how they could have been avoided, how workers or employers could have acted differently, etc.

Creating Rules

Distribute the handout, "*Avoiding Safety Problems on the Work Site*." Tell participants:

> *Imagine that you are members of a contracting company which will be hiring new, inexperienced workers to work on a construction site. You are planning to offer a training course called "Safety on the Work site." The safety problems on the handout have come up on the work site in the past, and we want to develop a set of rules that will prevent these problems from occurring. As a group, we will discuss each rule and explain why it is important.*

As a class, discuss each scenario and develop a rule that would prevent the problems described. Write rules and reasons on the board and ask participants to record these on their handouts.

Distribute copies of the program's safety rules. Ask participants to take turns reading them aloud. Compare them to the rules they created in response to the scenarios on the handout. Discuss whether there are differences between the two lists; combine them to create a list that encompasses both.

Safety Posters

Divide participants into small groups. Distribute poster board and markers to each group. Assign a few rules to each group from the composite list, and ask them to collaborate in making posters which illustrate each of the rules.

Circulate among the participants as they work. Encourage creative illustrations; give feedback and assistance as necessary.

Assign participants to hang the posters in visible places on the work site.

Avoiding Safety Problems on the Work Site

Imagine that you are members of a contracting company that will be hiring new, inexperienced workers to work on a construction site. You are planning to offer a training course called "Safety on the Site." The safety problems described on this sheet have come up on the work site in the past, and you want to develop a set of rules that will prevent these problems from occurring. You think all workers need to know these rules before they begin working. After each rule, explain why it is important.

Problem #1

On two occasions in the last year, laborers have had to be rushed to the hospital for cuts on their heads, which were unprotected. On one occasion, a loose board fell from the ceiling. On another occasion, a worker accidentally dropped a box of nails off of a set of beams onto a worker's head.

What could have been done to prevent these accidents?

Rule #1: _____

Reason: _____

_____

Problem #2

An experienced carpenter forgot to bring his protective gear to work. He was in a hurry to cut a stud with a power saw, and a sliver of wood flew into his eye and caused serious long-term injury.

What could have been done to prevent this accident?

Rule #2: _____

Reason: _____

_____

Problem #3

Last year, a new worker did not wear her uniform but wore a long-sleeved shirt that got caught in the circular saw when she was talking to a coworker. The saw pulled the worker's hand into the machine and she lost two fingers.

What could have been done to prevent this accident?

Rule #3: _____

Reason: _____

_____

Problem #4

A laborer brought an MP3 player to the site to listen to his favorite music while he did demolition, so he did not hear his coworker calling to warn people below that they were dropping debris into the dumpster. A fifty-pound sheet of drywall fell on his head and injured him seriously.

What could have been done to prevent this accident?

Rule #4: _____

Reason: _____

_____

Problem #5

Two carpenters joke around a lot on the site. On one occasion, one of the workers started a mock fight with the other, threw a fake punch, and tripped over some studs on the floor and sprained his ankle.

What could have been done to prevent this accident?

Rule #5: _____

Reason: _____

_____

Problem #6

A carpenter asked a coworker to pass her a hammer. The coworker threw it to her when she wasn't looking and it hit her on the shoulder, causing serious injury.

What could have been done to prevent this accident?

Rule #6:

Reason: _____

_____

Problem #7

A worker uses his power tools frequently but has not kept the blade sharp. When he used it recently the blade backfired and cut his hand.

What could have been done to prevent this accident?

Rule #7: _____

Reason: _____

_____

Problem #8

A few workers walked onto a work site wearing sneakers and sandals. The person wearing sandals stubbed her toe on a piece of wood, and the person wearing sneakers stepped on an upturned nail and had to be rushed to the hospital for a tetanus shot.

What could have been done to prevent this accident?

Rule #8: _____

Reason: _____

_____

Problem #9

Because of the heat, a demolition worker decided not to wear his dust-mask. Over a period of time, he inhaled lots of soot and debris and developed serious respiratory problems.

What could have been done to prevent this accident?

Rule #9: _____

Reason: _____

_____

Problem #10

A group of painters routinely left buckets of paint, tools, and nails lying on the floor at the end of the day. One morning, a worker walked on the site and tripped on a bucket of paint and fell on an upturned nail that broke through the skin on his leg.

What could have been done to prevent this accident?

Rule #10: _____

Reason: _____

_____

Problem #11

A carpenter drank a beer during his break. It left him feeling sleepy, and he had a hard time concentrating. He used a handsaw to cut a small section of wood and got his finger in the way, injuring himself severely.

What could have been done to prevent this accident?

Rule #11: _____

Reason: _____

_____

Problem #12

A worker smoked marijuana during her lunch break because it made her feel more relaxed. She hummed a song to herself and could not concentrate while her supervisor explained the safe procedures to use when working on the roof and how to take proper precautions. She climbed up on the roof and, not placing her feet properly, slipped and fell, seriously injuring her back.

What could have been done to prevent this accident?

Rule #12: _____

Reason: _____

_____

Problem #13

A team of workers on the fourth floor of a building began to throw debris into the dumpster below. The supervisor on the street below did not know they were planning to begin throwing the debris yet because they had not put the warning signs up and had not warned him. He walked under the window and was hit on the back with a piece of plywood and was rushed to the hospital.

What could have been done to prevent this accident?

Rule #13: _____

Reason: _____

_____

Problem #14

A worker climbed up onto a scaffold that did not have proper braces on it. The scaffolding snapped and he fell two stories, breaking his leg.

What could have been done to prevent this accident?

Rule #14: _____

Reason: _____

_____

YouthBuild Construction-Related Training & Employment Guidance Letters (TEGLs) and Training & Employment Notices (TENs)

TEGL 11-16 – YouthBuild Compliance with Davis-Bacon and Related Acts (DBRA)

https://wdr.doleta.gov/directives/attach/TEGL/TEGL_11-16_Acc.pdf

- Most recent YouthBuild-specific TEGL.
- Clarifies that YouthBuild participants are not exempt from prevailing wage requirements determinations for any project to which DBRA labor standards apply
- Provides information on how to determine when Davis-Bacon requirements apply
- Provides examples where prevailing wage requirements may not apply due to coverage thresholds set forth in statutory language

TEGL 06-15 – Qualifying Work Sites and Construction Projects for YouthBuild Grantees

https://wdr.doleta.gov/directives/attach/TEGL/TEGL_06-15_Acc.pdf

- Describes the level of construction work that qualifies a work site.
- Clarifies activities that may be done in conjunction with work site training but that do not qualify as stand-alone work site activities.
- Provides suggestions for potential work site partners.
- Reiterates the program structure requirements for the YouthBuild program as they relate to work site training.

TEGL 07-14 – Guidance for Implementing the "Construction Plus" Component of the YouthBuild Program

https://wdr.doleta.gov/directives/attach/TEGL/TEGL_7-14-Acc.pdf

- Provides guidance on Construction Plus implementation and requirements.
- Provides resources for researching local Labor Market Information to determine in-demand fields in the local area.
- Includes Considerations attachment that provides additional information for programs to consider in determining what Construction Plus industries to include.

TEN 13-12 - Defining a Quality Pre-Apprenticeship Program and Related Tools and Resources

https://wdr.doleta.gov/directives/attach/TEN/TEN_13-12_Acc.pdf

- Provides information on how a pre-apprenticeship program is defined and how to develop one.
- Provides helpful strategies for grantees to better understand collaboration with Registered Apprenticeships and paths to facilitated entry/articulation.
- Also provides information on resources to develop pre-apprenticeship programs and information on existing pre-apprenticeships for potential partnership.

TEGL 14-09, Mental Toughness/Orientation Allowable Costs in a YouthBuild Program

https://wdr.doleta.gov/directives/attach/TEGL/TEGL14-09acc.pdf

The purpose of this Training and Employment Guidance Letter (TEGL) is to provide clarification on allowable costs associated with Mental Toughness/Orientation activities under the YouthBuild Program.

TEGL 15-10 - Increasing Credential, Degree, & Cert. Attainment by Participants of the Public Workforce System

https://wdr.doleta.gov/directives/attach/TEGL15-10acc.pdf

- Further defines credentials, provides information on how to improve credential attainment, and how to identify industry-recognized credentials.
- Particular emphasis for grantees should be on the Credential Resource Guide (Attachment 2) which provides specific information to help grantees make informed decisions about whether credentials may qualify.

* New guidance may replace this under WIOA's new performance measures.

TEGL 05-10 - Match and Allowable Construction and Other Capital Asset Costs for the YouthBuild Program

https://wdr.doleta.gov/directives/attach/TEGL/TEGL05-10acc.pdf

- Provides important information on what construction-related costs are allowable with grant or match funds for work site training.
- Provides further explanation of match funds under YouthBuild.
- Particular focus should be on the attachment, YouthBuild Selected Items of Cost, which provides specific information on various construction activities and costs and whether they are allowed with grant/match funds.

TEGL 35-12 – Definition and Guidance on Allowable Construction Credentials for YouthBuild Programs

https://wdr.doleta.gov/directives/attach/TEGL/TEGL_35-12_Change_1_Acc.pdf

- Provides guidance on minimum level of certification allowable for each of three nationally industry-recognized construction certifications – i.e. more than one module may need to be completed and passed for it to count as a "certification outcome."
- Encapsulates TEGL 15-10 explanation of how to determine whether additional credentials qualify.
- Change 1, published July 2017, includes information on an additional national industry-recognized construction credential, BPI, as well as updating the definition of a credential to reflect changes under the Workforce Innovation and Opportunity Act.

YouthBuild Construction Site Daily Attendance Sheet

Participant Name: _____ Crew: _____

Supervisor's Signature: _____ Site: _____ Date: _____

Participant Name	Start	Break		Lunch		Break		Finish	Signature

YouthBuild Construction Work Site Checklist

_____ Initial Site Inspection

_____ Scope of Work/Plans/Specifications

_____ Materials and Supplies List

_____ Budget

_____ Timeline

_____ Purchasing Procedures

_____ Materials Delivery Plan

_____ Personal Protective Equipment

_____ Tools and Equipment

_____ Permits and Insurance Binders

_____ Access to the Work Site in Writing

_____ Safety Plan

_____ Labor Law and OSHA Safety Posters

_____ Security

_____ Communication Plan

_____ Subcontractors' Contracts

_____ Construction Trainers

_____ Participant Assignments

_____ Transportation

_____ Standard Weekly Work Schedule

_____ Construction Competency List and Participant Evaluation Forms

_____ Daily Log Sheet

_____ Project Back-up Plan

YouthBuild Daily Construction Training Report

To be completed by: Construction Manager or Construction Trainer.

Project:		
Date:	Weather:	Temperature:
Site(s): 1. 2. 3. 4.	No. of Participants: 1. 2. 3. 4.	
Construction Activities:		
Work Begun:		
Work Completed:		
Subcontractors on site: 1. 2. 3. 4.	Visitors: 1. 2. 3. 4.	
Unforeseen Obstacles:		
Accomplishments/Incidents/General Mood:		
Prepared by:	Title:	

This sample daily construction training report was adapted from the daily construction training report used by YouthBuild Addison, Corning, NY.

YouthBuild Infraction Sheet

Name:	Date:

Non-Cardinal Infractions	
	Absence
	Bad attitude/disruptive/disrespectful behavior
	Lateness (3 times = written infraction)
	Smoking in the building
	Failure to turn in educational assignment
	Failure to follow classroom and work site policies
Consequence	
	Verbal reprimand
	Written Warning
	Unpaid Status
	Termination
Comments:	

Participant Signature

Staff Signature

Cardinal Infractions	
	Alcohol/drugs during YouthBuild hours
	Destroying property
	Stealing
	Drug dealing
	Lying
	Poor attitude/disruptive/disrespectful behavior
	Leaving without notice
	Dangerous or careless behavior
	Verbal/emotional violence

	Threats of abuse
	Physical violence
	Possession of illegal weapon
Consequence	
	Written Warning
	Unpaid Status
	Termination

Comments:

Participant Signature

Staff Signature

Supplied by Crispus Attucks YouthBuild, York, PA

YouthBuild Safety Program

Safety Policy Statement

It is the policy of (Name of YouthBuild Program) to provide all participants with a safe and healthy workplace. To ensure that a safe workplace is maintained, participants will observe all safety practices, rules, and standards throughout the workday. All accidents and injuries can be prevented by monitoring and maintaining a quality safety program.

Safety Committee

The (Name of YouthBuild Program) safety committee will have three members. It will include one YouthBuild Policy Committee member, the current safety manager, and one vocational staff member. The safety committee will meet twice a month and be responsible for:

- Making regular safety inspections to help find and correct unsafe conditions or procedures
- Transferring the information to management so that the safety program can be updated and improved
- Reviewing accident reports
- Investigating methods to prevent accidents
- Maintaining an active interest in safety
- Listening to participant concerns and suggestions
- Keeping minutes of its meetings

Hazard Prevention Plan

The (Name of YouthBuild Program) Hazard Prevention Plan consists of:

- Determining potential safety hazards through safety committee inspections and through the review of accident reports
- Making an action plan for each potential hazard or risk
- Establishing a set of general safety rules
  - Establishing known and documented emergency and evacuation procedures
  - Having all appropriate and required information regarding emergency procedures and contacts, workers' rights, and OSHA requirements posted in a visible location

Action Plan

An action plan will:

- Name the hazard or risk
- Explain how to remedy the hazard or risk
- Decide who will be responsible for fixing the hazard or risk
- Set a date for the job to be done
- Set aside funds (if necessary) to fix the hazard or risk
- Follow up to ensure that the hazard or risk has been fixed

General Safety Rules

Each participant will act safely and follow the general safety rules:

- All unsafe conditions, accidents, and injuries will be reported immediately to a staff member
- It is the responsibility of the staff member to follow up on all reports of unsafe conditions, accidents, and injuries
- No one will work in this program if he or she is under the influence of alcohol or illegal drugs (Prescription medicines are allowed under a doctor's supervision)
- All building work areas, aisle ways, vehicles, machinery, equipment, and entries will be kept clean and clear of trash and storage materials
- Only qualified, tested participants shall operate tools and equipment
- Horseplay is NOT acceptable behavior on the construction site
- Specific safety equipment required by tool manufacturers and required for a particular task shall be worn
- All safety guards and devices must be in place when operating equipment
- It is prohibited to distract or talk to machine operators
- Loose clothing must be tucked in prior to tool or equipment operation
- Shoulder length hair or longer should be tied back prior to tool or equipment operation
- Tools and equipment that are not in good working order will be reported to a staff person, taken out of service, and marked accordingly
- Only qualified, competent people shall repair tools and equipment
- Tools and equipment will not be operated without the supervision of a qualified instructor
- Use of cell phones or other electronic devices by participants shall be restricted to prevent distraction from unsafe and hazardous conditions

Safety Meetings

There will be a 15-minute safety meeting every Monday at the beginning of the workday. Topics of meetings will include: introduction to safety equipment, review of operating procedures for tools and equipment, review of specific work conditions that require attention regarding safety, review of safety committee safety inspections, and any other safety-related information.

The safety meeting record sheet will note the topic, date, and attendance record of each safety meeting. "Make-up" safety meetings will be held as necessary to ensure that all work site participants are kept informed.

Tool Qualifications

Prior to operating tools and equipment, participants will receive instruction that includes a manipulative skill demonstration. All participants will apply their instruction through practice and demonstrate competency on the tool or equipment through a performance evaluation. A perfect score must be obtained in the safety section of the assessment prior to the participant being qualified to use the tool.

A written tool qualification record for each participant will be kept that details the safety instruction date, the participant test data, the test score, and the date the student was qualified to operate the equipment.

Fire Emergency Plan

- In the case of fire, all participants are to leave the building in an orderly manner through the nearest exit
- All exits are to be designated through illuminated exit signs
- In the case of power outage, emergency exit lights, designating paths to exits, will be illuminated
- The instructor shall account for all participants prior to leaving the building

Accident Reporting Plan

All accidents are to be reported to the instructor. A written accident report will be completed and kept for each accident.

First aid shall only be administered by a qualified, competent person.

This sample safety program is adapted from the safety program used by YouthBuild Portland, Portland, ME.