# **Green Jobs and Healthcare Implementation Study**

February 3, 2012

### **Interim Report**

#### **Authors:**

Ted Shen, IMPAQ International
Eileen Poe-Yamagata, IMPAQ International
Alan Dodkowitz, IMPAQ International
Nicholas Bill, IMPAQ International
Kassim Mbwana, IMPAQ International
Lisa Johnson, FHI-360
Stephanie Davison, FHI-360



#### Submitted to:

Employment & Training Administration
U.S. Department of Labor
200 Constitution Ave., NW
Washington, DC 20210

#### Submitted by:

IMPAQ International, LLC 10420 Little Patuxent Parkway, Suite 300 Columbia, MD 21044 Phone: 443.367.0088

Fax: 443.367.0477 www.impaqint.com

#### **ACKNOWLEDGEMENTS**

The authors would like to thank the U.S. Department of Labor's Employment and Training Administration for capable guidance of the project, in particular, Dan Ryan and Savi Swick. At IMPAQ International, Jacob Benus, Daniel Weissbein, Michael Kirsch, and Ted Shen provided leadership of the project, while Eileen Poe-Yamagata, Hugh Carrington, Julie Young, Nicholas Bill, Morgan Sacchetti, Alan Dodkowitz, Kassim Mbwana, Carolyn Corea, and Evan Perlman provided outstanding task leadership, data collection, data analysis, and reporting. At FHI-360, Mindy Feldbaum, Lisa Johnson and Stephanie Davison provided excellent evaluation design guidance, data collection and data analysis.

### **TABLE OF CONTENTS**

		Page
Exec	cutive Summary	1
1. In	troduction	2
2. Cr	ross-site analysis	4
	Program Context	
2.2	Program Components and Service Delivery Strategy	9
	Partnerships	
2.4	Program Management and Sustainability	13
2.5	Program Outcomes	15
3. Co	onclusions	17

**Appendix**. Detailed Site Descriptions

### **TABLE OF EXHIBITS**

	Page
Exhibit 1: Grant Program Summary Statistics	2
Exhibit 2: Grantees Participating in Early Site Visits	3
Exhibit 3: Grantee Organizational Characteristics	6
Exhibit 4: Grantee Organizational Type	7
Exhibit 5: Grantee Training	11

#### **EXECUTIVE SUMMARY**

The American Recovery and Reinvestment Act of 2009 provided funding for skills training in green jobs and healthcare jobs via four Solicitations for Grant Applications (SGA): Healthcare and Other High Growth and Emerging Industries (HHG); Pathways Out of Poverty (POP); State Energy Sector Partnerships and Training (SESP); and Energy Training Partnerships (ETP). In early 2010, 152 grantees were awarded an average of \$4 million to \$5 million for two- or three-year grants.

This interim report presents a descriptive analysis of eight of the 152 sites that implemented these grants, based on in-person site visits. The eight sites were selected purposively and are not representative of the overall grant program. Detailed summaries of the findings obtained from each of the eight site visits are presented in the Appendix.

During the site visits, interviewees had a number of recommendations:

- Build on strong prior partnerships with relevant stakeholder organizations to leverage existing resources and talent in creating a quality training program.
- Engage employers and industry groups in designing training program curricula to help ensure that the training received by enrollees will be relevant to employer needs.
- Draw on existing, well-established training curricula to make efficient use of proven training materials and avoids spending resources to re-invent the wheel.
- Conduct creative outreach to recruit participants to increase enrollment among individuals who many benefit from the training program.
- Thoroughly assess participant capabilities prior to enrollment to help ensure that the training program is a good fit for the participant and to reduce expenditures on participants for whom the training is not useful.
- Deliver training in sequenced modules so that workers can access the training over time to improve their skills.
- Provide appropriate support services after completing training to increase the likelihood that a program graduate will succeed in finding and retaining a job.
- Use program data to guide operations and enable programs to identify challenges in implementation and adjust their operations to address those challenges.

A number of lessons learned also were described by interviewees during the site visits:

- Labor market information (LMI) is useful to the extent that it is perceived by grantee staff as reliable, relevant, and up to date;
- Aligning programs with state or Federal energy policies or programs that do not come to fruition may make it more difficult to reach targets for program outcomes; and
- Weaker than expected demand for labor in the training program occupations may reduce job placement rates among program graduates.

#### 1. INTRODUCTION

The American Recovery and Reinvestment Act of 2009 (ARRA) provided funding to the U.S. Department of Labor for training workers in specific high growth and emerging industries, including healthcare, energy efficiency, and renewable energy. DOL awarded grants to a range of organizations through four specific Solicitations for Grant Applications (SGAs) to provide training, placement, and other services in these industries. These four SGAs are:

- Healthcare and Other High Growth and Emerging Industries (HHG)
- Pathways Out of Poverty (POP)
- State Energy Sector Partnerships and Training (SESP)
- Energy Training Partnerships (ETP).

In early 2010, ETA awarded 152 grants to private non-profit organizations (47 grantees), state or local government agencies (45 grantees), community college systems (43 grantees), labor unions (14 grantees), and private for-profit firms or foundations (3 grantees). The average grant award was over \$4 million.

The POP and ETP grants were for a 2-year period ending in January 2012. The SESP and HHG grants are for a 3-year period. The SESP grants end in January 2013, while the HHG grants end in February 2013. Exhibit 1 presents summary statistics for these grant programs.

Grant	Total Number of Grants	Total Funded Amount	Average Award Amount	Minimum Award Amount	Maximum Award Amount
Healthcare and High Growth	55	\$226,929,446	\$4,125,990	\$2,000,000	\$5,000,000
Pathways Out of Poverty	38	\$147,757,701	\$3,888,361	\$2,109,088	\$8,000,000
State Energy Sector Partnerships	34	\$187,908,818	\$5,526,730	\$2,500,000	\$6,000,000
Energy Training Partnership Grants	25	\$99,760,688	\$3,990,428	\$1,400,000	\$5,000,000

**Exhibit 1: Grant Program Summary Statistics** 

In the 152 grantee programs, the intended pathway for an individual participant typically involves determination of eligibility for participation; enrollment in the program; participation in education or job training activities or receipt of other program services; receipt of a credential such as a certificate or degree; placement in a job; and retention in the job.

In October 2010, IMPAQ International, LLC and its partner, FHI-360<sup>1</sup>, were awarded a contract from the DOL Employment and Training Administration to conduct a study of the 152 grantees. The primary objectives of this Green Jobs and Healthcare Implementation Study are to:

http://www.fhi.org/en/AboutFHI/Media/Releases/AED asset purchase060811.htm

<sup>&</sup>lt;sup>1</sup> In June 2011, the Academy for Educational Development's (AED) assets and business were acquired by FHI-360. AED's operations continue under the banner of FHI-360.

- Understand in-depth the implementation of the 152 grants
- Explore the extent to which grantees employed promising practices that could possibly be replicated and scaled in future programs
- Evaluate whether deployment of these promising practices by grantees are associated with positive participant outcomes in employment and earnings.

To address these objectives, a set of research areas was defined, covering: 1) the economic and community context in which each program operated; 2) the service delivery strategy and components of the program; 3) partnerships with employers and other organizations; 4) program management, funding, and sustainability; and 5) program outcomes. Sources of data for the study include site visits to selected grantees, focus groups with program participants, a web-based survey of grantees and their partner organizations, and grantee Quarterly Performance Reports (QPRs).

This Interim Report is based on a series of preliminary site visits to eight sites. Exhibit 2 below provides a list of the grantees for which site visits and focus groups were conducted as part of this early data collection phase:

**Exhibit 2: Grantees Participating in Early Site Visits** 

Grantee	Grant Program	Award Amount
State of California Employment Development Department	SESP	\$6,000,000
Southwest Housing Solutions Corporation (SWHS)	POP	\$4,000,000
West Hills Community College District	POP	\$3,000,000
BioOhio	HHG	\$5,000,000
Centerstone of Tennessee	HHG	\$5,000,000
Central Vermont Community Action Council, Inc.	ETP	\$4,846,195
Memphis Bioworks Foundation	ETP	\$2,931,103
SER Metro-Detroit, Jobs for Progress, Inc.	ETP	\$4,298,673

IMPAQ researchers spent 2-3 days on-site with each grantee conducting interviews with grantee staff, training providers, and partner organizations. Site visitors also conducted focus groups with program participants at each site.

This report provides a summary of the findings we have obtained as a result of these early data collection efforts. These findings should be considered preliminary and are limited to the short interval of time when the site visits were conducted (July – September 2011).

The remainder of the report is structured as follows. Section 2 summarizes the major themes emerging from the site visits and focus groups relative to the primary research questions. Section 3 provides preliminary conclusions resulting from these eight site visits.

Detailed summaries of the findings obtained from each of the eight site visits are presented in the Appendix.

#### 2. CROSS-SITE ANALYSIS

This chapter synthesizes information from the eight grantee sites which were visited by the IMPAQ team to date to evaluate the research hypotheses for this study. These hypotheses serve as the theoretical framework for the study and will aid us in providing valuable information for replicating the program in additional sites and for providing best practices for program implementation.

This section is organized around the five main research areas being investigated, including: 1) program context, 2) program components and service delivery strategy, 3) partnerships, 4) program management, funding and sustainability, and 5) program outcomes. It should be noted that all analyses of these research areas should be considered preliminary, as we were only able to visit a limited number of sites to this point in the project. Data gathered from the eight site visits should not be considered representative of the 152 grantees in this study. More definitive conclusions will be available after data collection activities involving all 152 grantees are completed. The sites visited were:

- State of California Employment Development Department
- Southwest Housing Solutions Corporation (SWHS)
- West Hills Community College District
- BioOhio
- Centerstone of Tennessee
- Central Vermont Community Action Council, Inc.
- Memphis Bioworks Foundation
- SER Metro-Detroit, Jobs for Progress, Inc.

#### 2.1 Program Context

#### 2.1.1 Use of Labor Market Information

While nearly all grantees used Labor Market Information (LMI) as an input in designing their training programs, the use of LMI varied substantially across grantees. Sites varied in their perceptions of the relevance and accuracy of LMI, their level of understanding of LMI, and their interpretation of LMI.

The SGAs provided guidance to the grantees on identifying the types of energy efficiency and renewable energy industries in which they could provide training. Targeted industries included:

- The energy-efficient building, construction, and retrofit industries
- The renewable electric power industry

- The energy efficient and advanced drive train vehicle industry
- The biofuels industry
- The deconstruction and materials use industries
- The energy efficiency assessment industry serving residential, commercial, or industrial sectors
- Manufacturers that produce sustainable products using environmentally sustainable processes and materials.

In identifying industries, "renewable energy" was defined as "electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project." "Energy efficiency" was broadly defined as programs aimed at mitigating the use of energy, reducing harmful emissions, and decreasing overall energy consumption.

In addition, the Bureau of Labor Statistics, defined "green jobs" as 1) jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources and 2) jobs in which workers' duties involve making their establishment's production processes more environmentally-friendly or use fewer natural resources. Some grantees are implementing the "greening of occupations" to upgrade skill sets of individuals in existing industries, while others, such as the California State Energy Sector Partnership (CA SESP) are training for emerging green occupations. As a relatively new and dynamic set of occupations and jobs, the LMI was perceived by some grantees as unreliable or irrelevant and thus unable to provide information at the requisite level of detail to support the design of the training programs associated with the grants. While some grantees used LMI to substantiate the need for certain types of occupational training, several of them appeared less willing to rely solely on occupational data to make key programming decisions.

As a result, some enhanced the LMI available by combining multiple sources of data. For example, Vermont Green used information gleaned from a Vermont Department of Labor project designed to refine existing BLS O\*Net definitions of green jobs and green job availability to identify training needs statewide. LMI was also often corroborated with employers, with grantees working with employers to determine whether there was sufficient demand for the skills to be trained for before creating or continuing specific training. For example, Vermont Green hired a consultant to interview Vermont green job employers to identify potential employers, training needs, and skill sets. In addition, while Southwest Housing Solutions (SWHS) and SER Metro-Detroit utilized LMI from the Michigan Department of Energy, Labor, and Economic Growth and the Bureau of Labor Statistics to support the need for training of weatherization specialists, energy efficiency experts and landscaping professionals, the design and development of the training programs themselves relied more heavily on direct input from employers in these industries. SER Metro-Detroit's business representatives use local LMI on a more regular basis to establish their field work schedules, by targeting employers that have a strong potential to hire trainees.

For other sites, such as BioOhio and the CA SESP, the specificity of the data was important. As a result, BioOhio defined general occupations statewide and then broke information down by region. For the CA SESP, the state WIB hired a company to assist regional sites in putting together detailed labor market information, which in most cases was informed by employer focus groups as well.

A common finding revealed through these approaches to using LMI was that energy efficiency jobs were not being created at the rate originally projected. As a result, some of the sites adjusted their training model to other, more promising fields or increased their outreach and placement efforts. For example, Memphis Bioworks negotiated a reduction in tuition for program participants at one of the training providers in order to free up funds to hire a job developer and employment specialist.

#### 2.1.2 Administrative Structure

Several factors seem to influence the flexibility, efficiency, and operational effectiveness of the grantees visited: the administrative structure of the grant program, the operational structure of the grant program, and the grantee organizational type. As shown in Exhibits 3 and 4, there was significant variation in these factors among the sites we visited. For example, the grantee represented the only administrative layer associated with the implementation of the program in many of the programs visited. However, the California Employment Development Department administers the CA SESP grant at the state level, while subcontracting the administration of the grant through six regional agencies. These regional agencies then subcontract with regional partners to implement the grant. This design was created to support a statewide strategy and lead to sustainability, but interviewees from the CA SESP suggested that the complexity of the grant's administrative structure may have slowed the implementation of the program and created inefficiencies in program design.

**Exhibit 3: Grantee Organizational Characteristics** 

Grantee		Administrative Level			Operational Level		
		Regional	Local	State	Regional	Local	
CA Employment Development Division (SESP)	✓	✓			✓		
Southwest Housing Solutions Corp (POP)			✓			✓	
West Hills Community College (POP)		✓			✓		
BioOhio (HHG)	✓	✓			✓		
Centerstone Tennessee (HHG)		✓	✓			✓	
Memphis Bioworks (ETP)		✓	✓		✓	✓	
SER Metro-Detroit (ETP)			✓			✓	
Vermont Green (ETP)	✓				✓		

**Exhibit 4: Grantee Organizational Type** 

Grantee	Type of Organization			
Grantee	Government	Non-Profit		
CA Employment Development Division (SESP)	✓			
Southwest Housing Solutions Corp (POP)		✓		
West Hills Community College (POP)	✓			
BioOhio (HHG)		✓		
Centerstone Tennessee (HHG)		✓		
Memphis Bioworks (ETP)		✓		
SER Metro-Detroit (ETP)		✓		
Vermont Green (ETP)		✓		

SWHS and SER Metro-Detroit focus mostly on grant administration and delegate the coordination and management of training activities to their training and education partners. Closely related in organizational structure, Vermont Green's grant administrator, Central Vermont Community Action Council (CVCAC), took state-wide responsibility for identifying existing and emerging green jobs and training needs. CVCAC relied on one partner, Vermont Technical College, as the primary source of training for all partners. However, individual partners, especially employer partners (firms) and career training partners (unions and industry associations) received funding to manage their own training programs.

Among the sites visited, two of the grantees (the CA SESP and the West Hills Community College) were state government-run programs while the others were nonprofit and/or locally run programs. BioOhio and Memphis Bioworks are both nonprofit organizations with strong business acumen and staff with a background in workforce development and/or the workforce development system. Acting as the grant administrator, these organizations were able to focus on grant compliance and administration, while the training providers and other partners were able to focus on their areas of expertise. Training providers appreciated a central organizing entity with this aforementioned expertise that did not compete for training dollars.

#### 2.1.3 Period of Performance

The relatively short period of performance for the Pathways Out of Poverty (POP) and the Energy Training Partnership (ETP) grants (two years) and the need to expend funding quickly, proved particularly daunting for several of the grant programs visited. A number of programs had trouble expending grant funds initially, thus delaying their progress towards achieving their stated outcomes. The issue was particularly problematic among programs with complex administrative structures, such as the CA SESP, which required the development of numerous agreements and subcontracts before implementation could begin. This issue also arose among those partnering with community colleges, such as Memphis Bioworks, which needed to synchronize their training with the academic calendar. In addition, some of the programs, including West Hills Community College (WHCC), BioOhio, and Memphis Bioworks, required state and Federal DOL approval to purchase special equipment which forestalled the commencement of parts of the training.

#### 2.1.4 Simultaneous State and Federal Policies and Incentives

Aligning grants with existing state and/or Federal policies related to the green jobs as a factor that influences program success was somewhat mixed among the grantees visited. Economic development strategies in some communities directly impacted program design. For example, both Memphis Bioworks and BioOhio have worked closely with industry and other organizations such as the Chamber of Commerce to drive economic development planning. BioOhio has worked with employers to make Ohio the center of biotechnology jobs in the United States. Developing a skilled workforce through this grant is a foundational element of this strategy.

The West Hill Community College benefited from a general state policy that encouraged the development of solar farms. Specifically, California's Renewable Portfolio Standard requires the percentage of energy to be generated by renewable resources to increase to 33% by 2020<sup>2</sup>. While this policy does not directly dictate what actions should be taken or which renewable energy sources should be developed, the WHCC has been able to capitalize on this policy<sup>3</sup>. The state of Vermont has had policies in place to support the development of renewable energy for years. Several statewide organizations and associations including the Vermont Environmental Consortium (established 2000), the Vermont Sustainable Jobs Fund (established in 1995), and the Vermont Center for Emerging Technologies (established in 2005) lay the foundation for regional networks and partnerships among small businesses, state agencies, and nonprofits. CVCAC tapped into these networks to find partners for Vermont Green, align statewide goals, and develop a collective approach towards green jobs. However, due to economic constraints and the perception by employers that new individuals trained/certified in green jobs were more expensive hires, a shift from training new workers to training employer-based incumbent workers was made.

Michigan's passage of the Clean, Renewable and Efficient Energy Act (PA125), coupled with various Federal and state financial incentives for weatherization and energy retrofits increased local demand for trained energy auditors and weatherization specialists. In addition, the City of Detroit received \$30 million in Federal weatherization funding under ARRA to make houses in Detroit more energy efficient. However, grantee staff reported that the release of these Federal funds has been a slow and time-consuming process.

While states may have benefited from these concurrent policies and funding, some sites were adversely impacted by expected energy policies and programs that did not come to fruition. For example, the CA SESP and Vermont Green expected the HomeStar and PACE programs to create jobs in residential solar installation and energy efficiency so they developed some training curricula around these programs. These programs have not been authorized to date, thus limiting their potential outcomes.

http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm.

Most states currently have Renewable Portfolio Standards and the influence of this policy on program implementation will be investigated throughout the remainder of the study.

#### 2.2 Program Components and Service Delivery Strategy

#### 2.2.1 Assessment Services

An early and thorough initial assessment of an individual's readiness to participate and ability to advance in the program was thought by some of the interviewees at the site visits to be especially useful in identifying participants who would successfully complete the training program. A number of programs, such as the SWHS and SER Metro-Detroit, used WorkKeys assessments or other tests to gauge a participant's readiness for program participation. SER Metro-Detroit, in particular, utilized rigorous pre-screening activities designed to make participants aware of the stringent time and work requirements associated with the training program. Some of the grantees, such as the WHCC and some BioOhio sites, integrated job requirements into the prerequisite process for enrollment into their training or informed participants of those requirements early on. Many grantee sites also required that potential participants pass a drug test, complete a criminal background check, and a physical examination before enrolling in the program. Participants at Vermont Green were also assessed as to their need for academic remedial services and were expected to bolster their credentials before engaging in training and certification programs.

#### 2.2.2 Support Services and Case Management

Though described by some interviewees to be important for program success, there was variation in the degree to which programs offered support services and the degree to which these activities were funded by the grant. SWHS and SER Metro-Detroit conducted a comprehensive assessment of each individual's supportive services needs, employment barriers, and financial literacy using tailored assessment tools and forms. Several sites noted that support services were a program component often leveraged through partner organizations. Citing limited funding for these activities, almost 100% of these services were provided through leveraged resources for the CA SESP. Resources offered by local governments and WIA co-enrollment, often provided access to wraparound services and educational help for grantees struggling to meet the academic requirements of the program. SER Metro-Detroit leveraged partner resources to provide additional services to training participants, including financial coaching, career coaching, and income support.

Some interviewees mentioned that using employment specialists and/or job developers as part of the case management process was particularly effective in helping participants find a job and retain employment. For programs that targeted the long-term unemployed, such as SWHS, these services were considered by some interviewees to be very helpful. In addition, SER Metro-Detroit utilized job coach mentors from two of their partner organizations, Detroiter's Working for Environmental Justice and the Detroit Electrical Joint Apprenticeship Training Center. Together, these organizations provided resume development and interviewing skills, technical math training, and linked participants to on-the-job training and apprenticeship opportunities.

Memphis Bioworks utilizes a robust and innovative case management data system. This centralized, web-based system provides real-time data and allows training providers to track client progress and manage case notes.

#### 2.2.3 Recruitment and Targeting

In general, most grantees engaged in little or no targeted recruitment to identify training participants. A few grantees, however, did engage with partners for their support in reaching out to specific target populations. For example, the SWHS worked with housing case managers to locate and identify veterans and has integrated their outreach and recruitment efforts with the Homeless Veteran's Reintegration Program. Vermont Green targeted women and youth with fairly successful results, utilizing case management partners that worked with these populations — Vermont Works for Women and the Vermont Coalition of Runaway and Homeless Youth. While many of the grantees identified target populations in their grant applications (e.g., displaced auto industry workers, minorities, ex-offenders), recruitment activities, in practice, were not specifically targeted to these populations. Instead, grantees focused on simply recruiting qualified individuals with the greatest need.

SWHS was able to successfully recruit and retain participants through a variety of outreach methods. These included word-of-mouth; marketing at career fairs; posting flyers at One-Stops, churches and other public buildings; and placing newspaper ads were the general outreach formats used. Electronic media, such as email blitzes and Facebook, were also used in some cases. A particularly innovative approach used by the WHCC included inserting program flyers in water bills. SWHS found that the most effective method for recruiting participants was word-of-mouth referrals. For example, one participant recruited eight of his family members into the program.

#### 2.2.4 Training Curricula

As shown in Exhibit 5, most, though not all, of the grantees used existing curricula in designing their programs. As discussed in more detail in the program outcomes section below, most training resulted in either a national or employer-recognized credential. Some of the training models, such as those utilized by SWHS and SER Meto-Detroit, utilize longstanding and well-established curricula directly transferrable to the current program, while others required some curriculum adaptation. In addition to augmenting existing curricula, new programs were developed for both BioOhio and Memphis Bioworks. Though grantees reported it took several months to develop or update a curriculum with appropriate employer input, many programs were able to accommodate this due to the semester system of the community college calendar. For example, in Memphis, the grant was received in January which was past the point of participants being able to enroll for the spring semester. In the first few months, the partnership developed curricula and then added these new courses to the community colleges fall semester when participants began their enrollment.

**Exhibit 5: Grantee Training** 

	Training Curriculum			
Grantee	New	Existing and Modification to Existing	Credential Received	
CA Employment Development Division (SESP)		✓	✓	
Southwest Housing Solutions Corp (POP)		✓	<b>✓</b>	
West Hills Community College (POP)		✓	<b>✓</b>	
BioOhio (HHG)	<b>✓</b>	✓		
Centerstone Tennessee (HHG)		✓	<b>✓</b>	
Memphis Bioworks (ETP)	✓	✓	✓	
SER Metro-Detroit (ETP)		<b>√</b>	<b>√</b>	
Vermont Green (ETP)		<b>√</b>	<b>✓</b>	

Many of the training programs were designed to adapt existing skills to accommodate a demand for the "greening" of existing industry sectors. For example, Memphis Bioworks exploited a shift from petroleum processing to bio-based processing of raw materials. The curriculum – developed to adapt existing skill sets to accommodate this shift – benefited from guidance provided by local chemical processing plant partners.

#### 2.2.5 Innovation in Program Design and Service Delivery

A number of innovative practices demonstrating flexibility in the delivery of services emerged from our site visits. For example, the WHCC schedules and secures partners to provide sequential skill development training through the use of mobile training units that travel to communities throughout the rural region it serves. The sequencing in training allows trainees to enter the labor market, obtain a job, and upgrade their skills even while holding that job. Similarly, SER Metro-Detroit's program provides flexibility in training options by offering six different training "tracks". After completing the foundation course (Track 1), participants may choose to enter employment (Track 2) or participants may decide to pursue advanced training through the electrical or laborers' unions (Tracks 3 – 5) or get "up-skill" training for installation of solar equipment (Track 6).

In BioOhio, specific strategies have also been applied to funnel unemployed or soon to be unemployed workers to training in innovative ways. By developing a cross-walk of transferrable skills, a BioOhio partner identified the transferable skills and skills gaps for workers who were soon to be laid off and steered them toward training in the emerging bioscience industry. In turn, the AFL-CIO funneled workers to appropriate trainings in the bioscience industry, potentially placing individuals in jobs before the actual layoffs took place.

For the SWHS landscaping program, the Greening of Detroit uses a 125-acre plot of land which is a local park to conduct both hands-on and "classroom" training in an outdoor, real-world setting. The weatherization program students are also provided with a mix of classroom and hands-on training. Another training provider includes mock-ups of buildings in various configurations so that students can directly apply what they have learned in the classroom.

Energy audit scholarships also enhance the skills and training of weatherization program students. Students are evaluated by their instructors throughout the weatherization training and the most successful students are provided with free tuition and materials to attend the HFCC Energy Audit course, which leads to a Building Performance Institute (BPI) certification to become a certified Energy Auditor. Similarly Vermont Green provides hands-on training experiences by investing in mobile weatherization mock-up models, model wind energy turbines and towers, and solar energy panels. In addition to enabling participants to experience hands-on training, the mobile model enabled Vermont Green to reach participants in remote areas, in addition to the central location used for the training. Given Vermont's low population, partners sometimes faced difficulty in getting a critical mass of participants to warrant investing in a training class.

#### 2.3 Partnerships

#### 2.3.1 Existing Partners vs. New Collaborations

The existence of previous partnerships may have an important effect on the implementation of the grant programs. All eight of the grantees visited had partners representing the following sectors: government agencies, nonprofit organizations, employers or industry associations, community organizations, and community colleges. This is consistent with SGA requirements. For most of the grantees, the partners convened for this grant existed prior to the current funding, though the configuration of the partnership may have been modified. The partnership configuration, particularly the role of the grantee, may influence the strength of the partnership and the implementation of the program itself. For example, grantees which seemed to be particularly effective had a strong central administrative structure. These grantees facilitated a collaborative environment among the partners and instilled a shared vision for the project.

Prior partnerships appear to facilitate project implementation, while the absence of these earlier partnerships appears to have had some detrimental effects on the implementation of the grant. Centerstone, which did not have existing partnerships in place prior to the grant, lacked a coordinated system of partners or signed MOU's with committed organizations. It took additional start-up grant time to learn about the local workforce investment system, identify and research potential training partners, and to select, hire, and train staff to make business and employer connections.

Additionally, Centerstone does not convene organizations, meet as a partnership, or have an advisory board structure. This lack of formalized organization may have influenced some of the program's poor outcomes to date. In contrast, using the grant as a stimulus to create or solidify effective partnerships may have long-lasting effects. As noted by the CA SESP, while establishing an effective partnership between the community college and workforce systems has been challenging, this partnership is helping to build regional capacities likely to have long-term regional benefits.

#### 2.3.2 The Strength of the Partnership

Having and utilizing strong and engaged partners also appear to positively influence the potential outcomes of the grant programs. Most notably, the active inclusion of employer and industry partners appear to be critical to program success. Most of the grant programs work closely with employers to garner their input and then have adapted their programs in response to the information obtained. Many grantees hold regular meetings with employers and have established employer advisory councils to gather feedback on industry growth, the labor skills and related training needed to accommodate that growth, and curriculum development. This level of communication provides a mechanism that has enabled the programs to adjust and adapt over time. For example, the WHCC program utilizes industry to help set goals and parameters and inform decisions related to training. As a response to employer feedback, a Memphis Bioworks community college partner built model biodiesel equipment replicating the equipment a participant would use on the job. Strong partnerships with employer and industry groups also affect the opportunities for apprenticeships, internships, and employment.

Articulation of roles and responsibilities through contracts or MOUs helps solidify formal partnerships and communicates the project's goals, providing a baseline for a shared vision of the project. As the central convening agency, Memphis Bioworks further reinforced this understanding through written policies and procedures to support grant compliance and to ensure program outcomes which are constantly monitored.

While the level of engagement may relate to whether or not the partner receives funding through the grant, developing strong relationships with non-funded partners is also likely to influence program outcomes. For many programs, the workforce system, local government, and chambers of commerce were critical partners that did not receive funding for their support. These informal partners often provide critical in-kind resources or were sources for leveraged funding. For example, local governments associated with the WHCC provide training space and related in-kind resources such as use of electricity (which can be substantial for some of the mobile units associated with this program).

While not technically program partners, participants and participant feedback may also be a valuable resource for improving program outcomes. Nonetheless, few programs seem to have a formal system for obtaining participant feedback. One exception is SER Metro-Detroit which has developed a detailed program feedback questionnaire that is designed to gather participant feedback on the training program to assist SER Metro in their continuous program improvement efforts.

#### 2.4 Program Management and Sustainability

#### 2.4.1 Use of Program Data

The value of using program data to guide and improve program operations is reflected in enhancements that some grantees made to align with existing data systems such as the Recovery Act Data (RAD) system. For example, Memphis BioWorks created a web-based data collection system that captures case management data on participants' progress and facilitates monitoring program outcomes. Intelligence obtained from this system, coupled with regular (monthly or quarterly) meetings with program partners to review detailed, written policies and procedures, facilitates monitoring grant compliance and enables the grantee to adjust program components and training in response to unforeseen developments during implementation. Having this management system in place led the grantee to reallocate dollars and goals from one partner that was not on track to another that was better positioned to support goal attainment. As another example, SWHS used their own system to record and track information about workshops and counseling sessions on income support, employment services, and financial services received by training participants.

In contrast to these systems, other grantees relied solely on the RAD, tracking only those outcomes required by DOL and did not gather any additional information that may have been useful for improving program outcomes.

#### 2.4.2 Sustainability

At this point in the program's operation, most of the grantees we visited do not have sustainability plans to continue grant operations at the current level of funding following the end of the grant's period of performance. However, most believe that some aspects of the program will continue when the current funding ends. This likely reflects the way grantees leverage resources to support common policy or programmatic goals. For example, SWHS received funding through the Detroit Regional Workforce fund for a green jobs development program, which will buffer and extend the goals of the grant once the funding ends. Consequently, new funding initiatives, such as ARRA-funded green jobs grants, are woven into an existing programmatic framework that both existed before the grants' funding and will likely continue after the funding ends. Further, the continual evolution of the U.S. economy toward supporting the green industry, health care and other emerging industries will likely sustain parts of these programs.

Some grantees pointed to concrete ways in which programs, or aspects of the programs, will be sustained after the funding ends. For example, programs that purchased capital equipment will continue to utilize the equipment after the end of the grant for continued classroom training. Some community colleges are working to institutionalize classes, so that tuition dollars could support future programming. For example, Vermont Technical College is considering expanding their green jobs training and certification programs to the broader New England market. Tuition received could be used to subsidize training for participants from state programs. One site within the CA SESP said it would shift annual allocated funding to the program if it continued to have a high job placement rate and if it was valued by employers. Memphis BioWorks will likely sustain their program because the program has gained a reputation as a green organization and its staff has also worked with the city government to create a steady level of demand for goods and services. Finally, SER Metro-Detroit envisions the eventual demand for program graduates as Detroit's aging housing stock is redeveloped using energy efficient technologies and skills.

In addition, some programs created partnerships in a sustainable way. Memphis Bioworks has convened a group of partners that are creating a regional approach to training which grant staff believe is providing a solid starting point for developing a longer term relationship. BioOhio is also a sustainable partnership. Specifically, BioOhio is working to develop Ohio as the national center for biotechnology. As a result, they have a state-wide strategy to develop a workforce and attract additional employers to the state. Vermont Green also utilized pre-existing networks of partnerships that will exist beyond the life of the grant.

#### 2.5 Program Outcomes

#### 2.5.1 Customization of Program Design

All grantees have necessarily made adjustments, in one way or another, to their program goals to accommodate unanticipated challenges (e.g., partnership changes, implementation delays) associated with program implementation. While the majority of programs seem to be reasonably on track with participant enrollment, many anticipate that meeting their outcomes related to job placement will be difficult. This anticipated challenge is a result of 1) limited job availability due to slower than expected economic growth and/or 2) many of the participants will complete their training near the end of the grant cycle so there will be little opportunity for them to obtain support in the job placement process. Though less of a problem, seasonality may affect the employment outcomes for some program participants. For example, SWHS provided training for jobs in landscaping and winterization/weatherization which may be linked to seasonal hiring.

SWHS has had to expand their geographical focus area to attract enough applicants and meet program participation goals. Memphis Bioworks tried to set goals which were based on a recovering economy, but still found that the anticipated number of jobs — such as those expected through the Haywood solar project — was much lower and harder to come by than anticipated. Some Vermont Green participants had high expectations about job placement which were not realized due to local economic conditions. Due to the realities of a recovering economy and difficulties in placing participants, some partners shifted their recruitment strategies to emphasize that their program's key benefits were receiving green jobs training and certification, rather than job placement. Still another grantee, Centerstone, upon learning that program participants could not obtain training-related jobs, discontinued their relationship with a training provider and ceased offering training in that provider's content area.

#### 2.5.2 Industry-Recognized Credentials

An assessment of the benefit of industry-recognized credentials (as opposed to certificates of completion) has been confounded by the generally poor economy and similarly poor labor market. In addition, concerns related to over-saturation of individuals with the same sets of skills have been raised.

Nevertheless, the procurement of nationally-recognized labor certifications did appear to be a benefit for many of the programs. For example, it is believed that these credentials provide participants with access to employment opportunities otherwise unattainable and to helping to create a flexible, portable pathway for career development. For example, Memphis BioWorks utilizes LEED certification, a nationally recognized energy efficiency certificate, and noted that this has helped participants prepare for traditional jobs, as well as emerging jobs in the green economy. Some programs experienced success when the local employers recognized the certificate or credential. For example, the Lead Supervisor and Lead Worker licenses are particularly valuable for the SER Metro-Detroit training participants since an individual cannot perform regulated lead work on any job site until this license is obtained. The SER Metro-Detroit program also provides participants the opportunity to earn the nationally-recognized Building Performance Institute certificate which is needed to become a certified Energy Auditor. The SWHS program participants will earn a Weatherization Specialist Program Certificate of Completion, as well as Construction Safety and Health course completion cards from OSHA and MIOSHA, safety certifications, and the ACT National Career Readiness Certificate. The WHCC prepares and administers the test for the American Welding Society's nationally recognized certificate. At regional solar sites, employers will not hire employees unless they have taken solar safety at WHCC, proving the efficacy of these certificates. In addition, employer partners at both WHCC and BioOhio hired new employees from the grant training programs first because they recognized the training program. Other nationallyrecognized certificates earned by participants include North American Board of Certified Energy Practitioners (NABCEP) and Home Energy Rating System (HERS).

In addition, many programs had certificate programs that created educational pathways that could be built on and had multiple points of entry if a participant was looking to continue with their education and certification. Examples of this could be found in SER Metro-Detroit, BioOhio, WHCC, and Memphis BioWorks. Also, of interest to note is that the bioscience industry currently has no industry-recognized credentials, though BioOhio is currently attempting to create them for the state of Ohio.

Further exploration in future data collection efforts will help determine how industry-wide credentials compare to employer-specific credentials in terms of training-related employment and subsequent retention. We will also examine, to the extent possible, whether the credentials provided by these programs enable participants to obtain even more substantial and recognized degrees in the future.

#### 3. CONCLUSIONS

At this early date in our research we are unable to rigorously link the variation in program design and implementation to program outcomes. However, by responding to the hypotheses set forth in our evaluation design, we can identify preliminary themes and best practices as noted below.

- It is important for grantees to understand labor market information and employer needs. Active use of Labor Market Information (LMI) and/or information gathered through other local/regional data sources in designing and tailoring their design and delivery strategies will likely yield more successful outcomes. Here active utilization refers to adapting and/or customizing labor market data to ensure it accurately reflects the labor trends in the target program area. In particular, corroborating LMI with employers or industry groups seems to be especially important to ensure a demand exists for the skills in which training will be provided in new and emerging industries.
- Grantees with workforce or economic development experience and partnerships established prior to the grant appear to be more successful compared to those that do not, as this previous experience appears to help speed grant start-up and implementation during the early stages. In this context, success involves a number of dimensions: identifying targeted training needs, developing and implementing program curricula, recruiting program participants, clearly defining roles and responsibilities, managing to outcomes, making necessary changes based on data, and using strong communication mechanisms.
- Programs with fewer administrative layers are likely to experience fewer delays in program start-up and operate with greater flexibility and efficiency. Based on the eight programs visited, it is possible that programs of non-government agencies especially those with strong central administrative structures are more likely than others to yield positive outcomes related to program implementation. This hypothesis bears further study based on additional data collection to be conducted in 2012.
- Aligning training programs with local, state, and/or Federal policies and programs related to the areas targeted by the grant program may provide good opportunities for developing partners and leveraging resources. While program outcomes may also benefit, other factors, such as the economy and overall job market, may strongly influence the benefit of this alignment.
- Strong assessments and screenings prior to program enrollment appear to be an important factor related to achieving positive program outcomes. Grantees which conducted thorough assessment and screening prior to program entry seemed to be more successful in identifying those individuals most likely to benefit from training and

- obtain employment, compared to grantees with less extensive assessment and screening procedures.
- The involvement of employers, industry, and chambers of commerce to provide active feedback in the development or adaptation of curricula, and providing classroom sessions, seems to help ensure that the skills developed and the credentials received as the result of training reflect the skills required by targeted occupations. Regular feedback from employers is particularly important to make adjustments to programs as needed. It is also important not to over-saturate a job market with people trained in a specific field, or with people at the same level of training. Grantees can minimize the degree of mismatch between the number of training program graduates and the number of available jobs by working closely with employers and other sources of labor market information to gauge labor demand and by training workers in a variety of occupations or industries within the green sector.
- Leveraging resources by developing strong informal partnerships with government, businesses, and local workforce investment boards is an efficient and effective way to provide support and wraparound services and to enhance other program offerings.
- Partnerships which facilitate a collaborative environment among partners and a shared vision for the project may achieve greater success than programs that do not. These programs are characterized by both formal and informal partners and are led by a strong, centralized administrative organization with strong business acumen. These collaborations share a vision of the project and a mission to continue to work and sustain the partnership after the end of the grant.
- Sites that created clear roles and responsibilities for each partner, which typically allowed each partner to focus on its area of expertise, seemed to have been more efficient during the grant start up and implementation phases.
- Requiring accountability and productivity of partner members through data-driven and monitored case management and reporting systems which provide information on program participation on a real-time basis will likely influence program success. Further, organizations that develop thorough written policies and procedures and that use webbased data collection systems to collect, monitor, and report on data on grant compliance and program outcomes on a regular basis seemed to be effective at adapting to changing environments.
- In rural communities (especially isolated rural communities with no public transportation), it is important to bring the training to convenient sites in order to maximize participation.

# APPENDIX SITE-SPECIFIC DESCRIPTIONS

	Page
1.	California Employment Development Department
2.	Southwest Housing Solutions Corporation
3.	West Hills Community College District
4.	BioOhio
5.	Centerstone Tennessee
6.	Memphis Bioworks
7.	SER Metro-Detroit, Jobs for Progress, Inc
8.	Vermont Green

### CALIFORNIA EMPLOYMENT DEVELOPMENT DEPARTMENT STATE ENERGY SECTOR PARTNERSHIP

#### I. Introduction

The California State Energy Sector Partnership (SESP) is one component of a three-pronged approach by the State of California to develop data-driven green jobs training programs through its Green Workforce Initiative. The Employment Development Department (EDD) acts as the fiscal agent of the grant, while the state's Workforce Investment Board (WIB) manages the programmatic elements of the grant.

Prior to the grant award, the State of California had some of the foundational elements of the SESP in place, including a state green jobs advisory council. However, implementation of California's SESP grant was delayed due to a state budget freeze and the need to spend down other stimulus dollars first.

The California SESP funds six sites in six different regions. Each site provides job training and supportive services specific to its location, resulting in programmatic differences between sites. Program goals included serving 1,200 participants, having 960 complete education or training activities and receive a degree or certificate, and placing 960 in unsubsidized employment.

#### II. Context

In 2008, the California State Assembly passed a bill (Assembly Bill 3018) establishing a Green Collar Jobs Council (hereafter the Council) consisting of workforce stakeholders, state and local education and energy agencies, and representatives of business and labor. The Council, supported by the California Workforce Investment Board, created a Green Workforce Master Plan, which provides the framework for current and future green workforce initiatives. It defines California's Green Workforce Initiatives to include three programs: 1) Clean Energy Workforce Training Program (CEWTP), a \$26.75 million program funding 34 regional grantees through WIA and U.S. Department of Energy ARRA funding, plus a 100% match); 2) the State Energy Sector Partnership (SESP), a \$6 million DOL program with 6 regional grantees; and 3) the Regional Industry Clusters of Opportunity Grants (RICO), a \$2.5 million program that helps 10 regional collaboratives identify, plan, and develop green industry clusters.

During the grant period, California's unemployment rate has substantially exceeded the national average. In August 2009, when the grant application was written, California's unemployment rate was 12.2 percent, well above the national average of 9.7 percent. The state's economy is not recovering at the rate projected and anticipated Federal investments have not come to fruition. Specifically, the Homestar and Property Assessed Clean Energy (PACE) programs have not commenced (and are currently in question due to their legality), preventing job creation in home retrofits and residential solar panel installation. Some of the California sites have adapted their training programs to this reality, while others are still providing training for these jobs in anticipation that other investments in these areas will occur.

The Green Collar Jobs Council eliminated the need for extensive planning required by the SESP grant because much of that work had been done prior to the grant award. The grantees are able to follow the strategy previously set and align grant programs with the work that was already initiated through the Council.

Funds from the U.S. Department of Labor are transmitted to the Employment Development Department, which then distributes funds to the local sites on a reimbursement basis. The distribution of funds for the program were delayed nearly nine months because the state of California had a budget freeze preventing any new funding from being expended.

SESP selected high-performing CEWTP grantees from four sites: Los Angeles, Northern California (NorTek), Sacramento, and San Diego. An additional two sites not included in the CEWTP project were selected because they had high levels of unemployment and the state WIB felt they needed additional support. These included a site in Alameda County that was an auto-impacted community suffering from recent General Motors layoffs and a site in the Central Valley that the California WIB felt it was an underserved area. The California WIB convened the six grantees in a 'Regional Action Clinics' (RAC) that served as a forum for sharing best practices and lessons learned. Additional RAC gatherings will be planned in the future. For this study, data were collected using in-person visits to two of the SESP sites and telephone interviews with the remaining four sites.

#### **III. Program Description and Delivery Structure**

The six sites funded by the California WIB exhibit some similarities:

- Each site was provided labor market information from Collaborative Economic, Inc.
- Each site has an industry advisory council.
- Each site involves the local WorkSource/One Stop Center in some element of programming, including recruitment, case management, co-enrollment, or job placement.

Common themes or program components between sites include:

- Sites report limited support services due to a lack of funding. Large portions of support services are provided by leveraged funds. For instance, money from the Workforce Investment Boards has been used to provide supportive services.
- Sites typically work with community colleges that provide modified and/or updated curriculum based on employer feedback.

However, the six sites differ dramatically in the industry sectors targeted and the training content offered. The following briefly the programs at the four sites that based their programs on the existing CEWTP program, followed by the programs at the two additional sites.

Los Angeles Workforce Investment Board — Working with Harbor Community College, the Los Angeles Unified School District, energy and water utilities, and organized labor, the Los Angeles WIB is training students to become electrical utility technicians for careers in green construction. The LA WIB shifted the focus of some its training offerings during the funding delay because anticipated jobs in water conservation were not materializing. Participants are trained in five modules in energy conservation over eight weeks and earn basic certificates such as the OSHA 10-hour certification. Math and English skills are addressed through contextualized learning. The first cohort of participants recently completed training and is currently seeking employment. Case management is provided through the WorkSource Center.

**Northern Rural Training and Employment Consortium** (NorTek) – Working with an established employer council, NorTek trains students in sectors including energy efficiency (BPI, LEED, HERS, Certified Green Building Profession), solar photo voltaic, solar thermal and environmental control technology. To date, NorTek has enrolled more than 200 participants, of which 76 have completed training. NorTek staff assist participants in job placement. At the time of the interview, NorTek staff reported their most recent review of individual site data showed they exceeded their job placement goals to date. Interviewees describe this program as a continuation of a previous successful green training program.

**Sacramento Employment and Training Agency** — Utilizing an existing local 'Green Capital Alliance' advisory committee, SETA partners with the local community college district to train students in energy efficiency and solar careers. SETA designed their grant program to be similar to the existing CEWTP program, which was funded under a prior grant. That prior grant ended September 30, 2011. SETA continued training participants according to their grant program design and began recording the training of participants under the current grant in August 2011.

**San Diego Workforce Partnership** — Working with five local community colleges, San Diego participants are training for energy efficiency industries. Targeting eight cohorts of 25 participants in a 120-hour pre-apprenticeship green building partnership, the program provides training leading to certificates including OSHA 10-hour certification, First Aid and CPR, as well as a certificate of completion. San Diego started its program and began expending program funds in July 2011.

Alameda County Workforce Investment Board — Through a partnership with three local community colleges and private training providers, three construction employers, and labor unions, Alameda offers training in energy efficiency whole building residential retrofit. Training includes CAD certification and a 9-week pre-apprenticeship in carpentry. The grant was awarded in January 2011; the training program by the carpenters union began in April 2011. A total of 100 participants over several cohorts have completed training, with a 100% placement rate in the first cohort. Transportation was the greatest support service needed by participants. Lack of funding has limited the degree to which support services could be provided.

**Stanislaus Workforce Partnership** – Stanislaus (and the Central Valley) were not included in the original proposal. The Stanislaus WIB is working with Collaborative Economic, Inc. to complete

employer focus groups and is beginning to develop regional advisory councils in each of the three regions within their service area (north, central and south). The Stanislaus WIB has not selected its training providers, entered into written agreements, or enrolled any participants to date. As a result, there is currently no data on enrollment or outcomes.

#### IV. Partnerships

The California State Energy Sector Partnership draws on statewide partners as well as partners specific to each region. Statewide partners include the members of the Green Collar Jobs Council, which provided assistance other than curriculum development or job placement. The Green Collar Jobs Council consists of the Secretary of the Labor and Workforce Development Agency, the Community College Chancellor's Office, the University of California Board of Regents, the State Department of Education, the Department of Corrections and Rehabilitation, the Department of Veterans Affairs, the Superintendent of Public Instruction, and the California Environmental Protection Agency. The Council also includes representatives from energy, alternative fuels, consumer, financial, labor, environmental justice, and other groups.

Regional partners vary by site, but most include the local community college district, the WorkSource/One Stop Centers, and local employers.

As part of California's overall energy/ green jobs vision, the state team invested in one entity to conduct extensive labor market research and to provide this information to each region.

#### V. Program Management, Funding and Sustainability

The State WIB actively works to align green jobs training programs and initiatives. For example, the State WIB integrates Regional Industry Clusters of Opportunity Grants (labor market data and regional strategic planning grants) into the training programs. At the state level, roles and responsibilities are distributed between two offices within the Employment Development Department. Specifically, the state WIB oversees the programmatic elements of the grant. Financial and contracts staff have facilitated the process of reimbursement and developing contracts and agreements. The state WIB held a Regional Action Clinic that brought together all the grantees to share effective practices, challenges, and ideas. Grantees submit information directly into the RAD and the California state data tracking system, which is then compiled at the state level.

Program start-up was delayed due to funding and budget issues in California. Interviewees stated that since the grant passed through the state of California, state statute prevented grant funds from being expended while California's budget freeze was in effect. As a result, programs were delayed by about nine months. Start-up was further delayed until July or August 2011 in the four sites that based their programs on the existing CEWTP program because those grantees were told to complete the CEWTP grant first before starting the SESP grant.

All sites have made modifications to their initial strategies. Some sites that are just starting their implementation do not have sustainability plans. Other sites, such as Los Angeles, plan to shift existing budget funds to support successful elements of the program after the DOL funding runs out.

#### **VI. Program Outcomes**

Outcomes between the sites vary greatly primarily due to start up time. The four sites that received CEWTP grants expended that funding before starting the SESP program in July or August 2011. The two sites that did not receive the previous CEWTP grants are at various phases of program implementation.

According to the quarterly performance report for the 3rd quarter of 2011, 259 individuals have been enrolled in the SESP, 62 have exited, and 40 have entered employment, of which 38 entered training-related employment.

As the RAD system numbers are a combination of all 6 locations, based upon the narrative discussions with the grant staff, it appears that Alameda County most likely has the strongest outcomes to date. They started enrolling participants first (April 2011) and have trained or are in the process of training about 100 participants, with 60 percent placed in jobs already and the remaining 40 percent still in training. Stanislaus County has the weakest outcomes as they are yet to select training providers or enroll any participants.

The remaining four sites are at various phases of enrollment and training. Only the NorTek site reported that participants have completed training. Job placement rates for those program graduates exceed 70 percent.

#### VII. Best Practices

Because many of the sites started enrolling participants in August 2011, it is premature to identify best practices and lessons learned. Respondents did note that the Regional Action Clinic hosted by the state WIB was a useful networking event that facilitated sharing of best practices.

Many respondents suggested that if the grants had been awarded directly to them instead of through the state of California, delays in beginning program implementation would have been reduced and the programs would currently have more enrollments and outcomes to report. However, some respondents stated there is strength in a statewide approach to administering the grant.

# SOUTHWEST HOUSING SOLUTIONS CORPORATION (SWHS) PATHWAYS OUT OF POVERTY (POP)

#### I. Introduction

Southwest Housing Solutions (SWHS) Corporation is the lead implementation agency for this Pathways Out of Poverty (POP) grant in Detroit, Michigan. Originally founded in 1970 as a mental health agency, SWHS later expanded its mission to include the provision of affordable housing and support services, as well as active participation in neighborhood revitalization and economic development in southwest Detroit. The agency currently oversees 600 affordable housing units and manages assets worth approximately \$150 million.

SWHS received \$4 million in funding to develop the *Detroit Green Works Solutions (DGWS)* training program, which provides technical training to eligible individuals in the areas of weatherization, building construction/deconstruction, retro-fitting, energy auditing, renewable energy, forestry, landscaping, and urban agriculture. SWHS implements the DGWS program through the SWHS Housing Opportunity Center's (HOC) Center for Working Families (CWF). The CWF in Detroit was created through a partnership between the Detroit Local Initiatives Support Corporation (LISC) and the United Way. The CWF's mission to advance the financial stability of families and individuals in the community is well-aligned with the goals and objectives of the POP grant. Projected performance outcomes include serving a total of 1,200 participants, with 410 completing education or training activities culminating in a degree or certificate, and a total of 360 participants being placed into unsubsidized employment.

#### II. Context

The City of Detroit was hit particularly hard by the recent recession. As the center of the American auto industry, the city has lost a significant number of manufacturing jobs, including 109,000 in 2009 alone. Despite the recent modest upturn in the auto industry, the state of Michigan and the city of Detroit continue to experience above average rates of unemployment and poverty. In September 2011, the city of Detroit had an unemployment rate of 12.7%, more than 3% above the national average. In addition, 2000 Census data showed that 30% of families and 33% of individuals in the Public Use Microdata Areas (PUMAs) served by the grant were beneath the poverty level, nearly triple the national average.

The Detroit Green Works Solutions program targets unemployed or underemployed disadvantaged individuals with one or more barriers to employment, such as a lack of education, criminal background, homelessness, or mental health and substance abuse issues. The program also targets veterans, integrating outreach and recruitment efforts with the Homeless Veterans' Reintegration Program (HVRP). The average education level among the target population is low, with only about 30% holding a GED or high school diploma. In addition, most of the participants have been unemployed long-term, some for many years.

Lack of access to convenient transportation is a major barrier to employment among the target population. Many participants lack a driver's license, in part because of Michigan's highly punitive "driver responsibility fees" for driving offenses and penalties which make it nearly impossible to get a suspended license reinstated. Compounding the difficulties faced by those without access to automobile transportation, Detroit's public transportation system faces many challenges. In addition, many weatherization/construction and landscaping jobs require the employee to travel to different job sites with their tools on a regular basis. Research by SWHS has shown that individuals are 2.5 times more likely to obtain employment with a driver's license.

Other unique challenges that have impacted the employment prospects for DGWS training graduates include cash flow and credit problems among employers, particularly small employers. Although Detroit has received Federal funding for weatherization assistance programs, it has been a time-consuming process to get the funds through the City Council to fund projects. Cash flow problems, coupled with tightening credit, have made it difficult for smaller employers to come up with the necessary capital to start new weatherization projects or to continue financing current ones. This lack of access to capital has made it challenging for employers to hire and retain new employees.

#### **III. Program Description and Delivery Structure**

**Outreach**. SWHS has developed an extensive outreach approach for the DGWS program. SWHS uses several mechanisms (including postcards, flyers, posters, and email broadcasts) and engages a variety of non-profit/community-based organizations such as churches, homeless shelters, food kitchens, One-Stop Career Centers, nurseries, and schools to market the program. SWHS housing case managers actively work to locate and identify potential program applicants. In addition, information about the SWHS program is posted on the Michigan Works Talent Bank. Despite the variety of outreach mechanisms used, word-of-mouth appears to be the most common way individuals find out about the program.

Orientation and Pre-screening. Interested individuals come to the SWHS facility for a group orientation and pre-screening. SWHS conducts program orientations at their Housing Opportunities Center roughly three times per week, with each session lasting about one hour. The participants are asked to bring their Social Security card, identification, and proof of income and residency. Half of the session is devoted to an overview of the training program, and the other half is reserved for completing paperwork<sup>4</sup>. After the orientation, the applicant takes a physical examination, a drug test, and a WorkKeys assessment. The physical and drug test are conducted at Concentra Medical center and participants must pass these tests in order to enroll. The WorkKeys test, offered by Mangrove Assessment, is a three-hour test that gauges applicants' math and reading skills. Individuals must score a three or higher in all areas of the WorkKeys test to be eligible for the program. Those individuals not achieving this score are

<sup>&</sup>lt;sup>4</sup> Paperwork includes the following: enrollment information form, demographics, additional information required for supportive services, types of assistance needed, media consent form, criminal background check authorization form, and financial literacy assessment form.

referred to remedial education resources offered at the SWHS's Adult Learning Lab and can retake the WorkKeys assessment again at a later time. SWHS staff also conducts a criminal background check on each applicant.

Intake and Case Management. After completing the required tests and paperwork, the applicant is referred to a case manager for an intake interview. During this process, the case manager will complete an intake interview form, which records information about the participant's demographics, work experience, education and training background, strengths and aptitudes, mental or physical challenges, and barriers to employment. The intake interview also involves an assessment of an individual's financial status. Based on this information, the case manager can make appropriate referrals to supportive services. The case manager also works with the applicant to complete an Individual Action Plan (IAP) prior to the training start date, which specifies the individual's professional and personal goals, barriers to achieving those goals, and tasks or steps required to realize their goals. The IAP is continually revisited and updated during training and following graduation.

Training. Participants may decide to enroll in either a weatherization/deconstruction training program offered by the WARM Training Center at Henry Ford Community College (WARM/HFCC) or a landscaping/forestry training program offered by the Greening of Detroit (Greening). The weatherization program lasts ten weeks and may be augmented with an optional two-week deconstruction class. Participants earn a number of certificates and certifications through this program. <sup>5</sup> The training lasts approximately 350 hours, with 280 hours devoted to occupational training and 70 hours devoted to career and professional development. Weatherization Specialist Program participants are enrolled at HFCC and earn one college credit through the program, which enables them to continue their education at HFCC after graduation if they choose to do so. HFCC offers additional training that will allow participants to become certified Energy Auditors (BPI/HERS certification). landscaping/forestry program, lasting eight weeks, results in a Landscape Industry Certification as well as the ACT National Career Readiness Certificate. The landscaping/forestry program also offers a weekly stipend of \$225. Both training programs use a combination of classroom and hands-on instruction.

**Coaching.** The program leverages resources from the CWS to offer coaching in three areas: financial management, career advancement, and income support. The CWF financial coach meets with the training participant within the first two weeks of the program to develop a Combined Financial Analysis that includes an assessment of the participant's financial literacy, a balance sheet that captures details on income and expenses, and a daily spending log. In a follow-up session, the financial coach works with the participant to develop a Client Action Plan that establishes short- and long-term financial goals, such as improving credit, saving money, or purchasing a car or a home. Improving financial literacy and management skills helps ensure

Participants earn a Weatherization Specialist Program Certificate of Completion, safety certifications (Asbestos Awareness, CPR, First Aid, and Lead-Aware Renovation), the ACT National Career Readiness Certificate, and a Construction Safety and Health course completion card from OSHA and MIOSHA. Those who participate in the two week deconstruction class will also get a Deconstruction Certification.

that participants attain and maintain financial stability after securing employment. The CWF continues to provide financial and career coaching to participants after they have graduated from the program.

Early in the program, participants work with career coaches to establish professional development and career goals, activities to achieve those goals, and a time frame for completing those activities. To help participants find employment, the program offers mock interviews and resume development assistance.

For qualifying training participants, the program provides links to income support programs so that participants may proceed through the entire training program while remaining unemployed.

#### IV. Partnerships

Though the POP grant funding and DGWS program are new for SWHS, some of the strategic partnerships under the grant existed previously. For example, the previous DGWS project manager served as the Director of Workforce Development at the Henry Ford Community College and had worked with the WARM Training Center to pilot a weatherization training program prior to the POP grant award to SWHS. SWHS and WARM/HFCC were able to utilize the existing model for the DGWS program, with some modifications such as new outreach, screening, and case management approaches.

As mentioned earlier, the training partners for DGWS include WARM/HFCC, which conducts the weatherization/deconstruction training, and Greening, which conducts the landscaping/forestry training. WARM is non-profit organization that provides education to residents and technical assistance to businesses, local governments, and professionals in the areas of energy efficiency, green building, and sustainability. Greening's mission is to improve the quality of life in Detroit by guiding reforestation through tree planting projects and educational programs. Greening provides training in forestry, landscaping, and agriculture for the DGWS program. The City of Detroit gave Greening a 125-acre plot in Rouge Park that had not been managed since 1980. This land is used for both hands-on and classroom training.

SWHS has also partnered with employers, unions/apprenticeship training institutes, and the Detroit Workforce Development Department (DWDD) to implement the program and facilitate employment and career advancement opportunities for participants. DWDD was involved in the initial grant application activities and provides in-kind marketing and referral services for the program. The Michigan Laborer's Training and Apprenticeship Institute (MLTAI) representative attends DGWS management meetings, reviews the training curriculum, and provides MLTAI contacts to students and staff. Interested DGWS graduates can apply for MLTAI's preapprenticeship training program and can receive credit and reduced costs by having completed the WARM weatherization training. Employers provide job opportunities and work closely with SWHS job development staff to identify and hire DGWS training graduates. The career paths chosen were largely based on employer advisory committee meetings, and employers provide continuous input to SWHS about the types of knowledge, skills, abilities and certifications that they are looking for.

SWHS also partners with a variety of local providers, including the United Way, churches, community action groups, and a variety of other organizations to offer supportive services to individuals.

#### V. Program Management, Funding, and Sustainability

The SWHS and their partner organizations believe that the DGWS program is based on a sustainable design. Renewable energy and weatherization needs should continue to increase due to Detroit's aging housing stock and an increasing demand for energy efficient technologies like solar-voltaic panels and geothermal heat pumps, thereby improving the employment prospects and outcomes for individuals completing training programs in these areas. Furthermore, the city of Detroit is currently building ten new public schools, all of which will incorporate energy efficient technology. SWHS has also received some funding through the Detroit Regional Workforce Fund for a green jobs development program, which will buffer and extend the goals of the POP grant once the funding ends. Finally, some of the Greening program graduates are applying for microloans (up to \$50,000) through the Center for Empowerment and Economic Development (CEED) to start their own landscaping businesses.

#### **VI. Program Outcomes**

According to performance reports provided by SWHS staff, 56 WARM/HFCC training graduates obtained employment during the period of April 22, 2010 through July 22, 2011 (from training cohorts 1 through 9). The average hourly wage for these training graduates was \$11.76. Roughly 67% of those entering employment into unsubsidized jobs achieved a 30-day retention period (37 of 55), 45% achieved a 90-day retention period (19 of 42), and 33% achieved a 180-day retention period (7 of 21). During the same period, 24 Greening graduates from cohorts 1 through 4 obtained new employment with an average hourly wage of \$11.04. Retention periods were similar to those of the WARM/HFCC training graduates; 65% achieved a 30-day retention period (15 of 23), 50% achieved a 90-day retention period (9 of 18), and 46% achieved a 180-day retention period (6 of 13).

The Greening of Detroit, which has several contracts throughout Detroit, is a major employer of DGWS graduates. Other employers of program graduates include Lowe's, Home Depot, English Gardens, W.H. Cannon, Historical Courtyard and Gardens, Vet Built, the Department of Natural Resources, the U.S. Forest Service, and MDOT. A major benefit of the program for employers is that it saves time and money since the participants have been prescreened and have received career coaching. The turnover that occurs is generally due to individuals finding better employment opportunities within the industry after obtaining on-the-job experience from entry-level positions. This process of career advancement is supported by the program as well as the employers.

As of September 30, 2011, the program had served 282 participants<sup>6</sup>. Program staff realized early in 2011 that additional recruitment time would be needed to reach their goals. Consequently, the program placed an application with the U.S. Department of Labor for a nocost extension and an expansion of the eligible PUMAs.

#### VII. Best Practices

**Program Integration/Leveraged Resources.** The financial coaching stood out as a particularly beneficial service because financial literacy is a challenge for many participants. SWHS and their employer partners thought that the career coaching offered by the program was one of the most valuable aspects of the training model because no matter how well the participants are technically trained, they also need the proper skills to find and retain a job.

Because the weatherization training participants are enrolled in HFCC as part of the program, they are also able to take advantage of all the resources that the community college has to offer, such as one-on-one tutoring, computer labs and other learning labs.

**Comprehensive Assessment.** The prescreening, intake assessment forms and the IAP are viewed as effective tools for identifying barriers to employment and needed supportive services. Thorough assessments help to ensure that appropriate supports and services are in place so that participants can concentrate on their training while enrolled in the program.

**Sharing Curriculum Ideas.** A best practice reported by the apprenticeship training institute (MLTAI) was the ability to share resources, knowledge, and ideas with the WARM/HFCC weatherization training professionals about the training curriculum.

**Continued Follow-Up and Connections for Success.** Once participants have completed the training and received services through their respective programs, they do not sever ties with SWHS/CWF. As part of the CWF model that has been incorporated into the DGWS program design, SWHS continually follows up with clients to ensure that proper supportive services are in place and that the individuals are making progress toward their career and personal goals.

Source: Form ETA-9153 – Standardized Quarterly Performance Report, ARRA High Growth and Emerging Industries Grant: Report quarter 06/30/2011

## WEST HILLS COMMUNITY COLLEGE DISTRICT PATHWAYS OUT OF POVERTY (POP)

#### I. Introduction

West Hills Community College District (hereafter West Hills) operates in the large, rural central valley of California. West Hills offers credit and noncredit courses, with programs targeted to the specific needs of the region such as agricultural programs and energy programs. Trainings funded by the POP grant cover topics such as residential and industrial electricity, trucking, irrigation, construction, heavy equipment, and welding. The focus on these areas reflects the strong relationship that West Hills has developed with area employers and is a major factor contributing to the high job placement rate of program graduates. The trainings result in certificates and credentials and may be taken by unemployed individuals seeking to improve their skills prior to job placement or by incumbent workers seeking to upgrade their skills. Program goals included serving 300 participants, having 150 complete education or training activities and receive a degree or certificate, and placing 147 in unsubsidized employment.

#### II. Context

The West Hills Community College District is located in the central valley of California and covers a large area including the towns of Riverdale, Avenal, Lemoore, Coalinga, Firebaugh, San Joaquin, Mendota, and Huron. Driving between some of these towns can take more than two hours, directly impacting the West Hills program design.

Interviewees indicated the region is severely depressed economically and that some citizens face substantial barriers to employment. At the time of the grant application, Fresno County and Kings County had reported unemployment rates of 24 percent and 20 percent respectively, more than double the national average. Informants suggested the actual unemployment rate in some communities may actually be closer to 40 percent as a substantial portion of employment in agriculture is seasonal. Further, a large portion of the population speaks Spanish only or limited English.

The area is rural and interviewees indicated that available labor market information is not always complete or up to date. As a result, West Hills focuses on soliciting specific industry needs and challenges. Specific businesses are able to provide real time detailed information to inform West Hills in program design.

During the period of the grant, various policies and private investments impacted areas of job growth and demand, forcing West Hills to adapt its programs. For example, Federal and state investment in home retrofitting did not come to fruition. As a result, West Hills did not train people in residential programs as originally intended. On the other hand, California's Renewable Portfolio Standard requiring 20 percent of its energy to come from renewable sources by 2020 encourages investment in solar farms in specific regions of California,

specifically in the central valley. As a result, West Hills increased its training in solar construction driven by feedback from solar companies.

Pathways Out of Poverty grants last 24 months, which has impacted West Hills program design. For example, informants suggested the investment and training cycle needed for solar farms will last well beyond the two-year period – a five year grant would have better served community needs. West Hills is highly responsive to industry needs and can create a training program in less than four weeks; however some elements of this program were delayed because investments in capital equipment took several months to receive approval for purchase through this grant.

#### **III. Program Description and Delivery Structure**

The West Hills Community College Pathways Out of Poverty program offers training in welding, residential and commercial electrical, truck driving, forklift operating, and electric motor and controls to unemployed and incumbent workers living below the poverty line. The program is strengthened by supportive services. Throughout the interviews, respondents stressed that industry needs were the driving force behind their program design.

Training offerings are sequential and certificate-based, and allow for multiple entry and exit points. Most of the training courses were in existence at West Hills prior to the grant. However, all trainings are regularly modified based on employer feedback. Local industry, which is primarily in new and emerging sectors and solar and updated food manufacturing/processing, recognizes the strength of the West Hills training and may require completion of the training program as a prerequisite for eligibility for specific jobs. West Hills training also prepares participants for, and administers the test for, the American Welding Society nationally-recognized certificate. Other nationally-recognized certificates offered include: National Electrical Code, American Society of Mechanics, and the American Petroleum Institute. At regional solar sites, employers will not hire employees unless they have taken the solar safety class at West Hills Community College.

Some unemployed or underemployed community members need skills enhancement but do not have access to the Community College in Coalinga. To serve these individuals, West Hills offers trainings in multiple geographic locations in coordination with local government agencies or other entities. For example, West Hills Community College has a mobile welding unit that allows an instructor to offer the class at any location that has an appropriate power source. Because this welding course and other courses offered are self-paced, with advancement based on skills attainment, West Hills can offer training during the same class period to individuals at different levels of skill.

Recruitment and assessment of participants takes multiple forms. For example, flyers in both English and Spanish are posted in public locations. Staff attends local career fairs and participates in popular local Spanish newscasts. Flyers for the program are also included in water bills so that people in isolated areas may have an opportunity to learn about the

program. Once a potential participant learns about the program, he or she will go through two separate screening processes, at West Hills Community College and at the WorkSource Center. This will include tests with CASES and PESCO (measuring students' interests), as well as requirements aligning with employer hiring standards. For example, students are informed of physical requirements and drug testing for each industry before being accepted into a program and taking training.

Recruitment staff and case managers coordinate supportive services, which include: transportation, childcare, work tools, and work supplies (such as steel toe boots, protective gloves, and hard hats). Many participants are co-enrolled in WIA. West Hills is the Career Center provider for the central valley, so case management and support services are provided by the Career Center. According to focus group participants, the Career Center is the "only place" to start a job search and it is helpful that the services are located in the same building.

Recruitment staff and case managers also host job preparation workshops both during the intake process and as part of training classes. Topics for these workshops range from resume writing and interview skills to financial planning.

#### IV. Partnerships

West Hills Community College is located in a rural region with few resources, resulting in limited choices for education and supportive service partnerships. Many of the traditional services offered through partners are provided in-house. For instance, West Hills Community College is also the grant recipient for The Workforce Center (the One Stop Career Center) funded through the Fresno County Workforce Investment Board. As a result, job training, case management, grant administration, and data tracking are all offered by West Hills.

West Hills Community College has additional primary partners for this project including: 1) industry and employers; and 2) city and county government, including the Fresno County Workforce Investment Board.

All interviewees noted that industry and employers drive all activities of the grant from inception through design and implementation. These partners provide direction by identifying the skills and abilities needed to enter employment in their industry; offer suggestions on equipment and materials to train on; and supply industry professionals to teach many of the classes. Employers use West Hills to screen and match potential job applicants based on employer-identified job requirements.

City and county governments serve as important partners by providing in-kind support, for example offering the use of libraries or schools as training facilities, or city or county garages to provide electricity for mobile training units. City and county governments also play an important role in job development. When new employers such as a solar farm plan to create jobs in the area, the local government will work with West Hills in negotiating the contract to ensure that a certain percentage of the workforce will be offered to local skilled workers.

Another component of city and county government, the Workforce Investment Board and the Workforce Center (One Stop), are important partners, providing space for staff, co-enrollment in WIA programs, aligning services, and leveraging supports<sup>7</sup>.

#### V. Program Management, Funding, and Sustainability

The program has three directors, who work closely together, leading credit and non-credit training, job preparation, and job placement. Each of these directors is supported by staff such as instructors, job developers, and case managers.

West Hills Community College has supported the program by providing additional direct financial support from partners such as AT&T, PG&E, and their local storage center. The program is also strengthened by aligning with other grant programs, such as funding from the Chancellor's office for incumbent worker training and Department of Transportation grant funds. Respondents suggested that one of the most important leveraged resources was training space and electricity for mobile units donated by local schools, libraries, and governments.

West Hills Community College plans to sustain the program by institutionalizing it within the college district and continuing to refine training and courses based on specific employer needs. Respondents suggest the greatest challenge in starting some of the programs was the lengthy process for acquiring the initial capital equipment, which was purchased through the POP grant. This equipment will remain in use for future workforce development training as part of their sustainability efforts.

The directors of non-credit and credit training are actively partnering to institutionalize the course this grant allowed them to create. They are in process of making the non-credit training viable for credit course offerings.

#### **VI. Program Outcomes**

To date, West Hills Community College has exceeded all anticipated outcomes, with the exception of job retention. For example, at the time of the site visit, West Hills had trained 336 individuals, exceeding the 300 proposed. Further, 177 individuals had been placed in unsubsidized employment, while the original goal was 167. Job retention requires 180 days of follow up, and students have not been placed in jobs for that period of time. However, retention may be a challenge as many of the participants were placed in jobs constructing solar farms, and these jobs in general last only six to nine months, the length of time required to complete construction. However, due to the training provided, there is now a ready, trained workforce for future solar projects coming to the region.

<sup>&</sup>lt;sup>7</sup> The Workforce Center is a service contracted out by the WIB. West Hills is the recipient of the grant; however support from the Fresno WIB is a component of that partnership.

Informants suggested participants will be successful in the long term because the trainings are designed to be sequential and complementary, as well as allow for multiple entry and exit points. For example, a participant may take a basic electrical class and be hired to work at a solar farm construction site. Typically, workers at solar farm construction sites are employed only for the duration of the specific project under construction. According to interviewees, a project typically lasts six to nine months. After construction is complete and the site is operational, the participant is laid off. West Hills staff will then contact that participant to inform them of the next level of training. The participant will then receive that training to upgrade their skills, while staff at West Hills work with employers on job placement. Participants are typically hired on another solar construction project after completing the upgrade skills training. This process allows workers wishing to upgrade their skills to participate in career ladder training.

#### VII. Best Practices

Respondents identified numerous best practices and success stories from the project. Generally, these can be summed up in three categories; 1) industry as the driving force behind program design; 2) flexibility in training design to meet the specific community needs; and 3) consistency and experience with grant staff, policies, and procedures.

First, industry acts as the driving force behind program design. Industry informs what training should take place, when, and the content of the training. Industry professionals also teach many of the classes. Because of the close relationship with industry, West Hills Community College can act as a screening agent for industry hiring. This relationship also allows West Hills staff to set realistic expectations for participants. For example, participants know during the assessment phase that drug testing will be required for job placement.

Second, West Hills Community College is able to overcome the challenges of working in a large, rural region. Specifically, the program offers flexible training schedules and secure industry professionals to offer courses throughout the large geographic region. The mobile training units travel to communities to provide sequential skill development. The sequencing of the training allows trainees to integrate the training with their experience either as incumbent workers or unemployed jobseekers. West Hills also effectively overcomes language barriers for Spanish speaking participants by offering courses that teach industry-relevant vocabulary (in English) that are developed by employer partners. Also, employers have started hiring special bilingual supervisors, since that has proven to be the best method to retain skilled Spanish-speaking employees. Employers created these special bilingual supervisor positions as a response to the needs of the newly skilled workforce.

Finally, respondents suggested that West Hills Community College has been able to keep many of the same staff members from grant to grant, thus retaining the knowledge and skills gained by those individuals during the grant period. These staff members have also developed expertise and created policies and procedures that can generally be applied across grant programs to ensure grant compliance.

# BIOOHIO HEALTHCARE AND HIGH GROWTH (HHG)

#### I. Introduction

BioOhio describes itself as an "industry-facing" organization operating statewide in Ohio to promote the growth of the bioscience sector, acting as a trade association for the industry. BioOhio distributes funding to six community colleges that have each created a bioscience program specific to the employment needs of their region. The HHG grant is part of a larger strategy for BioOhio to establish Ohio as the industry center for bioscience, and developing a workforce with academic and training standards is viewed as essential to meeting this goal. The BioOhio program is marked by significant employer involvement and a regional approach for grant program development. Program goals included serving 700 participants, having 630 complete education or training activities and receive a degree or certificate, and 560 complete education or training activities and obtain unsubsidized employment.

#### II. Context

Ohio is an auto-impacted state with a growing bioscience industry (estimated growth of 2 percent annually for the last 10 years according to informants). At the time the grant application was submitted, unemployment in the counties served by this grant ranged from 7 percent to 14.5 percent, with some metropolitan areas (Cleveland and Toledo) experiencing unemployment rates exceeding 10 percent. Currently there are approximately 62,000 people employed in bioscience careers in Ohio, with 1,000 job openings monthly, according to BioOhio surveys. Many of the skills used in auto manufacturing are transferable to jobs in bioscience, with some skills modifications or upgrades.

BioOhio and its partners use extensive labor market information supplemented by employer and industry feedback. The Council for Adult and Experiential Learning (CAEL), one of the project partners, helps community colleges to understand the needs of employers. For example, CAEL conducted surveys and held focus groups of employers in the Toledo area to better understand the labor market demands in that particular region. This labor market information impacted the distribution of training dollars.

BioOhio has six community college providers operating in four regions (Northwest, including Toledo; Northeast, including Cleveland; Central, including Columbus; and Southwest, including Cincinnati). There are two community college partners in the Cleveland area and two in the Cincinnati area. BioOhio used a regional structure for the grant because each region specializes in different areas of bioscience. As a result, each region has a different training model based on industry needs in that given region.

#### **III. Program Description and Delivery Structure**

The program is administered by BioOhio, a trade association of bioscience companies, operating solely in Ohio. Funding is distributed to six community colleges in four target regions based on industry needs.

Three of the community colleges had two-year associate degree programs in place prior to the grant, which served as the springboard for other community colleges to create curriculum and develop certificate programs. BioOhio helped all of the community colleges develop an advisory council of employers. The advisory councils assist with program and curriculum development geared toward specific employer needs in each region, provide company tours, and offer industry professionals as teachers for programs. Between the six community colleges, there are both credit and non-credit program offerings ranging from a seven-week certificate program to two-year associate degree programs.

Work across the six community colleges is strengthened by technical assistance provided by the Council for Adult and Experiential Learning. CAEL assisted sites early in the planning process to understand labor market information and helped develop pathways for individuals coming from jobs in other areas of manufacturing. CAEL also attends all regular group meetings and will be deployed to address specific workforce development issues as needed.

Each of the six community colleges delivers a different program with different program components and service delivery strategies. In general, all sites provide training focused on the bioscience industry needs in their region, with substantial input and continuous feedback from industry.

The bioscience industry does not have a national industry-recognized credential, analogous to the Registered Nurse (RN) credential in nursing or the Emergency Medical Technician (EMT) credential in medical response. However, each site is working with its employer advisory council to ensure that the local employer community values the training program. During the development phase, BioOhio asked all sites to use a single, existing program as the framework for developing training programs. BioOhio intends to continue working with sites to ensure some standardization across the state, thus creating a statewide industry-recognized credential.

Each community college recruits participants through various means. For example, some programs recruit existing community college students. Other programs have close relationships with local One Stop Career Centers. Still other programs work closely with employers who wish to have staff upgrade skills or employers that may be planning mass layoffs. Sites did report limited funding for recruitment and suggested traditional recruitment methods such as participating in career fairs, hanging flyers in public places, and newspaper advertisements were still popular.

Based on feedback from interviews, it appears all programs are offering some job preparation support, some of which is integrated into classroom trainings. For example, the Columbus State Community College bioscience manufacturing technology certificate consists of a sequential three-class training with one of the classes entirely focused on job preparation and soft skills. Job readiness and placement needs for the individuals served by this grant have indicated to these community colleges that their placement services need to be more robust. Case management and other supportive services, such as transportation and child care are not funded through this project and some sites are co-enrolling participants in WIA to offer additional supports and assistance for their participants. Respondents say that funding for support services would be a welcome addition to this program.

### IV. Partnerships

BioOhio identified the six community colleges and CAEL as the primary partners. However, industry is the driving force behind all program activities. Throughout all interviews, respondents mentioned that numerous industry partners (including the 13 that provided letters of support) informed curriculum and program design, set requirements for intake processes, provided site tours, and delivered classroom lectures.

Respondents also cited a variety of partners that differed across regions: the One Stop Career Centers, union partners (AFL-CIO), and community-based organizations. BioOhio has a particularly strong relationship with the AFL-CIO, which is working to help place union workers in any training leading to a job, union or otherwise. The AFL-CIO also helped connect BioOhio with two employers (Jim Beam and Avon) that were planning mass layoffs, to help employees retool their skills before the layoffs occur.

Partnership development is a particularly strong component of the BioOhio program. As a trade organization, BioOhio acts as an effective intermediary between industry and training providers. The programs have value to employers because employers know an organization representing their interests is coordinating the effort.

#### V. Program Management, Funding, and Sustainability

BioOhio has instituted management practices to ensure funding is spent in a timely manner and data is accurately tracked. For example, BioOhio requires monthly, instead of quarterly, reporting within five days after the end of the month. The program created fiscal and program tracking systems to ensure their grantees are reporting in an accurate and timely fashion. For example, the program manager will act like an auditor and randomly assess participant records to ensure information is recorded accurately. Similar to the project management activities used by Memphis BioWorks, the information submitted allows for the project manager to have informed discussions based on timely data. BioOhio holds monthly conference calls and quarterly face-to-face meetings with all sites. The calls and meetings serve to address any issues that may arise, as well as allow for cross-site learning and peer-to-peer exchange.

Leveraged support varies by location. By statute, the community colleges must leverage Pell funding. Sites were strongly encouraged to base their programs on an existing program, and some sites used existing equipment. All sites, to varying degrees, contributed staff time. BioOhio also contributed additional staff time and meeting space.

Respondents suggest that community colleges have the infrastructure to continue the programs after the conclusion of the grant, and many of the community colleges are working to institutionalize the programs as credit-bearing classes. Respondents also suggest that future funding and sustainability of the individual community college programs is ultimately based on industry demand. If industry views the training program as valuable, continues to work with the program based on hiring needs, and continues to provide financial support, program sustainability will be enhanced.

#### **VI. Program Outcomes**

In the BioOhio project, most sites began training around January 2011. Interviewees suggested that during 2010, four of the sites 1) obtained DOL approval to purchase training equipment; 2) developed the training curriculum; and 3) established new advisory committees. According to the most recent quarterly report (ending September 30, 2011), 303 participants have been served and 84 participants have entered employment. According to informants, the strongest outcomes to date have been shown by community colleges that had programs in place prior to the grant beginning.

Some sites have developed a career ladder or continuum of education. For example, the sites in the Cincinnati region have an eight-week certificate course appropriate for entry-level employment, but some participants choose to continue their education and pursue an associate's degree.

Outcomes not typically reported to DOL include: the creation of industry advisory boards at every community college and the development of new programs at three of the community colleges. Interviewees emphasized that throughout the design and implementation of all programs, industry has played an indispensable role.

#### VII. Best Practices

The BioOhio project is seeking to create programs that are directly responsive and valued by employers and industry partners. According to respondents, this project is a jumping-off point for a statewide strategy to create a highly skilled workforce for the growing biosciences industry. BioOhio stated that most colleges require employer advisory committees to support programs, and by policy, this practice will continue after the grant is completed. BioOhio also expects that the relationships with the bioscience community that have been strengthened during the grant will continue post-grant. The regional approach with industry advisors playing an integral role with each community college appears to be an effective practice.

Specific strategies have also been applied to funnel unemployed or soon-to-be unemployed workers to the training program. For example, Avon (the cosmetics company) and Jim Beam (the beverage company) were planning layoffs. CAEL identified the transferable skills and skills gaps for Avon employees relative to the skills needed for the bioscience industry. The AFL-CIO funneled these workers who will be laid off from the two plants to the appropriate trainings in the bioscience industry and these individuals may be placed in jobs before the actual layoffs take place.

Another example of a promising practice is exemplified by the partnership between Sinclair and Cincinnati Community Colleges. They have embarked on a co-located classroom with shared recruitment, enrollment, and classroom and instructor expenses.

The overall strength of the BioOhio program comes from the central management organization which helps ensure grant compliance, develops the partnership between community colleges, and connects programs to industry. BioOhio's role as an industry-facing organization is instrumental to the connection and success of this program. Respondents say that BioOhio leading the efforts brings credibility to the business and education communities. BioOhio is not a competitor wanting to operate programs; they support training providers in doing what they do well and they provide strong program management and business relations.

# CENTERSTONE TENNESSEE HEALTHCARE AND HIGH GROWTH (HHG)

#### I. Introduction

Centerstone Tennessee, a mental health and addiction service provider, operates in middle Tennessee, a region hit hard by auto plant closures and auto supply plant closures. Seeing the impact mass layoffs had on patients and the tight-knit rural communities which Centerstone serves, program staff felt the region needed additional job training programs complemented by the case management services Centerstone provides through its other programs. Centerstone serves any community member eligible for services, not just the existing mental health clients.

Centerstone's Healthcare and High Growth grant, which is called the Career Resource Center, operates in two communities, Columbia and Tullahoma, and serves five counties: Maury, Bedford, Coffee, Marshall, and Lawrence. Centerstone's program provides training at existing institutions for occupations including certified nurse aide (CNA); licensed practical nurse (LPN); registered nurse (RN); emergency medical technicians (EMT); pharmacy, radiologic, and surgical technicians. Centerstone's program focuses on providing supportive serves through case managers. Program goals included serving 600 participants, having 420 complete education or training activities and receive a degree or certificate, and placing 294 in unsubsidized employment.

#### II. Context

Centerstone Tennessee operates in a region of Tennessee that was hit particularly hard by the recent recession. The five counties served by the Centerstone grant had unemployment rates ranging from 10.6 percent to 19.2 percent in 2009, far exceeding the national average of 9.7 percent. In 2009, the General Motor's Saturn manufacturing operation, located in Maury County, was closed, forcing 3,000 layoffs, with additional layoffs occurring at multiple companies that supplied the GM plant. At the time the grant application was written, the unemployment rate in Maury county was expected to balloon to 20 percent.

In addition to being economically depressed and auto-impacted, the region is very rural, with little public transportation. Lack of adequate transportation and deficiencies in skills appropriate to the local industry mix were significant barriers to employment among program participants.

The Career Resource Center project was entirely new to Centerstone, which caused numerous challenges during the start-up phase of the grant and impacted its program structure. For example, given the rural nature of the region, identifying and securing office space was a challenge, as well as hiring qualified staff. Centerstone also did not have existing partnerships with training providers or the workforce system. This lack of experience required additional

<sup>&</sup>lt;sup>8</sup> Centerstone Grant Application, p. 1.

time and learning for developing partnerships, obtaining guidance from the local WIA-funded Career Center, and contracting with vendors.

Centerstone has not aligned programming with local, state, or national policies or programs. Since the Career Resource Center was created solely for this funding source, Centerstone relied heavily on the Career Center (WIB) which provided complementary services whenever possible.

#### **III. Program Description and Delivery Structure**

The Centerstone program operates in two locations (Columbia and Tullahoma) serving a five-county region in middle Tennessee. The two locations have a mirrored staffing pattern with cross-training and communication between the staff. Each location consists of a director, two case managers (called career developers), one employment specialist, and one intake specialist/customer service support staff member.

Centerstone's program refers participants to existing training at technical colleges and the Tennessee Career Center. Participants are predominantly unemployed and auto-impacted. Centerstone also provides support services such as childcare, transportation, textbooks and school supplies.

Participants may learn about Centerstone's program through a variety of means, but informants say word of mouth is the most effective source of recruitment. In fact, because of unexpectedly large demand for the program, many individuals were turned away from the program and had to wait months to enroll. To enroll in the program, individuals either visit the Career Center or call Centerstone to arrange a meeting to discuss training opportunities. Centerstone and the Tennessee Career Center most often co-enroll individuals in this grant program and WIA programs. Once enrolled, an employment specialist at Centerstone provides many of the services and supports of a traditional case manager, as well as guidance and support for enrollment in eligible training.

Participants may earn a variety of industry-recognized certificates including CNA, LPN, EMT and paramedic certification. The industry-recognized certificates are primarily offered through the local Tennessee Technical Colleges. Centerstone will either pay individual tuition to these institutions, or, if enough Centerstone participants are enrolled, Centerstone will pay for a "contract" class. Other certificates related to medical billing and coding were also awarded through private training providers. However, their value in the market place and industry recognition turned out to be limited at best, with only one job placement in that sector. Centerstone is no longer supplying participants to those programs after conducting market research and determining labor demand in that field was low.

Centerstone staff intended to provide extensive support services, but other funding streams were leveraged to a greater extent than originally expected. Originally, Centerstone had budgeted \$800 per participant for support services, with the possibility of exceptions to be made in extreme circumstances. Common support services paid by the grant include childcare,

transportation, work clothing, glasses, dental work, and tutoring. In most circumstances, employment specialists provide recommendations to training and support services, participants receive estimates of costs, and employment specialists approve whether the program will pay for the service or supplies. For example, a student in a nursing program may request scrubs and shoes for their clinical work. The student would provide a quote from a local business that is sent to Centerstone. The student's employment specialist would then approve the expense, the student would receive the scrubs and shoes, and the business would invoice Centerstone for the expense of the goods.

#### IV. Partnerships

Centerstone, previously known within the community for its mental health services, developed the workforce training program as an entirely new endeavor. As a result, all of its partners for this grant are new partners. Centerstone's closest partner is the Tennessee Career Center. Informants indicated that staff members of Centerstone and the Career Center work closely with one another to leverage resources, funds, and services. Other partners, such as Maury Regional Hospital and the Tennessee Technology Center, provide contracted services such as LPN training classes or clinical experiences for nursing students. Neither organization has committed to hiring participants. Centerstone has signed agreements with its training partners detailing the training to be provided and the associated cost. Through agreements with local post-secondary education institutions, participants may be referred for supplementary coursework.

In addition, Centerstone has developed relationships with many businesses that do not necessarily hire its training program graduates. For example, one nursing supply store provides scrubs and other materials for nursing students. Centerstone intentionally works with local businesses and vendors (to support the local economy), such as a local car repair shop that will provide estimates and special billing for participants that need vehicle service to attend training or jobs. Centerstone also works informally with local government, which was supportive in helping the program receive positive press and promoting the program in public meetings. These relationships are not formalized through a written contracts or MOUs, but through their accounting and case management system.

Informants from Centerstone suggested they have learned a great deal from the grant process. They recommended that grantees research potential partners and their training "products" thoroughly before committing to a partnership. For example, Centerstone had a negative experience in providing medical billing and coding training to grant participants. After making the financial investment to provide training in this area and having participants complete this training, program graduates found that there were no jobs in the area for individuals with less than 2 years of previous experience in the field. Centerstone now believes it needs to do its own research on labor market information and only offer training provided by the Tennessee Board of Regents.

Centerstone does not lead a partnership. It does not convene organizations as a community grant partnership or have an advisory board structure. Therefore, there are no formal reviews of goals, objectives, or outcomes with external agencies.

#### V. Program Management, Funding and Sustainability

Centerstone staff manages the project by contracting with training providers, partnering with organizations to provide support services based on participant needs, and often co-enrolling participants in the WIA system. Centerstone leverages funding or in-kind resources from a variety of sources including as WIA, Centerstone mental health services, FAFSA funding, Pell grants, food banks, and training facility space.

Since Centerstone operates case management systems for its mental healthcare services, staff was able to utilize the existing case management system for the Career Resource Center project. Staff also report directly into the Recovery Act Database from electronic files in the case management system.

When asked about sustainability, informants suggested staff of Centerstone headquarters is charged with fund development. If headquarters staff does not raise additional funding, the Career Resource Center program will end at the conclusion of the grant cycle. They expect this will be the case and so are already trying to find jobs within the organization for the current grant staff.

#### **VI. Program Outcomes**

As of the site visit, enrollment goals had almost been met, with over a year left in the grant to enroll 30 additional participants. To date, job placement has been limited, with reports of small businesses hiring only one or two people at a time. To address this need, Centerstone staff members are now focusing on job preparation and job placement. Each site has a career developer, tasked with outreach to the employer community.

#### **VII. Best Practices**

Because Centerstone had no prior experience in the field of workforce development and no workforce partners prior to this grant, there was a substantial start-up period and many "lessons learned." For example, informants say, Centerstone should have done more research into the labor market needs and selected training providers based on that need. Instead, Centerstone staff accepted labor market information from training providers that did not present an accurate picture of growth areas and skills necessary to enter such fields.

Centerstone is also conducting an additional evaluation of the grant program to gain a stronger understanding of the changes in stress levels and well-being of individuals as they move from unemployment through training and into jobs. They give pre and post tests to participants and will analyze the data to look for changes and impact. While this work is typically outside the scope of work for DOL grantees, it complements other work conducted by the Centerstone organization as a whole and appears to be a thoughtful addition to the program.

# MEMPHIS BIOWORKS ENERGY TRAINING PARTNERSHIP

#### I. Introduction

Memphis Bioworks (hereafter Bioworks) is a nonprofit organization working to develop the bioscience industry in the Memphis region through leadership and infrastructure, workforce development, and entrepreneurship. As the coordinator of the Southern Energy Training Consortium (SETC), Bioworks operates the Energy Training Partnership funded program in the greater Memphis region and surrounding counties. Overlapping three states (formally in Tennessee and Arkansas and informally in Mississippi), training providers and supportive service providers work across state lines to address the needs of the regional economy.

Bioworks is the grant recipient and partners with four community colleges and one labor union. The grant program provides training and limited supportive services to participants, with case management and data management services offered through a partner organization. SETC training providers leveraged existing curricula and expertise coupled with input from employer partners to produce new or modified training in:

- Solar installation
- Agricultural production for biomass crops
- Sustainable design and construction
- Renewable energy
- Chemical processing
- Plant process operations.

Program goals included serving 450 participants, having 420 complete education or training activities, having 179 complete education or training activities and receive a degree or certificate, and placing 247 in unsubsidized employment.

#### II. Context

Memphis and the surrounding region are economically depressed and experienced high levels of distress during the recent nationwide economic downturn. In June 2009, unemployment rates in the 26 counties targeted by the grant ranged from 7.9 percent to 18.4 percent, with nearly all counties falling above the national average for unemployment. In addition, more than 20 percent of the population in the target region lived below the poverty level in 2005. This economic depression is juxtaposed with a growing manufacturing base of biotechnology and energy related products and state-funded solar facilities. The Southern Energy Training Partnership is designed to marry these two issues by providing skills training in the biotechnology and energy sectors. However, Memphis Bioworks and its partners anticipate a

<sup>&</sup>lt;sup>9</sup> Memphis Bioworks proposal to DOL, P. 5.

slow recovery period. As informants suggest, setting goals for this project required extensive thought and planning, especially regarding job placement, because of the uncertainty of the timing of economic recovery.

Unexpected changes in the economy and local economic development have impacted job growth and demand in particular areas, forcing Bioworks to adjust elements of its program model. For example, economic growth in the solar construction industry has been slower than the labor market information indicated when SETC applied for funding because state investment in solar farms has been delayed. As a result, Bioworks shifted some of its funding to different training areas with higher projected rates of growth.

SETC is funded through the Energy Training Partnership, a 24-month grant. When designing the program, Memphis Bioworks and its partners felt participants would have the best labor outcomes with more education, especially with associate's degrees. While participants will be better prepared for the labor market, a large portion of participants will not complete training until the final two months of the grant, leaving little time for job placement before the grant expires. The 24-month grant cycle was also challenging because SETC was limited to the community college academic calendar and did not start most training programs until August 2010. Similar to many grantees we have visited to date, SETC found that it took nearly eight months to develop or adapt a training curriculum, increase industry buy-in to adequate levels, and receive approval for the purchase of capital equipment.

SETC aligns and plans programming in collaboration with local government and economic development efforts. For example, each of the training providers works closely with its Chamber of Commerce to ensure training aligns with the local community economic development strategy. The two training providers operating in the greater Memphis region are part of a larger effort to brand the city as a "green" city. The City of Memphis is also part of this effort and, as a result, is retrofitting all city government buildings, thus driving demand for the training provided by the SETC.

#### III. Program Description and Delivery Structure

The Southern Energy Training Consortium provides a variety of training from five training providers (four of which are community colleges) with supportive services provided either inhouse or through contracted services.

Memphis Bioworks acts as an intermediary, ensuring grant compliance, fair distribution of funds, and appropriate client data collection. Bioworks communicates program outcomes through a common web-based case management system, as well as through regular program meetings. The program consists of a variety of training in various energy sectors from manufacturing to energy production (i.e., solar panel installation) to green building, in order to avoid over-saturating the job market in a single training area. Training in the program is generally focused on building basic skills or expertise in a trade such as architectural design, but supplements trainings with green components such as LEED certification.

Each training program is slightly different with variation across training providers and training types. Training providers offer evening and daytime classes, as well as some Saturday classes. Most classes consist of some hybrid of classroom learning, hands-on experiential learning, and online learning. A strong emphasis is placed on hands-on learning. For example, training providers have invested in capital equipment such as a biodiesel generator and a mock house for students to practice in different scenarios mirroring the work environment.

Support services vary by location and training provider. For example, the largest training provider, located within a metropolitan area, provides extensive supportive services because the scale of the program allows the project to hire case managers and job developers. Specifically, Southwest Tennessee Community College has partnered with Seedco, a national nonprofit that advances economic opportunity for people, businesses, and communities in need. Seedco staff act as case managers connecting participants to support services such as child care, transportation, and tutoring, paid for through a variety of sources including the grant. Seedco also operates "Boot Camps" which help participants succeed in both the academic and work environment. Topics covered in boot camp sessions include study skills, time management skills, technical writing skills, effective communication, conflict resolution, tips for on-the-job success, resume support, and mock interview training. Smaller sites provide support services through different mechanisms, such as in-house career centers and tutoring services.

Recruitment varies by training provider, but traditional recruitment methods are generally used. For example, most training providers reported recruiting participants through One Stop Centers, public announcements, newspapers, and flyers distributed at public locations.

#### IV. Partnerships

Memphis Bioworks has formally partnered with five training providers and Seedco, and has informally partnered with Chambers of Commerce, city government, One Stop Centers and employers. The partner organizations in the Southern Energy Training Consortium had never formally worked together as a group prior to this grant, although some partners had informally worked together before. A highlight and driver to the effectiveness of the SETC is its strong partnerships with a shared vision.

Memphis Bioworks has subgrantee agreements with all training providers and Seedco which define roles and responsibilities, deliverables, and outcomes. Partners meet on a quarterly basis and Bioworks meets with individual subgrantees on a quarterly or monthly basis (depending on their role) to work towards meeting outcome targets.

While this partnership is new, informants suggested the strong central administrative structure helped all partners create a shared vision of the project and the partnership. Each partner recognizes its strengths and the strengths of other partners, creating a collaborative

environment. As a result of the grant, these partners have started planning additional projects and have applied for other grant funding together.

"Informal" partnerships are not solidified with a formal agreement or Memoranda of Understanding, unless leveraged funding has been provided, 10 but they serve an important role in administering the grant. For example, local employers help modify curriculum, provide tours and worksite exposure for students, and assist with job placement. The workforce system assisted in providing labor market information for the application process, and local Workforce Investment Areas are supporting the grant through One Stop Centers, for example by referring potential participants to the program. Local governments have supported the grant efforts in a variety of ways such as helping with job placement, recruitment, and advertising.

#### V. Program Management, Funding and Sustainability

The Southern Energy Training Consortium is managed through a central agency (Memphis Bioworks) which ensures grant compliance, monitors program outcomes and spending, and coordinates with training partners in developing recruitment plans, monitoring spending, and reporting participant outcomes.

The Memphis Bioworks program manager created policies and procedures manuals for all partners that include all Department of Labor contract definitions and terms. Bioworks provided training to all partners, conducts monthly reviews of goals, procedures, and outcomes, and works with training partners as needed to adjust training schedules to meet program goals.

Subgrantees expressed appreciation of the role of an intermediary like Memphis Bioworks as the grant administrator. By taking on a management and oversight function, Bioworks allows community colleges and nonprofit partners working in direct service to concentrate on their core strengths.

All project partners have leveraged resources through a variety of means. For example, the training providers based programs on existing programs and, in many cases, utilized existing equipment. The City of Memphis has been the largest source for leveraged funds, reallocating WIA dollars for paid internships and providing opportunities to retrofit city government buildings. Specifically, the City of Memphis WIA committed to providing \$100,000, with a potential for an additional \$180,000 in the city's next fiscal year.

Memphis Bioworks contracted with Seedco to provide case management and data management software and support. The web-based, real-time system allows each training provider and case manager to view their participant case files electronically, while Memphis Bioworks can view individual case files and create aggregate reports. Through this system,

<sup>&</sup>lt;sup>10</sup> For example, the City of Memphis WIB contributes leveraged funds and an agreement defines the responsibilities of the provider in receiving those funds.

Bioworks has been able to carefully monitor partner progress and ensure that data is accurately reported.

Sustainability for these programs derives from three sources, according to informants, although none of the training providers have created written sustainability plans. First, all partners are working to create and increase employer demand for the training provided. Second, the community colleges are working to institutionalize programs to be funded by tuition dollars. Third, SETC is working with economic development organizations to help build a workforce that will attract industry. As Memphis Bioworks has gained a reputation as a green organization, staff has worked with the city government to create a level of demand for goods and services.

### **VI. Program Outcomes**

To date, participant outcomes are somewhat limited due to the length of training for most participants. According to informants, a large portion of participants will be finishing training in December 2011 with job placement activities beginning for those participants in the fall of 2011 (prior to completion). Bioworks has added a fulltime job developer to assist the participants in placement and to perform outreach to the employer community on their behalf. However, since the grant ends in January 2012, staff is concerned about placing participants in jobs at the end of a community college semester and during the holiday seasons in December and January.

Informants pride themselves on accurate participant tracking supported by the web-based case management system that aligns with the RAD system. Informants can easily navigate the web-based tool and describe policies, procedures, and activities that ensure outcomes are accurately tracked and appropriate program adjustments are made.<sup>11</sup>

While participant outcomes are limited at this point in time, informants could easily name other outcomes of the grant that are not based on participant outcomes. For example, informants stated the collaboration of all partners has been a positive outcome of the grant. Members of the consortium, with their shared vision, anticipate using the grant as a jumping off point for regional collaboration in the future. Also, training providers are providing a range of certificates, credentials, and associates degrees that are valuable to the participant in the context of building a career in the long term.

# VII. Best Practices

The Southern Energy Training Consortium, operated by Memphis Bioworks, may best be defined by several factors, described below.

 Strong central management streamlined processes, ensured grant compliance, and created a long-term shared vision among all partners. The central management structure allows partners to come together in a neutral fashion, share ideas, and

<sup>&</sup>lt;sup>11</sup> During the site visit, informants provided a "tour" of the web-based system.

prevent competition for training dollars. Informants suggested the convening organization helped create a clear delineation of roles, responsibilities, and expectations which allowed all partners to focus on their area of expertise (training, teaching, providing supportive services) more than project management, oversight and reporting.

All partners have a shared vision of the project – there was a sense of urgency, a need to help people get work, and a foundation to build a lasting partnership among and between the organizations involved. Once all partners agreed to this shared vision, they helped use each other's expertise to maximize results. The consortium model allowed small, rural communities to access resources they would not have been able to access otherwise. Additionally, the rural communities had resources (such as curriculum) that they were able to share because of the partnership. In short, the consortium model allowed for a give-and-take relationship that would not have otherwise existed.

- A segmented training approach used labor market information enhanced by industry sources to identify multiple areas of labor demand in the service area. The program then delivered training in these multiple sectors, avoiding over-saturating any one sector.
- Strong data-tracking systems complementing thorough written policies and procedures allowed for data-driven decision making. The central convening agency was able to capitalize on its expertise, especially staff expertise in the area of workforce development and managing Department of Labor funding, to ensure compliance with grant objectives. A web-based, real-time case management and data management system was used to continually monitor grant outcomes and adjust program components and training accordingly. For example, in response to initial job placement outcomes that were lower than expected, Memphis Bioworks reallocated funds from the pool of funds set aside for tuition to hire a job developer and employment specialist. The training provider, Southwest Community College, agreed to the tuition change due to its strong working relationship with Memphis Bioworks and the mutual recognition that this change would be best for the program participants.

# SER METRO-DETROIT, JOBS FOR PROGRESS, INC. (SER-METRO) ENERGY TRAINING PARTNERSHIP (ETP)

#### I. Introduction

SER Metro-Detroit, Jobs for Progress, Inc. (SER-Metro) serves a diverse community in both the city of Detroit and Wayne County. SER-Metro, a non-profit organization in operation for the past 38 years, is a longtime provider of employment and training services and is highly active in economic and community development in southern Michigan. SER-Metro currently operates a year-round Youth, Adult Education, and TANF collaborative and an Alternative High School in partnership with Hazel Park Schools. SER-Metro was previously the One-Stop Career Center operator and has managed more than \$300 million in Federally-funded contracts, including a six-year, \$43.6 million U.S. Department of Labor Youth Opportunity Program.

Beginning in 2010, SER-Metro began operating the Regional Energy Efficiency Partnership Training Program (REEPTP) under the Energy Training Partnership (ETP) grant. Total funding for the program is \$4,298,673 and SER-Metro's goal is to recruit and train 340 individuals in 12 cohorts for occupations in energy efficiency, building construction, retro-fitting and deconstruction. The REEPTP consists of six training "tracks", starting with a foundational "Convergent Technology and Energy Efficiency" course requiring 390 hours of combined classroom and hands-on instruction. Upon completion of Track 1, participants may enter employment in qualified occupations (Track 2), pursue advanced training to become a Residential Wireman or Laborer's Apprentice (Tracks 3 through 5), or participate in "up-skill" training for installation of solar photovoltaic panels (Track 6 – for Journeyman Electricians only). As of August 2011, the program had recruited 207 participants in ten different cohorts.

#### II. Context

Southeast Michigan, both in the city of Detroit and Wayne County, have been hit extremely hard by the recession, with the auto industry slowdown felt years before the official national recession hit. In addition to the high unemployment rate, when the grant application was being written, approximately 50,000 people in southeast Michigan (over 25,000 in Wayne County alone) were expected to exhaust their unemployment benefits in January 2010.

To address these challenges, the REEPTP program targets individuals that have been displaced from the automotive industry, which makes up about 20% of the unemployed population in their service area, as well as minorities and women. Approximately 25% of the population is female, and 10% are new citizens. To be eligible for the program, applicants must have either a GED or high school diploma. The average age for training participants is about 30, with participant ages ranging from 19 to 63. Although some participants have construction experience, most do not and are seeking training to establish a new career path. A number of

<sup>&</sup>lt;sup>12</sup> Qualifying jobs include: Weatherization Tech/Installer or Supervisor; Deconstruction Tech; Recycling Tech; Energy Auditor; Energy Retrofitter; and Safety and Environmental Hazard Tech.

participants (about 10%) have left the training program because they have been called back for jobs or were not able to support themselves financially during the program and had to take a job. Some individuals, however, were able to temporarily exit the program and come back with the next cohort.

#### **III. Program Description and Delivery Structure**

**Outreach**. SER-Metro uses a variety of marketing and outreach mechanisms to recruit participants for REEPTP, including posting flyers, conducting onsite information sessions at community agencies, email broadcasts, profiling (using database data to identify candidates) and making telephone calls. SER-Metro also places advertisements at One-Stop Career Centers, churches, and other areas, and market the program at career fairs and at Detroit Edison, the major utility in the state, to bring in new participants. It appears that most individuals hear about the program by word-of-mouth.

**Orientation and Intake**. SER-Metro conducts orientation sessions centrally, as well as onsite at community agencies. These sessions are performed by intake/outreach specialists. The participants are asked to bring documentation including a driver's license, Social Security card, high school diploma or GED, and proof of unemployment insurance. Those without a valid driver's license or a diploma/GED are ineligible for the program. Participants are asked whether they are comfortable working in the conditions required by the program (outdoors, with heavy machinery, noisy environments, etc.), why they were interested in joining the program, and what immediate and long-term career goals they have. Participants who meet the basic qualifications are then TABE-tested the same day and must demonstrate an 8<sup>th</sup> grade math and reading level; if they fall below this threshold they are provided with a username and password for accessing the Plato Online Learning Management System software for self-directed remedial education. Finally, the participants must also pass a criminal background check, a drug test, and a physical examination. Once all of the criteria have been met, the intake/outreach specialist schedules the individual to meet with a Career Coach to begin the enrollment/career planning process (referred to as an "orientation letter appointment").

Enrollment and Career Planning. During the orientation letter appointment, the participant and the Career Coach put together a Customized Career Plan (CCP) to document educational and personal goals. The CCP documents any barriers to employment or training and helps connect the participant to appropriate supportive services. The Career Coach also provides participants with an introduction to O\*NET so they can continue to research the occupation and industry they are interested in. The CCP is revisited during the sixth week of training. Somewhere between the tenth or twelfth week of training a "team review meeting" is scheduled so that participants can begin working with an employment specialist to review and upgrade their resumes and begin taking other steps to ensure job-readiness.

**Training.** Among the six training tracks in the REEPTP program, Track 1 represents the core of the training program. The course lasts for 390 hours over a 16 week period and is segmented into three "tiers". Tier 1 includes three academic courses consisting of a Career and

Professional Development course and two Sustainable Environmental Design courses involving classroom instruction. By completing these courses, participants earn seven credit hours at Wayne County Community College, where the training is conducted. Tier 2 instruction consists of technical, hands-on training in environmental health and safety (six classes), general construction (six classes) and weatherization installer techniques (seven classes), lasting a total of 205 hours. Finally, additional classroom instruction consisting of weatherization supervisor training and energy auditing is provided in Tier 3, which lasts 80 hours. Upon completion of the course, the participant will receive an overall Convergent Technology and Energy Efficiency Certificate from the Wayne Country Community College (WCCCD), in addition to other certifications and licenses. <sup>13</sup>

### IV. Partnerships

In the Regional Energy Efficiency Partnership Training Program, the training partners are WCCCD and Detroiter's Working for Environmental Justice (DWEJ). There are six different WCCCD campuses, but most training programs are operated from the Eastern Campus Corporate College. WCCCD staff conducts the academic classroom portion of the training and DWEJ provides the technical hands-on training.

Pre-apprenticeship and apprenticeship training opportunities are provided by the International Brotherhood of Electrical Workers (IBEW) at the Detroit Joint Electrical Apprenticeship Training Center (DJEATC), as well as the Michigan Laborers' Training and Apprenticeship Institute (MLTAI), depending on the career path chosen by the REEPTP participant. DJEATC also provides "Track 6" training for solar thermal installers and technicians.

Other partners include the Detroit Workforce Development Department (DWDD) and various employer partners. The DWDD's primary contribution to the program is conducting referral activity. Employer partners provide continuous input and feedback regarding the training curriculum and types of certifications and skills that should be targeted, and also provide job opportunities, such as residential energy efficient installation, for graduates of the program.

# V. Program Management, Funding and Sustainability

SER-Metro and their partner staff believe there will continue to be an increase in the demand for energy efficiency technology and services, particularly because of the aging housing stock in the Detroit metropolitan area and the investments and advances being made in alternative energy nationwide. The Neighborhood Stabilization Program (NSP) will eventually provide funds for purchase and redevelopment of foreclosed and abandoned residential properties, which will provide a number of new projects for their employer partners and employment opportunities for REEPTP graduates. There are several skills alliances that have been funded by the state, and the Green Skills Alliance (part of the Detroit Regional Workforce Fund) convenes green business leaders in the region to identify ways to support their shared industry and workforce needs.

<sup>&</sup>lt;sup>13</sup> These include Green Advantage Certificate, First Aid, CPR, AED, Lead Worker license, and Lead Supervisor license.

Detroit Energy (DTE) and the big box stores (e.g., WellHome, a division of Masco) are part of these alliances.

SER-Metro and their partner representatives envision many career opportunities in the region, including energy auditing, solar panel installation, electric car charging station installation, and wind turbine maintenance. Representatives from the IBEW believe that the growing demand for electric cars will spur the development of an electrical infrastructure that will require numerous workers with specialized skills and training to build. Although training graduates will require additional training to transition into these careers, the REEPTP provides an excellent foundation of skills for these careers.

### **VI. Program Outcomes**

Of the 207 people who have enrolled in the program, very few have left without completing the training, although there has been some attrition in the training program due to auto industry callbacks. Much of this success can be attributed to the quality and rigor of the prescreening activities conducted by SER-Metro, as well as tutoring and learning labs that are available to the participants through WCCCD. The first training class (Career and Professional Development) is purposely designed to make participants aware of the stringent time and work requirements associated with the training program, as well as the investment being made in them by the community. Therefore, if a participant decides to drop out, it generally occurs in the beginning of the program before significant time and monetary investments are made.

SER-Metro staff reported that 18 of 20 participants from the first training cohort obtained employment in occupations consistent with the training they received. Still, there has been some difficulty with job placement due to the lack of local, regional, and national economic growth. Some of the job opportunities offered to training graduates also turned out to be quite different from initial expectations. For instance, one company had been offering what appeared to be energy-efficient equipment installation jobs, but the participants soon came to realize that the jobs were in fact door-to-door equipment sales jobs.

Overall, SER-Metro management believes the program has been quite successful in linking the unions, employers, college, and a number of other partners. This has aided the smooth implementation and operations of the program and will continue to contribute to positive employment opportunities and outcomes for the graduates.

#### VII. Best Practices

**Community Referral Partners**. SER-Metro's recruitment strategy increases the number of qualified candidates to the program through eligibility determinations that occur onsite at community-based organizations, non-profits and other agencies that provide services to their target population.

**Job Coach Mentors.** SER-Metro utilizes job coach mentors from Detroiter's Working for Environmental Justice (DWEJ) and the Detroit Electrical Joint Apprenticeship Training Center (DEJATC). DWEJ provides resume development and interviewing skills services for program participants and DEJATC provides technical math training and links participants to on-the-job training and apprenticeship opportunities.

Job Development Teamwork. Employer partnerships have been established through Business Services team members who work together to make personal one-on-one visits with employers. These meetings seem to have a greater impact than conducting job development through emails and phone calls. Labor Market Information (LMI) is reviewed regularly to establish field work schedules and target employers that have strong potential to become REEPTP employer partners. Hiring events are also scheduled to coincide with REEPTP graduations.

**Leveraging Resources.** SER-Metro has been able to leverage additional resources to support the REEPTP training participants from the Center for Working Families (CWF), which includes financial and career coaching, and income support.

**Client Feedback for Program Improvement**. Through the "REEPTP Program Feedback" form provided to participants at program exit, SER-Metro is able to gather participant feedback that can be used to institute changes in the program where necessary. The form contains a number of questions regarding participants' experience with the overall training program, as well as the training instructors, career coaches and other individuals they worked with. The form also allows the participants to offer suggestions about how to improve the program.

# VERMONT GREEN ENERGY TRAINING PARTNERSHIP (ETP)

#### I. Introduction

Vermont Green is a statewide public-private green jobs training and employment partnership administered by the Central Vermont Community Action Council (CVCAC). Founded in 1965, CVCAC is part of a nationwide network of Community Action Agencies (CAA) established by the Economic Opportunity Act of 1964. CVCAC was established to help people achieve economic self sufficiency. CVCAC's primary work is focused on outreach to individuals and organizations providing them with information, education, and support services; empowering individuals to develop skills that will allow them to take control of their economic futures; advocacy for programs that provide economic opportunities for individuals in their communities; and organizing individuals, groups, and agencies to identify actions that address social and community issues.

Beginning 2010, CVCAC began administering ARRA funding among Vermont Green partners. The Vermont Green statewide partnership aims to prepare workers for occupations including energy-efficient construction and winterization of homes, renewable electric power, recycling and waste reduction, and sustainable agriculture. Vermont Green partnerships fall along its three program components: employer partners, career development counseling program partners, and career training partners. Among Vermont Green's three employer partners, the program goals are to train and certify a total of 458 new or incumbent employees in green jobs. Vermont Green's goals also include the provision of career development counseling towards employment in green jobs for 440 individuals among its seven Career Development Counseling partners. Finally, Vermont Green aims to train a total of 1,114 individuals among its eight career training partners. Vermont Green headquarters are located in Barre, Vermont, which is also the headquarters of CVCAC.

#### II. Context

There are several contextual issues in assessing and understanding Vermont Green and the environment in which it operates. First, as stated by one of the interviewees and repeated by many others, "Vermont wants to make green jobs the cornerstone of the economy moving forward...therefore we [Vermont Green] work in lock step with the state towards that". There is political will, business buy-in, and community commitment to growing a Green Economy. As early as 2003, Vermont's Governor Douglas stated, "Our concern for the environment needs to be part of how we think about the economy. Remember, it's a choice between both or neither" 14.

<sup>&</sup>lt;sup>14</sup> Vermont Agency of Commerce and Community Development (2008). *Promoting and Fostering the Green Economy in Vermont- A Strategic Plan for a Green Future*".

This policy attitude has helped shape "the Green Valley" vision that ties environmental protection to economic development and promoting growth of a Green Economy. For example, Vermont became the first state in New England to sign onto the Regional Greenhouse Gas Initiative. This state commitment to a green economy has permeated the business community in Vermont and fostered the establishment of several industry partnerships and associations, such as the Vermont Environmental Consortium. CVCAC viewed the advent of the ARRA funding as fortuitous timing for Vermont, namely, the provision of funding for a state that was already poised to grow its green economy. CVCAC tapped into this existing interest to bring a team of partners together to respond to the RFP request.

Vermont's small population and its geographic distribution are also cited as factors influencing the implementation approach of Vermont Green. The lack of critical mass at a program level necessitated a statewide approach that tapped into pre-existing networks among Vermont's small businesses, state agencies, and nonprofit social programs. Geographical challenges also presented logistical challenges leading Vermont Green to adjust how it conducted its activities, for example conducting meetings via telephone or video conferencing, rather than in-person. Vermont Green also offered mobile training to accommodate logistical challenges, for instance the use of a mobile weatherization demonstration trailer. Furthermore, Vermont's economy is characterized by a network of small businesses operating in regional economies each with their own unique needs.

Finally, the state of the economy impacted the way in which Vermont Green responded to the RFP, as well as implementation of their activities. While building the partnership and responding to the RFP, Vermont Green anticipated being able to train new workers and set their goals to reflect this. However, as the economy contracted, Vermont Green had to adjust their programs to work with increasing numbers of incumbent workers.

# **III. Program Description and Delivery Structure**

The Vermont Green program consists of three components: employer partnerships, case management partnerships, and training partnerships. This approach to service provision is new for the CVCAC and was designed to leverage pre-existing systems across the different partners in the Vermont Green partnership. For instance, Vermont Works for Women (VWW), a case management partner, was already providing employment and social services case management services to its clients. With the addition of Vermont Green funding, VWW added counseling clients for training and certification for green jobs to their portfolio of services.

**Outreach and Recruitment**. Vermont Green recognized that potential members for the partnership were already using their own recruitment strategies to reach out to their service populations. Additionally, Vermont Green chose to target at-risk youth, veterans, the disabled, and women in trades typically dominated by men. To actively recruit these populations, Vermont Green focused on obtaining recruiting partners with experience in serving these populations. Vermont Green did not develop and print extensive recruitment literature about Vermont Green; instead, they focused on meeting with other organizations and groups who

would refer participants to service providers in the partnership. Among the groups they met with were the Vermont Departments of Labor and Education, Community College of Vermont, the Northeast Organic Farming Association, and the Vermont Youth Conservation Corps. CVCAC specifically worked with the Vermont Department of Labor to identify "green" firms and their training needs. CVCAC would then take responsibility for developing and delivering the training.

Outreach and recruitment at the partner level typically relied on several approaches. Case management partners reached out to potential recruits using traditional means such as sending emails to their listserv of clients, creating a Facebook presence, reaching out to their community networks, and recruiting at workshops and training programs. Some career training partners, such as the trade unions, advertised their programs on Craigslist, while others communicated with high school guidance counselors or posted opportunities on their own internal job listings. Among some employer partners, green jobs trainings were provided for both incumbent and new employees. CVCAC worked with these employers to match them to new employees from other programs within the Vermont Green network for training and certification.

A common challenge for all partnership types was finding candidates who had sufficient academic preparation for training and certification. Partners used screening tools to identify candidates requiring remedial education services. These candidates were required to complete remedial training before being enrolled into a training program. Another challenge faced was that some candidates expected immediate placement into jobs as they viewed the services rendered by Vermont Green partnerships as job placement programs. Some of these partnerships retooled their recruitment and marketing efforts to emphasize green jobs training and certification. Overall, Vermont Green partners were able to meet recruitment goals.

Training and Credentials. Once Vermont Green employer and career training partners recruited candidates into their green jobs training and certification programs, they either offered the training using industry-accepted training curricula within their own facilities, or worked with CVCAC to match their clients to partners capable of providing the required training. CVCAC worked with partners to match their clients to appropriate partner training programs. CVCAC also worked with Vermont Technical College to develop training and certification programs that met the needs of clients from partner programs. On a case-by-case basis, CVCAC worked with partners to refer their clients to out-of-state training and certification programs not available within Vermont Green's network of partners. Case management partners primarily referred their clients to training and certification programs within the Vermont Green network, namely employer and career training partners and/or Vermont Technical College. Some of these case management partners, such as Vermont Works for Women and the Champlain Valley Office of Economic Opportunity, also provided training.

CVCAC also developed innovative training methods to provide services to participants in remote rural areas or where gathering a critical mass of trainees was challenging. For example, CVCAC developed a mobile weatherization demonstration model to train clients. This model could be driven to remote areas or a central location that brought clients from different regions

to one location. CVCAC also invested in a mock-up wind turbine model that would facilitate providing hands-on training on wind energy turbines.

**Support Services**. Among the successful supports and services identified by Vermont Green case management partners were the provision of gasoline cards to assist participants with transportation needs; assisting clients to arrange car repairs; providing lodging for clients; providing clothing and basic entry level tools such as tool belts, boots, and construction pants; and client follow-up services. CVCAC recognized that some case management partners were focused on counseling and support services for their clients and were not particularly adept at job placement services. Consequently, CVCAC contracted a dedicated job placement officer at Vermont Technical College to provide this service.

Employer and career training partners did not generally provide support services. One career training partner acknowledged that support services were issues they had not been taken into consideration when applying for the grants, but that they have observed the benefits from the case management partners, and they would consider creating similar services when writing new grants.

#### IV. Partnerships

Vermont Green partners fall into three categories – employer partners, career development counseling program partners, and career training partners. Most of these partners were already part of a pre-existing network, the Creative Workforce Solutions, an informal network that brought together Vermont business, service provision nonprofits, trade associations and unions, and state government agencies to discuss workforce strategies. Vermont Green brought many of these partners together to focus on green jobs and Vermont's Green Economy. Employer partners include Country Home Products, Northern Power Systems, and SB Electronics, which are all engaged in the development of energy efficient products such as solar heating panels and electric vehicle components.

There are seven partners actively engaged in providing career development counseling. During the grant writing process, a decision was made to ensure that programs serving youth, women in non-traditional jobs, the disabled community, and communities predominantly affected by poverty were represented. These partners often provided general counseling to their populations on other issues important to specific populations, with career and employment counseling being one of many services being offered. Among the key counseling program partners are Bennington-Rutland Opportunity Council Inc. (BROC) — Community Action in Southwestern Vermont (part of the nationwide CAA network), Vermont Works for Women, Champlain Valley Office of Economic Opportunity, and Vermont Coalition of Runaway and Homeless Youth Programs.

Vermont Green also brought together eight industry organizations, trade unions, and a technical training college to focus on the provision of green jobs training and certification for their members. Among the key training partners are the Homebuilders and Remodelers

Association, the International Brotherhood of Electrical Workers Local 300, UA Local 693 Plumbers and Pipefitters, Vermont Fuel Dealers Association, and Vermont Technical College.

Among other partners that do not receive ARRA grant funds from CVCAC but are actively engaged in assisting with workforce development are state agencies such as the Vermont Department of Labor, Vermont Office of Veteran's Affairs, Vermont Regional Workforce Investment Board, and Vermont Energy Investment Corporation.

# V. Program Management, Funding and Sustainability

CVCAC has begun looking for alternative resources to sustain Vermont Green. Among their options are funding distinct pieces of the program, such as the case management component. CVCAC is also looking into foundation and state funding sources. They are confident that the goals of the Vermont Green grant will continue to be important to the state of Vermont and that some funding will be available. The Vermont Department of Labor is confident that some of the funding will be provided by the state budget, especially if specific target populations are identified. For example, in a recent study of Vermont's long-term unemployed, the Department of Labor realized that approximately 20% of these individuals had college degrees and experience in trades that would benefit from retraining in green jobs to meet existing areas of need such as "greening" universities and winterizing homes and commercial buildings. Both CVCAC and the Department of Labor agreed that Vermont Green partners have a long-term perspective on Vermont's Green Economy and "all relevant partners are at the table".

Among employer partners, employers' approach to sustainability has been to ensure that they are also training their incumbent employees as trainers for future employees. Career training partners such as unions have begun considering using part of their membership dues to continue to provide training services. In addition to membership dues, some unions are considering cost-sharing mechanisms with individuals and contractors. Case management partners note that they will continue to seek funds from foundations and state agencies to support their case management portfolios, including green jobs counseling services.

Vermont Technical College was already engaged in training Vermont's workforce prior to Vermont Green funding. The advent of the funding enabled them to develop training classes in solar, wind, and geothermal energy for CVCAC clients. To enhance sustainability, the college is exploring opening up this training to clients outside of CVCAC, such as the New England market, for a fee. Proceeds from the training classes could be used to hold some spaces for trainees from state programs.

#### **VI. Program Outcomes**

Vermont Green has generally been able to meet and exceed recruitment and training goals set out in their grant proposal for most of their partnerships. They are facing "more recruits than we can serve". However, an area where they have not been as successful has been the recruitment of youth. Youth are already engaged with school-based programs and have not

been enrolling into Vermont Green programs at the anticipated rate. The Homebuilders and Remodelers Association has also faced some challenges in meeting their goals.

Overall, through September 2011, Vermont Green partners had enrolled 1,573 individuals into their training and certification programs. Of these, 1,331 had completed training, 1,204 received certificates, and 1,067 placed in employment. Of those placed in employment, 864 had been placed in occupations related to their training. Enrollments by program component are as follows: case management partners enrolled 836 individuals; employer partners enrolled 301; career training partners enrolled 314; and other partners enrolled 122 individuals.

While Vermont Green believes that they have been quite successful with recruitment, they also point to their introduction of the mobile weatherization demonstration model, the mock-up model of wind turbines for hands on-training, and the purchase of a solar training model by one of the partners as significant outcomes for their first year of operation.

#### VII. Best Practices

**Utilizing Pre-existing Partnerships**. CVCAC successfully brought together a network of partners with a common goal of supporting Vermont's green jobs initiative under the Vermont Green partnership. This success can be attributed to CVCAC's efforts to take advantage of pre-existing networks between businesses, nonprofits, and government agencies such as Creative Workforce Solutions and Renewable Energy Vermont (REV). In addition to sharing a common goal, these partners had already established proven communication, planning, and operational strategies. CVCAC involved these partners during the grant writing process to provide diverse and knowledgeable input into the overall design of Vermont Green. This was critical for Vermont, a small state with unique regional economies, geographical challenges, and a network of small businesses. This approach enabled them to take advantage of synergies already cultivated within the networks. Partners also expressed the benefits to being able to work with a diverse group of partners.

Misperceptions about Green Jobs. Some Vermont Green partners and administrators noted that there were some misperceptions about green jobs training and certification among potential employers. Potential employers expressed a reluctance to hire green jobs applicants as they perceived them to be more expensive than non-certified workers. In addition, some employers were reluctant to train their incumbent employees in green jobs as they thought that training would be expensive. CVCAC took a two-pronged approach to resolving these misperceptions. First, CVCAC actively recruited employer partners and provided training for their employees. They also trained employees to become "master trainers" so that employers would have in-built institutional knowledge for future training needs. A second approach was to involve the job placement counselor at Vermont Technical College in educating employers about what it meant to be "a green job certified employee" and that they would not pose additional costs to employers.

Leveraging LMI Resources to Identify Green Jobs and Areas of Need. Vermont's Department of Labor is the recipient and administrator of a \$4 million LMI Research Grant in Green Areas on behalf of the Northeast Research Consortium consisting of New York, New Jersey, Georgetown University, and direct employers in Indianapolis, Indiana. The goals of this grant are to refine existing BLS O\*Net definitions of green jobs and model green job availability over the upcoming 6-12 month period. Information gleaned from this grant was shared with Vermont Green during their grant writing process. Vermont Green continues to use this data to identify training needs statewide. In addition, the Vermont Department of Labor is working with the New England Clean Energy Council and New England Energy Efficiency Partnerships to develop a website that consolidates all green jobs opportunities in Vermont. This information will be shared with Vermont Green.

**Job-readiness and Pre-apprenticeships**. Career training partners identified green jobs training and certification as meaningful credentials for job placement. However, there was added value in ensuring trainees were also exposed to real-work work conditions by engaging in apprenticeships or hands-on training. The Plumbers union cited their pre-apprenticeship program as a good example.

**Providing Comprehensive Counseling Services**. Vermont Green case management partners thought that comprehensive screening and follow-up services were critical to ensuring successful training and placement of participants. They noted that not all potential participants were suitable for immediate training and job placement, but rather needed to first address some underlying social problems. In addition, they cited anecdotal evidence that candidates who were committed to green jobs training were more likely to be successful than participants who sought training and certification because they had heard that green jobs were lucrative or were merely seeking any form of employment.

**Data Monitoring**. Vermont Green invested in developing a monitoring tool based on DOL/ETA guidelines to assist them in tracking progress. While some partners expressed that providing data presented additional burdens, they were still able to provide it to Vermont Green on a regular basis. This data monitoring has been used to support enhanced program management.