

Prepared for
Oregon Housing Works

Final Report for Housing Works: A Regional Workforce- Housing Alliance



Prepared by
Public Policy Associates, Incorporated

March 2017

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Acknowledgments

The PPA team would like to thank the staff and consultants who worked on the Housing Works initiative for their assistance with the evaluation. The program effort encompassed seven partnering agencies with scores of staff who deeply supported the evaluation effort. Our sincere appreciation is extended to the following organizations and the current and former employees who aided this work.

Worksystems, Inc. Janice Frater Patrick Gihring Pam Hester Nick Knudsen Andrew McGough Jennifer Medhaug Blair Schaeffer-Bisht	Southwest Washington Workforce Development Council Jeanne Bennett Mary Brown Chelsea Chunn Tim Foley Amy Gimlin Matt Sneed
Clackamas Workforce Partnership Bridget Dazey Jan Filgas Kim Parker	WorkSource Tina Cruz Michelle McClanahan Vivian Scott Luke White Eduardo Garnica Jaime Rodriguez
Community Solutions of Clackamas County Jamie Goodpaster RJ Koscielniak Michael Lutz Bruce Mack Lori Mack Nathan Page	Vancouver Housing Authority Roy Johnson Hilaree Prepula Savannah Scott Jan Wichert
Clark College Edie Blakley	

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Thank you, also, to the Washington State Employment Security Department and the State of Oregon Employment Department. Of course, thanks are also due to the members of our PPA evaluation team: David McConnell, Nathalie Winans, Lori Corteville, Daniel E. Bergan, and Stephanie Price. Finally, our thanks go out to the generous participants of the Housing Works program who shared with us their experiences and thoughts through surveys and focus groups, as well as comparison group members who were gracious enough to complete surveys for the study.



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Executive Summary

This is the final evaluation report for the Housing Works (HW) program, which was funded through the Workforce Innovation Fund (WIF) by the U.S. Department of Labor and ran from 2012 to 2016. HW operated in a four-county region that included Portland, Oregon and Vancouver, Washington. Led by Worksystems, Inc., the deeply engaged partnership consisted of three workforce investment boards (WIBs) and four public housing authorities (PHAs).

Overview of Project and Study

Housing Works was a collaborative program that combined the resources of workforce investment boards and public housing authorities to provide public housing residents with intensive training and support to help them obtain the work credentials and experience needed to enter high-demand industries (construction, health care, manufacturing, and office work). This combination of training, experience, and support was intended to lead to higher income and reduced or eliminated dependency on housing authority rental assistance. The core components of Housing Works included vocational case management, career and resource planning, career pathways trainings, job preparation, and job-attachment services.

The HW program had four overarching goals:

- **Increase the collaboration between the HW region's WIBs and PHAs** through the execution of formal agreements that dedicate ongoing resources to coordinate co-funded services and through purposeful policy alignment that reduces barriers to partnership over time.
- **Increase the efficiency of the region's WIB and PHA services** by co-investing resources in the public housing resident population with the shared goal of eliminating program redundancies and increasing resident employment.
- **Increase the earning potential of public housing authority residents** by improving their access to and retention in training services linked to high-demand occupations.
- **Accelerate a path to self-sufficiency for public housing authority residents** through the attainment and retention of employment in high-demand occupations with pathways for advancement.

A central purpose of the evaluation was to determine the extent to which these goals were achieved. It was also intended to provide feedback to the program leaders and staff that could be used to improve the effectiveness of their efforts. Finally, the evaluation aimed to provide insight to those who might consider replicating the HW model that would inform their decisions and increase their likelihood of success.

Research Approach

The evaluation was multi-pronged, addressing the implementation, impact, and costs of the program. The research findings were crafted to support decision-making about program improvement, sustainability, and replication, and to yield insights into participant outcomes. The evaluation relied on diverse research methods that included gathering primary data from site visits, key stakeholder interviews, participant focus groups, a series of participant surveys, employer surveys, and comparison group surveys. Program and administrative data sources included multiple management information systems and wage record data from two states.

The research questions addressed in this report fit within three general categories:

- **Implementation study: program activities.** These questions addressed the extent to which the program was carried out as planned, the systemic changes that occurred across the partners as a result of the program, and the use of data to guide decision making. Additional questions addressed the following:
 - Efforts to identify and address systemic policy and process barriers or 1 unintended consequences 1
 - The nature of and reasons for deviations from the model
 - Lessons learned from program implementation
 - Sustainability, including the elimination of program redundancies and the 1 identification and use of leveraged resources 1
- **Impact study: program outputs and outcomes.** These questions addressed the extent to which the program achieved expected rates of participation and provided value to participants. Relevant impact study research questions dealt with the following:
 - The extent of participation in HW job services, training, and job attachment
 - Participation in WorkSource workshops and services
 - The value, effectiveness, and benefits of the services to participants

- **Cost study: efficiency, allocation, effectiveness.** The research questions regarding cost were largely focused on efficiency, assessing:
 - System costs relative to successful outcomes
 - Reductions in PHA subsidy for participants and use of savings
 - Redundancies and changes in service delivery
 - PHA's leveraging of other resources to implement HW

The actual research questions are included by category at the beginning of each chapter and in their entirety in Appendix A.

Key Findings

Service Model

The HW program's strong fidelity to the HW model and findings that the process was highly effective provide evidence that the model is highly functional.

- A strong collaborative structure with organizational buy-in at the frontline staff level is an essential factor in program fidelity and ultimate success.
- Engaged in data-driven decision-making, the HW partners shifted away from occupational coaching¹ and long-term basic skills as mandatory or core model elements. This may or may not be fruitful for other regions that implement programs similar to HW. These types of training could be more important in regions with larger populations in need of it.
- Over the course of the HW program, the partners improved their initial participant communications to ensure that participants clearly understood what the program required of them and were a good fit for the program. This resulted in improved participant satisfaction regarding the enrollment and orientation.

¹ Occupational coaching was intended as a bi-monthly workshop to be delivered during training and job search phases to improve life skills and job readiness. This was different from vocational case management services conducted by the PHAs with support from WorkSource liaisons. VCM included frequent contact with participants to track progress, address concerns, and keep participants motivated for the entire duration of their program. This included career and resource plan development and monitoring, and provision of and referral to support services.

Core services in the model—career mapping, resource planning, and Career Link exercises—were affirmed as valuable by participants and staff alike.

- The career-mapping sessions helped participants identify their strengths and career goals and to learn what careers they were ready for. The resource plans helped them understand how to complete a training program that would propel them towards a higher-paying career. Finally, the Career Link courses helped them envision the real-world employment prospects of their target industries.
- The HW model of vocational case management was also highly effective. Small caseloads allowed vocational case managers (VCMs) to tailor the amount of vocational contact to meet the needs of program participants, many of whom required very intensive support to stay on track and overcome multiple and significant barriers to program completion and employment. Frequent contacts with WorkSource liaisons helped the VCMs navigate the WorkSource system on behalf of their participants.

Systems Change

The systems-change and sustainability components of HW were largely successful, validating the theory of change that formed the basis of the HW model.

- The initiative had built strong connections between WIBs and PHAs, both within individual counties and across the four-county region; eliminated barriers to collaboration; and provided participants with invaluable training, guidance, and support.
- This success can be attributed to a strong leadership and communications structure, effective vocational case managers and WorkSource liaisons, and coordination with outside agencies for the leverage of critically important support services, as well as the initial impetus provided by the Columbia-Willamette Workforce Collaborative and the Aligned Partner Network.

The collaboration is likely to be sustained substantively and to engage a growing pool of human service providers into the future.

- The region is expected to continue meaningful cross-sector engagement and collaboration using vehicles such as county level memoranda of understanding (MOUs), the Aligned Partner Network, and the Columbia-Willamette Workforce Collaborative.

- Communication features of the partnership that will not continue are the quarterly implementation—which were grant specific—and the county alliance meetings which are no longer needed. The regional alliance has been postponed.
- The partners have actively continued to invest in the core model elements, to co-invest resources, and to seek out new initiatives. Specifically, two counties have signed MOUs and two others are engaged in the Aligned Partner Network. Funding has been allocated for WorkSource liaison positions. Three counties have obtained new grants with former HW partners, and three counties have funding or staff allocated for partnership programs.

Cost and Efficiency

The HW partnership was highly effective in leveraging resources to increase efficiency or provide additional support to participants.

- This included successful leveraging of in-house resources such as combined quarterly case reviews with Family Self-Sufficiency program staff, and leveraging of outside resources such as child care and transportation. Leveraged resources were vital supports to the success of participants.
- The program team used data effectively to identify policy and process improvements. The changes that were enacted affected operations, enhanced opportunities for participants, and allowed for sustaining both the collaboration and many programs post-grant.
- The redundancy that proved to be the most challenging was eligibility determination and registration for customers in HW. Efforts were made, to good effect, to de-duplicate the process and streamline it as much as feasible. One of the best examples was a site that managed to conduct orientation and readiness interviews on the same day.

The cost study identified several positive outcomes for the HW program, including that the net public investment was lower for participants than for the comparison group.

- The cost allocation analysis findings were consistent with the expectation that there would be more training costs and less spent on subsidies: The average program cost per participant calculations showed that WIBs spent more for their HW participants than for their typical customer, while PHAs spent less on their participants in HW compared to their typical customer.

The program appears to be cost effective and successful in increasing the employment and earnings potential for participants, which is an important step toward self-sufficiency.

- The cost effectiveness was based on the number of participants who were successfully employed in the quarter after their exit: The program costs were on average \$1,125.59 per month per successful employment outcome. The average six-month *increase* in earnings for each successful employment outcome for participants (\$5,023.22), however, was more than four times the average monthly investment.

The participant housing subsidy costs were reduced for two of the PHAs over the course of the HW program.

- Exploratory analysis suggests that the change in subsidy is due to employment earnings, based on a subset of the data that showed that the participant group had a greater increase in earnings over time than the comparison group.
- The subsidy analysis is not definitive of the potential subsidy savings, however, given the amount of missing data from the analysis.

Outcomes

The program has met most of its service-delivery goals, as indicated below.

- The service-delivery goal that 80 percent of participants would agree that services were effective in creating their successful outcomes was met. Feedback from participants indicated notable barrier reduction and positive assessments of the accessibility, utility, and overall satisfaction with services. Overall satisfaction did vary by one's employment status; those who were employed at one-year post-exit were much more likely to report satisfaction with their vocational case manager overall and the program overall.
- The target number of people earning credentials was met. A total of 308 individuals earned on average 1.7 credentials, including 309 industry certifications.
- One of the service-delivery goals in the program was that 65 percent of participants would report the removal of barriers to employment. The most direct measure of this—stating at exit that the program helped them “get past barriers to employment”—did not meet the threshold (63 percent), but a similar measure was at 67 percent: that the vocational case manager helped them to “overcome barriers to employment.” Nonetheless, a majority of participants at every stage cited barrier reductions in gaining employment—and in being work ready. More than 7 in 10

participants at exit reported that the program helped them to navigate workforce services, prepare for employment, and overcome challenges to enrolling in as well as completing occupational training. Among those unemployed at one-year post-exit, nearly half still perceived a reduction in the barrier to employment due to the program, and more than half cited barrier reductions to employment readiness.

- Another service-delivery target that was met was that 80 percent of employers would be satisfied with the performance of interns and on-the-job training (OJT) hires. According to employers, participants were adequately prepared, met standards during training, and employers intended to continue the employment for at least six months. Employers cited benefits that accrued to their own firms as well, most commonly the opportunity to be altruistic, added capacity, and the ease of the hiring process.
- The service-delivery goal was that 80 percent of employers would be more positive about the ability of the workforce system to deliver qualified candidates. This was met; more than half of employers said their direct experience as placement hosts influenced their view of WorkSource and more than 90 percent would consider using the hiring program again.

The program was unable to meet its goals for the number of individuals placed in internships and OJTs. Occupational training, internships, and OJTs provided participants with a variety of benefits, key among them development of job skills, useful experience, and experiences that were a good fit with their career plans.

Participants Significantly Outperformed the Comparison Group in Terms of Credentials and Training but Had Mixed Results in Employment and Earnings Outcomes

The impact research questions related to participant outcomes—relative to the comparison group outcomes—were in the areas of credentials earned, training obtained, employment, and wages. The hypothesis testing results were as follows:

- Not surprisingly, given the thrust of the program, significantly more participants were found to have credentials earned and training opportunities accessed relative to the comparison group members.
- The results also indicate that participants were significantly more likely to be employed in the first quarter after exit than the comparison group, regardless of employment status at enrollment.
- Other employment and earnings hypotheses were not confirmed, however. There was no evidence that participants were more likely to be retained in employment, or

more likely to be employed in the focus industries than members of the comparison group. There was no significant difference found in the earnings or the change in earnings between the two groups.

Many of the employment-related performance goals were not met.

- Among participants, 55 percent had been engaged in one or more training opportunities and 52 percent had earned one or more credentials. This met the performance goals for credentials and training opportunities, and vastly outstripped the comparison group in these areas.
- As measured by wage record data 59 percent of participants were unemployed at enrollment and, of these, 46 percent entered employment by exit. However, this did not meet the grant performance goal of 65 percent Entered Employment.
- A total of 60 percent of participants were employed the first quarter past the exit quarter irrespective of employment status at enrollment. This was significantly higher than the comparison group at 38%.
- Participants did well in retention, and met the performance goal of 70%,² however, this was not significantly different from the rate for the comparison group. Of participants who earned wages during the first quarter, 82% retained employment in the second and third quarter, and 69% were employed in one of the four focus industries.
 - Participants did not meet the performance target for employment in their chosen focus industry—at 42 percent—and they were less likely to be in a focus industry than the control group, although the proportions were descriptively similar.
- The six-month earnings for participants on average was \$8,092.59, based on a summation of wage record earnings in the second and third quarters after the exit quarter, among those employed in the first, second, or third quarter and regardless of status at enrollment. This did not meet the performance goal of \$12,000.
 - However, the earnings increase exceeded the performance goal of 20%; those employed at enrollment experienced a 53% increase in wage earnings in the second and third quarters after exit, from the two quarters prior to registration.

² This is slightly different from the initial calculations by WSI which included those employed at registration and are employed during Q2 and Q3, as well as those not employed at registration and entered any employment by exit and retain that in Q2 and Q3. Our calculations are for first quarter, not exit quarter.

In summary, while employment after one quarter was positive and statistically significant, there was no evidence that participation positively influenced other key employment outcomes—retention in employment and employment in a focus industry. There is strong evidence that participation increased the likelihood of earning credentials and accessing training opportunities. There was no evidence that participation increased earnings on average, yet did increase notably earnings after the program for those who were employed before the program.

In contrast to the employment-related outcomes, the program did better in meeting service delivery goals. The model was widely praised by participants, and employers were satisfied with their placements—so much so that the view of WorkSource was elevated. The evaluation team determined that the service delivery was largely efficient and the staffing particularly effective in helping those with barriers navigate and access workforces services, and to help participants persist in their program.

This combination of evidence suggests that the program did exceedingly well in preparing individuals for employment, building skills and experience (albeit with fewer placements than intended), and supporting and resourcing people for career path employment. The fruition of this was seen in the employment in the first quarter. Further, for those unemployed at enrollment, 27% were employed at exit, and 46% were employed in the first quarter after exit, suggesting that the outcomes were still unfolding for the participants, and perhaps need more time to be fully manifest, beyond the second and third quarters.

Another consideration is that the comparison group may have been likely to perform than the participants; they had higher education levels at entry and were more likely to be single head of household than participants.

Recommendations

Service Model

The service delivery model as implemented has sufficient power to positively impact the job readiness of a highly-barriered population. Core features of the program model (e.g., Career Link, career mapping, and low caseload VCM) offer significant value and should be adopted widely to improve opportunities for disadvantaged clients.

- Although a cohort approach may not make sense for all participants or career paths, many participants greatly valued it. The evaluation data indicate that cohorts or

other peer-support approaches should be considered for future initiatives that make use of the HW model.

- The HW partners were able to not only fulfill but to exceed their recruitment goals; however, they required a grant extension and a more judicious selection of training programs to do so. Programs emulating the HW model would be well advised to select industry-driven training programs that can be realistically completed by their participants within the time allotted.
- In general, and always when recruiting for health care occupations, initiatives should proactively identify and address the issue of completion of eligibility requirements. Additionally, participants with past criminal backgrounds need specific case management for accessing health care occupations. Initiatives should plan for and obtain resources to conduct formal criminal background checks at intake (or before) because these match what state-certifying boards use to screen applicants.
- Given their level of familiarity and trust with participants, soft-skill training should be provided by the VCMs, rather than in a classroom setting.

Systems Change

The HW initiative has strong potential for replication in other locations as well as application at a larger scale in Oregon and Washington states.

- A variety of funding opportunities should be aggressively pursued to supplement the budgets of workforce and housing agencies. All efforts to maintain the focus on cross-sector systems change is another brick in the foundation of normalizing alignment and co-investment. Funding should be used to both ensure effective leadership and coordination and provide for liaison positions that bridge systems at the level that reaches VCMs directly.
- The dedicated application of regular programming dollars is needed to ensure successful coordination of regional efforts across sectors. This level of time and resource investment is essential for co-resourced and aligned policy and practice to become self-sustaining over time.
- WorkSource should continue to field the employer satisfaction survey. Results should be closely monitored and the results leveraged to engage additional employers as potential placement hosts based on the positive feedback.
- Replication efforts should be attempted in regions with the right foundation: a history of collaboration, a visible and trusted convening agency, and a partner group

that understands the mutual benefits of systems change and is fully committed—from leadership to front-line staff—to bringing it to fruition.

- Initiatives seeking to increase the employability and employment of disadvantaged populations will need to have significant and effective job development capacity in place prior to startup of the initiative.
- For either replication or expansion initiatives, significant effort will be needed to engage state Departments of Health and Human Service at multiple levels, i.e., executive, management, and frontline staff. DHS is a significant body in terms of both its resources and its caseload, in addressing poverty and barriers to self-sufficiency. Alignment of DHS policy and practice with other service providers offers the greatest potential for impacting vast numbers of individuals.
- Ongoing evaluation of new or expanded efforts is recommended with a focus on both implementation and outcomes. This will help maintain a focus on data-driven decision-making for ongoing improvement of the quality of the process. It will provide the opportunity for additional rigor to clarify insights into the participant characteristics and model elements that are most strongly associated with positive outcomes.

Cost and Efficiency

Effective alignment and coordination of resources will require creative approaches and a commitment to building and keeping relationships across a network of service providers to access complementary services and supports for participants.

- Key resources to leverage include support services, especially child care and transportation, to facilitate access to occupational training opportunities.
- Referrals of participants to outside organizations should be directed to specific individuals at those organizations wherever possible to minimize the possibility of disconnects.
- For future cross-sector coordination, significant advance efforts would be needed to assess from the perspective of the customer the logistical end of enrollment and eligibility determination and related documentation needs.
- Cost studies are a recommended element for any future initiatives in cross-sector collaboratives.

This is the final report of the evaluation of the Housing Works (HW) program funded through the Workforce Innovation Fund (WIF) in 2012 by the U.S. Department of Labor. HW prepared public housing residents for employment in the high-demand industries of manufacturing, health care, office work, and construction. Based on a successful pilot, the program was launched with an expanded geography encompassing Clackamas, Multnomah, and Washington counties in Oregon and Clark County in Washington. A core partnership of three workforce investment boards (WIBs) and four public housing authorities (PHAs) conducted these efforts and Worksystems, Inc. (WSI) served as the WIF grant leader and administrator.

Overview of Housing Works

The program's goals were to increase employment income and empower participants to consistently earn a living wage. Partners further sought to create system changes across the partnership by aligning resources and policies, co-investing resources, and unified service delivery that is seamless to participants. Systems change was envisioned to reduce redundancies and create efficient and relevant services during and after the grant period that would lead to improved employment outcomes for program participants. The traditional workforce development approach was substantially altered in this model by securing a central role for PHAs to hire vocational case managers (also called career coaches) to guide participants individually in navigating the array of workforce services and supports.

There were four overarching objectives of the HW program.

1. Increase the collaboration between the HW region's WIBs and PHAs through the execution of formal agreements that dedicate ongoing resources to coordinate co-funded services, and through purposeful policy alignment that reduces barriers to partnership over time.
2. Increase the efficiency of the region's WIB and PHA services by co-investing resources in the public housing resident population with the shared goal of eliminating program redundancies and increasing resident employment.
3. Increase the earning potential of public housing authority residents by improving their access to and retention in training services linked to high-demand occupations.

4. 1Accelerate a path to self-sufficiency for public housing residents through the attainment and retention of employment in high-demand occupations with pathways for advancement.

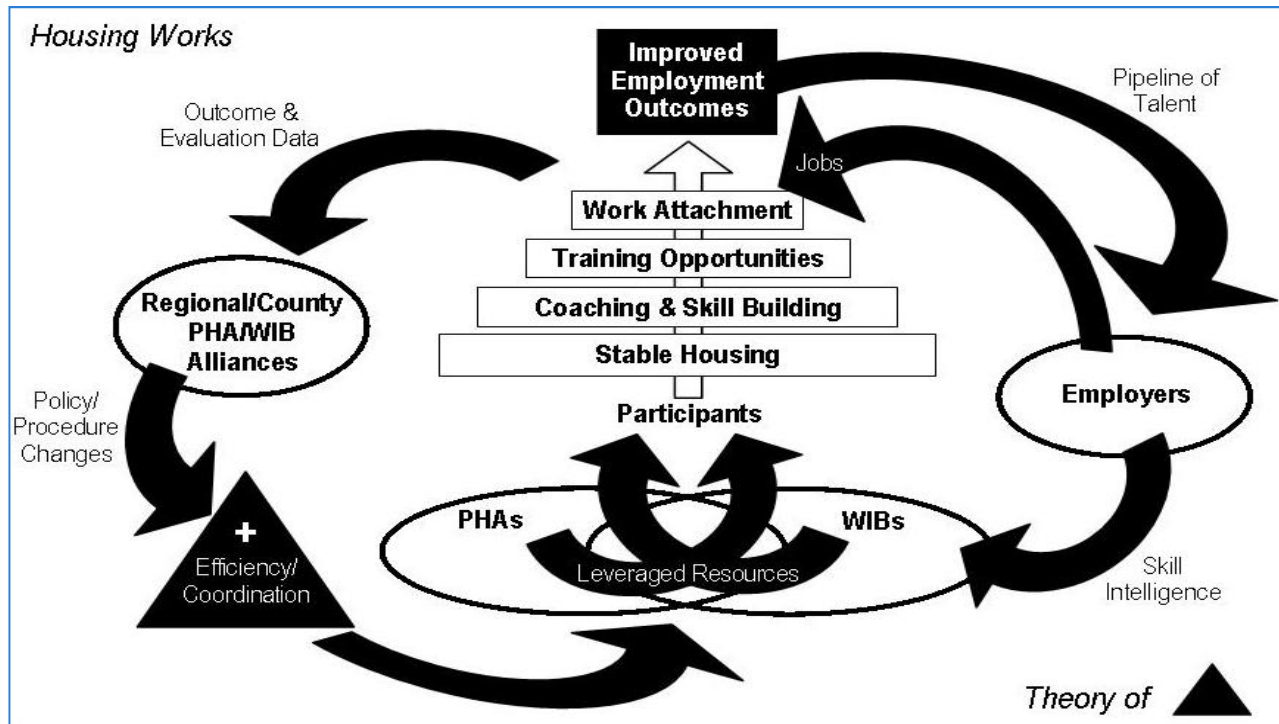


Figure 1. Housing Works Theory of Change

The underlying theory of change in the model is depicted graphically in Figure 1 above. It posited that “Housing Works will achieve system alignment through an integrated package of services that is greater than the sum of its parts.”³ The premise was that the leveraged resources of aligned workforce and public housing systems would result in stronger organizational efficiencies and better employment outcomes for PHA residents.

A series of assumptions foundational to the theory of change include: the readiness of the PHA and WIB partners to engage in a high level of collaboration; availability of services of interest to participants; and that the labor market would have job opportunities relevant to participants. Further, it was presumed that the assessment and counseling processes would identify an appropriate set of services tailored to each participant that would be appealing and would increase job readiness. The program was guided by a logic model that shows the intended relationships among inputs,

³ Housing Works, *Workforce Innovation Fund Application*, 2012, 10.

activities, and results. The logic model is presented in Appendix B. The first row of the logic model describes the cross-sector collaboration work, the early stages of activity to recruit and engage participants, and ongoing vocational case management. This is the unique cross-sector work that allows for the alignment of policy and procedures, and the leveraging of resources including the allocation of PHA case managers to become VCMs. Through these activities, the participant is provided VCM support, information, and referrals and has a clear plan—updated as needed—for the resources and action steps needed to develop their career (outputs and short-term outcomes). In the medium-term outcomes, participants should experience a reduction in barriers to work readiness—in the form of increased access to and retention in training in high-demand industries—and fewer barriers to employment.

The coordination of service referenced in the first row of activities includes an essential process piece where the PHA VCM becomes oriented to and knowledgeable about the workforce system—in preparation for teaching participants how to navigate the workforce system—as well as their deep and ongoing collaboration with the WorkSource liaison that makes their continued growth and skill in this area possible. The development of the VCM skill is a critical part of the first row, and the ongoing collaboration is implicit in the second and third rows. Most outcomes in the logic model are focused on the participant experience, but the expected systems change impacts are the streamlined and satisfactory service delivery.

The activities in the second row of the logic model are the development and delivery of workforce services, including Career Link, skill development, and occupational training, and assessment of skill. These activities rely on coordination among VCMs and WorkSource staff and training providers. The participant outputs start with completion of Career Link, which is considered a milestone that marks an active and genuine engagement in the program. Participants also receive skill development, coaching, and occupational training. In the short-term outcomes, participants are retained in training, and are satisfied with the supports, services, and peer experiences. In the medium-term outcomes, participants gain credentials and if needed long-term basic skills. Both the first and second rows culminate in participants' increased earning potential and employment in high-demand industries, and, for local business, an increased supply of talent.

The third row of the logic model essentially describes the leveraging of the business services in WorkSource to identify and recruit employers, establish placements with them, and arrange the right placements for HW participants. The participant outputs are the start of OJTs and internships, and the short-term outcomes are successful completion of the placements. For the employer, the short-term outcome is satisfaction

with the hire. The medium-term outcomes are that participants gain employment, retain employment, increase earnings, and provide a greater contribution to rent costs. The expected longer-term impacts are retention at 3 and 4 years, increased earnings, and paying a higher proportion of rent costs. It should be noted that the final data analysis was not focused on tenant contribution, but the other side of the coin, which was rent subsidy amounts; this treatment was more consistent with the overarching goals of the program.

Implementation Timeline

The program implementation timeline began with preparations in 2012 including Career Link curriculum development and recruitment efforts in October 2012. Program enrollment began November 2012, and ended as planned in May 2014 for County B but was extended through April 2015 for the other counties. Other services ongoing during that time were Career Link (started in December 2012), career mapping, access to skill development resources, and VCM. Systems-change efforts were ongoing through April 2016.

Scope of Intervention

Population

The targeted population for the intervention was eligible PHA residents in the four counties. The eligibility criteria are described below and were intended to cover some basic requirements such as over age 18 and receiving a subsidy from the public housing authority. The eligibility criteria were also intended to ensure that potential participants were sufficiently motivated to engage in job preparation, training, and placement, and to ensure enough facility with the English language as to make good use of the services.

Program Eligibility Criteria

- Participant eligibility criteria⁴
 - *Core*: Individual is legal to work, over 18 years of age, and is receiving a subsidy from the public housing authority
 - *Industry*: Individual identifies interest in at least one of the focal industries: health care, office administration, construction, or manufacturing

⁴ For eligible individuals, priority of service was given according to veteran status: individual was a current or former active-duty military personnel (without dishonorable discharge) or was a spouse of a veteran.

- If interested in health care, individual attests to not having a criminal background that would disqualify them from employment
- *Motivation*: Individual scores 10 points or higher on motivation items
- *Basic skills*: Individual has either a high school diploma or equivalent, or has completed 5th grade and is willing to attend training to attain 12th-grade skill level (completion of 5th grade is required in order to meet entry level for available long-term basic skills)⁵
- *English as a second language (ESL)*: Individual has English language skills sufficient to complete a job application and to participate in a job interview or training conducted in English
- *Ability to participate*: Individual is willing to participate in training programs that could range from 20 to 40 hours per week, and between two weeks and three months (depending on their individual plan).

Program Activities

A brief description of the intervention activities, along with timing and the program staff involved is outlined below.

Recruitment, Selection, and Enrollment

The recruitment and selection processes were managed by the PHAs and consisted of outreach, group orientation, and intake assessment of readiness. Orientations employed a presentation developed by WSI with input from partners. PHAs used the Interest Forms completed at the orientation to assess whether the candidates met the minimum criteria, and then scheduled a one-on-one readiness interview, within one week of completion of the form.

Enrollment in WorkSource. WorkSource staff enrolled selected candidates and requested additional documentation required for WorkSource and Workforce Investment Act (or Workforce Innovation and Opportunity Act) registration. Participants would go to their local WorkSource (One-Stop) center to enroll in WIA.

Enrollment in Grant. PHA vocational case managers generally completed grant enrollment within one week of WorkSource registration. They ensured required documentation was complete and entered into the information system; they also

⁵ Note: Early in 2014, eligibility was constricted to include only individuals who did not need long-term basic skills training.

obtained participant's consent and HW release of information. The timing of enrollment for the grant and for WorkSource varied across sites.



Figure 2. Participant Flow

Initial Planning and Exploration

Initial planning with the participant was completed with career-mapping workshops and individual resource planning sessions, ideally within two weeks of enrollment. It was intended that vocational case managers facilitate the workshops and planning sessions, after initial support from WorkSource liaisons to prepare the VCM for the facilitation task. In actuality, the role of career map facilitator varied from site to site, and most frequently, a contracted training provider would run the career mapping. Participants and VCMs created the career and resource plan together and documented the initial plan on a standard form. Completed career and resource plans were shared with the WorkSource liaisons, who provided coaching and advice to VCMs on an ongoing basis.

Long-Term Basic Skills Training (LTBS). During the initial planning phase, the VCMs referred low-skill participants to receive basic skills assessments to help determine whether they should be enrolled in LTBS before moving on to Career Link.

Career Link. As initially envisioned, the Career Link courses would be delivered to the cohorts of participants through community colleges that were training providers. The courses were expected to be 40-60 hours in duration and focused on life skills, basic skills needed for a given industry, and career exploration. As the program was implemented, the courses were generally 40 hours total and were facilitated by VCMs,

WorkSource staff, and a local community college. Career Link courses were not uniform across campuses, and were offered for each of the industry sectors served (health care, office work, manufacturing, and construction). VCMs prepared the participants for success in the course, and met with participants again afterwards to review their Career and Resource Plans and next steps.

Case Management

After completing the Career Link courses, the participants would engage in preparation, training, and job-attachment activities. Throughout this process, the PHAs provided participants with vocational case management services. Vocational case management was conducted by the PHA staff with support from WorkSource liaisons. It was planned that PHA vocational case managers would have at least 10 contacts (in person, by phone, or via e-mail) per quarter with each participant, and would revisit and update the participant's Career and Resource Plans to reflect changes in goals or the completion of program steps. It was also anticipated that every two weeks, the case managers would meet with their WorkSource liaisons to review the Career and Resource Plans, address problems, and develop strategies to maintain participant engagement in the program.⁶

Vocational case managers' roles included ensuring that the participants were ready for employment and interviews (i.e., that they have soft skills, interview skills, and a well-prepared résumé) and possessed the basic skills needed for the placement. VCMs verified supports were available as outlined in Career Maps and Resource Plans, and checked in during placements as needed with the WorkSource liaison, internship coordinator, and/or participant.

Engagement in WorkSource and Training Activities

Occupational Coaching. Occupational coaching for participants was intended to be a support throughout engagement in WorkSource and training activities, and to be conducted by training providers hired by WIBs, and co-staffed by VCMs. Occupational coaching was envisioned as a series of workshops related to job search, life skills, job readiness, and to keep participants motivated. Attendance was expected at least once per month, and could be dropped after employment was secured. To adapt to wide fluctuations in participant interest, the implementation of this feature varied locally, and was eventually dropped as a mandatory service.

⁶ Results on the contacts with VCM and liaisons can be found in the Implementation chapter, page 13.

Preparatory Activities. To prepare for occupational skills training and job attachment, participants would engage in WorkSource workshops and other services that were deemed useful and aligned with career plans.

Occupational Skills Training. Training providers provided participants with training in health care, manufacturing, office work, and construction that would lead to industry-recognized credentials. WorkSource usually approved and paid for a portion of the training. WorkSource staff and VCMs assisted the participant in selecting training options. The VCMs helped the participants select a training provider and prepare and submit training and scholarship applications, and ensure they had the needed soft skills and basic skills (e.g., computers, math, and reading) to complete the training successfully.

Job Attachment and Retention

Internships and On-the-Job Training. The process for identifying and securing job placements was not intended to be identical at each site. For the most part, existing strategies for employer engagement were to be leveraged rather than create an HW-specific approach. For the most part, job developers would be contracted and trained in on-the-job training (OJT) and internship marketing by WIB staff. However, due to low placement numbers, there was more evolution in duties related to placements than were anticipated or deemed ideal; in two counties VCMs were encouraged to carry out job development on their own.

Job Search. As the participants conducted their job search, the VCMs coached them and connected them with WorkSource resources (including staff support, workshops, and online job postings) to help maintain their engagement and focus on their goals. Wherever possible, the participants would receive placement assistance from job developers, PHA vocational case managers, and employers. As implemented, there was little direct aid in placements from employers. Presumably job developers represented the employers for these purposes, so it was not desirable or necessary for employers to take on that role.

Retention. After participants were placed in jobs, the PHA vocational case managers followed up with them on a regular basis to help them maintain stable employment, refer them to support services, and/or assist them in searching for replacement jobs or achieving job advancement.

Scope of Collaboration

With an intention to create change in both workforce and housing systems, the Housing Works model called for partners to enact key strategies: formalize coordination structures; improve interagency collaboration; and co-invest resources in the PHA resident population. The companion tactical steps that were needed are presented in Figure 3 and are described below.

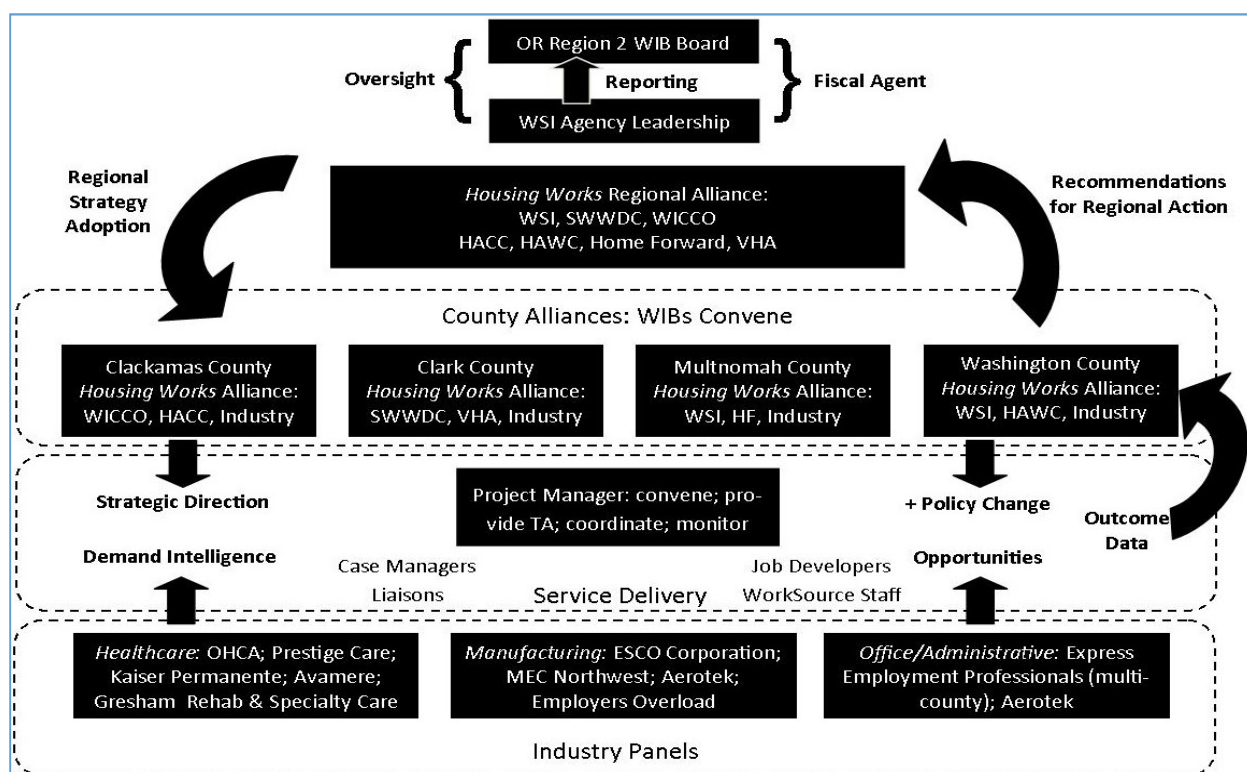


Figure 3. HW Companion Tactical Steps

Collaborative Investment of Resources

Under HW, all partners were required to match the federal grant funds with dollars from their own agencies. An assumption of HW was that the partners would see value in collaborating to serve their common customers and would continue this investment after the grant ended.

Policy and Procedural Changes to Remove Barriers to Collaboration

The HW model called for all partners to assess their policies and procedures to identify institutional barriers to collaboration in the Regional Alliance of HW partners. It was hoped that this process would result in lasting policy change that would clear a path toward collaboration well beyond HW, resulting in more effective and efficient services to their common clients.

WorkSource Liaisons

The HW model dedicated a staff member at the WorkSource center(s) to maintain an ongoing connection between WorkSource agencies and VCMs. This individual provided technical assistance and training to the VCMs to help them navigate the WorkSource system. It was expected that the WorkSource liaisons would streamline communications and facilitate understanding across the partnership. Ultimately, it was hoped that the partners would see enough value in their WorkSource liaisons to retain the liaison staff position following the grant period.

Staff Development

The HW model called for providing training to both WorkSource and PHA staff regarding cultural competency; working with individuals in poverty and with significant barriers to employment; helping participants cope with or avoid steep cuts in benefits after achieving better-paid jobs; and understanding the rules and performance measures of the workforce and housing systems. By providing the same training to the staffs of both the workforce and housing agencies, it was intended that they operate the program with a shared base of knowledge and lexicon. These topics were significant and frequent themes in cross-agency meetings throughout the duration of the program, but formalized training was enacted.

Regional Alliance

The Regional Alliance served as the structure for interagency coordination and collaboration. It was a governing body with representation from each of the area WIB directors as well as the directors of the four public housing authorities. They met twice annually to develop goals and priorities for regional action, create a collective resource development strategy, and formalize sustained coordination.

County Alliances

Each of the four county alliances was convened by the region's WIB monthly or bi-monthly to enact the tactical application of interagency policy and resource alignment. The county alliances were responsible for providing information and recommendations to the Regional Alliance. Prior to the end of the grant, partners were expected to formalize Memoranda of Understanding (MOUs) to sustain the co-resourcing strategy. Representatives were to include the WIB, the PHA, and other stakeholders deemed relevant, such as the community college or employers. As the work unfolded, employers did not sit at the table and it was apparent that the WIBs provided a proxy for the employer perspective.

Industry Panels

WIBs were responsible for engaging partners from each of the targeted industries. Industry partners were to be convened as panels to provide ongoing industry intelligence that informed training pathways and to provide employment and work experience opportunities for the program participants.

Coordination of Service Delivery

To implement HW and improve the coordination of service delivery, each agency had specific yet intertwined roles. As noted above, the WIBs were to provide WorkSource liaisons who would train, coach, and offer ongoing support to PHA vocational case managers. WIBs were responsible for engaging training providers to deliver occupational coaching. Coaching sessions were to be co-staffed by these training providers and by PHA vocational case managers. Career Link courses were to be developed and delivered by training providers. Job developers were to be contracted and trained in on-the-job training (OJT) and internship marketing by WIB staff.

The PHAs were to engage and sustain dedicated vocational case managers who would provide intensive support to HW participants, leverage additional supports for HW, and ensure that participant services were documented. A key feature of the VCM role was a low caseload. This gave the VCMs time to work closely with PHA residents as they identified career paths, completed their training, searched for work experience and job opportunities, created resumes, prepared for interviews, obtained support services, and eliminated barriers to participation and success.

Evaluation Purpose and Scope

The evaluation was multi-faceted, examining the implementation, the impact, and the costs of the program. It was designed to yield meaningful answers to research questions and to generate data to support decision-making about program improvement, expansion, and replication. This report presents findings and lessons that span the course of the 54-month grant, with 42 months of service delivery.

The research activities included obtaining primary data through seven site visits, which incorporated scores of key stakeholder interviews in each visit, and a total of 12 participant focus groups conducted over three site visits. Primary data were also gathered through early-stage participant surveys, exit-stage participant surveys, one-year post-exit participant surveys; surveys of employers who hosted internship, work

experience, and OJT placements; comparison group enlistment response, and comparison group surveys at two time points.

Program and administrative data were also utilized in the research, and included data on participants and comparison group from the PHA management information system; service data on program participants from Worksystems' I-Trac management information system; and wage record data from the Oregon Employment Department and the Washington State Employment Security Department.

The complete evaluation methodology is provided in Appendix C.

Evaluation Timeline

The evaluation timeline started in July 2012 with the development of evaluation design and a two-day site visit to meet with Worksystems and partners. The evaluation concluded its final report in April 2017. Appendix C provides details of the timeline for each evaluation activity.

Comparison Population

The evaluation design included a comparison group. The population was drawn from PHA residents in the four counties. The eligibility criteria are described below. The eligibility criteria differed slightly between the participant and comparison groups in three elements. The education bar for participants was designed to ensure an open door to the program, as long as an individual was willing to attain at least a GED level while in the program. The education bar for the comparison group was to ensure that an individual had some foundation (9th grade) that would theoretically allow them to move up to the GED level required of participants. The comparison group was not required to express an interest in the focal industries as that may have unnecessarily constrained enlistment into the group. The comparison group was not intended to receive specific training services and was not required to express an ability to attend training. Asking about this ability in the screener survey could have misled them to think that a training was being offered to them. This interest was measured in a later survey, and 73 percent said they could be available for a training "that took a while, like an entire week." The differences in criteria did not appear to impact validity.

- Comparison group eligibility criteria
 - *Core:* Individual is legal to work. This is self-screened at enlistment.

- *Core*: Individual is over 18 years of age and is receiving a subsidy from the public housing authority. List is pre-screened by PHA.
- *Core*: Individual is not enrolled in HW as a participant. Self-screened at 1 enlistment, and monitored by evaluation team over time. 1
- *Industry*: Not a requirement; free to vary. Data to be collected in enlistment.
- *Motivation*: Individual scores 10 points or higher on motivation items. Data collected at enlistment.
- *Basic skills*: Individual has completed 9th grade. Self-screened at enlistment.
- *ESL*: Individual has English language skills sufficient to complete a job application, and to participate in a job interview or training. Self-screened at enlistment.

Report Navigation

This report highlights observations, findings, and lessons that the study reveals about the Housing Works program. Each chapter is organized such that key findings are definitively stated in headings, with supporting evidence summarized immediately thereafter. Each chapter opens with a note about the focus and scope of the section, and the evaluation approach for the research questions addressed therein.

The list below shows the topics of the chapters following this introduction, and the research questions addressed within.

- Program implementation
 - Implementation research questions 1, 2, 3, 6, 7, and 9
 - Impact research questions I-1a and I-1b
- Systems change
 - Implementation research questions 4, 5, 8, 14, and 15
- Cost study
 - Implementation research questions 12 and 13
 - Impact research question I-3
- Participant outcomes
 - Impact research questions I-2 and I-4 through I-11

- Conclusions 1
 - Implementation research questions 10, 11, and 16 1

The appendices provide detailed results from various data streams, along with the evaluation methods and complete list of research questions.

This chapter covers key evaluation findings related to the implementation of the Housing Works (HW) program. Provided here are findings addressing program fidelity and refinements made during the grant period; participant recruitment and enrollment; program services delivered; and participant satisfaction with services received and the program overall.

Program Design and Objectives

The overarching service-delivery objectives were to increase the efficiency of the region's workforce investment board (WIB) and public housing authority (PHA) services to program participants, improve their access to and retention in training services, and provide seamlessly coordinated service delivery. Together, these actions were intended to accelerate a path to self-sufficiency for PHA residents through the attainment and retention of employment in high-demand occupations with pathways for advancement.

Evaluation Approach

The implementation evaluation was designed to monitor progress made toward the overarching goals of the program, offer feedback on the fidelity of program implementation, and assess indications of systems change, as well as how results were achieved and how they were valued by stakeholders.

The research questions that guided the implementation analysis discussed in this chapter included the following:

- To what extent was fidelity to the model maintained at each of the four sites and across the sites? What site-specific adaptations were made and why?
- Did the program unfold as planned and on the intended timeline?
 - In what ways and for what reasons did the program diverge from its plan?
 - To what extent did program leaders believe that the changes increase or decrease the likelihood that the original goals of the program would be achieved?

- Did the program operate at a scale sufficient to meet its estimates for program outputs and outcomes?
- How did WIBs and PHAs apply lessons learned from data analysis to decision-making about HW as it happened?
- How was the plan to provide very low-income families with access to training and employment programs communicated to stakeholders?
 - To what extent were the communications sensitive to cultural and economic differences?
 - Did the approach to communications promote stakeholder buy-in?
- Did case managers counsel and refer participants into workforce and social services in a manner consistent with the model?
- What were the unintended consequences of HW? How were these addressed during the grant period?
- How many individuals participated in and completed Career Link courses, Oregon Pre-Adult Basic Skills (OPABS) training, occupational skills training leading to industry certification, internships, and on-the-job training (OJT)?
- How many individuals participated in and completed WorkSource standard/general workshops/services (résumé workshop, computer basics, etc.)?

Evidence supporting the findings presented in this section is derived from multiple data sources:

- On-site observations
- On-site interviews
- On-site roundtables
- On-site focus groups
- Early-stage participant surveys
- Exit-stage participant surveys
- One-year post-exit participant surveys
- Administrative data

The units of analysis for some results in this chapter are the collaborative, but other results are analyzed at the individual level of program participant.

Finding: Program Fidelity Was Very High

In spite of process and policy adjustments, changes to the enrollment schedule, and the conversion of one service to non-mandatory status, the program unfolded with remarkably high adherence to the planned model. This notable achievement is largely attributable to the commitment to the program model that was demonstrated consistently across partners.

Evidence

Early in the grant, a fidelity scale was created by the evaluation team and revised with input from the program staff and partners. The fidelity criteria are shown in the methodology appendix. A score of 85 percent was deemed to constitute adherence to the program model.

Detailed scoring of core program components was conducted by the evaluation team at four points in time during the grant implementation, and shared with the partnership. A summary of the scores at each time point is shown in the table below.

Table 1: Housing Works Fidelity Score 1

Partnership Assessed	Through Grant Q3		Through Grant Q4		Through Grant Q8		Through 1 Grant Q13 1	
	Total Score	Total %	Total Score	Total %	Total Score	Total %	Total Score	Total %
Regional Alliance	8	66.7	9	75.0	11	91.7	11	91.7
County A	21	84.0	28	96.6	23	85.2	22	84.6
County B	18	75.0	26	89.7	25	92.6	22	84.6
County C	17	81.0	25	86.2	26	92.9	23	88.5
County D	16	72.7	26	89.7	26	92.9	23	88.5

The assessment consisted of two sets of core components to be scored. One set was for the Regional Alliance (RA) level, which examined items such as the provision of policy guidance on systems alignment to partners; the identification and resolution of redundancies and barriers to collaboration; the conduct of biannual RA meetings; and the use of data to drive decision-making. The RA carried out its part of the

collaboration almost exactly as planned; the challenge at this level was convening industry panels and recruiting employers to host participant placements. At the earliest points of assessment, the RA lost points on the use of data to drive decision-making.

The other set of core components was assessed for each of the counties that delivered services. Each county demonstrated a high degree of fidelity to the program model, with all four counties scoring at or above 85 percent (with rounding to the whole number) for the last three assessments. Each county provided the required core services and tools, and each used the vocational case management structure as designed. Examples of service-delivery components that were typically adhered to included:

- Biweekly contact between liaisons and vocational case managers (VCMs) (it was actually much more frequent)
- Establishing a VCM-to-participant ratio of 1:30 or less
- Delivery of Career Link courses
- Delivery of skills training (40-hour programming, other) leading to industry certification

Service delivery components that provided challenges included the following:

- Minimum of 10 VCM contacts per participant, per quarter
- On-time rollout of later rounds of recruitment
- Availability of internships and OJT as planned
- Completion of initial career mapping and resource planning with all participants (an issue mostly for one county)

Each county provided the same services using the same vocational case management structure. Nonetheless, there were local variations in the delivery of some program elements. For instance, one PHA found that it was not necessary to use the program intake form as all of the required information could be imported from another dataset. One PHA was able to do the Workforce Investment Act (WIA) registration process as a group. Variations were seen in assigned responsibilities, which were sometimes fluid. For example, occupational coaching was taught by the VCM in one county and through WorkSource in another.

The evaluation team found that local variations were unlikely to have affected participant outcomes. Many of the observed changes were driven by responsiveness to participant needs, such as the differences in the length of time each PHA takes to complete the 40-hour Career Link curriculum and holding orientations in different locations and at different times. Other adaptations across sites were ongoing quality improvement, such as modifications made to the Career Link curriculum to bring in more industry speakers and eliminate redundancies with WorkSource offerings.

Notable changes were made to the occupational coaching and long-term basic skills components. Occupational coaching was dropped as a mandatory element in 2014 after analysis showed a lack of attendance apparently due to lack of interest, despite varied attempts by separate sites to improve the situation. Because of the low attendance, the service tended to be experienced one-on-one, rather than in the intended small group format. Occupational coaching was not part of the pilot that led to HW, and its value was uncertain; it was seen by some participants and some partners as redundant without offering unique or notable value relative to the effort of attending.

The initial grant eligibility criteria were purposefully broad to allow the program to be widely accessible. As of early 2014, however, individuals who needed long-term basic skills were no longer being enrolled since they would not have had enough time to complete both remedial work and the other program components before the grant ended. It is unlikely that this change biased the outcomes because prior to this change, program data showed that participants tended to have relatively high levels of education; at that time, a majority had at least a high school diploma or a GED.

Finding: The Use of Data to Drive Decision-Making Positively Impacted Participant Satisfaction with the Early Stages of the Program

Using the communication structures as described in the systems change chapter, the HW team was effective in identifying implementation problems and the nature of changes that would effectively resolve issues.

Evidence

Partners were deeply engaged in using data from multiple sources to identify opportunities for program improvements. In addition to the program changes noted above, improvements to the recruitment and orientation processes were made based on

feedback from program participants and lessons learned. Through focus groups and survey feedback, participants requested more information and explanation about HW during orientation, and suggested that attendance at some program sessions would improve if they were offered at different times of day and in different locations. The partners also eventually shifted toward a cohort approach to Career Link and training to facilitate additional supports through a peer experience. As shown in Figure 4, for example, from year one to year three, there were dramatic increases of 12 percentage points in participants who felt they got a clear picture of the program at orientation, and 10 percentage points in understanding the level of commitment HW required.

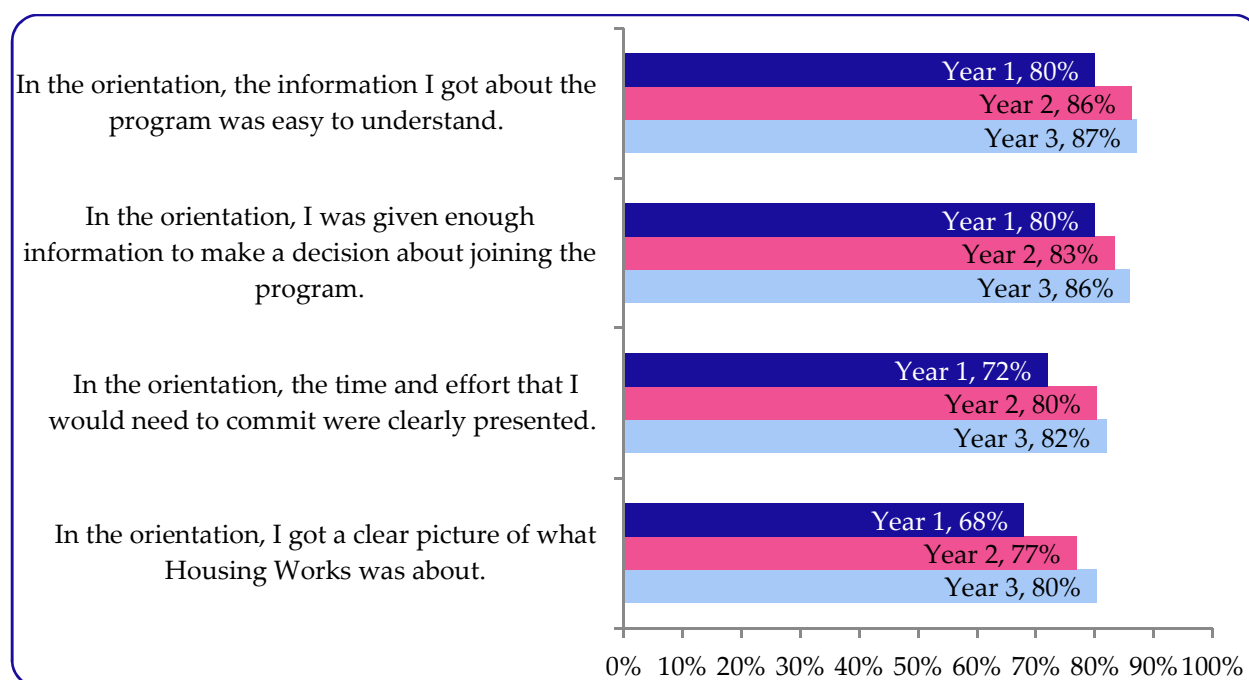


Figure 4. Participant Perceptions of Orientation

Although participant satisfaction with the enrollment process remained high throughout HW implementation (94 percent), improvements to streamline the process and provide greater detail on HW program requirements were made. Focus group participants had indicated a need for more clarity on the HW program, fewer enrollment steps, and a need to mitigate barriers, such as transportation cost and accessibility. Two of the sites took steps to reduce the repetition of eligibility documentation and facilitate enrollment in HW and WIA in one session. As shown in Figure 5, although early stage survey results indicated modest improvements in the percentage of participants that felt enrollment took too long or had too many steps (decrease of 2 percentage points and 1 percentage point, respectively), it is evident that concerns about enrollment being burdensome were well founded. There was a slight increase of 3 percentage points in the number who found enrollment to be easy, but the

greatest change from year one to year three was a 13 percentage point increase in the number of participants that felt HW program requirements were clearly explained at enrollment.

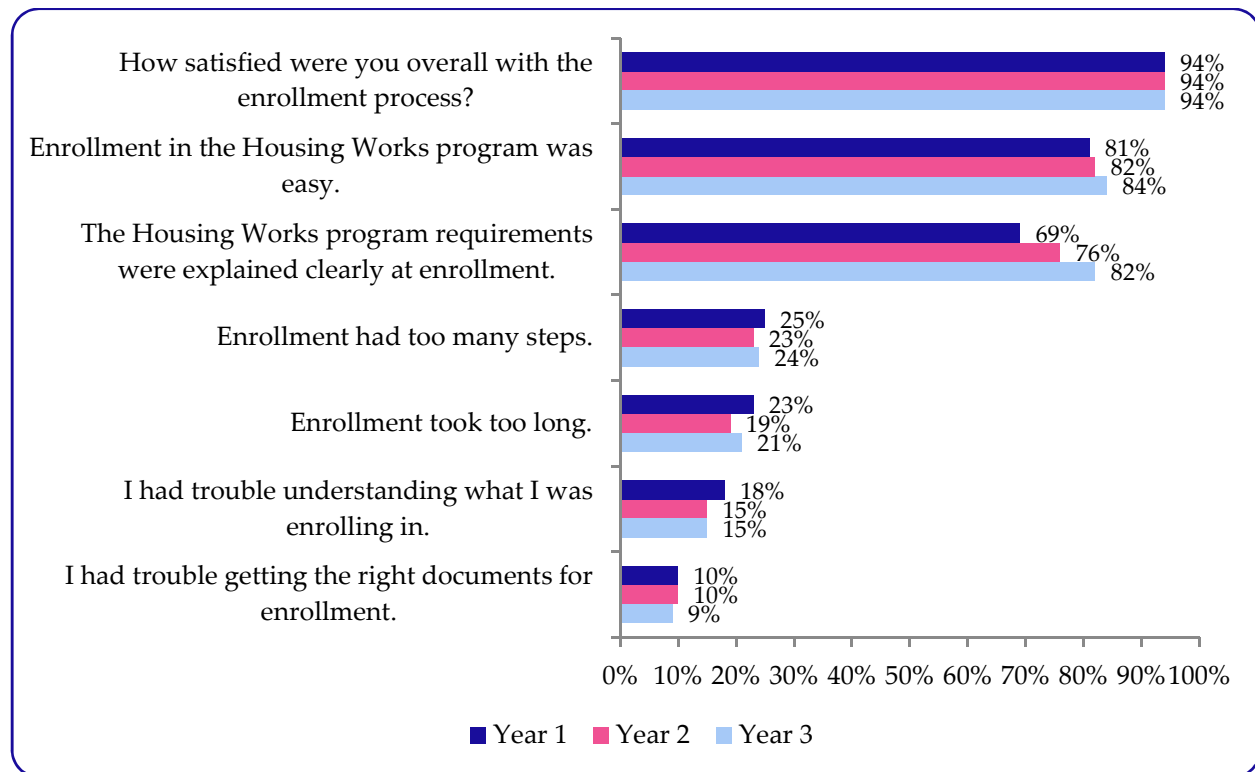


Figure 5. Participant Perceptions of Enrollment

Finding: Participants Valued the Peer Experience for the Support, Sharing of Ideas, and a Feeling of Inclusion in a Larger Community

Although not technically part of the defined model, HW staff valued a cohort approach and incorporated that approach into HW service delivery. The evaluation team tested the idea with participants that the program included a peer experience, and their benefits of this approach.

Evidence

During 2014 and 2015, partners attempted to move closer to a cohort approach to help keep participants together as they progressed through the program. Not all of the partners implemented this approach in the same way and variations included

recruitment of participants for training in a particular target industry or career path, for specific credentials, or for a specific type of job. At minimum, enrollees were together at the early stages, through orientation and Career Link. Since participants were able to pursue training of their choosing, it sometimes made sense for the cohort to dissolve following these early program stages. Participants already enrolled for training in office work and health care were also recruited using this approach since the two industries have similar work environments and soft skill requirements.

A majority of participants did perceive the program to be a peer experience. As shown in Figure 6 below, 38 percent responding to the exit survey indicated there was a lot of peer experience in the program, while 34 percent responded that there was some. One year after the program, slightly more than two thirds responded that through HW they had some or a lot of peer experience.

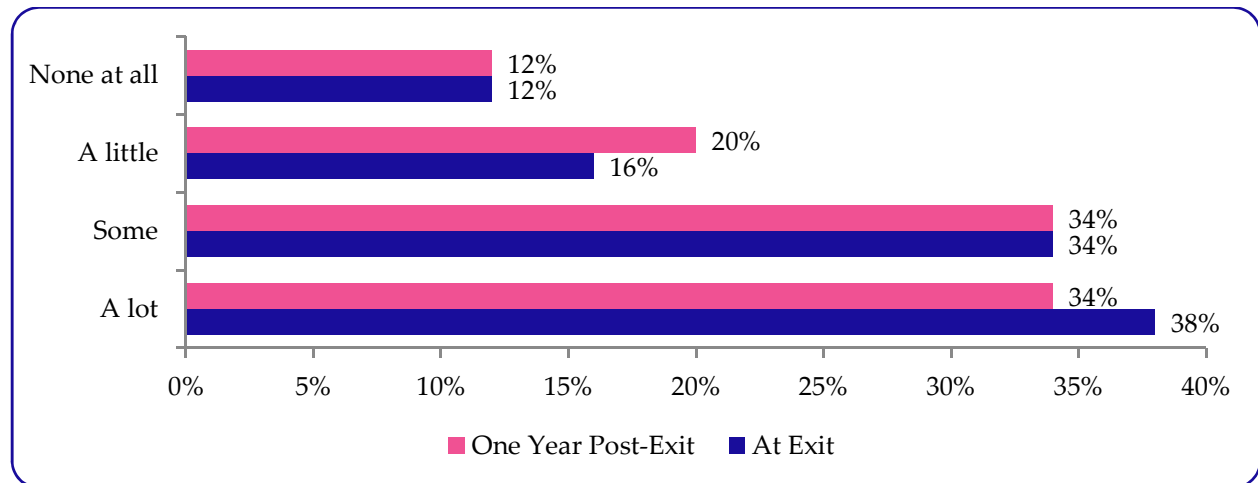


Figure 6. Amount of Peer Experience Received by Participants

It was anticipated that HW participants would benefit if they were able to move through the HW program steps together as a group, and the exit and one-year post-exit surveys were updated to capture participant perceptions of this experience.

Figure 7 shows that participants valued the peer experience in several ways including:

- About 8 in 10 noted the mutual helping, and sharing, and being part of a larger community.
- 77 percent said it fostered engagement and learning.
- 73 percent said it offered encouragement, and helped them persist.

One year after HW, 66 percent of respondents continued to feel that it was beneficial to have a group of peers in the program and more than one-third of respondents continued to stay in touch with at least one peer from the HW program.

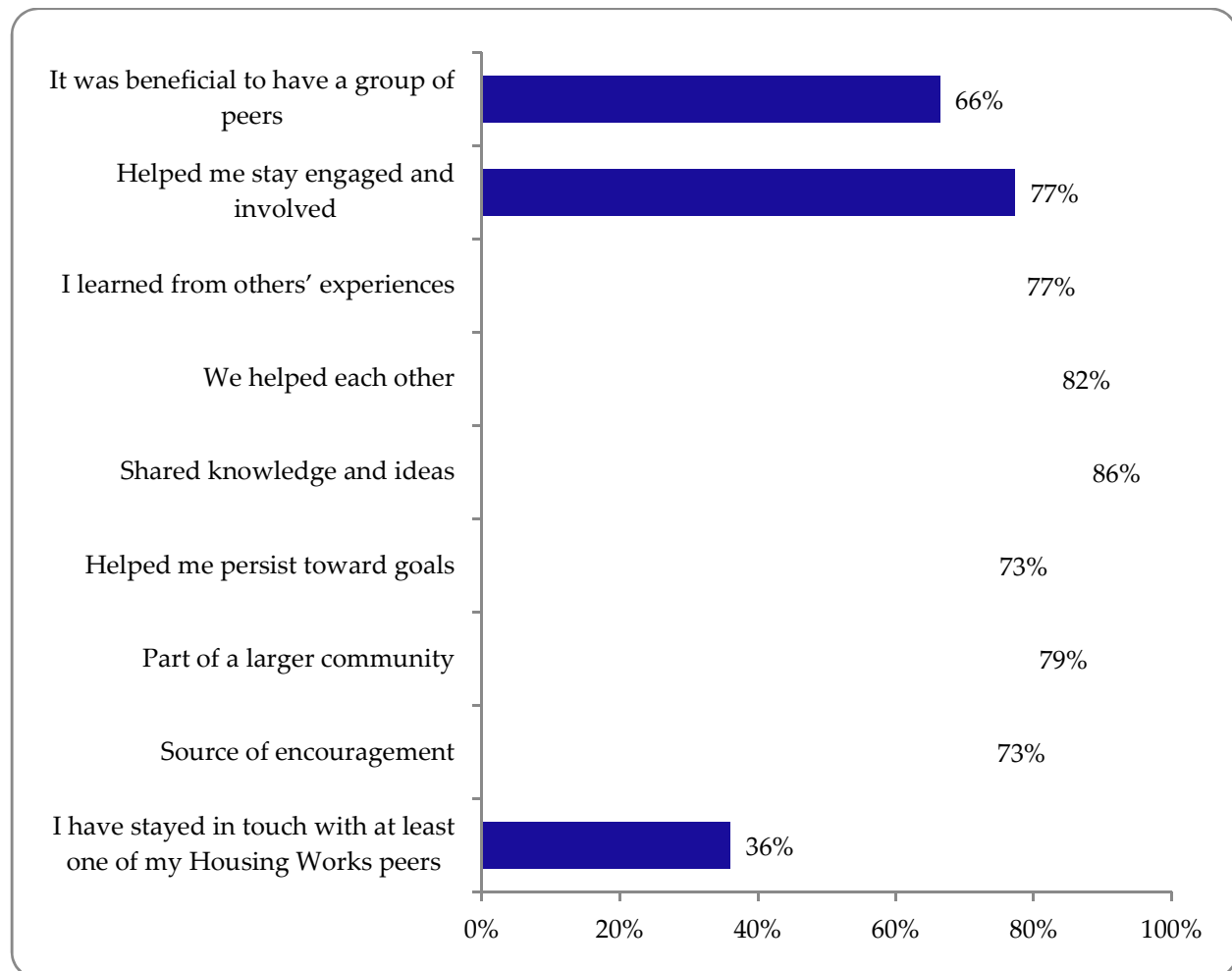


Figure 7. Participant Reflections on the Housing Works Peer Experience One-Year Post-Exit

Finding: Recruitment and Enrollment in Housing Works Began Quickly, Was Challenged, But Eventually Exceeded the Goal for Enrolling Participants

The initial response to the HW opportunity was greater than anticipated and recruitment proceeded vigorously. It proved difficult to continue to enroll participants

at such a pace for several reasons, discussed below, and sites had difficulty meeting their original deadlines for enrollment. After extending the period for enrollment and targeting training that could reasonably be completed within the grant period, the partners surpassed their original enrollment targets.

Evidence

Recruitment was carried out according to each of the partner PHA's normal procedures for outreach and communication. Materials were customized from a template and distributed in a manner appropriate to the population prioritized for the HW intervention. Initial recruitment efforts focused on each of the four industries and by the end of the first year, three out of the four sites had enrolled approximately 60 percent of their overall goal and more than 200 of the originally targeted 480 participants had been enrolled.

This robust interest in the program was not without its challenges, however. It became unwieldy to launch career exploration activities for multiple industries in a short time frame and much more effort than anticipated was required to support participants in determining trainings for multiple industries that differed in costs, funding options, and setting. Enrollment in Housing Works was also designed to maintain a 1:30 ratio for VCMs. To address these challenges, partners began enrolling participants in industry-specific cohorts and enrollment deadlines were extended multiple times.

While enrollment had originally been intended to end in May 2014, only one site had reached the enrollment target by June 2014. Another influence on the pace of enrollment was that early in 2014, program policy was changed to constrict eligibility to include only individuals who did not need long-term basic skills training. It was determined that there would not be enough time left in the grant period for both remedial work and the other program components to occur. In addition, noting that not all HW participants had engaged in program services, a decision was made to count only those who had completed Career Link as genuinely served participants. Partners then applied the target for enrollment to the number of *genuinely served* participants, and one site increased its target enrollment goal by 50 percent (from 50 to 75 participants), increasing the overall target for enrollment from 480 to 505. Enrollment was extended into 2015 (a third year) for three of the four sites in order to make additional progress towards meeting the new targeted number of enrollees, with at least one site conducting a total of 35 months of recruitment compared to the original plan for 20.

Although enrollment waitlists for each of the sites had been developed, by June 2014 those lists had been exhausted. Recruitment to meet the targeted number of genuinely served participants was different from initial HW recruitment in several ways due largely to the limited time left for grant activities. For the sites that enrolled participants into 2015, a major source for recruitment continued to be the Family Self Sufficiency program; staff found these individuals to be more open to the program and motivated to participate. Some of the sites took steps to reduce the amount of time participants had to spend in the program by offering initial services like Career Link sooner and engaging in multiple services on the same day. There were also efforts to ensure that participants could complete occupational training within the ever-shortening grant period, such that more short-term vocational trainings were pursued and recruitment for training that had eligibility requirements—such as immunizations for certified nurse assistant training—were met prior to enrolling in HW.

By the end of the grant period, all of the housing authorities had exceeded their goals for enrolling participants, as shown in Figure 8.⁷ Most sites met or nearly met their enrollment goals for *genuinely served* participants. In total, the sites enrolled 594 participants in HW and 80 percent (477) were identified as genuinely served participants.

⁷ One site had increased their original goal from 50 to 75 participants.

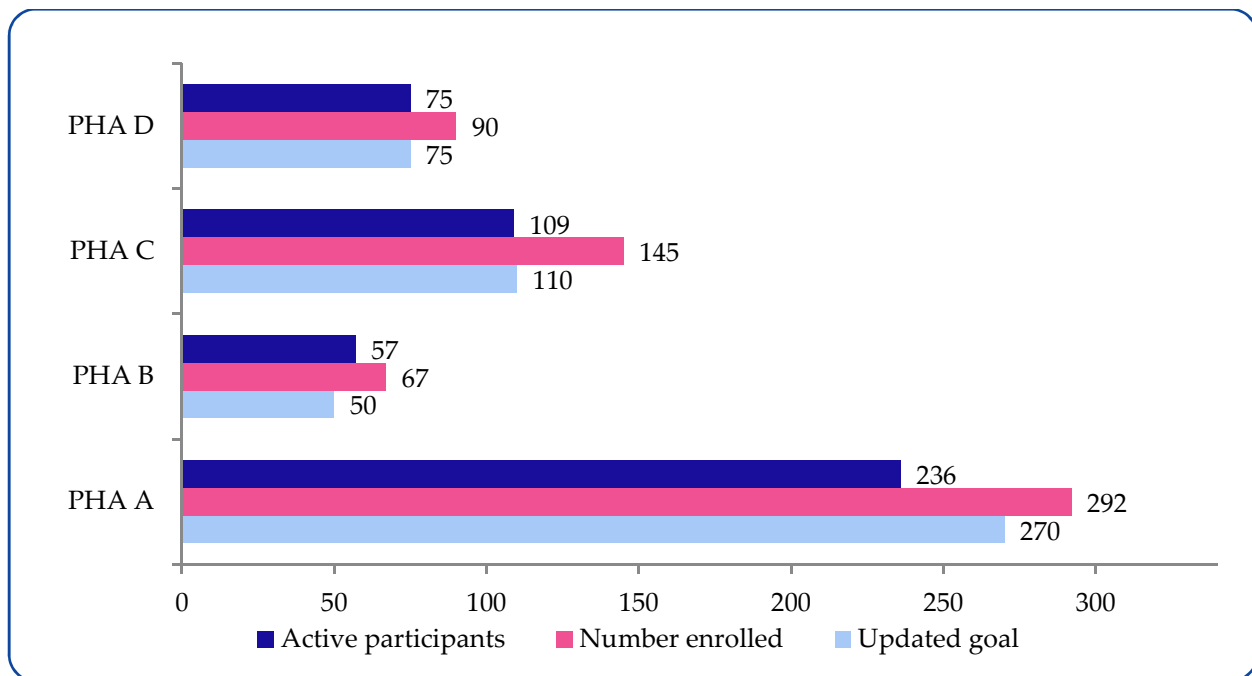


Figure 8. Housing Works Enrollment Goals, Total Enrollment, and Active Participants

Finding: Career Mapping Was Highly Regarded By Participants and Is a Critical HW Program Component

Throughout the grant period, participants noted the career-mapping session as memorable, valuable, and engaging. Nearly all of the HW participants completed the career-mapping session although not all did so within three weeks of program entry as had originally been planned. The career-mapping session helps participants explore and identify their strengths, weaknesses, likes, dislikes, and how their personal situations may restrict their job search (for example, which hours they can work) in order to figure out what kinds of jobs would be a good personal fit for them. These findings guide participants and VCMs in their development of the career and resource plan.

Evidence

Five-hundred-eighty-eight (588) of the 594 HW participants completed career mapping. As shown in Figure 9 this represents 99 percent of the total participants, with only very slight variation in completion rates among the sites.

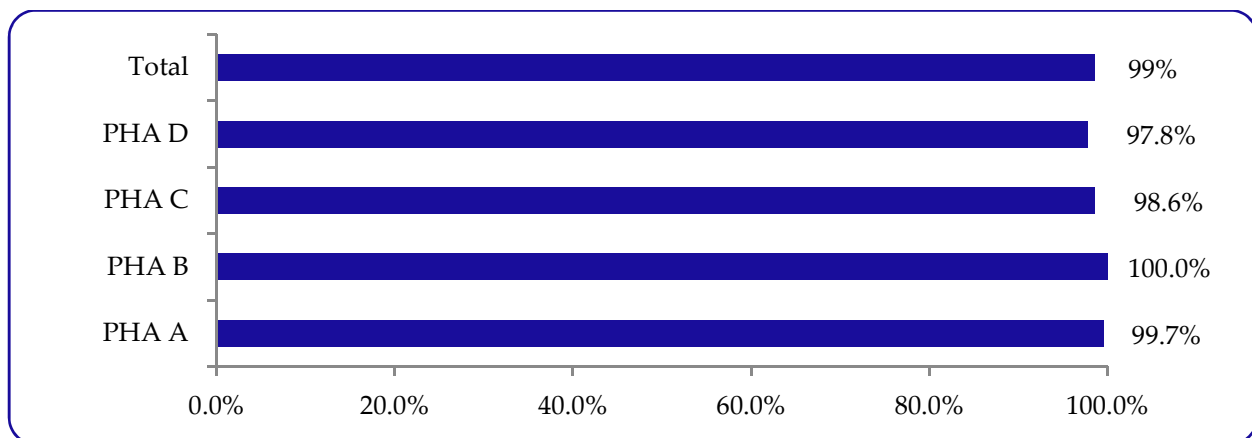


Figure 9. Participants Receiving Career-Mapping Services

The HW implementation goal was for 100 percent of participants to complete career mapping within three weeks of enrollment. As shown in Figure 10, although only one site was able to meet this goal; across all four sites 85 percent of participants did complete career link within three weeks.

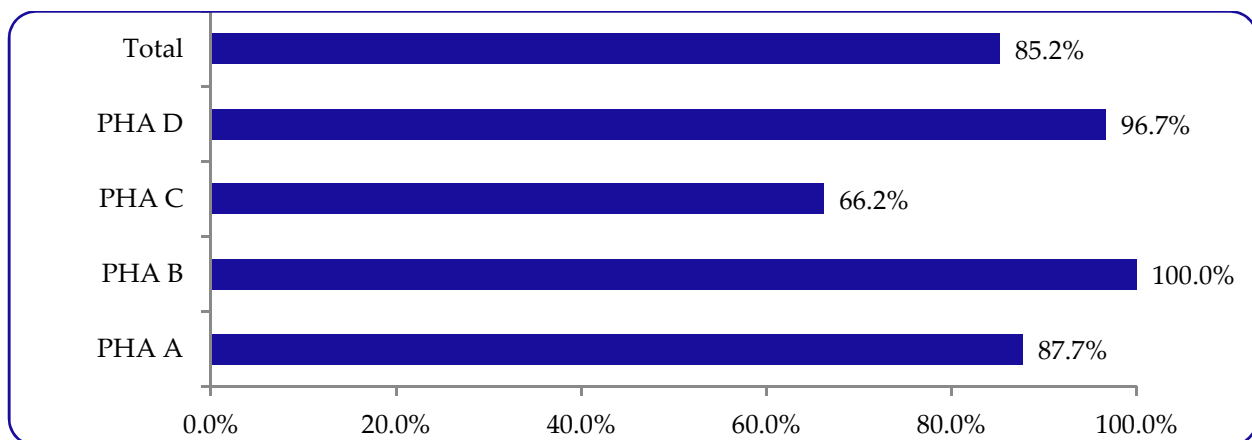


Figure 10. Participants Receiving Career-Mapping Service within 3 Weeks

Information gathered through interviews with program staff and participant focus groups indicated a high level of enthusiasm for the career-mapping workshop among participants. As presented in Figure 11, 90 percent of participants indicated that the workshop was somewhat or very helpful. In particular, more than three quarters (78 percent) felt it was helpful in clarifying career goals and strengths. More than seven out of ten participants also agreed that career mapping was a useful preparatory exercise that helped them identify employment goals and learn what they were ready for.

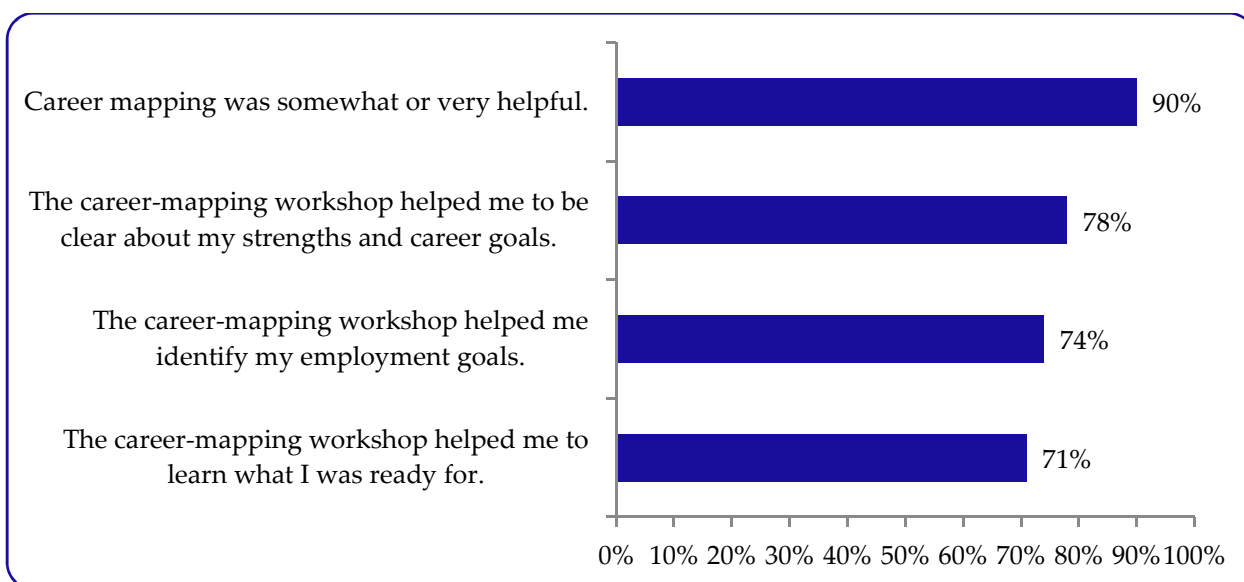


Figure 11. Participant Views of the Career-Mapping Workshop

In exit surveys, participants considered the career mapping and career and resource planning (the latter is updated after career mapping) to be one of the most useful program features, second only to case management (Figure 12, below).



Figure 12. Most Useful HW Services According to Participants at Exit 1

Finding: Resource Plans Were Completed By Nearly All Participants, and Their Value in Helping Achieve Training and Employment Goals Was Highly Rated

Creating and maintaining individual resource plans was a core component of the program model intended to further the ability to achieve training and employment goals. The positive feedback from the participants was congruent with program staff perspectives of the value of the plan.

Evidence

According to data gathered from I-Trac, 570 of the 594 HW participants completed resource plans. As seen in Figure 13, this represents 96 percent of all Housing Works participants. There was only slight variation among the sites in terms of the percentage of participants completing resource plans. The rate of completion ranged from a low of 92 percent in one site to a high of 97 percent in two sites.

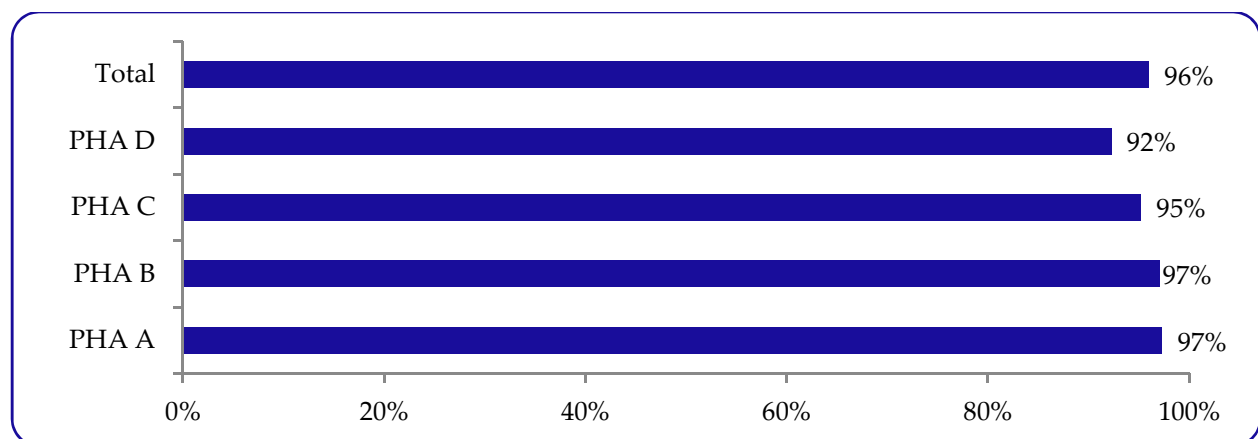


Figure 13. Percentage of Participants Receiving Resource Planning

HW put forth an implementation goal of having 100 percent of participants completing the resource plan within three weeks of enrollment. As shown in Figure 14, nearly 7 in 10 participants completed the resource plan within this time frame. None of the sites achieved this implementation goal. Completing the plans within three weeks varied among the sites from a low of about half to a high of about 8 in 10.

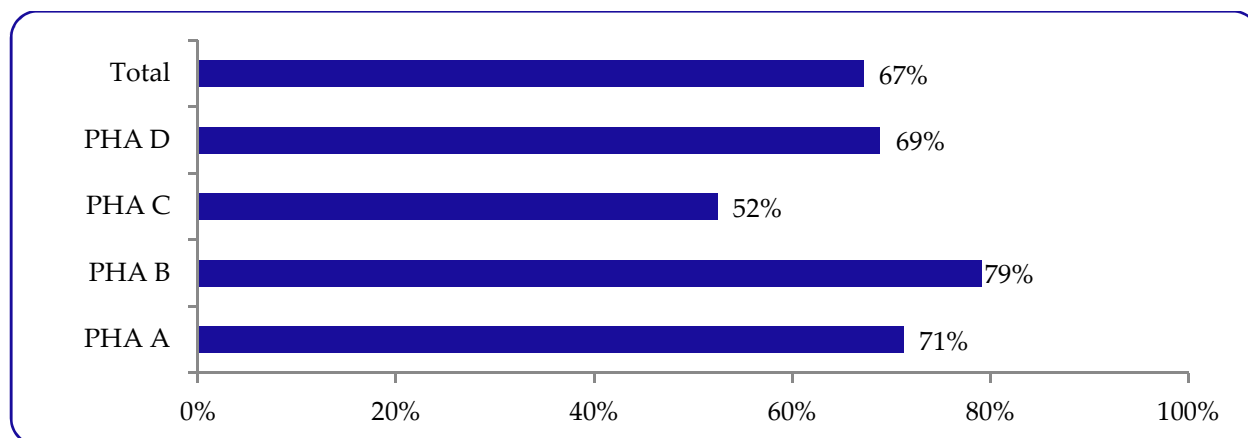


Figure 14. Percentage of Participants Receiving Resource Planning Within 3 Weeks

I-Trac data indicates that for the 594 HW participants, 764 resource-planning sessions were completed. This suggests that participants were actively updating their plans as they progressed through the program. Early-stage survey results shown in Figure 15 below reflect that 75 percent of participants were using their plans. Participants were also very positive about the resource plans. More than three in four respondents indicated that the resource plan helped them identify strategies for meeting their goals, and more than 8 in 10 responded that the resource plan provided concrete steps for how to accomplish their goals. Eight out of 10 respondents expected the resource plan would help them stay on track for training and expected to update their plan in the future. Very few participants felt their plan had no real purpose.

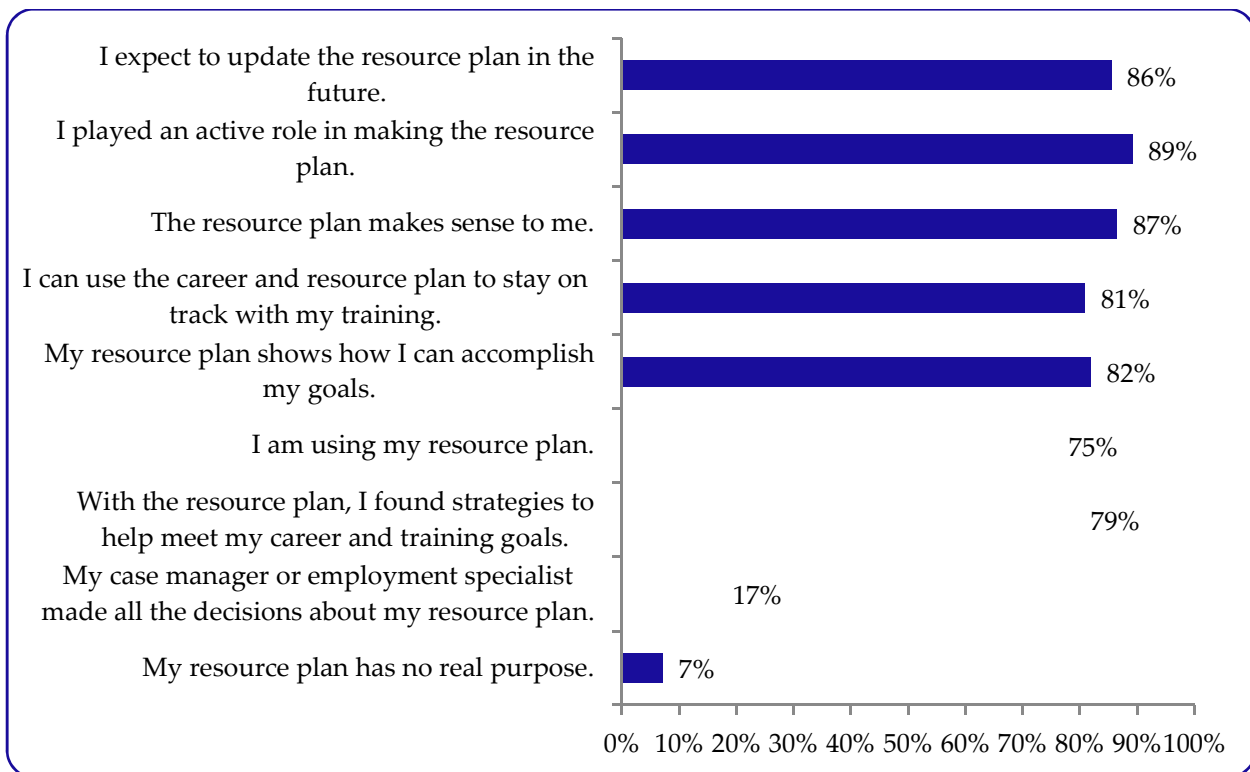


Figure 15. Participant Perceptions of the Resource Plan at Early Stage

After exiting HW, participants were asked to reflect on their resource plan and re-assess the value of that activity. Figure 16 below presents participants' view of the resource plan upon finishing the program. While the percentage of those who indicated their plan had no real purpose increased notably from responses given while in the program, indicators of the plan's guidance role were strong: 87 percent agreed that the plan helped them stay on track with their training and 81 percent felt it helped them reach employment goals.

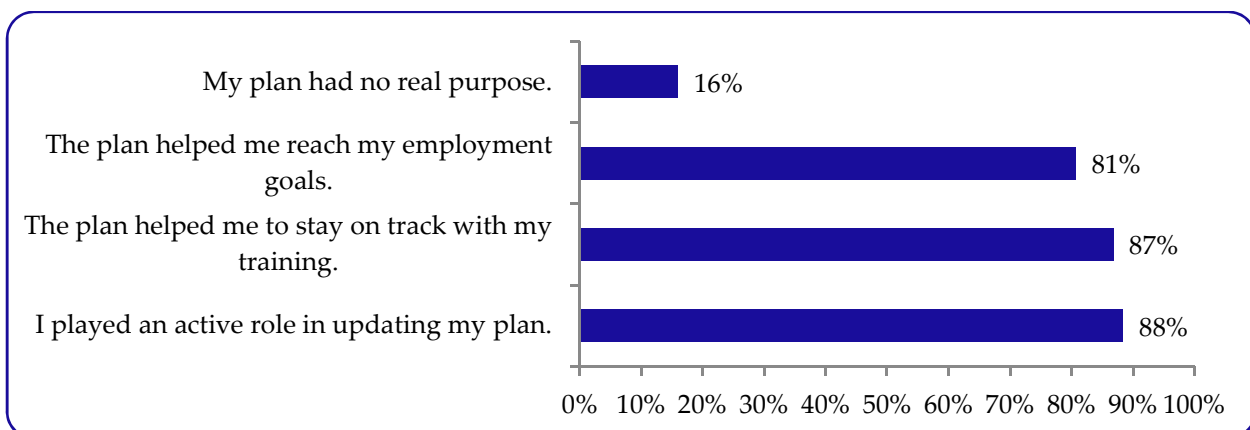


Figure 16. Participant Perceptions of the Resource Plan at Exit

Finding: Career Link Was a Valuable Tool for Helping Participants Understand Real-World Employment Possibilities

Career Link was a widely used service for HW participants and allowed them to hear firsthand from industry experts about real careers they were considering. Participants found these sessions to be very informative and worthwhile in helping determine their career paths.

Evidence

Overall, 87 percent of HW participants completed the Career Link exercise, as displayed in Figure 17. The denominator, however, includes all participants both active and inactive. When the HW leadership determined that participants would need to complete Career Link in order to be considered a genuinely served participant, the percentage of participants completing Career Link subsequently increased. There was very little variation among the sites in terms of the percentage of participants completing Career Link.

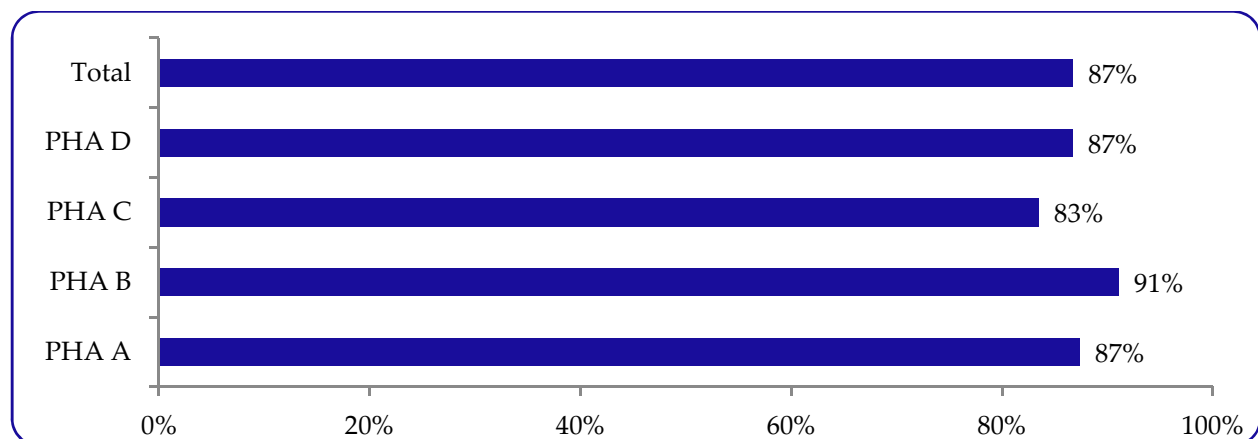


Figure 17. Participants Receiving Career Link

There were, however, variations in how the sites delivered Career Link. While the total duration of the sessions was standard at 40 hours, sites allowed anywhere from a two-week period to a two-month period to complete those 40 hours. Further differences included one site where the housing authority facilitated the Career Link classes, two sites where the facilitator was WorkSource, and the fourth site utilized the local community college. Partners later adjusted Career Link to be more industry specific and participants perceived these latter sessions to be more valuable. As shown in

Figure 18, despite these differences, participants across the sites demonstrated high levels of agreement with the usefulness of Career Link to provide information about real-world jobs and understand better possibilities that industries held for them.

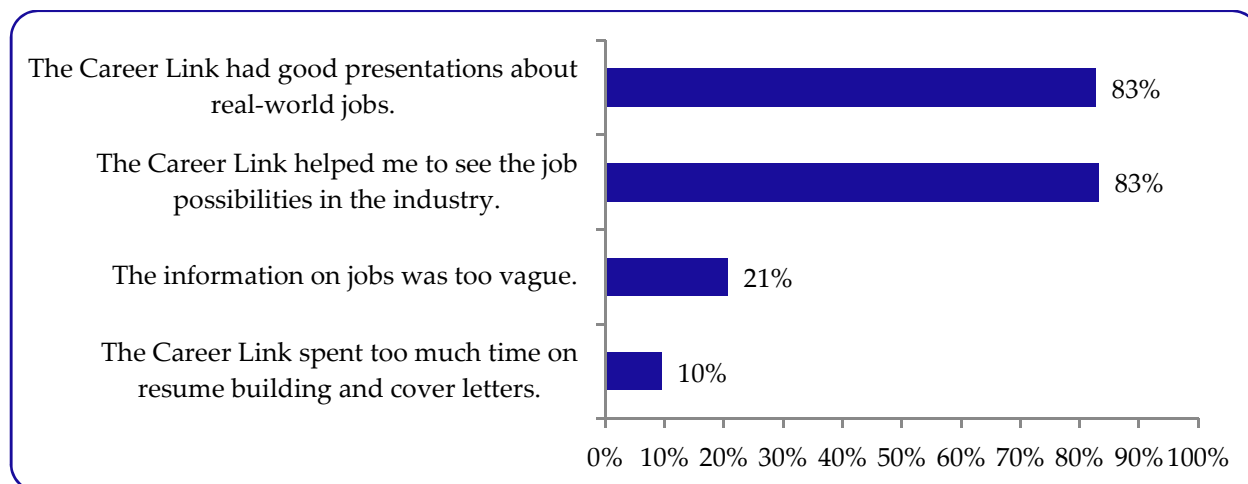


Figure 18. Participant Perceptions of Career Link

Finding: HW Achieved Its Goal for Occupational Skills Training and Participants Were Satisfied with the Training Received

Engaging in occupational training was a key element of the HW model. Although the program was targeted to four industry sectors, participants were encouraged to develop their own training and career goals and enroll in training that would help them reach those goals. Not all HW participants entered occupational training, but among those that did, satisfaction with the training and support HW provided was high.

Evidence

The implementation goal for Housing Works was to have 235 individuals start or complete occupational skills training. Figure 19 shows that by the end of the HW program, 252 participants had entered occupational skills training and 199 of those people had completed. Completion rates for occupational skills training varied among the sites with a high of 90 percent and a low just under 50 percent. An additional 136 participants entered short-term vocational training, and all of those individuals completed their training.

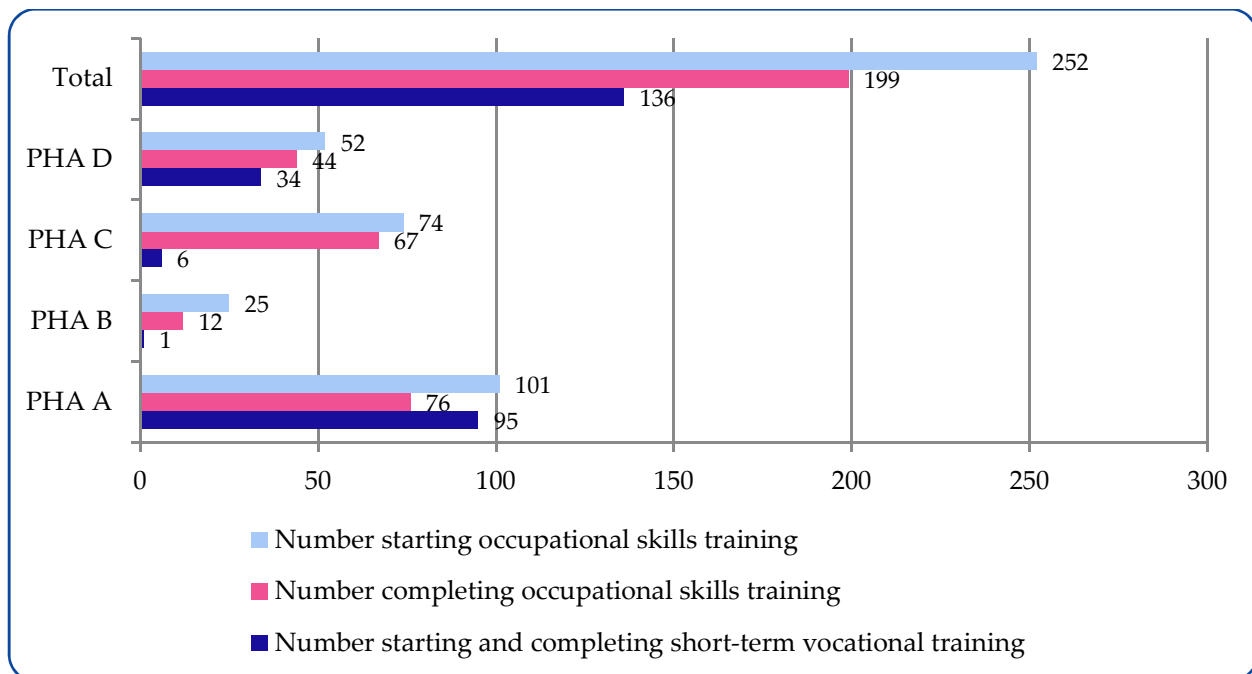


Figure 19. Number of Participants Entering and Completing Occupational or Short-term Vocational Training

Housing Works participants were recruited for and had an interest in pursuing careers in four particular industries. As shown in Figure 20, participants completed trainings in the targeted industries proportional to expressed interest. Most HW participants were interested in health care careers and most HW participants who completed training completed health care training. Likewise, construction was the least popular industry choice for those enrolling in the program and also saw the lowest number of training completers.

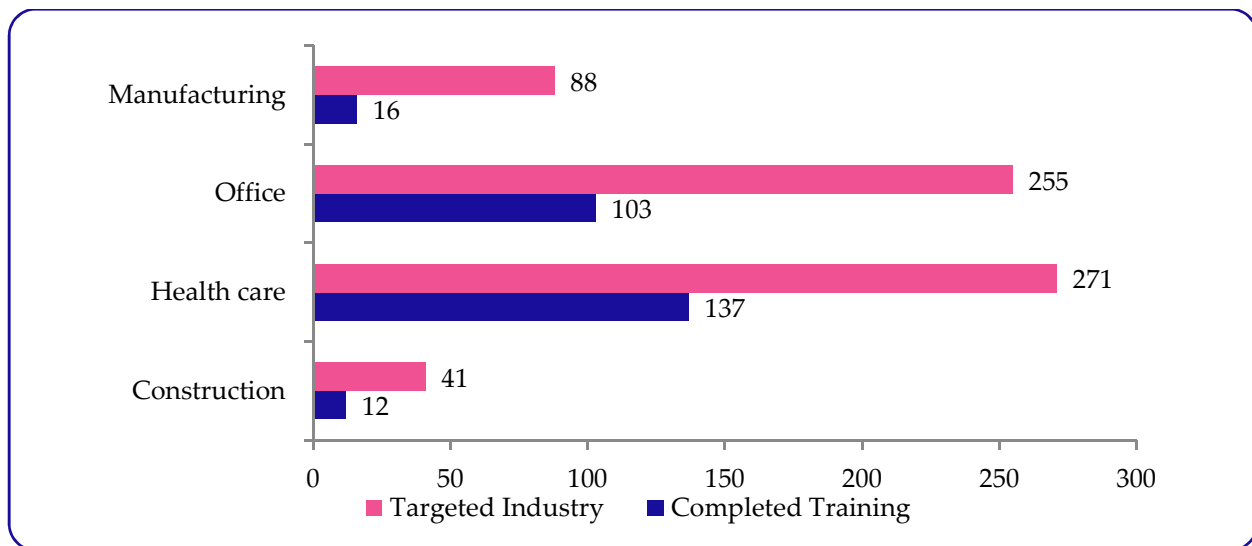


Figure 20. Participant Targeted Industries and Number of Individuals Completing Training

Participants that received occupational training services were fairly positive about the experience upon exiting HW. As listed in Figure 21, 81 percent of participants thought that the training they were enrolled in would ultimately lead to future employment, while 73 percent thought they had chosen the right field of study and 75 percent felt the training fit with the career plan they had developed through HW. Participants were also favorable about the support they received through HW to select a training provider (75 percent), address challenges to enrolling in training (73 percent), and overcome challenges to completing training (69 percent).

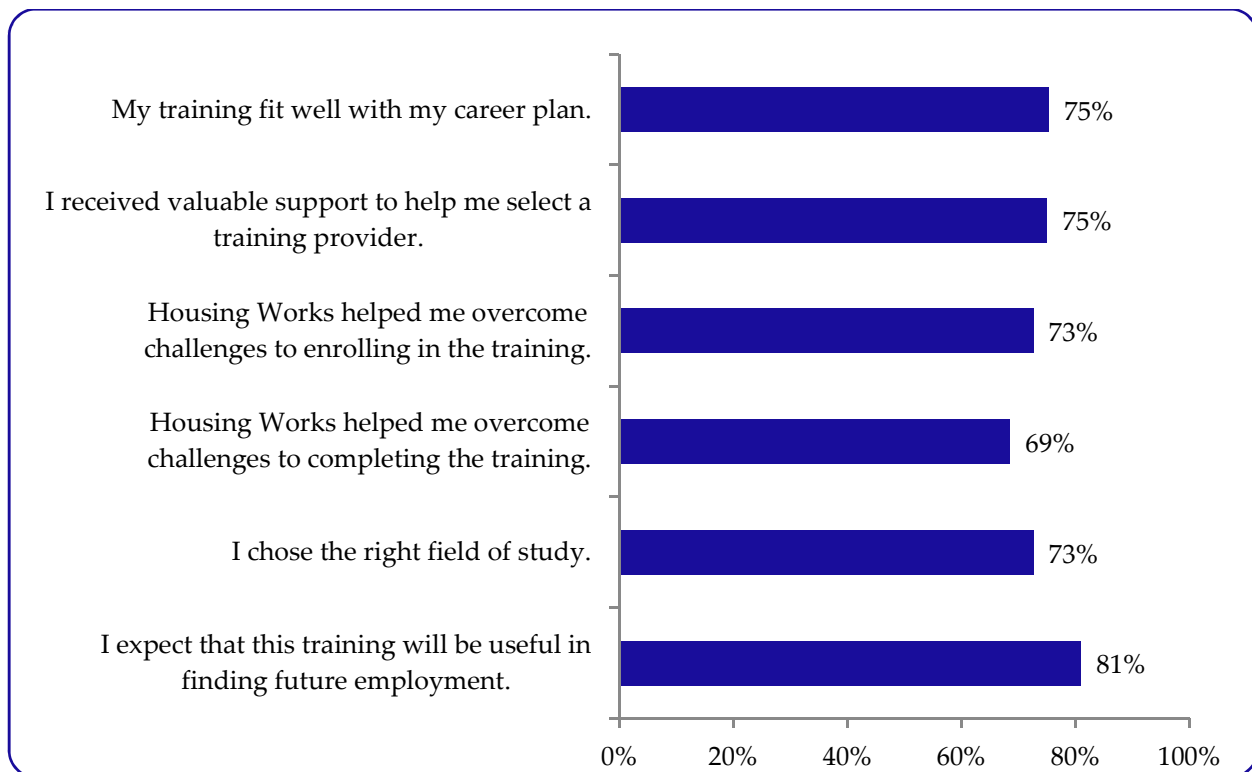


Figure 21. Participant Perceptions of Occupational Training at Exit

One year after exiting the program, participants were still highly satisfied with the occupational training they had received. As shown in Figure 22, below, nearly 9 out of 10 participants reported being satisfied or very satisfied with the services. Participants continued to see the training as a good fit with their career plans, but only 7 in 10 participants thought the training was actually useful in finding employment compared to 8 in 10 at program exit who expected the training to lead to employment.

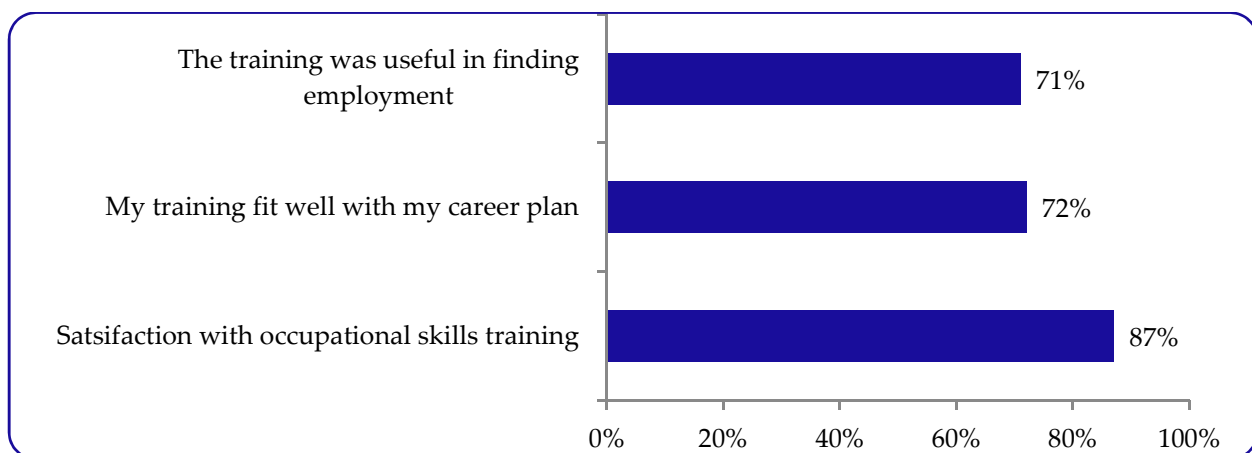


Figure 22. Participant Perceptions of Occupational Training One-Year Post-Exit 1

Finding: The Goal for the Number of Participants Completing Internships or OJTS Was Not Met, but Participants Valued Those Opportunities

HW was challenged to move participants from training into training-related placements. Of the participants who were placed, most completed their internship or OJT, and these experiences were viewed favorably.

Evidence

A secondary service-delivery target was to obtain 240 internships and 75 on-the-job training experiences for HW participants. A total of 196 individuals started a training-related placement, which was approximately 62 percent of the service goal. As shown in Figure 23, HW was closer to reaching its goal for internships (70 percent of goal) than to the goal for OJTs (39 percent of goal).

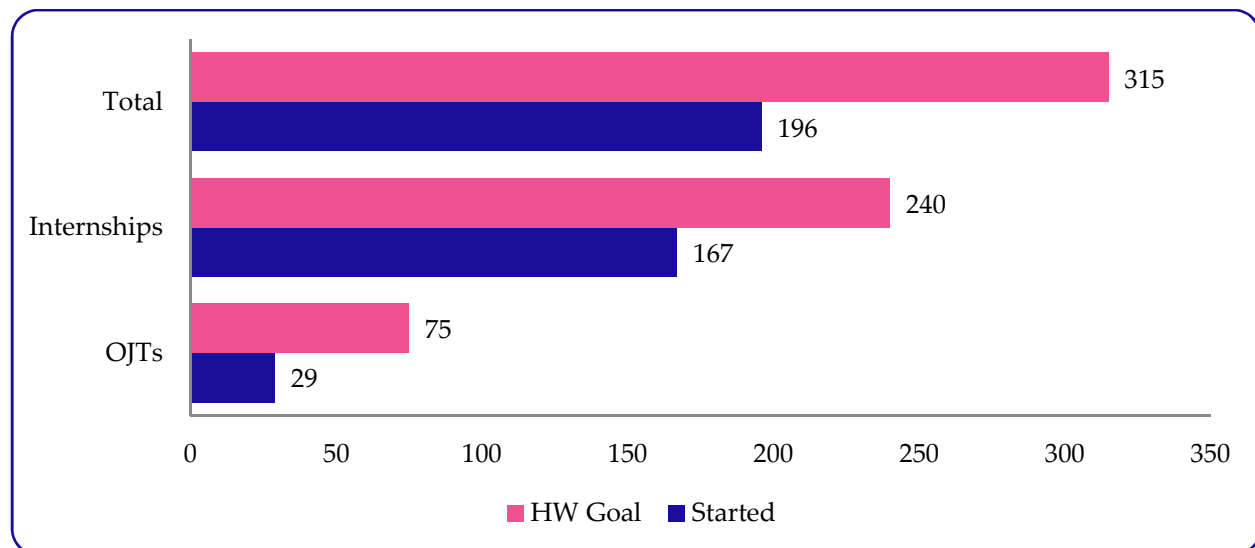


Figure 23. Training-Related Placements Relative to Program Goals

For those who began a placement, 83 percent (163 of 196) completed their placement. As seen in Figure 24, nearly all of the participants that received an OJT completed. Internships and OJTs were not very prevalent in the construction sector, and in fact there were no OJT experiences in manufacturing at all. Most of the OJT experiences were in health care, while most of the internships were in the office sector. The industry in which the placement occurred was not recorded for approximately one-third of the cases.

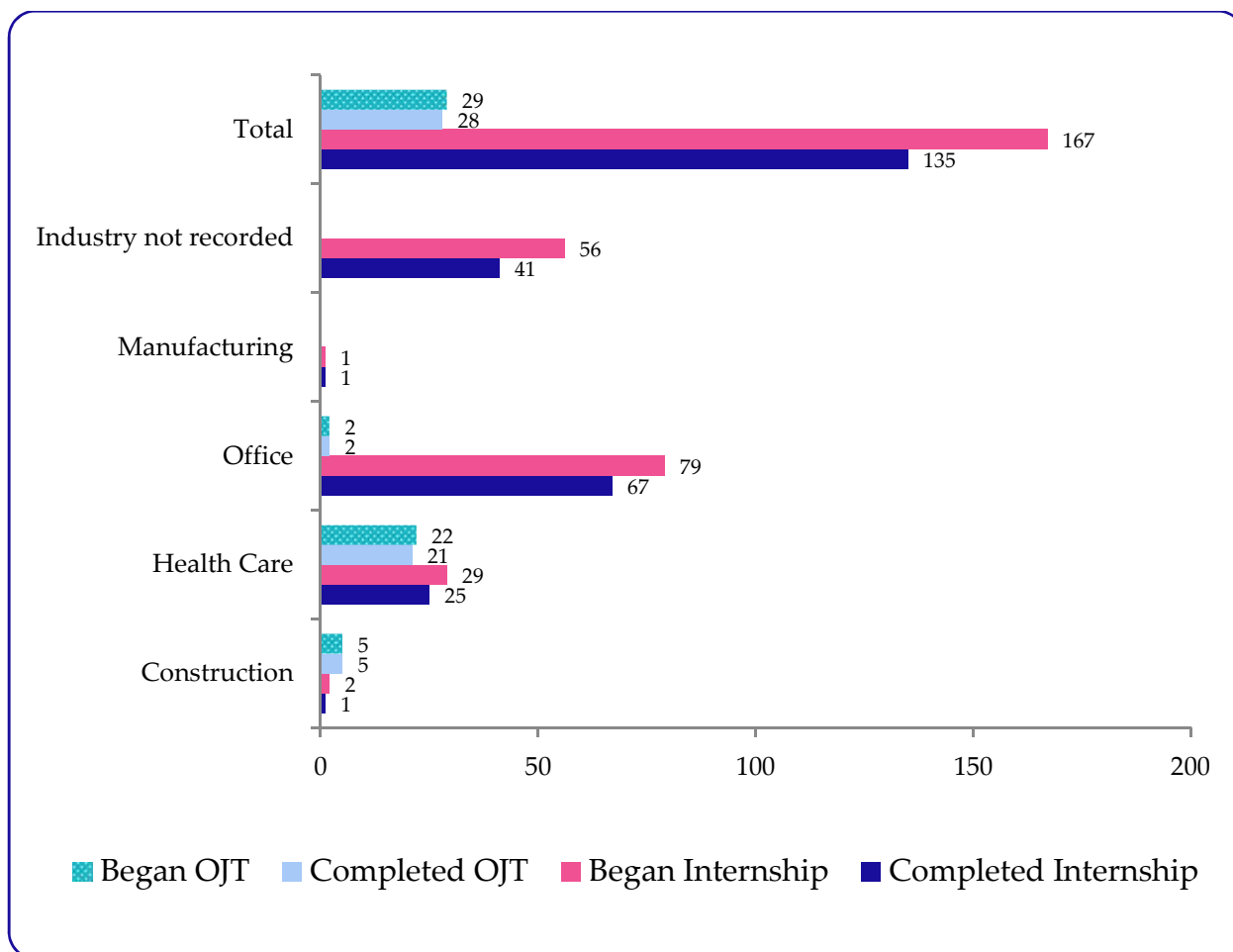


Figure 24. Participant Training-Related Placements

Participants valued these training-related placements and indicated a high level of agreement with the benefits such experiences provided. More than three quarters of participants in internships and more than 8 in 10 participants in OJTs thought these experiences helped them to further their job skills. Nearly 8 in 10 thought the experience fit well with their career plan, and most participants indicated that the internship or OJT provided useful experience in the field (see Figure 25, below).

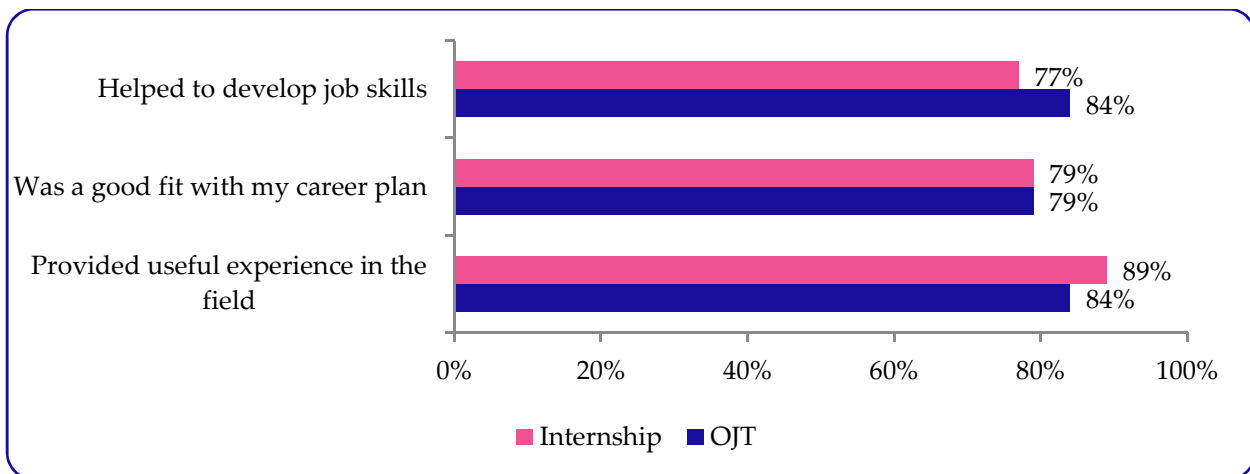


Figure 25. Participant Perceptions of Internship and OJT Experiences

Participants identified their training-related placement as a positive experience. As shown in Figure 26, more than 85 percent of participants agreed that the OJT or internship was a positive experience. However, training-related placements for some were not quite what they were expecting: 72 percent of OJT participants agreed that the OJT met their expectations, while only 65 percent of internship participants felt the same way.

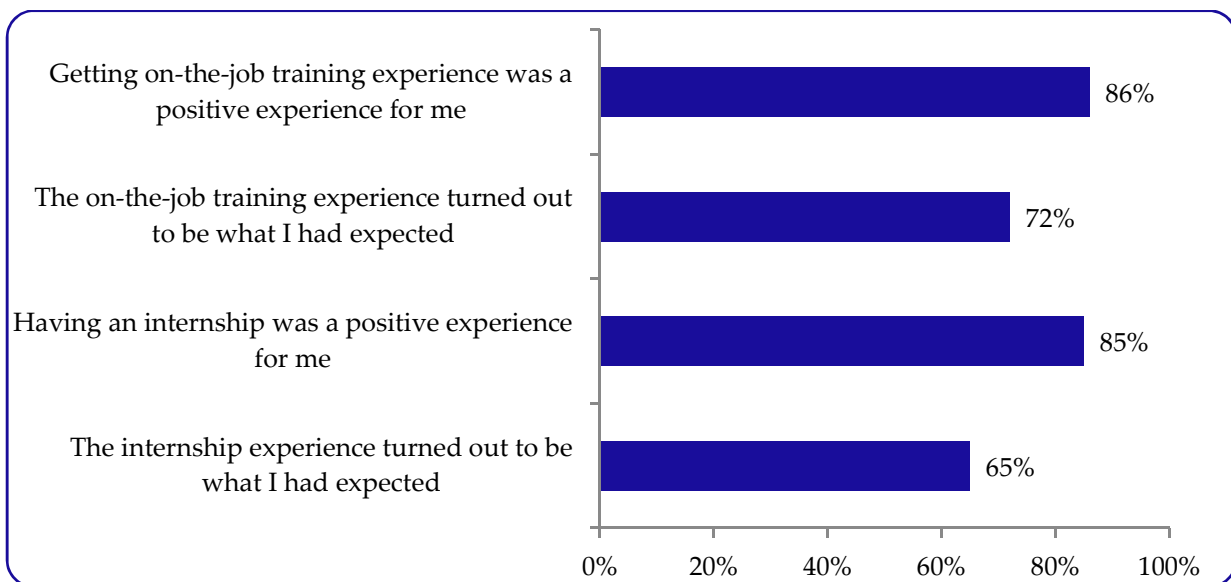


Figure 26. Participant Satisfaction with Job Attachment Activities 1

Finding: Housing Works Vocational Case Management Was Not Delivered as Frequently as Anticipated and Yet Was Highly Satisfactory to Participants

Although the target for vocational contacts per quarter was not met, participants were satisfied with the amount of contact they did receive and were highly satisfied with vocational case managers overall.

Evidence

The HW program implementation goals related to case management included having participants receive at least 10 vocational contacts per quarter and receiving at least 80 percent satisfaction with vocational case managers' ability to support career plans and help navigate WorkSource services. The goal for number of contacts was not met, but during the course of program implementation it was discovered that the projected amount of contact was neither necessary nor desired. VCMs tailored the amount of vocational contact to the needs of the participants, which was much to the participants' satisfaction. Some participants required more time and support to prepare for occupational training or placement than others and VCMs tuned in to these needs and were creative and adaptive in helping participants chart a course to success.

The average number of contacts per quarter that were coded as "vocational case management" notably fell short of the goal. Because vocational case manager contact could be coded in various ways, it was useful to take into account other contacts that were vocational in nature such as career-mapping, support services, and resource planning. This provided a more complete picture of how much contact, on average, took place between VCMs and participants. As seen in Figure 27 below, for three of four PHAs the expanded "vocational contact" level was below the targeted number at each point in time that it was assessed—and dropped over time—to a total of 5.9 contacts per quarter on average by the end of the grant.⁸ Since the averages presented are cumulative, there must have been significantly less contact by VCMs over the last several months of the grant. This could be due to several reasons including efficiencies

⁸ Contacts include career-mapping workshop, vocational case management, support service case management, and resource planning. Contacts do *not* include long-term basic skills, internship, job developer, occupational skills training, OJT, Career Link, occupational coaching, other basic skills, and short-term vocational training.

related to greater experience with the role of a VCM, efficiencies in program delivery as noted previously, participants being recruited for shorter trainings that could be completed within the grant period, and in some cases recruiting for specific credentials. These factors together might explain the change seen here.

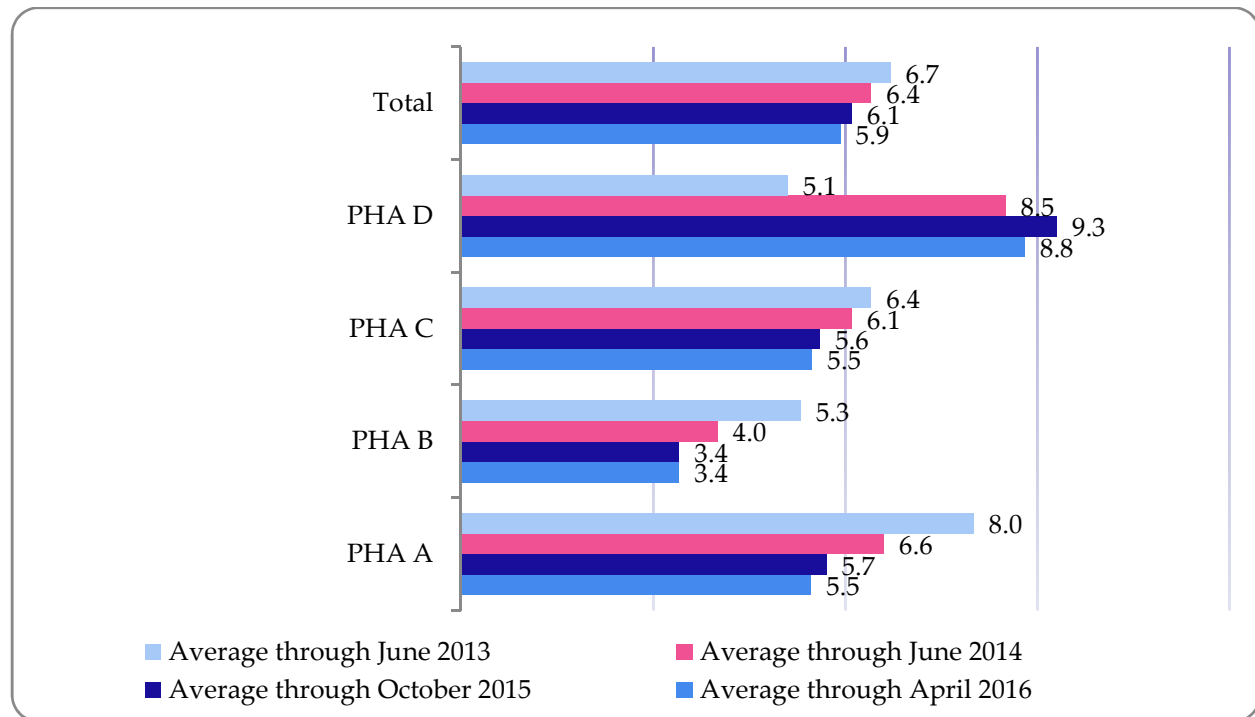


Figure 27. Change in Average Number of Vocational Service Contacts per Quarter

Even though HW did not meet its goal for average number of vocational contacts every quarter, participants felt that the amount of contact they received met their needs. As shown in Figure 28, more than 8 in 10 participants at early stage and at exit said that the amount of contact they received was about right. Very few participants indicated that they received too much or too little contact.

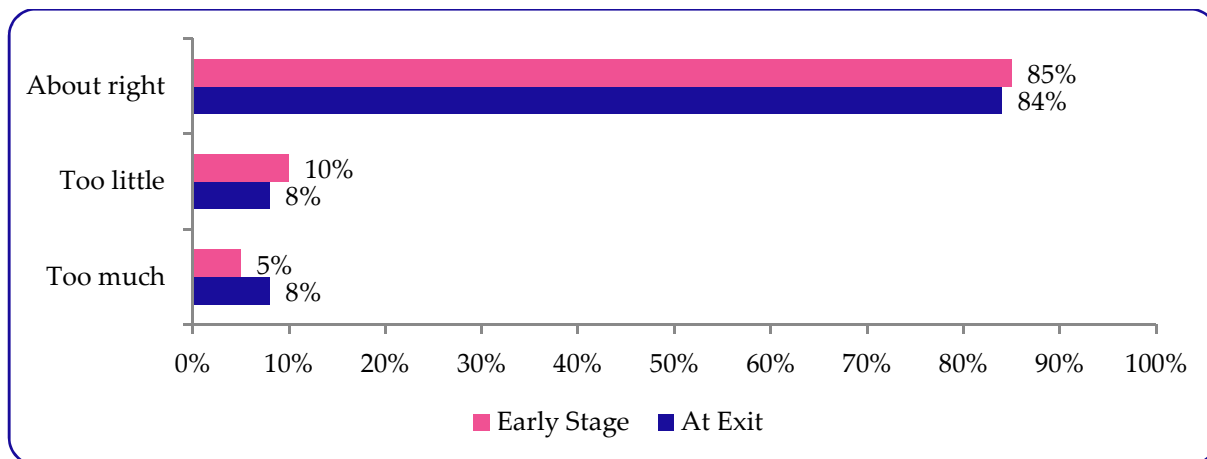


Figure 28. Frequency of Vocational Case Manager Contact According to Participants

Participants were also highly satisfied with their vocational case managers and indicated that VCMs were helpful and engaged participants in the development of their plans. Figure 29 shows that while in the program participants were generally more positive about the VCM than they were at program exit—for example:

- 86 percent of participants responding to the early stage survey felt the VCM provided guidance and supported decision making and 84 percent felt the same at exit.
- In the program, 84 percent of participants agreed that the VCM is helpful and 79 percent also agreed with this at exit.
- 82 percent in the program thought the case manager understood their needs and 79 percent thought the same way at exit.
- At exit, though, there were increases of 5 and 6 percentage points respectively among participants that felt the VCM did not listen or understand their needs.
- One year after exiting the HW program, only about 6 in 10 thought the VCM actually helped them overcome barriers to employment.

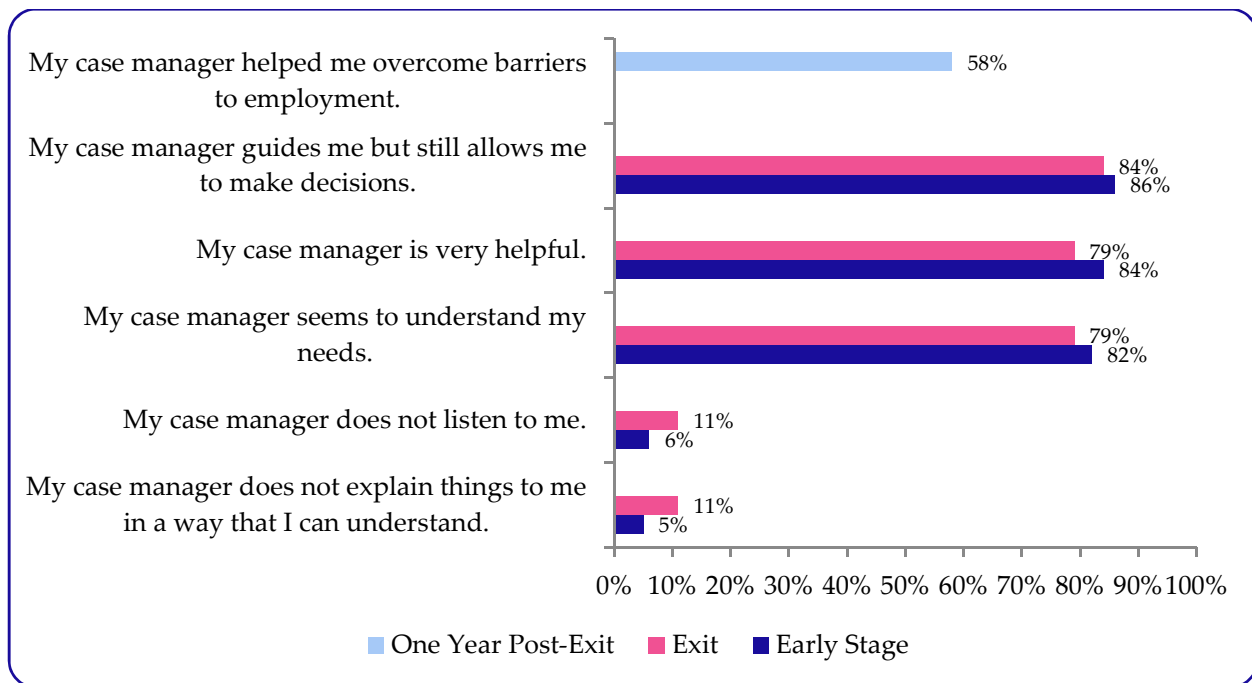


Figure 29. Participant Perceptions of the Vocational Case Manager

Finding: Participants Were Very Satisfied While in the HW Program, But Less So Over Time

The HW program received very high marks from participants as they were moving through the program stages. However, participant satisfaction with HW waned once participants had exited and further decreased one year after exit.

Evidence

The program established a service-delivery goal that 80 percent of participants would agree that services were effective in helping create successful outcomes, and this target was fundamentally met. Figure 30 shows that 9 in 10 participants were satisfied or very satisfied with HW enrollment, Career Link, their case manager, and the HW program overall while they were in the program. There were some variations over time, for example:

- 8 in 10 participants that exited the program indicated they were satisfied with the support they received to secure employment and 86 percent were satisfied with their occupational training. At exit, satisfaction with the case manager and HW program

overall decreased slightly to about 8 in 10 participants being satisfied or very satisfied.

- One year after the program, participants were less satisfied with their case manager and the HW program overall, but only slightly less so than at exit. Seventy-five percent were satisfied or very satisfied with HW overall and 76 percent were satisfied with the case manager.
- Satisfaction with the occupational training increased one percentage point from exit to one-year post-exit, while satisfaction with support for securing employment dropped 15 percentage points.

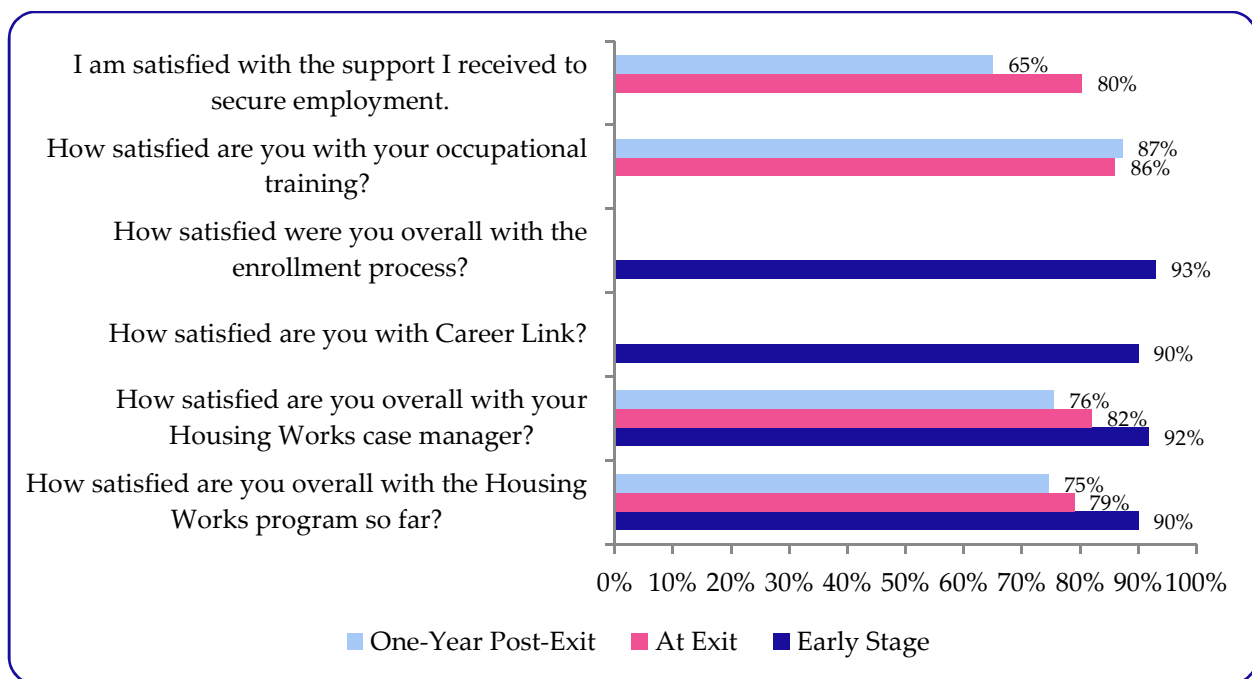


Figure 30. Participant Satisfaction with Housing Works

A partial explanation for the decrease in satisfaction from program to exit to one-year post-exit is shown in Figure 31. A large portion of respondents (40 percent) to the one-year post-exit survey were not working at the time of the survey, and an additional 29 percent were only employed part time. Further, it should be noted that nearly 70 percent of HW enrollees did so because they wanted to get a job.

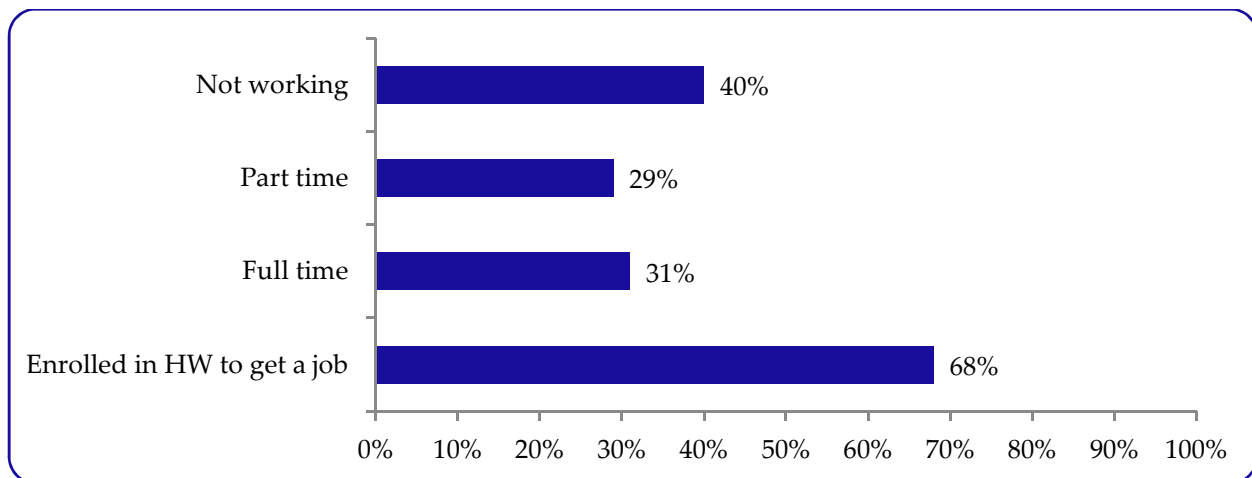


Figure 31. One-Year Post-Exit Responder Employment Dispositions

Related to this, when examining other dimensions of participant satisfaction with HW, there is a general decline from program exit to one-year post-exit. Figure 32 shows decreases in participant satisfaction in each of these areas ranging between -7 percentage points and -12 percentage points. The smallest decreases were seen on items related to accessing employment services and receiving support around those services. Items related more directly to job readiness, such as preparing for employment, getting past barriers, and meeting goals saw greater satisfaction decreases. Additionally, nearly 4 out of 10 respondents who were employed at the time of the survey felt that they could have gotten their job even without going through the program.

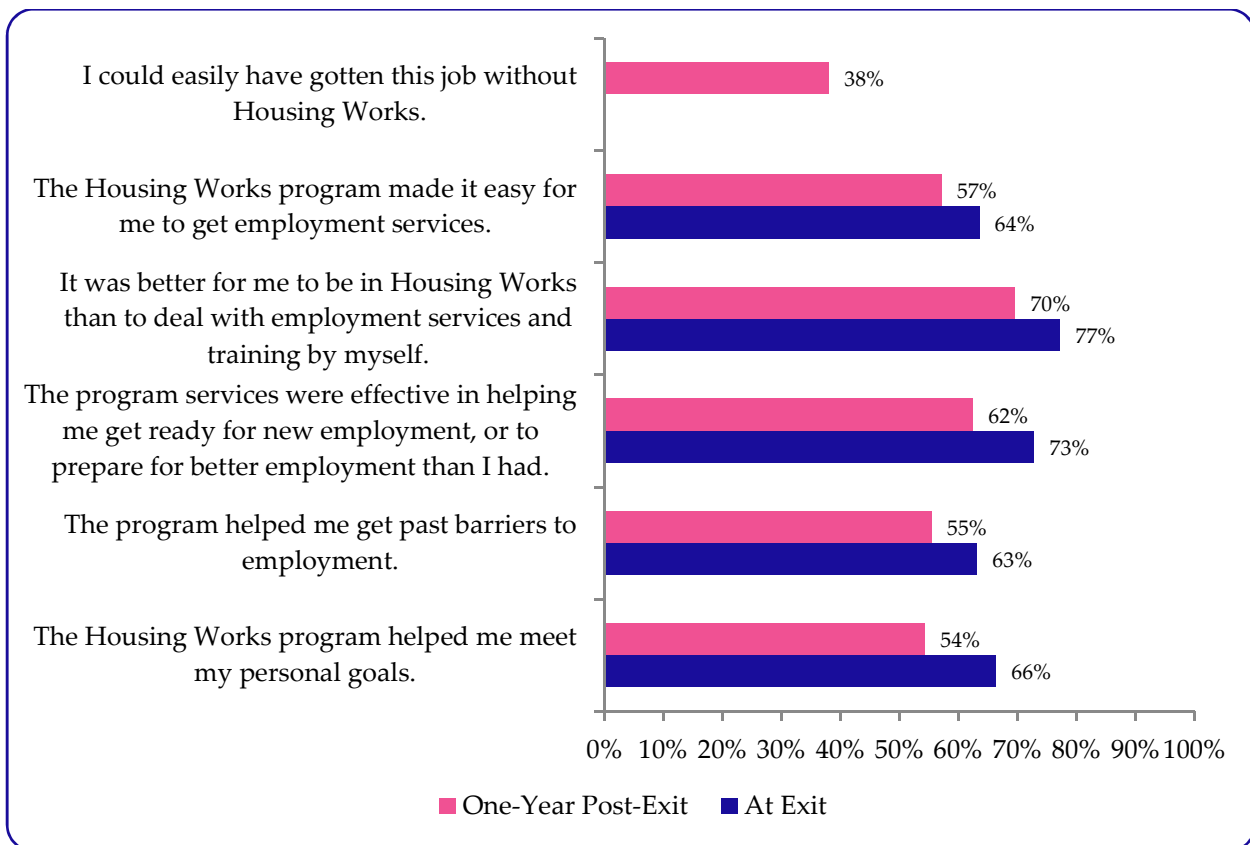


Figure 32. Participant Perceptions of the Housing Works Program

An additional program service-delivery goal was for 80 percent of participants to demonstrate a more positive perception of WorkSource products and services. This goal was not met, and overtime participants showed a trend toward a view that employment services received through the HW program over time were the same as WorkSource services (32 percent). As shown in Figure 33, at the early stage, most participants (73 percent) felt HW was somewhat or much better compared to prior experiences with WorkSource services but over time those attitudes appear to have shifted. At exit that decreased to 66 percent and at one-year post-exit it was down to 60 percent who that felt that way. This could also be related to the low level of employment among survey respondents. In spite of the shifting attitude, the most common response at any point in time was that HW was much better relative to their prior experience with WorkSource services.

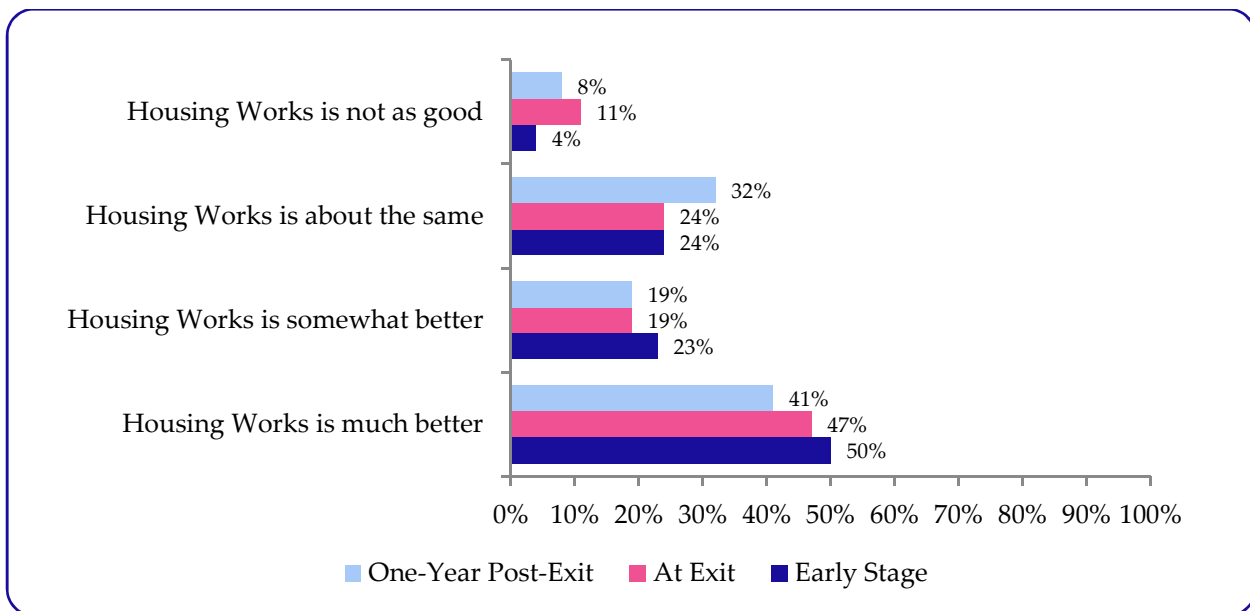


Figure 33. Participant Comparisons to Prior Use of WorkSource Services 1

The findings in this chapter address the research questions relating to systems change (also referred to as systems alignment in Housing Works [HW] documents). The chapter begins with a summary of the systems change objectives under HW, then assesses the extent to which these objectives were achieved during and after HW.

Systems Change Objectives

As discussed in the introduction section of this report, the overarching systems change objectives in the HW theory of change consisted of aligning policies and procedures, co-investing resources, and establishing a streamlined service delivery that appeared seamless to program participants.

In keeping with the HW theory of change, the systems change component of HW called on the workforce and housing systems in the Portland and Vancouver region to combine their staffing and resources to help their mutual clientele achieve self-sufficiency while bolstering the talent pipeline for employers. The model operated under the assumption that this alignment would reduce program redundancies and make services more efficient and valuable to participants, ultimately resulting in better-paid jobs that allowed participants to free themselves from dependency on government assistance.

Systems Change Evaluation Approach

The evaluation sought to identify, describe, and assess systems changes as they occurred, and to determine which features of systems change were retained after the conclusion of the grant period. During the program, the evaluation team monitored progress toward the program's overarching goals and offered ongoing feedback on the fidelity of program implementation to the HW model.

Data for the systems-change component of HW were gathered from a variety of sources. These included Worksystem, Inc.'s quarterly reports to the U.S. Department of Labor, meeting minutes, and other program-related documents; in-person and

telephone interviews conducted during and after the grant period; and roundtables and focus groups conducted during the grant period.

The following research questions addressed the systems-change components of HW:

- To what extent were workforce investment boards (WIBs), public housing authorities (PHAs), community colleges' adult basic education programs, employers, and others involved in devising and implementing HW? How did these contributions work together to support HW? Were there any gaps in the partnership?
- Did county alliances identify systemic policy and process barriers to successful collaboration (at the agency, local, state, or national levels) during the course of the program? If so, did they collaboratively develop solutions to those barriers? If not, why not?
- What systemic changes occurred:
 - Across the PHAs?
 - Across the WIBs?
 - Between the PHAs and WIBs?
 - How were any such changes achieved?
- How did PHAs leverage other resources to implement HW? What effect did those resources have on the success of the program? Did the effect vary by type of funding stream?
- How will HW be sustained after the conclusion of the grant period? In particular:
 - What aspects of the model did and did not survive beyond the grant period and why? To what extent did WIBs and PHAs continue to fund HW activities? How did these differ by county?

“What we have learned is that relationships are really important. We need to understand each other’s systems, and we need to have open channels of communication. Systemwise, we will continue to face certain challenges because we have certain requirements. And we can definitely work [to figure out] what can be removed, what is integrated in the system, and what can be changed, and then learn how to work with [what] cannot be changed.”

– PHA Program Manager

Finding: Collaborative Structure Are Key to Success

At the core of the HW model was a collaborative structure that developed and strengthened links between the workforce and housing systems with the goal of benefiting their mutual participants. Throughout the program, this structure was considered highly effective and a key factor in the overall success of the HW model. However, the partners encountered important barriers to collaboration in the area of employer engagement and job development.

Evidence

The strength of the HW collaborative, particularly from a leadership and management perspective, was a consistent theme in partner interviews throughout the grant period. This engagement included WIBs, PHAs, education and training providers, and most frontline staff. Although there were challenges in staff turnover, employer engagement, and job development, the partnership remained consistently functional, focused, and productive.

WSI Leadership

A key component of the HW partnership was the leadership by WSI. In site visits, interviews, and roundtables from the beginning to the end of the program, the WSI staff received nearly universal praise for their skilled program management, their accessibility, and their timely and succinct communications. WSI's central presence and guidance helped to ensure consistency in the implementation of the HW model across the partnership.

WorkSource Liaisons

The WorkSource liaisons also received high praise throughout the grant period. The liaisons were well regarded for their availability and expertise, and they acted effectively to connect WorkSource agencies with the PHAs. They met regularly with vocational case managers (VCMs) to address participant issues and were a key presence at county alliance meetings and quarterly implementation meetings. In a key testimony to their value, WorkSource liaison positions have continued beyond the HW grant period, as will be discussed later in this chapter.

Partner Engagement Mechanisms

Partner engagement was maintained through a formal communications apparatus consisting of meetings involving every level of staff involved in the grant. This

structure was designed to ensure a strong organizational commitment by the partners, from leadership to frontline staff, and was credited with maintaining a strong HW partnership throughout the grant period. Formal mechanisms for partner engagement included the following:

- **Regional Alliance.** Under the Regional Alliance, the leadership of WSI, the WIBs, and the PHAs came together on a semiannual basis to discuss overall strategy, systems alignment, policy implications, and the development of resources for leveraging and sustaining program features. Throughout the grant period, Regional Alliance meetings saw good attendance and active participation. Interviewees praised the meetings as a valuable opportunity to facilitate cross-agency collaboration and the forward movement of the HW initiative.
- **County alliances.** At the county level, key implementation staff, such as WorkSource liaisons, PHA program managers, VCMs, and other county-level partners (e.g., community colleges) assembled in monthly or biweekly meetings to address specific program issues and resolve problems with individual participants. In a departure from original plans, the WIB staff acted as proxies for employers, a logical choice given that employer schedules would not have permitted frequent participation in such meetings. Interviewees reported many instances where the county alliance meetings were used to clear away roadblocks to success for individual HW participants, and overall satisfaction with the meetings was very high. Throughout this process, implementation staff at the partner agencies improved their knowledge of other sectors (e.g., their funding requirements and how their missions drive their procedures). This knowledge was very important for avoiding or removing barriers.
- **Quarterly implementation meetings.** Program managers and frontline staff from all four WIBs and all three PHAs came together for quarterly implementation meetings to share information on challenges, solutions, and best practices. The implementation meetings were not an original part of the HW model; they were added because the partners recognized the need for an additional level of communication where detailed information about program management and implementation could be shared across the counties. The sharing of information across staff members who had the same role but served in other locations or agencies was an invaluable source of information, clarity, and perspective.

“[The county alliance meetings are] a really, really smart way to connect a bunch of people who are working in concert to support customers.”

– WIB Executive

“Our partners with HW were so good, [our staff turnover] didn’t really slow down the program.”

– WIB Executive

Over the course of the program, the strength of the HW partnership was tested by ongoing staff turnover at virtually every level—from executive leadership to program managers, trainers, and frontline staff. In most cases, the affected organizations moved very

quickly to fill the vacant positions. As the program drew to a close, interviewees agreed that, remarkably, staff turnover had not significantly impaired the productivity of HW. In one PHA where VCM turnover had been a significant problem in the early stages of the program, staffing levels improved to the extent that focus group participants at that PHA expressed great satisfaction with their VCMs.

Collaborating for Delivery of Support Services

A key challenge for agencies and participants alike was the need to make the best use of limited support-service dollars to help participants overcome barriers and complete their programs. The funds were utilized for transportation, child care, textbooks, and other costs that participants needed to incur in order to carry out their training. To leverage their support-service dollars, the partners developed productive connections with various outside agencies. Several examples are provided below.

- In addition to being an important source of potential HW recruits, Family Self-Sufficiency (FSS) programming provided access to education and asset development for participants in two HW counties. As a result of this partnership, HW participants were able to benefit from FSS resources as well as FSS case managers whose relationships with the participants continued after the end of the HW grant period.
- The partners in one county learned that both the local Department of Human Services (DHS) and HW offered transportation supports; as a result, the DHS transportation dollars were freed for other uses. The connection with DHS was also of great importance for providing HW participants with access to additional child care and transportation supports (in cases when HW paid for other costs).
- The VCMs at one PHA referred participants to Dress for Success, a nonprofit that provides professional clothing to disadvantaged women.
- One PHA worked with local food banks to provide food assistance to HW participants by allowing its VCMs to pick up food for participants whose work or training schedules prevented their picking it up on their own.

Employers

Employer engagement was an ongoing challenge that the partners worked diligently to address. A key issue in employer engagement was the need to recruit employers who would commit to hire WorkSource clients—a difficult task given the region’s competitive job market and the employment barriers faced by many clients. Ultimately, it was hoped that employers would view WorkSource as a key resource and provider of talent. To coordinate the response to this issue, WSI created an employer engagement plan with guidelines for recruiting employers. The plan included goals, processes, and timelines for employer engagement in internships, OJT, and hiring; Career Link content development and participation; industry panels; and county alliances. As noted above, early HW plans called for including employers in county alliance meetings, but in practice, the WIBs acted as proxies for employers due to the time commitment required for these meetings. The Columbia-Willamette Workforce Collaborative (CWWC), which encompasses the three WIBs of the Portland-Vancouver metropolitan area and predates the HW initiative, was charged with assembling industry panels representing

“Having that extra support of the [VCM], I really think that is key to the success [of HW].

So people don’t just feel like it’s one person referring them; they’ve got a whole team in their corner that are rooting for them.”

– PHA Program Manager

the manufacturing, health care, office, and construction sectors. Although the manufacturing panels formed relatively quickly, extra effort was required for engaging the remaining industries. Delays in employer engagement contributed to complications in job development (discussed further below under “Frontline Staff”) and, ultimately, to loss of momentum among affected participants. Once engaged, however, most employers were satisfied with the performance of the new hires, according to employer surveys conducted by the evaluation team.

Frontline Staff

In most cases across the partnership, the high level of organization and strong leadership of the HW initiative transmitted very well from leadership to frontline staff. In particular, the VCMs generally received high praise from program leaders and participants alike. They were instrumental in helping participants to overcome work-readiness barriers, obtain training for in-demand careers, navigate the WorkSource system, search for work experiences

“All I really [do] is advocate for my client against the WorkSource system. [It] was just not at all what I thought it would be. I thought it was going to be this partnership where we were talking together and working together.”

– Vocational Case Manager

and hiring opportunities, and obtain jobs. Where problems with VCMs were reported, these were generally related to turnover of VCM positions rather than to intrinsic qualities of the VCM role or the individual VCMs.

In two counties, interviewees reported important disconnects between VCMs, WorkSource, and an agency contracted to conduct job development for the placement of HW participants, resulting in deep frustration for staff and for participants who were hoping for new work experiences or jobs. The HW leaders took several actions to address this issue, including staffing changes at the job development agency, increased frontline staff involvement at county alliance meetings, and increased online communications between VCMs and agency staff. In addition, VCMs in the affected counties attempted to fill the job development gap by working directly with employer contacts to help their participants find jobs—a departure from their envisioned scope of work. After the HW grant ended, the partners continued to refer participants to this job development agency. Interviewees reported that the interaction overall had greatly improved since the end of the grant. They attributed this change to the smaller number of post-HW participants, support from FSS coordinators who shared the same clientele, improvements in customer service among job development staff, and better understanding of one another’s systems as a result of working together over time.

The HW placement experience also highlighted the need to establish a placement system at WorkSource centers to better serve job seekers and employers. In April 2014, the WorkSource centers established the Talent Link process, which guides clients through a job-readiness validation and then enters them into a pool of high-priority job seekers. The WorkSource center’s job search navigators and regional business team work individually with them to conduct a personalized search for job and interview openings. As of early 2016, one WorkSource center had an average success rate of 75 percent in placing job seekers within 90 days.

Finding: The Regional Alliance Benefited From—and Supported—Other Collaborative Organizations

The HW collaborative was supported by—and, in turn, helped to strengthen—the Aligned Partner Network (APN) and the Columbia-Willamette Workforce Collaborative.

Evidence 1

The Aligned Partner Network encompasses two of the four HW counties and predates the HW initiative by several years. Like HW, the APN was designed to help move individuals with significant employment barriers toward career-track jobs by breaking down silos and coordinating the resources and expertise of the agencies that serve them. Through the APN, WorkSource offers training and job-placement services, while an array of community and agency partners (including the HW partners in the two counties as well as various other agencies) offer case management, support services, career mapping, and resource planning. For both the APN and HW, relationship-based case management was a particularly important feature, designed to provide participants with the moral and logistical support they needed to become financially self-sufficient. The WorkSource liaison was another key feature, helping to bridge the WorkSource system with the other partner agencies.

Together with the CWWC, which brought together the region's three WIBs, the APN provided an important impetus for the intensive partner engagement that took place under HW. Over the course of the HW program, interviewees stated that the regular connections and strategic thinking of the Regional Alliance helped to reinforce the strength and momentum of the APN and CWWC. A few examples of regional collaborative work that emerged at the close of HW are described below.

- The Department of Human Services office in one county joined the APN in 2015, thanks in large part to communications initiated under HW in connection with DHS participants who

"[The APN coordinator is] providing additional training for our career coach, because we still have a dedicated person who works with the liaison and our clients to make that connection easier from [PHA]'s side. So she has been inviting even our FSS coordinators . . . to come in and attend some of these trainings, with the idea that we'd better understand each other's systems. We support [their] clients because at the end of the day they are our mutual clients from both sides."

– PHA Program Manager

"[DHS' cooperation] has helped their performance numbers at the state level . . . We've given them the ammunition they needed to show their system can work too . . . the partnership is benefiting both sides."

– Vocational Case Manager

were participating in HW. The partners are optimistic that this connection will continue to develop and that they will discover new ways of working together to benefit the common customers of DHS and the HW partner agencies.

- The Oregon Employment Department (OED) has discussed the possibility of developing an onboarding training to educate all new WorkSource staff about the structure and function of the APN, as well as how to interact with network members. OED management currently attends the APN system meetings to stay updated and to share information with their staff.
- The region's WIBs have worked to expand the focus of the CWWC to include housing. Together with PHAs and other partners, they have formed a subcommittee that is developing a formal regional plan with strategies for economic development, workforce development, and housing.

Finding: Many Elements of the Model Have Been Sustained, Including Fund Allocations

"The local WorkSource office and [WIB] have been really open to suggestions and feedback post-Housing Works . . . We're definitely looking at this relationship as a work in progress. We're sharing with each other, we're open to feedback from our partners . . . and now that we have enough experience 1 working with each other, we are able to look at our systems and 1 try to figure out what do we adjust to make this easier for our mutual participants."

– PHA Program Manager 1

When the HW grant period drew to a close, many program elements were eliminated. However, in a fulfillment of the original assumptions of the HW model—and a testimony to its success—many elements of the HW model have been sustained. This includes important funding commitments by the partners, albeit generally at a smaller scope and scale. The partner agencies also pledged to continue working together to seek new grant funding, and in several cases these efforts have borne fruit.

Evidence 1

Sustainability of Partner Engagement Mechanisms

The Regional Alliance has continued in existence theoretically; however, no meetings have been conducted or scheduled since April 2016, mainly due to staff transitions at WSI. In

spite of this, WSI has been a highly visible and communicative presence among the former HW partners. The PHAs in all four HW counties have voiced an expectation and hope that the Regional Alliance will continue, and WSI has called a meeting for the beginning of April to review the evaluation results prior to the final presentation.

County alliance meetings and quarterly implementation meetings were discontinued at the end of the HW grant period. This was expected, given that the focus of these meetings was on carrying out the work under the HW grant. However, two counties have carried forward a meeting structure similar to that of the county alliance under new projects.

As of the third program year, all four counties had pledged to sign county-level memoranda of understanding (MOUs) with commitments to the sustainability of program elements. In the end, two counties signed MOUs and two entered into contracts that dedicated funding to support the continued working relationships. Two have invested in the WorkSource liaison position, one has an informally dedicated staff person who had been a WorkSource liaison for a short time after the program, and one has received a grant for a project similar to HW that calls for a close and ongoing PHA-WIB relationship.

County-Level Sustainability

Partners in each of the four counties have taken many concrete actions to sustain elements of HW at the county level. These are summarized in Table 2, which is followed by detailed descriptions of activities in each county.

Table 2: HW Elements Sustained as of Early 2017

Elements	County A	County B	County C	County D
County partnership agreements	Aligned Partner Network contract	County MOU	County MOU	Aligned Partner Network contract
Regional Alliance	Postponed	Postponed	Postponed	Postponed
County alliances	Discontinued	Discontinued	Discontinued	Discontinued
Quarterly implementation meetings	Discontinued	Discontinued	Discontinued	Discontinued
WorkSource liaison position	Funding allocated for staff position	Worksource staff person assigned temporarily	Funding allocated for staff position	Continued relationship via post-HW grant
New grants involving former HW partners	Yes	Yes	No	Yes
Funding and/or staff allocated for partnership programs	Yes	Yes	Yes	Yes

Detailed descriptions of sustainability activities by county are provided below. 1

County A

- Thanks to their continuing membership in the APN, the partners entered into a contract in which the county PHA and WIB agreed to jointly fund the staff time for a WorkSource liaison who continues to bridge PHA staff and participants with the services and resources of the WorkSource system. As of early 2017, the WorkSource liaison was the same individual who had served in this capacity under HW. WIOA training funds were also set aside in each of the WorkSource centers for APN member clients to access training.
- The PHA in this county co-enrolled most of its HW participants in a Family Self-Sufficiency program that provided support services as well as access to education,

“We’ve been working with the same liaison who [worked] with us through the last phase of HW, and that’s been helping a lot because he connected with us and he understood enough about [the PHA] and our residents and our participants to know who we are, where we stand . . . the challenges we face and the clients we serve.”

– PHA Program Manager

training, asset development, and homeownership opportunities. As a result, participants who were still unemployed or underemployed at the end of the HW grant could continue to receive support from FSS. After HW ended, the partners built the capacity of the FSS coordinators to continue this work by providing them with training to work with the WorkSource liaison and refer participants to the WorkSource system.

- The county PHA allocated \$125,000 in rent assistance funds in 2015 and in 2016 to support participants in the WIB's Economic Opportunity Program, which provides low-income county residents with career coaching, support services, and training (in a model similar to Housing Works) to help them achieve career-track employment goals. These funds supported engaged participants in their career-track goals and helped participants avoid homelessness or become housed while they were in the program. In 2016, this funding was matched by an additional \$350,000 in rent assistance funding for Economic Opportunity Program participants from two other local government agencies as part of the city and county's efforts to address the homelessness crisis. The funding is supported by an MOU between the PHA and WIB that commits rent assistance funding through June 2018.
- The PHA is considering the development of other grant-funded pilot projects in which it could leverage its own funds with WorkSource training and internship opportunities. The PHA is particularly interested in developing more solutions to help participants who are struggling to retain employment over the long term while coping with the "benefits cliff" — the loss of public subsidies after getting better-paid jobs.

County B

- The partners signed a county-level MOU that pledged to maintain the county's HW partnerships and communications in general, and to seek out future projects together. The MOU also committed to continue allowing the partners to access several I-Trac functions that bridge the WIB and the PHA. Both of 1 these commitments continued to be active as of early 2017, and interviewees felt that the partnership had continued to strengthen after HW as a result of the various grants and 1 other agreements that had been put in place. 1

*"There's more of a bridge
between us and the [WIB] than
there was before, so it's much
easier for them to reach out to
us and us to them [after] 1
Housing Works."
– PHA Program Manager 1*

- The county received a Community Development Block Grant to cover the cost of intensive case management for two years post-HW, for customers who were active in HW at the end of the program but were unemployed or underemployed.
- The county worked with the Oregon Employment Department to bring a WorkSource staff member to the PHA once a week to connect PHA participants with WorkSource services. This arrangement worked well for several months, but the staff person was returned to WorkSource because the scope of work was morphing into case management, a more intensive form of engagement than WorkSource had intended. However, because of the relationships that had been developed during the stay at the PHA, this staff person has continued to be the PHA's primary contact for referring its participants to WorkSource for training and other services.
- The county's WIB had committed to serve 20 PHA residents per year after the end of the HW grant. Interviewees reported in early 2017 that this was occurring as promised.
- The county's PHA contributed \$200,000 in short-term rental assistance vouchers for customers of Reboot Northwest, a WIB-led program that used federal Ready to Work funds and HW's Career Link model to provide training to veterans and long-term unemployed individuals for IT (information technology) and advanced manufacturing careers. As of early 2017, nearly all of the vouchers had been used, with the program slated to end in summer 2017.

County C

- The partners signed a county-level MOU that made specific staffing commitments, including a funding allocation to retain a WorkSource liaison position, with time allocated for serving as a primary point of contact for PHA staff and customers as well as support of organizational partnership activities. The PHA also dedicated case management staff time for Workforce Innovation and Opportunity Act-funded programming, as well as space for a WorkSource staff member at a new community center that is in the process of being developed.
- Although the partners have discontinued county alliance and quarterly implementation meetings, the PHA and Worksource liaison have continued to meet on at least a monthly basis to ensure the smooth implementation of the MOU. Once the work under the MOU becomes more routine, they expect these meetings to occur less frequently—e.g., on a quarterly basis.
- Under the MOU, the WIB also dedicated other resources and services that benefit the staff and clientele of its partners. These include the support of WIB professional development training and technical assistance for WorkSource and PHA partners,

WorkSource career coaching, workshops, and education programs for PHA participants. For example, the WIB supported the development of a new construction certificate program at a local community college, and the PHA has referred many of its participants to this program. Some of the WIB's programs are being carried out in-house at the PHA, which greatly benefits PHA participants because the nearest WorkSource office is relatively far from the PHA.

- The MOU called for the installation of a touchscreen kiosk at the PHA with information about WorkSource and its available resources. Due to space concerns at the PHA, the kiosk had not been installed at the time of data gathering for the final report; however, the PHA was raising funds for a new resource center that will have sufficient space, slated for construction in 2018.
- The MOU also called for the establishment of space on site at the PHA for a WorkSource staff member. At the time of reporting, this individual was on site at the PHA, providing case management services and workshops to the mutual clientele of WorkSource and the PHA. Due to the aforementioned space limitations at the PHA, the capacity for workshops was limited, but this problem was expected to be solved by the construction of the new resource center.
- The PHA and WIB collaborated on the creation of a program designed to connect low-income youth aged 18-24 with training for careers in construction and manufacturing. At the time of reporting, the WIB had issued a request for proposals to develop the training program, and the PHA had committed to refer candidates for the program from its clientele. The relationships developed under HW were credited as a catalyst for this program and partnership.

County D

- This county entered into a contract with the WIB that funds a VCM and support services at the PHA through a five-year federal Health Profession Opportunity Grant. The local program administered through this grant is called Health Careers Northwest (HCNW). The program resembles HW in that it provides case management and support services to participants who are preparing for careers in health care. The participants include several PHA residents who achieved basic credentials through HW (e.g., Certified Nursing Assistant licenses) and wanted to obtain more advanced credentials. As a result of HCNW, the PHA has been in regular contact with the WIB and has carried on with a meeting structure very similar to that of the former county alliance. As with HW, these meetings involve the VCM and WorkSource liaison (both of whom are the same individuals who carried out their respective functions under HW) as well as DHS supervisors and case managers, FSS case managers, and WIB staff. Unlike HW, HCNW is focused

exclusively on health careers, and its program participants were selected by lottery. Through HW, the VCM began to be located part time with a designated desk at the local WorkSource center, and this has continued with the HCNW grant.

Cost Analysis

This chapter provides input into one of the program's four overarching goals: To increase the efficiency of the region's workforce investment boards (WIBs) and public housing authorities (PHAs) by co-investing resources in the PHA-resident population with the shared goal of eliminating program redundancies and increasing resident employment.

The research questions regarding cost are focused in large part on efficiency issues, such as redundancy of service delivery; leveraging of other resources; system costs relative to successful outcomes; and reductions in PHA subsidy for participants. Research questions addressed in the cost chapter include:

- Were the systemic and service enhancements of Housing Works (HW) a cost-effective model for increasing the participants' abilities to obtain long-term employment? Specifically:
 - What program redundancies were identified, and which were eliminated?
 - What other key factors contributed to increased cost efficiency?
 - Did cost per successful outcome decline for WIBs?
 - Did cost per successful outcome decline for PHAs?
- Did participants begin contributing more to their rent over time, resulting in cost savings/subsidy reduction for PHAs? If so:
 - How did PHAs use the saved costs?
 - How did Moving-To-Work status affect the re-programming of saved costs?
- Did the participants' need for housing assistance (or other types of assistance) decrease?

The analysis looks at system-level costs and benefits rather than individual-level costs and benefits. The key costs are those incurred by the workforce system and the public housing system. Primary benefits are the savings anticipated by the systems, deemed important for the potential to apply the savings to reach additional clients. The unit of analysis for the systems costs and the subsidy assessments are dollars, and the data sources include wage record data and administrative data from all partners. The analyses for the issues of redundancies and leveraging are qualitative, derived primarily from stakeholder interviews and observation.

Program Redundancies and Efficiencies

The co-investment and alignment of resources for the benefit of the PHA-resident population was intended to decrease redundancy and increase the efficiency of the WIB and PHA service-delivery systems. Facets of system efficiencies of interest were:

- Process by which redundancies were identified
- Extent to which redundancies were identified
- Nature of changes enacted, including additional resources leveraged
- Perceived effect of changes enacted

In this study, “redundancy” means the provision of a service by multiple agencies that results in total capacity in excess of the need for the service. Where redundancies were identified and eliminated, that suggests a tangible benefit for the systems engaged in delivery of the program. Where redundancies had been identified but not eliminated, there lies the opportunity for additional savings. Often, redundancies mean participants face unnecessary complication or confusion, so elimination of redundancies can directly benefit them, too. The effect is, however, beyond the scope of this study.

Finding: The HW Partnership Was Highly Effective in Leveraging Resources to Increase Efficiency or Provide Additional Support to Participants

As discussed in the Systems Change chapter, the HW partners used the HW communication structures to great effect. The process by which redundancies were identified occurred within this structure. Interactions and sharing of information occurred at multiple levels across HW partners (i.e., leadership, management, and frontline levels), with non-HW partners, and even within the partner agencies. Partners identified a number of opportunities to increase efficiency, particularly in the areas of leveraging in-house and outside resources. These opportunities and the nature of the changes enacted are highlighted below.

The cost-efficiency goal is deeply connected to objectives to utilize data for ongoing process improvements and to understand the sustainability and replicability of the program. The program team used data from both the evaluation and HW internal communication debriefings to identify policy and process improvements. These

changes affected operations, enhanced opportunities for participants, and created impetus for sustaining both the collaboration and many program elements post-grant.

Evidence

As highlighted in the Systems Change chapter, partners found opportunities to **leverage in-house resources** to create efficiencies for their programs and enhance opportunities for participants.

- For the PHAs that had FSS programming, the VCMs developed close working relationships with FSS case managers and were able to conduct combined quarterly case reviews. FSS and HW programs were also cross-promoted to residents and resources were coordinated for maximum impact for the participant.

Similarly, the program staff members were able to **leverage outside resources** to good effect for their participants.

- Support services such as child care and transportation—which can facilitate access to occupational training opportunities—were particularly salient. In one county, coordination with the local Department of Human Services (DHS) resulted in DHS providing additional services to HW participants, and in the same county, DHS dollars were freed for other uses when HW could cover the support services instead.
- In one county the PHA referred participants to outside support-service providers such as Dress for Success, a nonprofit that provides professional clothing to disadvantaged women. Another example was coordination with local food banks to provide food assistance to HW participants.

Eligibility determination and registration were redundant processes for customers accessing multiple programs at various agencies—e.g., Oregon DHS and WorkSource—since each agency requires its own enrollment. Stakeholders suggested that both the WIB and PHA systems were “risk-averse” to an extent that universal intake would not be feasible. This issue is not unique to these systems; governmental and human service organizations are frequently constrained by funding and regulatory requirements that make it difficult to accept any alternative to direct verification of information for their own system.

Nonetheless, some leveraging and deduplication was crafted to smooth entry into the program. For example:

- One PHA arranged for its WorkSource registration, HW orientation, and readiness interviews to take place on the same day rather than in sequence, which early participants had decried as burdensome. Another county created a similar efficiency by holding HW readiness interviews at WorkSource so that participants could register for WorkSource services on the same day.
- Efficiencies were created with an eventual shift to a cohort approach to enrollment and training; however, this had to be balanced with labor-intensive tailoring of participant plans.

In contrast to enrollment processes, stakeholders felt that there were **few redundancies in services or supports** across PHAs and WIBs.

- However, some program participants signaled that there was wearying redundancy between HW career preparation components (e.g., in occupational coaching, career mapping, and Career Link) and their prior experience in WorkSource services, or in Family Self-Sufficiency programming in the PHA. Staff did attempt to make program requirements more palatable, and for participants who have had pre-grant job-preparation workshops, the extent to which this was resolved is unclear.

At the level of **engagement with employers**, efforts were made in two counties to reduce duplicate contact with employers by contracting with an agency that acted as a clearinghouse for placements. This was a common infrastructure to reach out to employers rather than an HW-specific product.

- Despite this, VCMs were pressed into an active role in job development due to difficulties in securing placement through the job development agency. The partners engaged in deep work late in the program to resolve this redundancy as of late 2015. In the early months of 2017, partners were still working with this agency and reported improving results.

As noted in the Systems Change chapter, the partners made extensive and successful efforts to leverage their collaborative experience to apply for and win other grant opportunities and create broader engagement strategies.

- One example is A Home for Everyone, an initiative that seeks to address homelessness in County A. In this, a PHA is providing short-term rental vouchers

to its local WIB for distribution to individuals who are homeless or on the verge of homelessness who are participating in the Economic Opportunity Program. The initial \$125,000 in rent assistance funding that the PHA invested has now reached a total of \$475,000 in rent assistance funding through investments from two other local government entities.

Cost-Allocation Findings

The cost-allocation analysis focuses on the *average program cost per participant*. The methodology used for data collection and calculations are defined in the Appendix C.

Calculations for Cost Allocation

Average cost per participant:

Total Housing Works program costs / # of participants

Average cost per participant by PHA:

Total Housing Works program costs for PHA / # of participants in PHA

Average cost per participant by WIB:

Total Housing Works program costs for WIB / # of participants in WIB

Finding: HW Matched the Expected Pattern of Higher Costs for Training and Lower Costs for Housing Subsidies

Over the course of the HW program, WIBs spent more for HW participants than on their typical customers, while PHAs spent less. The PHA costs would have been incurred regardless of the HW program, but the WIB costs occurred mainly as a result of the HW program. The observed costs incurred matched the pattern of expenditures that the HW program was expected to produce: more cost to train participants for employment, but a reduction in costs spent on housing subsidies.

Evidence

The average monthly cost per HW participant for the PHAs was less than the average monthly cost for the typical customer in each county (Table 3).

Table 3: Average Cost Per Person by PHA

PHA	Number of HW Participants	Average Cost per Participant over Entire HW Program	Average Monthly Cost per HW Participant	Typical Cost per Non-HW Person*
PHA A	292	\$17,130.00	\$407.86 for 42 months	\$586.07 (in 2013)
PHA B	67	\$12,548.87	\$348.58 for 36 months	\$633.00 (in 2012)
PHA C	145	\$16,133.98	\$384.14 for 42 months	\$518.27 (in 2011)
PHA D	90	\$21,791.86	\$518.85 for 42 months	\$614.84 (in May 2012)
Total	594	\$17,076.45	\$406.58 for 42 months	\$588.05

* The typical cost was an attempt to measure cost prior to the start of the HW program.

The average monthly cost per HW participant for the WIBs was more than the average monthly cost for the typical customer in each county (Table 4).

Table 4: Average Cost Per Person by WIB

WIB	Number of HW Participants	Average Cost per Participant over entire HW Program	Average Monthly Cost per HW Participant	Typical Cost per Non-HW Person*
WIB 1	67	\$8,184.51	\$227.35 for 36 months	\$205.30 (in 2011)
WIB 2	145	\$8,338.20	\$198.53 for 42 months	\$2,139.95 (in 2011)
WIB 3	382	\$12,903.09	\$307.22 for 42 months	\$185.61 (in 2011)
Total	594	\$11,256.53	\$268.01 for 42 months	\$843.62

* The typical cost was an attempt to measure cost prior to the start of the HW program and represents customers who were WIA enrolled. WIB 2 calculation is the total WIA Adult and Dislocated Worker field expenses (not grants) divided by total number of WIA Adult and Dislocated Worker enrollments. WIB 1 calculation is the total dollars spent for all field costs (includes WIA and grants) for FY 2011 divided by the total number of WIA Adult and Dislocated Worker enrollments. WIB 3 calculation is the total dollars spent for all field costs (includes WIA and grants) for FY 2011 divided by the total number of WIA-enrolled clients (adult, dislocated worker, and youth). For WIB 2, the typical costs are higher because Washington State does not currently offer universal enrollment, i.e., individuals are screened prior to becoming enrolled. In Oregon, in contrast, individuals are automatically co-enrolled in WIA and Wagner-Peyser. Not all of these customers received funding or intensive services. WIA 1B-funded staff in the centers are not allowed to provide case management services, and usually provide much lighter-

touch services than a VCM is able to provide. Center staff also provide services over a much shorter period of time, often only serving someone on a one-time basis. Also, only a small portion of WIA enrolled customers receive training funding. In WIB 3 for example, of the 56,559 who were WIA enrolled in 2011, 2,630 received occupational skill trainings including internships and on-the-job training.

Finding: The Net Public Investment for Participants Was Less Than the Comparison Group Over the Course of the Program

Net public investment is simply the governmental funds spent; in this case, that includes workforce costs and housing subsidies. Other public benefits—such as TANF, SNAP, and SSI—could not be included in the analysis of public investment because a full accounting of this data was lacking. It was postulated the net public investment for participants will be lower than for the comparison group.

Exploratory Hypothesis: The net public investment for participants will be lower than for members of the comparison group.

- **Result:** Confirmed

Evidence

The average cost combined for WIBs and PHAs was a total of \$28,333.01 for each of the 594 participants enrolled across the entire 42-month HW program. This figure is also viewed as the net public investment per person since it encompasses both workforce costs and housing subsidies over the course of the HW program.

The calculated net public investment for the comparison group during this same period (n=283) was \$32,859.86 per person. This figure includes estimated WIB⁹ and PHA costs for the comparison group. The calculation includes inflation of housing costs over time, and may still be an underestimate¹⁰ depending on whether housing costs in a given year outpace national inflation as measured by the BLS.

⁹ The WIB figure is based on survey self-reported data on use of WorkSource center services.

¹⁰ Based on data available from as one PHA on typical housing costs for all years of the HW program; in some years the increase in housing costs in that region outpaced national inflation as measured by the BLS.

Cost Effectiveness Findings

A cost-effectiveness analysis compares program costs to non-monetary outcomes; in this case, whether participants were successfully employed after the HW program. If an employment record existed in the first quarter after the exit quarter in the wage record data, participants were counted as “successfully employed” for the purpose of the cost effectiveness analysis.¹¹ A successful employment is regardless of their employment status at enrollment.

Calculations for Cost Effectiveness

Total Housing Works program costs / # of participants who were successfully employed in the quarter after their exit quarter

The cost-effectiveness analysis used the same expenditure data as that collected for the cost-allocation analysis, with the same caveats (see Appendix C).

Finding: Investment in Housing Works Appears To Be Cost Effective

While the total investment of funds per participant was substantial, this analysis considers those total costs for all served relative to positive employment and earning outcomes for individuals. The positive overall outcomes suggest the HW model can be cost effective.

Evidence

Using the formula in the box above, the combined cost-effectiveness figure for WIBs and PHAs was \$47,274.74 for each successful employment outcome over the course of the HW program.¹² This equates to a monthly cost effectiveness of \$1,125.59 (or \$447.19 over-and-above the usual PHA expenditures) per successful employment outcome. A successful outcome is defined as gaining employment for those unemployed at enrollment or increasing income for those employed at enrollment.

¹¹ Limitations of wage record data are discussed in the Methodology Appendix.

¹² The program ran 42 months, and the participants’ average duration in the HW program was 12.4 months. However, it should be noted that the majority of cases were auto-exited, which means that the last 30 days in the program were not active.

The cost-effectiveness figure should be considered in light of outcomes: 46 percent of participants who were unemployed at enrollment gained employment by exit; while 53 percent of participants employed at enrollment improved their earnings through the HW program. Examination of wage record data for six months prior to enrollment and six months after successful employment showed an average six-month *increase* in earnings of \$5,023.22 for *each successful employment* outcome by HW program participants (regardless of employment status at registration). This would indicate the program was successful in increasing the employment and earning potential for participants, which is an important step towards self-sufficiency.

Factors Influencing the Cost Findings

Twenty percent of WIB expenditures for the HW program were from leveraged funds, and 82 percent of PHA expenditures were from leveraged funds. Since leveraged funding sources could be volatile year to year, this highlights the importance for partners to continue aligning services and co-investing to sustain the HW model.

There are prominent differences between the participating WIBs in the average cost of a typical customer. This is partly related to varied definitions of customers, such as when all American Job Center self-service users are enrolled in Workforce Innovation and Opportunity Act (WIOA) services versus when screening for eligibility is completed prior to enrollment.¹³ It is important to consider WIOA enrollment practices and other reasons for differences in typical costs as this may greatly influence the interpretation of the finding and accordingly the implications for future efforts or replication in other regions.

Rent Subsidy Changes

Rent subsidy changes were examined for a reduced dataset.¹⁴ PHA subsidy data were matched for households from Time 1 (November 1, 2012) to Time 2 (April 30, 2016). Households not in Time 1 were dropped from analysis since they entered the PHA after that time point and did not have data. Households missing in Time 2 are assumed to

¹³ The notes attached to Table 5 discuss these differences in typical costs.

¹⁴ Consisting of 378 participant households and 210 comparison households. The cost methodology is described in Appendix C.

have exited the PHA program and were assigned a subsidy of zero.¹⁵ In the participant group, there were 23 households who had more than one person enrolled in HW.

Finding: Average Monthly Subsidy Spending Was Reduced for the Participant Group Over the Course of the HW Program

Over all counties, the average monthly subsidy spending at Time 1 was similar between the participant and comparison groups (\$563.44 and \$586.34, respectively). At Time 2, the average monthly subsidy spending was less for participants (\$518.75) than for the comparison group (\$607.51).

Evidence

Independent t-test of means shows significant reduction of subsidy in participant group ($t = 2.4$, $p_{0.025} = 0.016$ assuming unequal variance). The mean *reduction* of subsidy in participant group was \$44.69. The comparison group saw an average *increase* in subsidy of \$21.17. It should be noted that the reduction in subsidy was notable only for two of the four PHAs, as shown in the table below.

Table 5: Change in Monthly Subsidy for Participants by PHA

PHA	Average Subsidy at Time 1	Average Subsidy at Time 2	Change in Subsidy
PHA A	\$518.26	\$437.26	-\$81.00
PHA B	\$458.68	\$456.07	-\$2.61
PHA C	\$565.97	\$524.11	-\$41.86
PHA D	\$696.40	\$690.65	-\$5.75
<i>Total</i>	\$563.44	\$518.75	-\$44.69

Finding: Reduction in Housing Subsidy Spending for Participants May Be Linked to Increased Earnings

It was postulated that earnings would influence the reduction of subsidies.

Exploratory Hypothesis 3a: The housing subsidy for participants will be lower than for members of the comparison group, due to employment earnings.

- **Result:** Confirmed

¹⁵ Examination of I-Trac data indicates they had exited the Housing Works program before Time 2.

Evidence

The participant group saw a greater increase in earnings over time (\$3,400.96) than the comparison group (\$2,835.48).¹⁶ Therefore, there appears to be a relationship between increased earnings and reduced housing subsidies.

Another factor that appeared to have an impact on subsidy level was the presumed exits from the HW program at Time 2. The number of presumed exits was greater for the participant group than the comparison group (12 percent and 6 percent, respectively). This helped to contribute larger savings to the participant group. Assuming these are true exits from the PHAs, and not simply moving to another county where their continued costs could not be tracked,¹⁷ then this would be an indicator of program success. The earnings data for this subgroup indicates that half of the 12 percent saw a substantial increase in earnings (more than \$2,000), which would support the theory that some of these people were true exits from PHAs.

Limitations of Subsidy Analysis

The results of this analysis should not be viewed as definitive of potential subsidy savings. There were a fair number of cases in both the participant and comparison groups that were missing from the analysis because the data received from PHAs were for set time points at the beginning of the HW program and at the end. Ideally, one would want to have the PHA subsidy data when the participant entered HW and when they exited, so that subsidy changes in the enrollment period after November 1, 2012 or the exit period prior to April 30, 2016 would also be captured.

A great variety of factors are brought into the calculation of subsidy for a given household by a PHA. Subsidies are recalculated on a particular schedule by each PHA and are also triggered by specific events that occur outside the schedule, such as a death in the household. Factors that influence the amount of subsidy include changes in:

- The number of people living in the household.
- Wage earnings.

¹⁶ These earnings calculations are restricted to the reduced subsidy dataset. The reader is referred to the cost methodology in Appendix C for more information on the time frame and data set.

¹⁷ One county did make notes that four participants left their jurisdiction and that two were deceased, but these cases had subsidy data at both time points. Whether participants left the jurisdiction in other counties and what impact that could have on the interpretation is unknown.

- Deaths, births, and marriages.
- Location and size of the residential unit.

For the purposes of this analysis, it is assumed that these events occur organically and are randomly distributed across groups, i.e., that no systematic differences would occur to a group aside from the intended changes in employment status. However, it should be noted that the comparison group was much less likely to be engaged in the FSS programming, which provides a buffer to increased tenant contribution to rent.

Participant Outcomes

This chapter addresses the research questions related to participant outcomes. The chapter presents findings related to effectiveness of services, attainment of performance goals, and results of hypothesis testing of participant outcomes.

Outcome Objectives

All program activities combined were intended to culminate in positive outcomes for participants related to work skills and readiness, employment, retention, and earnings. The overarching goal was for individual public housing authority (PHA) residents to experience an accelerated path to self-sufficiency through the attainment and retention of employment in high-demand occupations with pathways for advancement.

Evaluation Approach

The impact evaluation was focused on identifying the degree to which the program achieved the desired outcomes at the individual level, and how the inputs and activities influenced the ability to meet program objectives. The assessment included the effectiveness of services and whether performance targets were reached.

The research questions relevant to the analysis presented in this chapter included the following:

Effectiveness of services

- Did participants in the health care and manufacturing programs become certified?
- How did participants rate the value and effectiveness of the services they received?
- Were supervisors satisfied with work performance of interns and on-the-job training (OJT) participants?
- In what ways, if any, did participants benefit from targeted job development and placement services funded through the grant?
- In what other ways did employers and job seekers benefit from Housing Works (HW)?

- How did participant outcomes compare with previous program outcomes for the same individuals?

Impacts

- How did the outcomes for the participants differ from outcomes of the comparison group members for each of the following indicators: attaining employment, attaining employment in the targeted industry, initial earnings and earnings at 6 and 12 months, and maintaining employment for 6 and 12 months?
- For both the participant and comparison groups, how did outcomes differ by characteristics such as race; age; gender; veteran status; prior workforce attachment; educational background; and participation in a Moving-To-Work PHA?
- To what extent are outcomes for individual participants related to the mix of services and the intensity of their use? Is there a particular mix or level of use that is most predictive of positive outcomes?

Effectiveness of Services

Finding: The Program Exceeded the Target Number of People Earning Credentials

Not only were recognized credentials earned by more individuals than were planned, but the participants who earned credentials overall averaged more than one.

Evidence

According to I-Trac data, a total of 536 credentials were earned by participants, of which 309 were industry certifications. The credentials most frequently earned were:

- Industry certifications (309)
- Professional organization certificates (116)
- Professional license/certifications (66)
- Other recognized diploma, degree, or certificate (26)

A total of 308 *unique individuals* earned one or more industry-recognized credentials, averaging 1.7 credentials per person. The total number that earned one or more credentials represented 52 percent of the 594 participants. The proportion of individuals earning credentials ranged from about one-third of those enrolled in one

county, to two-thirds in another county. The total number greatly exceeded a primary outcome target of 210 individuals earning industry-recognized credentials.

Further, the key stakeholder interviews and participant focus groups indicated that a great number of participants were focused on health care credentials. This was reinforced by the training provider list, which included institutions such as:

- Care Health Solutions
- Caregiver Training Institute
- CNA Training School of Nursing, Inc.
- Mary Ann Wilson CNA Training School
- NW Nursing Assistant Certified Training
- National School of Dental Assisting
- West Coast Phlebotomy Inc.

To gauge satisfaction, telephone surveys were conducted on a rolling basis with employers who had hired a participant for an internship or OJT after the close of a placement.

Additional detail on credentials earned is provided in Appendix Table E-17.

Finding: Employers Lauded Their New Employees

Employers found value in the employees they hired through WorkSource. They were sometimes surprised at how well the hires fit into positions that were often difficult to fill with qualified candidates and that required on-the-job training.

Evidence

One of the service-delivery targets was that 80 percent of employers would be satisfied with the internships/OJT performance. Based on the following data, this target was met:

- According to employers, participants were adequately prepared to begin their jobs and had necessary basic work readiness skills (53 percent agreed and 35 percent strongly agreed).
- Participants also met standards during the training period most of the time (47 percent agreed and 39 percent strongly agreed). Almost 80 percent of employers

said that direct colleagues of the participant gave positive feedback about the 1 participant (41 percent agreed; 38 percent strongly agreed); only 11 percent 1 disagreed. 1

- Of employers with participants in OJT experiences, 12 of 15 reported that they intended to continue employment for at least six months.

Although not all positions were difficult to fill, 60 percent of employers agreed or strongly agreed that it can be difficult to find qualified applicants for those positions. The vast majority of employers reported that positions required some on-the-job training (89 percent agreed or strongly agreed).

Finding: Employers Perceptions of WorkSource Have Improved

Employer experiences as placement hosts were sufficiently positive to influence their view of WorkSource and its capacity to provide strong job candidates. They were more likely to use the service in the future, and would recommend it to other businesses.

Evidence

One of the service-delivery targets was that 80 percent of employers would be more positive about the ability of the workforce system to deliver qualified candidates. This target appears to be met based on multiple inputs:

- Responses to a direct question about changed perceptions in the value of WorkSource—due to the program—revealed a notable 53 percent improvement (25 percent changed somewhat; 28 percent changed a lot; 41 percent stayed the same), as shown in Figure 34.
- Importantly, more than 80 percent of employers believed that WorkSource can deliver strong job candidates (53 percent agreed and 31 percent strongly agreed).
- Changed perceptions of WorkSource ability to deliver candidates were also revealed in the approach to filling vacancies. While half of employers had used WorkSource regularly to fill vacancies, the vast majority (30 percent agreed; 62 percent strongly agreed) that they would consider using this program to fill vacancies in the future.

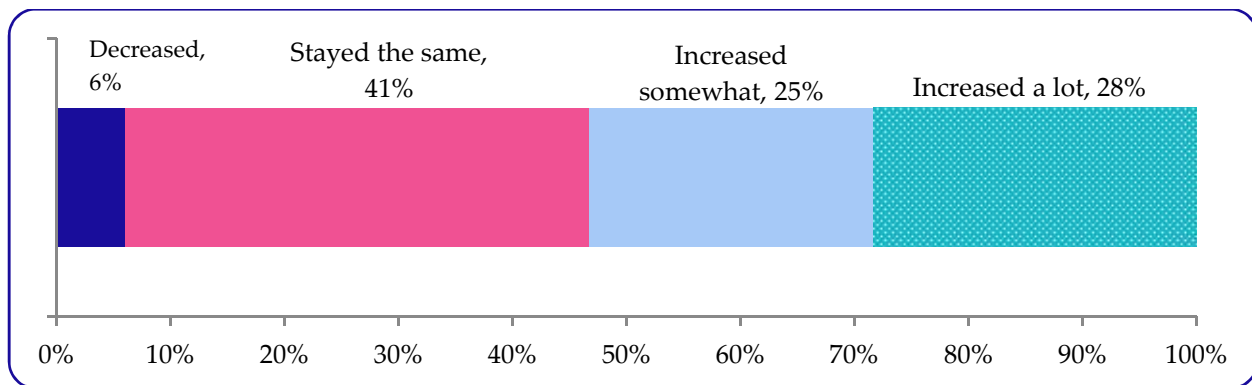


Figure 34. Change in Perception of WorkSource Value as a Result of the HW Program

The majority of employers had positive responses to every inquiry about WorkSource performance. Detailed employer results are available in Appendix F. Additional examples include the following:

- Almost all employers (94 percent) agreed or strongly agreed that they would encourage other businesses to use WorkSource.
- Over 90 percent of employers believed the WorkSource program was a worthwhile investment of the company's time and resources; 60 percent strongly agreed that it was worthwhile and 31 percent agreed.
- The majority of employers also believed that WorkSource is valuable for organizations like theirs (88 percent agreed or strongly agreed). Less than 5 percent disagreed or strongly disagreed with that statement. This was consistent across employer size and regions.

Of the 113 employers who were interviewed, 100 provided open-ended comments on the benefits of the experience for their own company, of which 98 were positive and two reflected on learning what *not* to do in hiring. The most common themes that emerged from open-ended comments were (1) the value of experiencing altruism in helping the new employees, (2) the added support and capacity brought by the new hires, and (3) the ease of the hiring process. More specifically:

- 23 noted the value of being altruistic in giving someone an opportunity such as helping someone to learn a trade or seeing the employee grow and flourish.
- 23 commented on the office support to the company or otherwise adding capacity to the business, including completing important projects that might not otherwise have been completed, and freeing up the time of other staff.

- 14 noted the benefit as making the hiring process easier, including the opportunity to test out the fit of the hire, and an additional 4 noted the financial incentive to hire.
- 10 noted the new employees were hardworking or added value, and 6 observed that the employers themselves gained insights from the experience.
- 9 provided general positive comments, and 8 noted that the effort helped to meet the needs of a nonprofit organization.

Employers also weighed in on whether they had experienced any surprises or unintended results due to the new hire. A total of 18 employers noted pleasant surprises, and 26 comments shared negative surprises that accompanied the hire. These are summarized in Table 6.

Table 6: Employers' Surprises or Unintended Results From The Hire

Positive Surprises	Negative Surprises
18 employers noted pleasant surprises	26 comments were negative surprises
• 9: good skill level and high quality of the candidate • 5: general surprise at how well the hire had worked out • 3: good fit of the person to the job	• 7: poor skill level • 7: behavioral challenges, such as not showing up for work, sudden quitting, and lack of commitment to the work • 2: lack of WorkSource support • 2: poor fit of the candidate to the job • 2: lack of experience of the hire

Finding: Occupational Training and Placement Benefited Participants in Several Ways

Occupational training, internships, and OJTs provided participants foundational support for developing job skills and gaining useful experience. Participant feedback was more nuanced in terms of how this helped with gaining other employment.

Evidence

Participants were nearly equally divided in whether the occupational training reflected an existing direction or a new path for them: among those who received occupational

training, more than half said the training built upon prior study, but about 40 percent reported it as a new direction.

More than 80 percent of those who had experienced occupational training, internships, and/or OJTs reported it as a positive experience. Specifically:

- Among those who received occupational training, 86 percent reported being satisfied or very satisfied with training (at exit and at one-year post-exit).
- Internships were cited as a positive experience by 84 percent of those engaged in those placements; and 6 of the 7 people who had had OJTs and responded to the survey said the same.

In addition to overall satisfaction, of those who had experienced occupational training, internships, and/or OJTs:

- Over 70 percent said it fit well with their career plan.
 - In addition, at one-year post-exit, 42 percent of interns said it helped them decide whether this was the right career path.

The specific benefits cited by those who had experienced internships or OJTs included:

- More than 7 in 10 said it helped them develop job skills.
- More than 7 in 10 said it helped them improve technical skills.
- At one-year post-exit, 5 of 7 participants who were placed in an OJT said it helped them improve technical skills, as did 20 of 55 participants with internships.
- More than 8 in 10 said it gave them useful experience in the field.

Those who had experienced internships gained an increased understanding of practicalities.

- For example, about one-third said it showed them the realities of the industry (35 percent) and reinforced an understanding of employer expectations (38 percent), and 42 percent said it helped them decide whether the career path was right for them.

The results were mixed in terms of the experience leading to, or increasing the likelihood of, additional employment. While virtually all the feedback in this vein was

positive, at one-year post-exit, those who had had internships were more cautious in attributing this type of benefit to their experience.

- At exit, 81 percent expected the occupational training would be useful in finding future employment; at one-year post-exit, 71 percent reported that it was useful in finding employment.
- At exit, most of those who had had OJTs said it helped them get their foot in the door (4 of 7 individuals responding).
- Most interns at program exit said the experience helped them with their job search (62 percent), about half said it helped them get another job (49 percent).
- At one-year post-exit, however, those who had had internships were much less likely to cite the experience as useful in terms of obtaining a job: one-quarter or fewer said it had helped them get their foot in the door, get a job elsewhere, or get a job at the host site.

Specific key feedback about each of these opportunities at several points in time is summarized in the charts below. Complete survey results are provided in the Appendices.

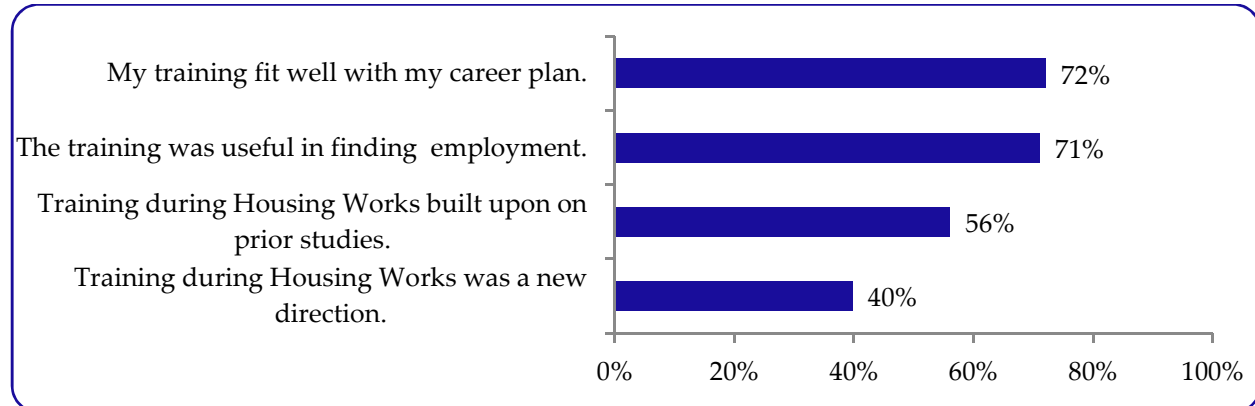


Figure 35. Participants' Perceptions of the Value of Occupational Training 1

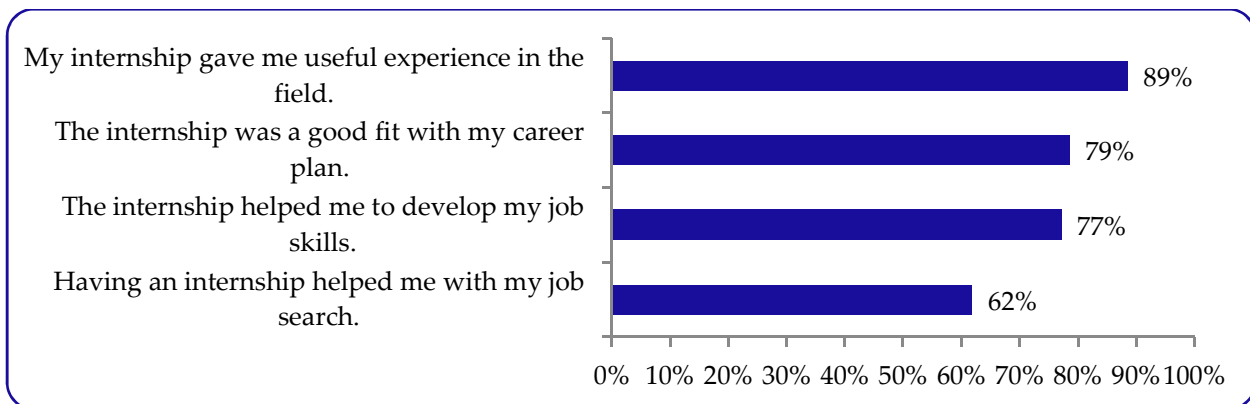


Figure 36. Participants' Perceptions of Internships at Exit 1

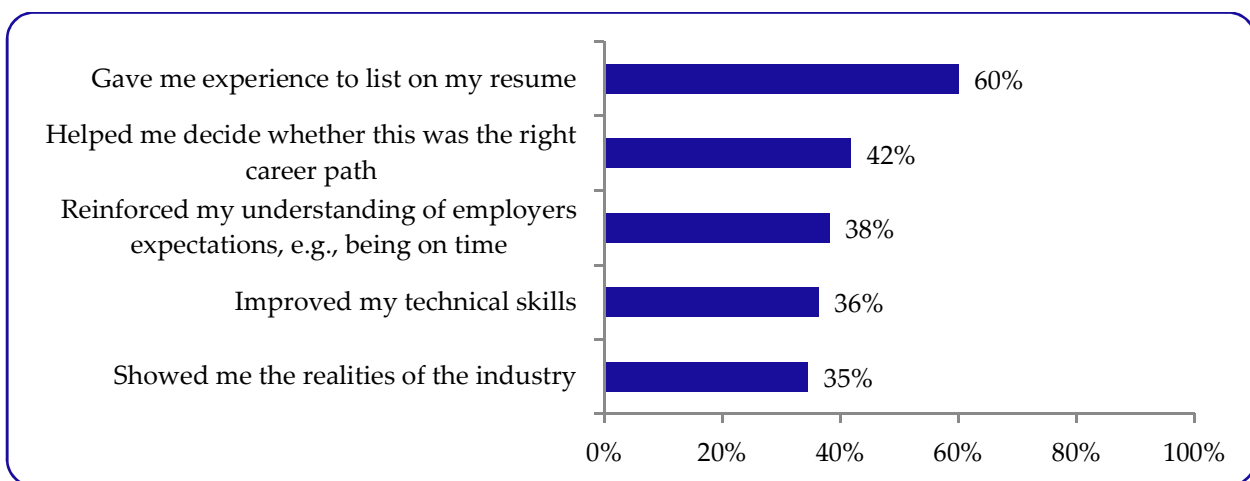


Figure 37. Participants' Reflections on Internships Benefits One-Year Post-Exit 1

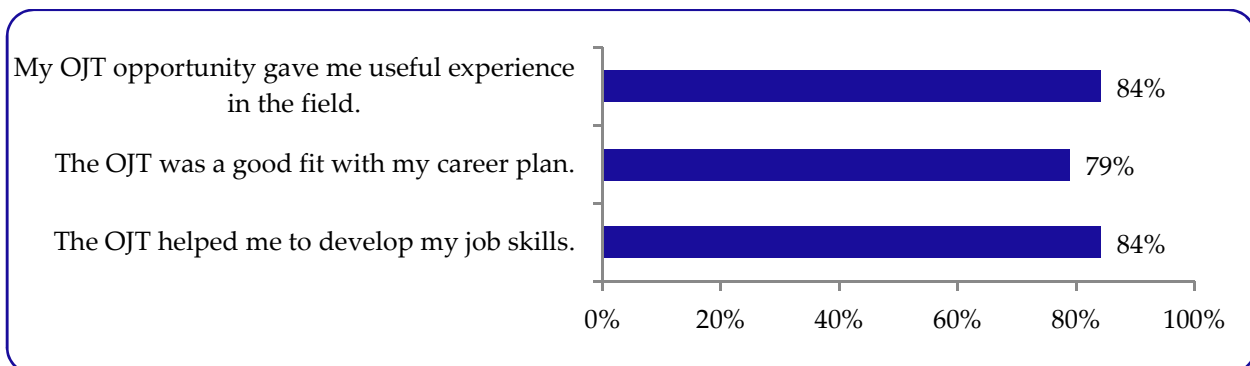


Figure 38. Participants' Perceptions of OJTs (n=19) 1

Finding: Housing Works Markedly Reduced Barriers to Work Readiness

One of the service-delivery goals in the program was that 65 percent of participants would report the removal of barriers to employment at one-year post-exit. Participants expressed high hopes at the early stage of the program, with 84 percent stating that they expected the program would help them get past barriers. While not quite meeting the intended 65 percent threshold, there were a number of indications that barriers to becoming more work ready were reduced for the majority of participants.

Evidence

A number of barriers were broken down for a majority of participants, based on participant feedback at exit and at one-year post-exit, as shown in Figure 39. These findings indicate a notable impact on the ability of participants to become more work ready. Specifically:

- Results showed that more than 7 in 10 participants at exit reported that the program helped them navigate workforce services and prepare for employment. More than 6 in 10 had the same reflection at one-year post-exit.
- About 7 in 10 said the program allowed them to overcome challenges to enrolling in and completing occupational training.

If the barrier-reduction target was based on these preparation indicators, it would have been met. Based on the most pointed indicators of reduced employment barriers at one-year post-exit, however, it cannot be said that the program met this particular service-delivery goal. Specifically:

- More than 6 in 10 said at exit that the case manager helped them to “overcome barriers to employment” (67 percent) and that the program helped them “get past barriers to employment” (63 percent). These proportions dropped slightly at one-year post-exit.

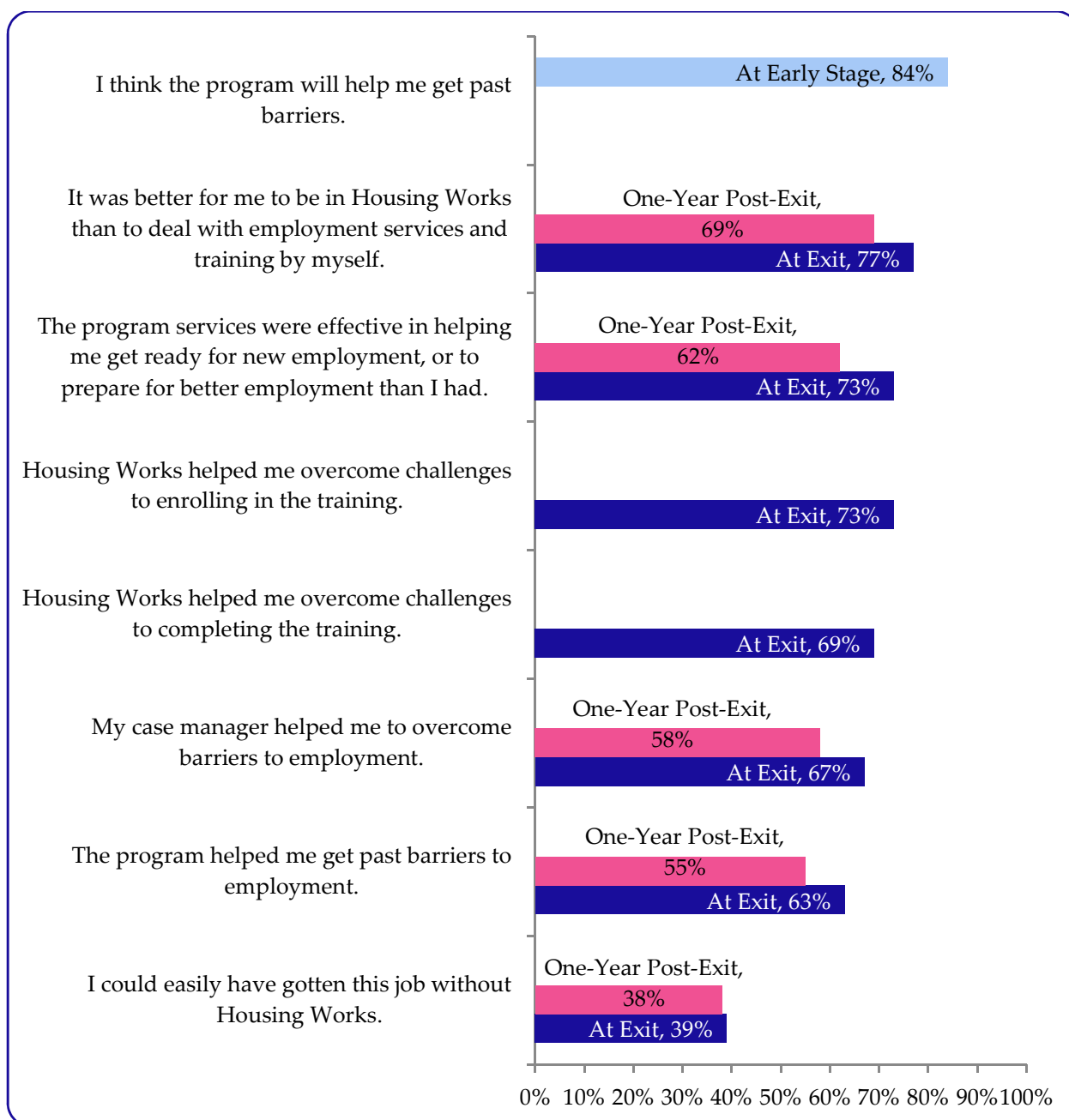


Figure 39. Perceived Reduction in Barriers, At Different Time Points

Further analysis showed that those who were *employed* at one-year post-exit were significantly more likely to report a reduction in *each* barrier listed in Figure 40—compared to those who were not employed at that time point. For each indicator, there was a gap of at least 10 percentage points between employed and unemployed persons in the proportion who believed that a barrier had been reduced. The greatest difference was in the idea that the program helped them to “get past barriers to employment” —

which revealed a full 18 percentage point gap between the two groups. There were no statistical differences in barriers across genders or sites.

It is noteworthy praise that among those who were *not* working at one-year post-exit, nearly half still perceived a reduction in the barrier to employment, and that more than half cited reductions in employment barriers due to vocational case manager aid, in effectiveness of work readiness services, and in having HW aid to navigate employment services rather than attempt that alone.

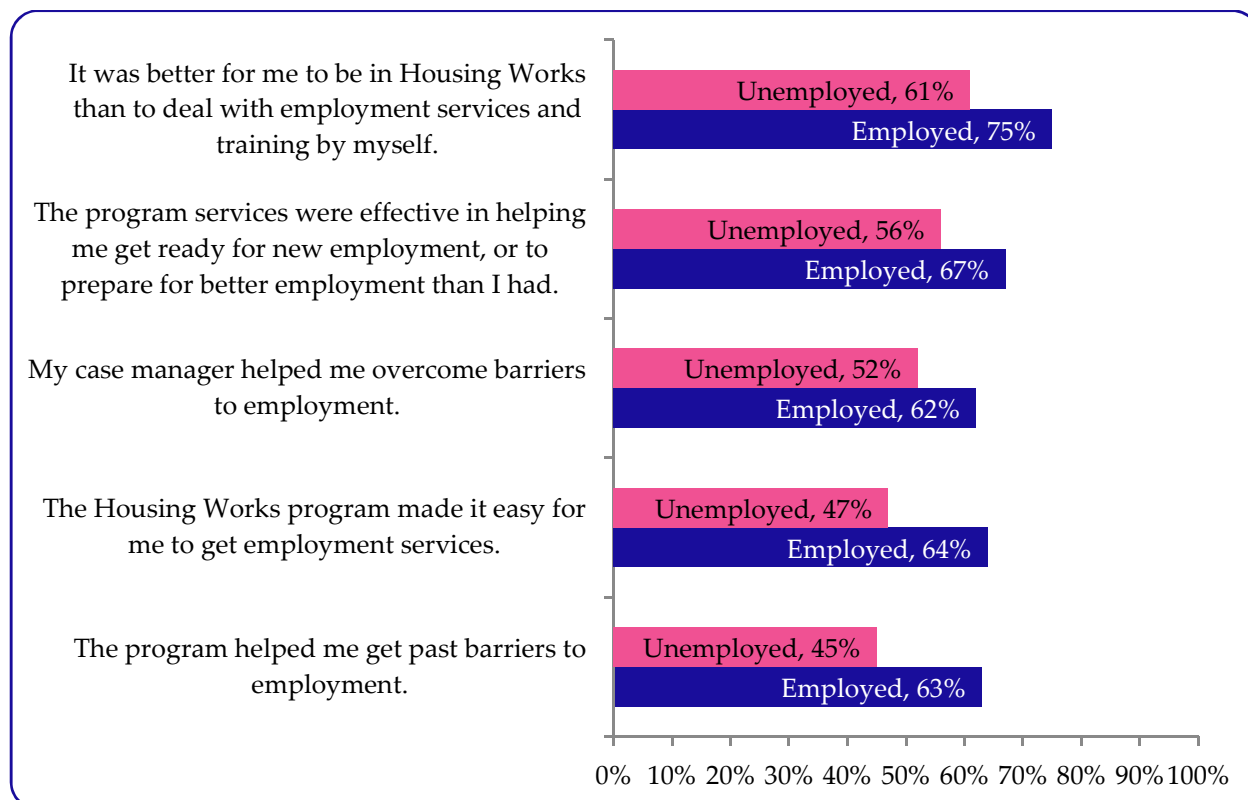


Figure 40. Perceived Reduction in Barriers, at One-Year Post-Exit, by Employment Status

Finding: Participants Perceived Housing Works as Effective

The program established a service-delivery goal that 80 percent of participants would agree that services were effective in creating their successful outcomes, and this target was fundamentally met.

Evidence

As noted above, the program was deeply effective in reducing barriers to employment. As highlighted in the Implementation chapter, most participants were satisfied with the

various services provided in the grant and found them to be accessible and useful. As shown in Figure 41 below, the majority of participants also reported being satisfied with the program overall and with the critically important case management experience.

The level of satisfaction did drop over time, however. Reports of satisfaction started at about 90 percent at the early stage of the program, to about 80 percent at exit, to about 75 percent at one-year post-exit.

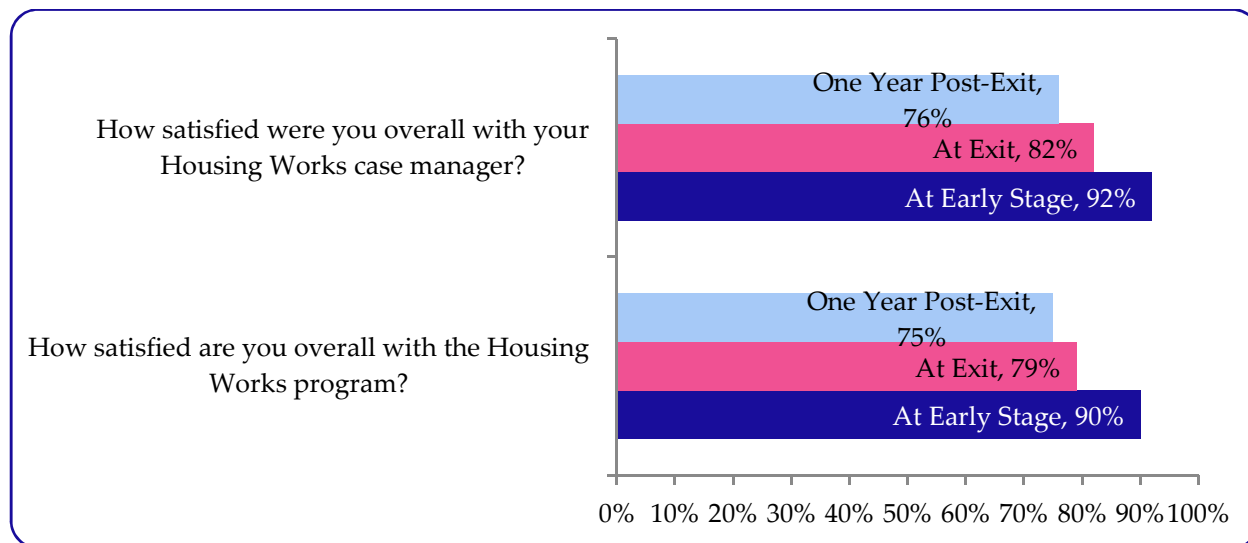


Figure 41. Overall Satisfaction at Several Time Points

As with barrier reduction, differences were also seen in overall satisfaction according to whether one was employed or not. Those who were *employed* at one-year post-exit were much more likely to report satisfaction with their vocational case manager overall and the program overall (statistically significant and not statistically different, respectively) compared to those who were not employed at that time. About 8 in 10 employed persons expressed satisfaction, and about 7 in 10 unemployed persons felt the same.

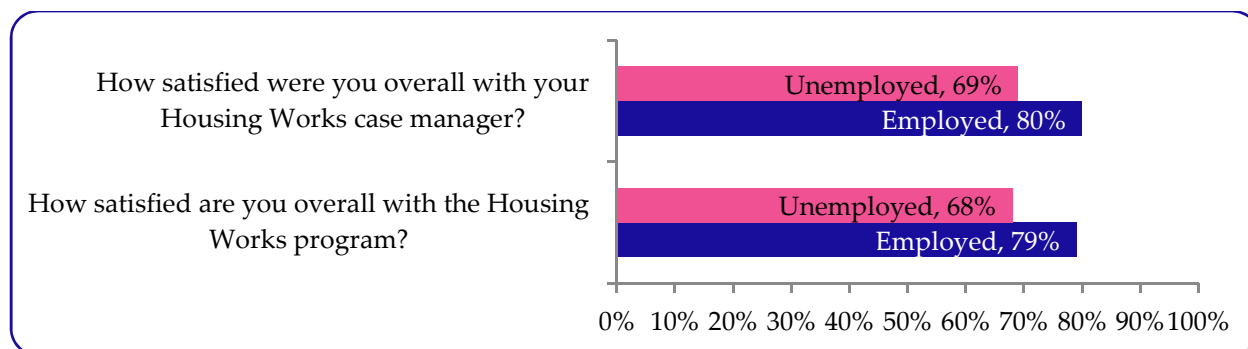


Figure 42. Overall Satisfaction at One-Year Post-Exit, by Employment Status 1

Quasi-Experimental Analysis

Participant and Comparison Group Characteristics

The following pages provide a description of characteristics on which the participant and comparison groups were matched prior to analysis of outcomes.

The participant group included —from the perspective of the program team— *both* those who were actively engaged (having completed Career Link) and those merely enrolled. Duplicate records for a participant who was enrolled more than once in the I-Trac system for Housing Works were merged into a single participant record, so that all services received in the two periods are counted.

Additional characteristics of the participant group, including services received and efforts to improve job readiness, are shown in Appendix E.

While over 600 people were initially identified for the comparison group, the final comparison group for analysis included only those who had data from all sources.¹⁸

Additional characteristics of the comparison group, including specific employment interests and efforts to improve job readiness, are shown in Appendix K.

The participant and final comparison groups differed on several *initial* characteristics (these are the factors that could potentially bias the analysis). The participant group had more people who identified as Hispanic. The comparison group tended to be older; however, there was a lot of missing data for this variable in the comparison group that could have changed this descriptive. The comparison group was more likely to have college education and degrees. The participant group was more likely to have a couple head of household and dependent kids. The comparison group was more likely to be receiving other government benefits in the form of Temporary Assistance to Needy Families and Social Security Income, but the participant group was more likely to be enrolled in the Family Self-Sufficiency program. While interest in target industries was similar between groups, the participant group scored higher in the motivation survey. The participant group was much more likely to be employed at enrollment and in the six months previous to enrollment.

¹⁸ Sources: Screener items at enlistment, Survey One, Survey Two, and PHA data.

Table 7: Characteristics of HW Participant and Comparison Groups
Gender

	Participant (n=594)	Comparison (n=283)
Female	464 (78%)	223 (79%)*
Male	130 (22%)	60 (21%)*

* Missing gender data was imputed for 67 comparison cases

Race 1

	Participant (n=594)	Comparison (n=283)
Black or African American	191 (32%)	61 (22%)
American Indian or Alaska Native	<10	<10
Asian	13 (2%)	<10
Native Hawaiian or other Pacific Islander	12 (2%)	<10
White	278 (47%)	145 (51%)
More than one race	36 (6%)	12 (4%)
Opted not to respond/Unknown	57 (10%)	59 (21%)

Ethnicity 1

	Participant (n=594)	Comparison (n=283)
Hispanic or Latino	70 (12%)	10 (4%)

Age 1

	Participant (n=594)	Comparison (n=283)
18-24	73 (12%)	<10
25-34	168 (28%)	54 (19%)
35-44	177 (30%)	59 (21%)
45-54	123 (21%)	66 (23%)
55-64	45 (8%)	22 (8%)
65+	<10	<10
Missing	0	74 (26%)

Highest Education Achieved (at entry) 1

	Participant (n=594)	Comparison (n=283)
Less than HS	53 (9%)	18 (6%)
HS diploma or GED	238 (40%)	75 (27%)
Some college or training	226 (38%)	133 (47%)
Associates degree	38 (6%)	32 (11%)
College graduate or advanced degree	39 (7%)	23 (8%)
Missing	<10	<10

Relationship Status 1

	Participant (n=594)	Comparison (n=283)
Single Head of Household	425 (72%)	252 (89%)
Couple Head of Household	106 (18%)	31 (11%)
Missing	63 (11%)	<10

Table 7: Characteristics of HW Participant and Comparison Groups**Has Dependent Kids (<18 years old)**

	Participant (n=594)	Comparison (n=283)
Yes	275 (46%)	87 (31%)
No	280 (47%)	196 (69%)
Missing	39 (7%)	<10

Comparison response to “Do you have any children that have to be supervised or have a sitter when you are not at home?”

Veteran 1

	Participant (n=594)	Comparison (n=283)
Yes	23 (4%)	31 (11%)
No	571 (96%)	252 (89%)

Family Size 1

	Participant (n=594)	Comparison (n=283)
Mean	2.9 (SD=1.7)	2.3 (SD=1.6)
Missing	11	51

Annual Household Income (as of November 1, 2012) 1

	Participant (n=594)	Comparison (n=283)
Mean	\$10,892.37 (SD=\$9,119.01)	\$10,995.74 (SD=\$8,585.97)
Missing	100 (17%)	63 (22%)

Months in Public Housing (as of November 1, 2012) 1

	Participant (n=594)	Comparison (n=283)
Mean	48.4 (SD=60.2)	57.8 (SD = 61.4)

Government Benefits Received (includes TANF and SSI/SSDI, not SNAP) 1

	Participant (n=594)	Comparison (n=283)
Yes	185 (31%)	126 (45%)
No	409 (69%)	157 (55%)

Enrolled in Family Self-Sufficiency (FSS) Program 1

	Participant (n=594)	Comparison (n=283)
Yes	280 (47%)	20 (7%)
No or Unknown	314 (53%)	263 (93%)

Interest in Target Industry (can select more than one) 1

	Participant (n=594)	Comparison (n=283)
Construction	41 (7%)	42 (15%)
Health Care	271 (46%)	170 (60%)
Manufacturing	88 (15%)	72 (25%)
Office	255 (43%)	152 (54%)

Table 7: Characteristics of HW Participant and Comparison Groups

Motivation Score		
	Participant (n=594)	Comparison (n=283)
Mean	38.6 (SD=2.3)	33.4 (SD=7.3)
Missing	16 (3%)	<10
Employed at Enrollment 1		
	Participant (n=594)	Comparison (n=283)
Yes	241 (41%)	20 (7%)
No	353 (59%)	263 (93%)
Employed in 6 Months Previous to Enrollment 1		
	Participant (n=594)	Comparison (n=283)
Yes	282 (47%)	26 (9%)
No	269 (45%)	257 (91%)
Missing or Unknown	43 (7%)	<10

Key employment and earnings outcomes for both participant and comparison groups are shown in Table 8. The earnings data presented here were also used in the cost analysis. However, the descriptive statistics—for the comparison group—vary slightly from the subset of the comparison group that was used in the hypothesis testing, which is described in the following section on propensity score matching.

Participants made notable gains in employment status over the course of the program as measured by wage record data (WRD); 41 percent were employed at enrollment. A total of 60 percent of participants were employed the first quarter past the exit quarter irrespective of employment status at enrollment. The grant performance goal for Entered Employment, set at 65 percent, was not met; instead 46 percent of participants unemployed at enrollment entered employment by exit.

Of 274 participants who earned wages during the first quarter after the exit quarter, 82 percent retained employment in the second and third quarter, and 69 percent were employed in one of the four focus industries. The retention rate met the performance goal of 70 percent retention.¹⁹

¹⁹ This is slightly different from the initial calculations by WSI, which included those employed at registration and employed during Q2 and Q3, as well as those not employed at registration and entered employment by exit and retain that in Q2 and Q3. Our calculations are for first quarter, not exit quarter.

A total of 326 participants—55 percent—had been engaged in one or more training opportunities and 308 had earned one or more credentials (52 percent).

The six-month earnings for participants on average was \$8,092.59, based on a summation of wage record earnings in the second and third quarters after the exit quarter, for those employed in the first, second, or third quarter and regardless of status at enrollment. This did not meet the performance goal of \$12,000. However, the earnings increase exceeded the performance goal of 20 percent: those employed at enrollment experienced a 53 percent increase in wage earnings in the second and third quarters after exit, from the two quarters prior to registration.

The comparison group started out with a 7 percent employment rate and increased this to 36 percent—irrespective of employment status at enrollment—at close, as measured by wage record data. The “enter” and “exit” points for all comparison group members were established as beginning and end points of the HW program.

In terms of retention, 77 percent of the comparison group members who earned wages during the first quarter retained employment in the second and third quarter, and 68 percent were employed in one of the four focus industries.

Of the comparison group, 117 (41.3 percent) had used any WorkSource services between October 2012 and April 2016, which suggests interest in and action toward improving their current job situation (shown in Appendix K). Of the comparison group, 21 percent has accessed one or more training opportunities during the program time frame, and 12 percent had earned one or more credentials. The six-month earnings in the second and third quarters was on average over \$8,000 for those employed in the first, second, or third quarter and regardless of status at enrollment.

Table 8: Outcomes of HW Participant and Comparison Groups 1

Employed in First Quarter and After Exit Quarter 1		
	Participant (n=594)	Comparison (n=283)
Employed after Exit Q; Employed at Enrollment	195 (33%)	14 (5%)
Employed after Exit Q; Unemployed at Enrollment	161 (27%)	88 (31%)
Unemployed after Exit Q; Employed at Enrollment	46 (8%)	6 (2%)
Unemployed after Exit Q; Unemployed at Enrollment	192 (32%)	175 (62%)
Retained Employment in Second and Third Quarter (if Employed in First Quarter)		
	Participant (n=274)	Comparison (n=102)

Table 8: Outcomes of HW Participant and Comparison Groups 1

Retained Employment	225 (82%)	79 (77%)
Did Not Retain Employment	49 (18%)	23 (23%)

Employed in Target Industry (if Employed in First Quarter)

	Participant (n=356)	Comparison (n=102)
Yes	246 (69%)	69 (68%)
No	110 (31%)	33 (32%)

Training Experiences 1

	Participant (n=594)	Comparison (n=283)
None	268 (45%)	224 (79%)
One or more training opportunities experienced	326 (55%)	59 (21%)

Credentials Earned 1

	Participant (n=594)	Comparison (n=283)
None	286 (48%)	249 (88%)
One or more credentials earned	308 (52%)	34 (12%)

Earnings (in Second and Third Quarters After Exit Quarter) 1

	Participant (n=308)²⁰	Comparison (n=128)
Mean	\$8,092.59 (SD=\$6,308.03)	\$7,999.95 (SD=\$6,874.64)

Change in Earnings (from 6 Months Previous to Enrollment to 2nd plus 3rd Quarters After Exit)

	Participant (n=308)	Comparison (n=128)
Mean	\$5,023.22 (SD=\$5,744.91)	\$6,894.90 (SD=\$7,206.70)

All performance goals and their results are reported in Appendix J. Summarized below are the goals most closely aligned to participant outcomes related to employment, retention, and earnings. These findings reflect the entire population of 594 participants, except where noted in the table.

²⁰ A total of 137 cases were not included in the analysis due to missing data.

Table 9: Performance Goals and Results: Employment and Earnings 1

Performance Measure ²¹	End of Grant Target	Result
Entered Career Plan Employment	75%	Not met. 42% of all participants attained chosen industry employment; however, 69% were employed in one of the four targeted industries, even if it was not their initial choice of industry.
Entered Employment	65%	Not met. 46% of participants unemployed at registration who entered employment by exit.
Retained in Employment	70%	Met. 82% of participants employed at exit who were also employed at both 2nd and 3rd quarters after exit quarter.
Six-Month Earnings	\$12,000	Not met. \$8,092.59 is the average earnings in the 2nd and 3rd quarter after exit (n=308) of those employed in first or second or third quarter; regardless of employment status at registration.
Earnings Increase	20%	Met. Those employed at registration experienced a 53% increase in wage earnings in 2nd and 3rd quarters after exit quarter, from 2 quarters prior to registration (n = 241).

Propensity Score Matching

This study used a quasi-experimental design called Propensity Score Matching. This is a statistical methodology used to reduce the biases in comparing outcomes between those who participate in a program and those who do not that can occur because of the differences between the groups. This technique *matches* persons in the comparison group to a person who has similar characteristics in the treatment group in order to provide a counterfactual for the person in the treatment group. The analysis then proceeds using the matched sample that is more comparable in their characteristics, and should therefore produce findings that are more comparable.

²¹ The two earning metrics are different from the initial calculations by WSI, which were estimated based on hourly wage at exit. Our figures are derived from wage record earnings of those employed in quarters one or two or three, and regardless of employment status at enrollment and not confined to career track employment.

After accounting for variables dropped (see Appendix C for reasons variables were excluded), the final propensity score matching model was:

$$\begin{aligned} \text{Participation}_i = & a_i + \beta_1 \text{gender(male)}_i + \beta_2 \text{race(African American)}_i + \beta_3 \\ & \text{race(American Indian)}_i + \beta_4 \text{ethnicity(Latino)}_i + \beta_5 \text{relationship status(single)}_i \\ & + \beta_6 \text{veteran}_i + \beta_7 \text{highest education}_i + \beta_8 \text{motivation score}_i + \beta_9 \text{missing} \\ & \text{motivation score}_i + \beta_{10} \text{other government benefits (TANF, SSI)}_i + \beta_{11} \text{household} \\ & \text{income}_i + \beta_{12} \text{missing household income}_i + \beta_{13} \text{employed in 6 months prior to} \\ & \text{enrollment}_i + \beta_{14} \text{months in public housing}_i + \varepsilon_i \end{aligned}$$

All 594 cases were retained in the participant group for analysis. The matched pairs were restricted to the area of common support. This model assumption restricted the comparison group cases to the range of propensity scores generated by the participant group to ensure similarity. Any comparison group cases that have propensity scores above the maximum or below the minimum of the participant group were dropped from analysis. Of the 283 comparison group members who entered the propensity score model, 228 were in the range of common support and retained for outcomes analysis.

Findings for these outcomes are presented as the average treatment effect on the treated (ATT). ATT was selected as the estimator because this would allow for causal interpretation of the effects of the HW program. The matched comparison group is treated as the counterfactual to those who were in the HW program. In other words, the matched comparison group is assumed to be what the participant group members would have looked like if they had not enrolled in HW. One could assume that the final comparison group members may have been a bit higher functioning and motivated than other potential comparison group members since they answered two surveys, sought out credentials, and accessed WorkSource services. Therefore, the counterfactual would be the best-case scenario of services, education, and training for people in public housing in the absence of the HW program.

Findings

The impact research questions related to participant outcomes—relative to the comparison group outcomes—are in the areas of credentials earned, training obtained, employment, and wages.²² The results of the confirmatory and exploratory hypotheses

²² Please refer to Appendix A for the list of research questions.

testing are described below. The analysis of public investment across participant and comparison groups—including housing subsidies—are discussed in the cost chapter.

Employment

Confirmatory Hypothesis: Participants will be more likely to be employed than members of the comparison group by October 2015.

- **Result:** Confirmed

Employment was a binary variable where an employment record in the WRD was coded “1” and “0” represented no employment record found.

The U.S. Department of Labor (DOL) Common Measure for entered employment was not used here. Instead, if the person was employed in the first quarter after exit quarter, they were counted as a successful employment at exit. A large proportion of people in the HW program were employed at enrollment (41 percent), and it is believed the HW program helped them to improve their job status and earnings. This definition of employment aligns with the performance metrics chosen by Worksystems, Inc. for this grant.

Another issue with using the DOL Common Measure definition in our analysis is that the number of comparison group employed at the beginning of the HW program is quite small. That would have meant the analysis would proceed with only 20 comparison matches to 241 participants. This imbalance could have produced bias in the results. Instead the analysis did not select cases by employment at enrollment and proceeded with the inclusion of 594 participants and 228 comparisons.

The results indicate that participants were significantly more likely to be employed after exit than the comparison group.

The ATT estimates for dichotomous dependent variables represent the estimated percentage point increase in the dependent variable resulting from participating in the program. The ATT estimate for employment after one quarter is positive (ATT=.20) and statistically significant ($p < .05$, two-tailed). That is, participation increased the probability of employment by an average of 20 percentage points.

The ATT statistic is also essentially the measure of difference in probabilities for the outcome—known as a risk difference. A risk difference is a very simple measure of effect size, and cannot be compared to other studies easily unless further calculation is

done to standardize the measure. An ATT of 0.20 for employment after exit would be said to have a medium effect size (Table 10).

Table 10: ATT Propensity Score Matching Estimates of the Influence of Participation on Employment in Quarter Following Exit Quarter²³

Employment in First Quarter After Exit Quarter
ATT = 0.20 1
SE = 0.08 1
t statistic = 2.6* 1
Participant N = 594 1
Comparison N = 228 1

ATT refers to the average treatment effect on the treated, or the average change observed in the variable being tested. SE stands for standard error, a measure of statistical accuracy of an estimate. The t statistic is a measure of statistical significance; positive values are directional toward the treatment group and negative values indicate greater outcome for the comparison group.

Retention and Employment Industry

Exploratory Hypothesis: Participants will be more likely to be retained in employment in the second and third quarters than members of the comparison group.

- **Result:** Not confirmed

Exploratory Hypothesis: Participants will be more likely to be employed in the focus industries than members of the comparison group by October 2015.

- **Result:** Not confirmed

Exploratory tests were performed to assess retention in employment and employment in focus industries. Both the analysis for retention and for employment in focus industry examined only the individuals who were employed in first quarter after exit quarter.

Employment retention was defined as employment in second quarter *and* third quarter after exit quarter, regardless of employment status at enrollment. Again, this is different than the DOL Common Measure. This was done for the same reasons as

²³ See Appendix C.

discussed in the Employment Findings. This was coded as a binary outcomes variable where “1” indicated the person was able to retain employment in the second and third quarters (even if it was not with the same employer), and “0” indicated that a person was not employed in the second or third quarter or both. A total of 137 participants were missing data for their second and third quarters due to exiting at the end of the grant and were excluded from analysis.

Employment in focus industry was coded as a binary variable where “1” indicated the person was employed in a target industry and “0” indicated they were not. Target industries were coded based on the North American Industry Classification System (NAICS) codes in the first quarter. A list of NAICS codes included as “target industries” can be found in Appendix C.²⁴ If a person worked more than one job in the quarter, they were coded “1” if at least one of those jobs were in a target industry.

There was no significant difference between groups in terms of employment retention. While the participant group retention looked favorable in the descriptive statistics table, the matched cases for the comparison group resulted in non-significance. Additionally, the matched comparison group was able to secure employment in target industries at a higher rate. An ATT of -0.10 for employment in focus industry would be said to have a small effect size (Table 11).

Table 11: ATT Propensity Score Matching Estimates of the Influence of 1 Participation on Employment Earnings^{25 1}

Employment Retention	Employment in Focus Industry
ATT = -0.06	ATT = -0.10
SE = 0.04	SE = 0.04
t statistic = -1.5	t statistic = -2.3*
Participant N = 274	Participant N = 356
Comparison N = 87	Comparison N = 87

ATT refers to the average treatment effect on the treated, or the average change observed in the variable being tested. SE stands for standard error, a measure of statistical accuracy of an estimate. The t statistic is a measure of statistical significance; positive values are directional toward the treatment group and negative values indicate greater outcome for the comparison group.

²⁴ There are distinct limitations in applying NAICS codes for office careers as this can cover a great number of sectors.

²⁵ See Appendix C.

Credentials and Training Experiences

Confirmatory Hypothesis: Participants will have increased the number of credentials obtained than members of the comparison group.

- **Result:** Confirmed

Exploratory Hypothesis: Participants will have accessed a greater number of workforce training opportunities than members of the comparison group.

- **Result:** Confirmed

“Credentials earned” was defined as a completed degree, certificate, or license during the HW program time period. This includes a high school degree or equivalent (GED), an associate’s degree, a bachelor’s degree, an advanced degree, professional license, professional organization certificate, industry/trade certificate, or other certification from vocational training.

“Training experienced” was defined as receipt of on-the-job training, internships, short-term vocational, or occupational training during the HW program time period, regardless of the source. The comparison group definition included self-report on-the-job training, internships, vocational training, and WorkSource job training.

For the purpose of analysis, both of these variables were coded as binary variables where the count of credentials or training opportunities greater than zero was coded “1” and “0” represented no training opportunity or credential.

The ATT for training experiences is large and positive (ATT=.23) and statistically significant ($p < .05$, two-tailed); participation increased the probability of participating in training experiences by 23 percentage points. The ATT for receiving credentials is also large and positive (ATT=.37) and statistically significant ($p < .05$, two-tailed); participation increased the probability of receiving credentials by 37 percentage points. There is strong evidence that participation increased the likelihood of earning credentials and accessing training opportunities. This is not surprising since this was one of the main characteristics of the HW program.

An ATT of 0.37 for credentials earned would be said to have a large effect size. An ATT of 0.23 for training experiences would be said to have a medium effect size (Table 12).

Table 12: ATT Propensity Score Matching Estimates of the Influence of 1 Participation on Credentials Earned and Training Accessed^{26 1}

Credentials	Training Experience
ATT = 0.37 SE = 0.06 t statistic = 6.4*	ATT = 0.23 SE = 0.07 t statistic = 3.5*
Participant N = 594 Comparison N = 228	Participant N = 594 Comparison N = 228

ATT refers to the average treatment effect on the treated, or the average change observed in the 1 variable being tested. SE means standard error, a measure of statistical accuracy of an estimate. The 1 t statistic is a measure of statistical significance; positive values are directional toward the treatment 1 group and negative values indicate greater outcome for the comparison group. 1

Earnings

Confirmatory Hypothesis: Participants will have a larger average employment earnings than members of the comparison group by October 2015.

- **Result:** Not confirmed

Earnings was defined as the total wages earned in the second and third quarters. An additional outcome variable was created to assess the change in earnings as compared to the wages earned by that person in the six months prior to the enrollment quarter. This was done to more accurately reflect the increase in earnings as a result of the HW program. Both of these analyses were restricted to people who were employed in the first, second, or third quarter after exit.

This outcome variable was different from the others in that it was not a binary variable. Instead the earnings were treated as a continuous variable.

There was no significant difference found in the earnings or the change in earnings between groups.

²⁶ See Appendix C.

Table 13: ATT Propensity Score Matching Estimates of the Influence of 1 Participation on Credentials Earned and Training Accessed^{27 1}

Earnings at Exit	Change in Earnings
ATT = -\$434	ATT = \$203
SE = \$1400	SE = \$1400
t statistic = 0.32	t statistic = 0.14
Participant N = 308	Participant N = 308
Comparison N = 111	Comparison N = 111

ATT refers to the average treatment effect on the treated, or the average change observed in the 1 variable being tested. SE means standard error, a measure of statistical accuracy of an estimate. The 1 t statistic is a measure of statistical significance; positive values are directional toward the treatment 1 group and negative values indicate greater outcome for the comparison group. 1

Factors Influencing the Participant Outcomes

Overall, many of the employment-related performance goals were not met. The participants were more likely to be employed in the first quarter relative to the comparison group, and to have earned credentials and have training opportunities. Significant influences in the final model included: employment in the previous six months, Latino ethnicity, veteran status, single head of household, motivation score, and highest education achieved at enrollment.

- *The participants were more likely to have both earned credentials and accessed training opportunities than were the comparison group members. This finding is consistent with strong emphasis in the implementation on building job skills and developing career paths.*
- *Participants outperformed comparison group in gaining employment which appears to be due to the program, particularly the skill-building noted above, as well as support services, job-readiness focus, and reduction of barriers.*
- *Participants exceeded the goal for retaining jobs at 82 percent but they were not statistically different from the comparison group in retention, nor did they outperform on employment in a focus industry. Employed comparison group members had a higher proportion of employment in health care and office work relative to the participant group (data not shown in this chapter). The higher level of education of the comparison group or being employed in focus industries may make retention more feasible. It is also*

²⁷ See Appendix C.

possible that the comparison group differs in some way that is unobserved by the study that relates to retention and high-demand focus industries.

- *Participants' wage gains were similar to the comparison group.* Review of the wage record data suggests a good deal of job turnover amongst the participants, which could curtail their earning potential, or reflect a lack of career path employment, or reflect positive movement along their career path. There were 137 participant cases missing wage record data for their second and third quarter due to exiting at the end of the grant and were therefore excluded from retention and earnings analysis. Were these data available, they could potentially influence the outcomes.
- The average gains also reflect only those employed in the first, second, or third quarter, and therefore would look different if aggregated over the entirety of each group.

Data analysis assumptions are critical to the interpretation of findings. For example, the entry and exit dates for the comparison group were subjectively set to coincide with the beginning and end points of the intervention. This allowed for a 42-month window for any changes to become apparent in the comparison group in contrast to the actual time in the program, which defined participant experience and that varied widely across participants.

The comparison group was different than the participant group on several characteristics—most notably education level and employment status at enrollment. The use of propensity score matching makes the two groups as equivalent as can be in the analysis despite differences in descriptive statistics prior to matching. Only a small number of comparison group cases were not matched and dropped from the analysis (16 percent). This indicates the final matched groups were fairly close in the characteristics that were included in the analysis. Another potential issue of bias between the two groups was that the size of the comparison group was about a third of the size of the participant group. This scenario leaves two choices for methodology: match one comparison case to several participant cases, or drop participant cases from analysis to get a 1-to-1 match. Dropping participant cases from analysis was deemed sub-optimal, so a single comparison case was matched to multiple participant cases in the analysis. The selected strategy of matching a single comparison to multiple participants has a known tendency to increase the standard errors of the estimated treatment effects. The standard errors were estimated with bootstrapping, which provides more accurate estimates under matching with replacement. None of the estimated standard errors appear overly large, so it is unlikely that the estimated treatment effects were greatly inflated. Overall, the potential biases that could have

impacted the findings were not deemed disruptive to the interpretations already presented.

Additional exploratory analysis of subgroups could possibly influence the interpretation of findings. The design called for further testing of results for members of specific subgroups. However, some were no longer appropriate to pursue.

- Veterans and non-veterans: Veterans made up very small proportions of both the participant and comparison groups (less than 10 percent). Splitting out this group in the QED model was unlikely to yield significant and meaningful results. Using an Exact test for small proportions was considered; however, switching to a different statistical method would ignore the assumptions of equivalence created by the more complex propensity score matching, and would not address the limited predictive power of the small groups.
- People who need child care and people who do not need child care: The variable for this subgroup was whether people reported having dependent children. This variable was dropped from the QED model because of an imbalance of missing data between the participant and control groups. For that reason, a subgroup analysis was not pursued.

The following subgroups did have additional analyses to determine the effect of participation among different levels of the subgroup. The same matched QED models were used, but the subgroup of interest was recoded into two levels and run independently in the model so the predictive power would remain high. This means that comparison tests between the two levels were not run. The analyses were comparing the effect sizes between the two levels. Additionally, to keep predictive power high, the analysis was limited to the outcomes of employed at first quarter after exit quarter, credentials earned, and training experienced.

- People with higher level of education and people with lower level of education at entry: Education was split into two levels—those with a high school diploma or GED and below, and those with some college or training and above. People with a lower level of education at entry were more likely to see participants get employed in the first quarter. Education level did not have a very different impact on credentials earned nor training experienced.
- Different race categories: Race categories were split into two levels—white and non-white. Latinos were recoded to “non-white” for the purpose of this subgroup analysis. These race categories were not seen to have a very different impact on employment in the first quarter, credentials earned, nor training experienced.

Conclusion 1

Key Lessons and Implications for the Field – Looking Across Model, Systems Change, and Implementation

Systems Change

Systems Change, Sustainability Validate the Housing Works Theory of Change

The systems-change and sustainability components of Housing Works (HW) were largely successful, validating the theory of change that formed the basis of the HW model. The evaluation team observed that the initiative had built strong connections between workforce investment boards (WIBs) and public housing authorities (PHAs), both within individual counties and across the four-county region; eliminated barriers to collaboration; and provided participants with invaluable training, guidance, and support. This success can be attributed to a strong leadership and communications structure, effective vocational case managers (VCMs) and WorkSource liaisons, and coordination with outside agencies for the leverage of critically important support services, as well as the initial impetus provided by the Columbia-Willamette Workforce Collaborative and the Aligned Partner Network.

A key testimony to the effectiveness of the HW systems change is that the partners saw value in continued investment in the HW model and are committed to continue working together to carry out projects, reduce redundancies, and seek out new pilot initiatives. Given the region's history of collaboration and the organizational and funding commitments established at the end of the grant period, the partners show a great deal of promise for further collaboration into the future.

Implementation

Strong Fidelity to the HW Model Helps Inform Replication

The HW program's strong fidelity to the HW model helps to support the conclusion that the model is highly functional, i.e., readily operationalized and responsive to the context in which it is enacted, as originally envisioned. The evaluation findings suggest that a strong collaborative structure with organizational buy-in from leadership to frontline staff is an essential factor in program fidelity and ultimate success.

Although the HW partners shifted away from occupational coaching and long-term basic skills as mandatory or core model elements, results may vary for other regions that implement programs similar to HW. These types of training could be more important in regions with larger populations in need of it. Furthermore, these changes in the HW region resulted from the ongoing use of data to inform decision-making—a core element of the HW model in itself.

Over the course of the HW program, the partners improved their initial participant communications to ensure that participants clearly understood what the program required of them and were a good fit for the program. This resulted in improved participant satisfaction regarding the enrollment and orientation. All participants can benefit from enrollment and orientation communications that clearly lay out what is expected of them.

Participants also greatly valued the career mapping, resource planning, and Career Link exercises. The career maps helped them identify their strengths and career goals and to learn what careers they were ready for. The resource plans helped them understand how to complete a training program that would propel them towards a higher-paying career. Finally, the Career Link courses helped them envision the real-world employment prospects of their target industries.

The HW model of vocational case management was also highly effective. Small caseloads allowed VCMs to tailor the amount of vocational contact to meet the needs of program participants, many of whom required very intensive support to stay on track and overcome multiple and significant barriers to program completion and employment. Frequent contacts with WorkSource liaisons helped the VCMs navigate the WorkSource system on behalf of the participants. Given their level of familiarity with and trust of participants, soft-skill training should be provided by the VCMs, rather than in a classroom setting.

Working together, the core components of the HW model set participants on a path that was more likely to lead them to successful program completion. These program elements—or others that fulfill the same functions—should be incorporated in future programs that follow the HW example.

Peer/Cohort Interaction Should Be a Model Element

Likewise, some of the partners sought to facilitate the development of cohorts of participants who provided support to one another as they progressed through the program. Although a cohort approach may not make sense for all participants or career

paths, many participants greatly valued it. The evaluation data indicate that cohorts or other peer-support approaches should be considered for future initiatives that make use of the HW model.

To Complete Enrollment, Training Programs Should Match Time Available

The HW partners were able not only to meet but to exceed their recruitment goals; however, they required a grant extension and a more judicious selection of training programs to do so. Programs emulating the HW model would be well advised to select industry-driven training programs that can realistically be completed by their participants within the time allotted. Recruitment and steady movement through a workforce program will be aided where one can focus on short-term training for high-demand occupations such as CNA, CDL, and peer-support specialists. However, career opportunities with short-term credentials are well not suited to all participants, so to serve a diverse population, an initiative would also need to plan logistically for how to offer alternative paths to career opportunities.

Proactively Address Eligibility Requirements Such as Criminal Background

In several cases, HW participants discovered late in the program that their criminal backgrounds prevented them from moving forward in the careers they had selected. In general, and always when recruiting for health care occupations, initiatives should proactively identify and address all eligibility requirements, such as immunizations and the issue of criminal background. Initiatives should plan for and obtain resources to conduct formal criminal background checks because these are more effective and accurate than self-reported background inquiries.

Cost and Efficiency

The HW Partnership Was Highly Effective in Leveraging Resources to Increase Efficiency and Provide Additional Support to Participants

This included successful leveraging of in-house resources such as combined quarterly case reviews with Financial Self-Sufficiency (FSS) program staff, and leveraging of outside resources to address needs for transportation, child care, textbooks, clothing, and criminal background checks.

The Program Team Used Data Effectively To Identify Policy and Process Improvements

The changes that were enacted affected operations, enhanced opportunities for participants, and allowed for sustaining the collaboration and many programs after the grant period. The redundancy that proved to be the most challenging was eligibility

determination and registration for customers in HW. Efforts were made, to good effect, to de-duplicate the process and streamline it as much as feasible. One of the best examples was a site that managed to conduct orientation and readiness interviews on the same day.

The Cost Study Identified Several Positive Outcomes for the HW Program

The cost allocation analysis calculated the average program cost per participant and found that WIBs spent more for their HW participants than on their typical customer, while PHAs spent less on their participants in HW compared to their typical customer. The observed costs were consistent with the expectation that there would be more training costs and less spent on subsidies. The net public investment was lower for participants than for the comparison group. Additional research is needed to verify the cost findings, and research should be structured to gather administrative data on an ongoing basis to minimize the loss of data due to quality issues or missingness.

The Program Was Successful in Increasing the Employment and Earnings Potential for Participants, Which Is an Important Step Toward Self-Sufficiency

The cost effectiveness looked at program costs relative to the number of participants who were successfully employed in the quarter after their exit and calculated an average monthly cost of \$1,125.59 per successful employment outcome. Comparing this figure to participant outcomes shows the average six-month *increase* in earnings for each successful employment outcome for participants was nearly as large as the average monthly investment; earning increases were 74 percent of the value of the investment. This suggests that the investment in HW is cost effective.

Exploratory Analysis Suggests Housing Subsidy Savings in Some Areas

The average monthly subsidy spending was reduced for the participant groups in two of the PHAs over the course of the HW program. Exploratory analysis suggests that the change in subsidy is due to employment earnings, based on a subset of the data that showed that the participant group had a greater increase in earnings over time than the comparison group. The subsidy analysis is not definitive of the potential subsidy savings, however, given the amount of data missing from the analysis. The monthly savings were small, and further research would be worthwhile to identify the cumulative impact over time.

Outcomes

The Program Was Highly Effective and Met Many of Service-Delivery Goals

The program established a service-delivery goal that 80 percent of participants would agree that services were effective in creating their successful outcomes, and this target was fundamentally met. Feedback from participants indicated notable barrier reduction and positive assessments of the accessibility, utility, and overall satisfaction with services. Overall satisfaction did vary by one's employment status; those who were *employed at one-year post-exit* were much more likely to report satisfaction with their vocational case manager overall and the program overall.

The program exceeded the target number of people earning credentials. A total of 308 individuals earned on average 1.7 credentials, including 309 industry certifications.

A Majority of Participants at Every Stage Cited Barrier Reductions in Gaining Employment and Being Work Ready

One of the service-delivery goals in the program was that 65 percent of participants would report the removal of barriers to employment. The most direct measure of this—stating at exit that the program helped them “get past barriers to employment”—did not meet the threshold (63 percent), but a similar measure was at 67 percent: that the vocational case manager helped them to “overcome barriers to employment.”

Nonetheless based on participant feedback, a majority of participants found that several barriers were broken down related to their ability to become more work ready. More than 70 percent of participants reported at exit that the program helped them to navigate workforce services, prepare for employment, and overcome challenges to enrolling in and completing occupational training.

When barrier reduction indicators were assessed at one-year post-exit, they were less likely to be affirmed. When these results are broken out by employment status, it is an impressive testimony that among those who were *not* working at one-year post-exit, nearly half still perceived a reduction in the barriers to employment due to the program, and more than half cited barrier reductions to employment readiness.

Training and Placement Were Beneficial To Participants

Occupational training, internships, and on-the-job trainings (OJTs) provided participants with a variety of benefits, key among them development of job skills and useful experience that fit well with their career plans. About one-third cited increased understanding of practicalities in the field. At exit, 67 percent of interns said the experience helped them with their job search and about half said it helped them to get

another job. At one-year post-exit, however, they were much less likely to indicate their experience was useful in obtaining a job (15 percent).

Employers Cite High Performance of Participants

One service-delivery target was that 80 percent of employers would be satisfied with the performance of the interns and this goal was met. Employers found value in the employees they hired through WorkSource and some expressed surprise at how well the hires fit into positions that were often difficult to fill. According to employers, participants were adequately prepared, met standards during training, and employers intended to continue the employment for at least six months.

It is striking that these high ratings coexisted with comments of negative surprises—such as poor skill level and behavioral challenges—in the experience as well. The primary benefits that accrued to the firms were the opportunity to be altruistic, added capacity in-house, and the ease of the hiring process.

Employers' Perceptions of WorkSource Have Improved

One service-delivery target that was met was that 80 percent of employers would be more positive about the ability of the workforce system to deliver qualified candidates. Employers with direct experience as placement hosts were sufficiently positive as to influence their view of WorkSource (53 percent improved) and its capacity to provide strong job candidates (84 percent agreed), and that they would consider using the hiring program again (92 percent agreed).

Participants Significantly Outperformed the Comparison Group in Terms of Credentials and Training but Had Mixed Results in Employment and Earnings Outcomes

The impact research questions related to participant outcomes—relative to the comparison group outcomes—were in the areas of credentials earned, training obtained, employment, and wages.

Not surprisingly, given the thrust of the program, significantly more participants were found to have credentials earned and training opportunities accessed relative to the comparison group members.

The results also indicate that participants were significantly more likely to be employed in the first quarter after exit than the comparison group, regardless of employment status at enrollment.

Other employment and earnings hypotheses were not confirmed, however. There was no evidence that participants were more likely to be retained in employment, or more likely to be employed in the focus industries than members of the comparison group. There was no significant difference found in the earnings or the change in earnings between the two groups.

Probit estimates showed the influence of several factors in the model. The comparison group had a higher education at baseline, with 33 percent having less than high school, GED, or high school completion, and 20 percent having an associates or higher degree; in contrast the proportion of participants at these levels was 49 percent and 13 percent, respectively. The comparison group was more likely to be a single head of household (89 percent compared to 72 percent) and to be a veteran or spouse of a veteran (11 percent compared to 4 percent). The comparison group had lower motivation scores, was less likely to be Latino, and less likely to be employed in the previous six months.

Differences between the groups that look superficially notable but were not influential in the model, i.e., were not statistically significant or were dropped from the model, were:²⁸ the comparison group was more likely to have a longer duration in public housing (58 months compared to participants at 48 months) and to receive TANF and SSI/SSDI benefits (41 percent versus 31 percent), but much less likely to be enrolled in the FSS program (7 percent compared to 47 percent).

It may be that the comparison group was fairly high functioning which could make it more difficult to discern a difference between the participant and comparison group. The comparison members were self-selected which could introduce an element of bias. They were sufficiently interested in the topic of job readiness and employment to participate in the study, and many had taken steps to invest in their future. For example, the comparison group had taken a variety of actions that reflect an investment in increasing one's job skills in the time period coinciding with HW. This included 15.5 percent completing any paid or unpaid job internship, or OJT, 12 percent completing a credential, and 34 percent taking a class to increase knowledge or skills for employment and/or working toward a credential (not necessarily completing a credential).

²⁸ Descriptive statistics are noted here; these are not identical proportions as in the propensity score model as some cases in the comparison group were dropped because they were not in common support.

Recommendations for Further Research and Investments

Replicating Systems Change

The HW initiative appears to have strong potential for replication in other locations as well as for expansion in the states of Oregon and Washington. The systems change components of HW could be implemented at relatively low cost and could yield large dividends by building efficiencies across agencies that serve a common clientele, including workforce and public housing agencies as well as health and human services providers, and others who nurture the self-sufficiency of their clients. The WorkSource liaison role represents an added cost, but the fact that the HW partners elected to fund liaison positions after the grant concluded is a compelling demonstration of their value.

Given the limited budgets of workforce and housing agencies, an initial infusion of funding would almost certainly be necessary to ensure effective leadership and coordination of a systems change effort, as well as the creation of liaison positions for workforce agencies. However, if such an effort is successful, it will require the dedicated application of regular programming dollars to the task of coordinated regional efforts across sectors. This level of time and resource investment is essential for co-resourced and aligned policy and practice to become self-sustaining over time.

Based on the HW experience, a systems change effort will have the greatest chances of success if it takes place in a region with a history of collaboration, and a visible and trusted convening agency. Success will also be enhanced by a partner group that understands the mutual benefits of systems change and is fully committed—from leadership to frontline staff—to bringing it to fruition.

Cost and Efficiency

Effective alignment and coordination of resources will require creative approaches and a willingness to take risks. The partners should continue to establish and maintain relationships across the network of service providers to access complementary services and supports for their clients. Key resources to be leveraged include support services, especially child care and transportation, to facilitate access to occupational training opportunities.

Referrals of participants to outside agencies should be directed to specific individuals at those organizations wherever possible to minimize the possibility of disconnects. For future cross-sector coordination, significant advance efforts would be needed to assess

from the perspective of the customer the logistical end of enrollment, eligibility determination, and related documentation needs.

Cost studies are a recommended element for any future initiatives in cross-sector collaboratives. Such assessments provide important data for possible adjustments to the model, as well as building the evidence base that speaks to the interests of potential funders.

Outcomes

The service-delivery model as implemented has sufficient power to positively impact the job readiness of a population with several barriers. Core features of the program model (e.g., Career Link, career mapping, and low caseload VCM) offer significant value and should be adopted widely to improve opportunities for disadvantaged participants.

Initiatives seeking to increase the employability and employment of disadvantaged populations will need to have significant and effective job development capacity in place prior to startup of the initiative.

WorkSource should continue to field the employer satisfaction survey. Results should be closely monitored and the results leveraged to engage additional employers as potential placement hosts based on the positive feedback.