The KEYSPOT Model

A home away from home

An evaluation of the Philadelphia Freedom Rings Partnership

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Media Mobilizing Project
People’s Emergency Center
Philadelphia Parks and Recreation
Philadelphia FIGHT
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IT Support for Workstation User Survey implementation
Cognis IT

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50% of Philadelphians cannot afford broadband Internet access in their own homes
In September 2010, by mandate of the American Reinvestment and Recovery Act (ARRA), the National Telecommunications and Information Agency (NTIA) awarded a total of $18.2 million to a diverse group of Philadelphia organizations under the Broadband Technology Opportunities Program (BTOP). An additional $8.9 million in matching funds provided by partners brought the total budget to $27.1 million. The group, later formalized as the Freedom Rings Partnership (FRP or “Partnership”), implemented a Public Computer Center (PCC) grant and a Sustainable Broadband Adoption (SBA) grant under a single umbrella branded as the KEYSPOT Program. These two programs, led by a core group of eleven academic, nonprofit, and government institutions, worked jointly to expand computer and Internet access and training to vulnerable populations in Philadelphia.

Open Technology Institute (OTI) led the planning and implementation of the partner-driven evaluation from January 2011 to January 2013. Through a needs assessment and shared decision-making process, partners identified a set of goals for the Partnership and measurable indicators towards those goals, moving their overall vision beyond the NTIA-prescribed deliverables. These goals address the ability of the FRP to reach Philadelphia’s most underserved populations; the effects of the FRP programs on broadband adoption, jobs, educational attainment, and community engagement; and the capacity and well-functioning of the Freedom Rings Partnership to meet its shared goals. OTI then collaborated with partners to develop a mixed methods evaluation plan. Though this Report represents the culmination of the evaluation, it does not represent the final picture of the Partnership. This Report represents the findings from data collection ending in January 2013, but the PCC and SBA grants officially end in June and August, respectively.

What the evaluation does show is a complex portrait of an innovative digital inclusion program in one of the country’s largest and poorest cities. The FRP has uniquely embedded public computer access and digital literacy programs within a network of social services and community-based work. With this approach, the FRP has helped bring Philadelphians online and helped them harness broadband’s positive socioeconomic effects. It has been most successful in cultivating social support for new users interested in broadband, and applying an expanded, Partnership-developed definition of broadband adoption, which includes a range of activities related to digital literacy and technology use.
The key points from this evaluation include both participant and Partnership outcomes.

SBA and PCC partners have partially met and/or exceeded their original training, awareness, and public computer center outputs, though not yet met their grant deliverables for new household and business broadband subscribers, or average number of public computer center users per week.

KEYSPOTs predominantly serve African Americans in Philadelphia’s poorest neighborhoods, while specific partners serve diverse target populations, including the homeless, veterans, people recovering from substance abuse, youth, seniors, English language learners, and other vulnerable populations.

KEYSPOTs serve individuals with various broadband needs, including those who: (1) lack funds to purchase home broadband or who do not have a computer at home; (2) may have tools at home but lack the confidence to use them; (3) do not have home Internet but feel broadband is highly relevant to their lives.

Participants learn about KEYSPOTs through personal recommendation and on-site promotion of digital and non-digital services, via cross-referrals of sites’ existing health and human service programs and the KEYSPOT lab and training programs.

KEYSPOTs provide critical access points to the Internet for participants, helping them overcome fear of technology and increase their digital literacy skills with the help of supportive frontline staff who create a safe, welcoming, and engaging space for new Internet and computer learners.
Participants visit KEYSPOTs for a variety of reasons, mostly pertaining to workforce development activities and training.

While participants do not initially visit KEYSPOTs for the purpose of community engagement, they discover a KEYSPOT community of learners, as well as participate in their own communities at KEYSPOTs, both on-site and online.

The Freedom Rings Partnership has increased the IT capacity of partner organizations; supported professional development of its digital literacy trainers; and improved service delivery through extensive collaboration inside and outside the partnership.

Partners unanimously agree about the importance of continuing digital literacy trainings and public computer centers in Philadelphia, but they are uncertain as to how and with whom to sustain the work.

Though more research is needed to determine the impact of KEYSPOTs on participants’ employment status, educational attainment, and home broadband subscription status, this evaluation establishes that KEYSPOTs laid the foundation for future improvements in those three areas.

Because this Report only represents interim results of the FRP progress towards its goals, the authors recommend a longitudinal study tracking a cohort of participants over time to document those outcomes. Similarly, the long-term outcomes of Partnership health can only be determined after the program has finished and a follow-up study conducted to see how the Partnership influenced each partner organization and their relationships with each other.

Overall, this evaluation illuminates an important broadband adoption model of reaching those most isolated from broadband via embedding computer centers and trainings in social service and community-based agencies—referred to in this Report as the KEYSPOT Model of Broadband Adoption. This model demonstrates how individuals who recognize the critical relevance of digital tools interact with trusted social settings that provide a comfortable learning environment and engaging staff who inspire and stimulate digital learning and broadband use, whether the use takes place in home or in public settings. The FRP’s experience with BTOP resulted in the creation of an innovative model for broadband adoption, bringing broadband and its benefits to Philadelphia’s most underserved communities.
Open Technology Institute (OTI) presents its final summative Report of the Freedom Rings Partnership (“FRP” or “the Partnership”). The Report assesses the Partnership’s progress towards its shared goals, which include but are not solely defined by grant deliverables outlined in its applications to the National Telecommunications and Information Administration’s Broadband Technology Opportunities Program. Spanning a period of two years from January 2011 to January 2013, the Report represents a collaborative or partner-driven evaluation process. The Report provides a qualitative and quantitative portrait of the Partnership’s current progress towards shared goals, including stimulating broadband adoption, promoting broadband’s socioeconomic effects for Philadelphia’s most underserved populations, and impacting the health and capacity of the Partnership.

The Report is structured as follows. The first two sections provide context for understanding the evaluation and findings: OTI describes relevant characteristics of Philadelphia in order to understand broadband adoption and presents an overview of the Partnership, grant deliverables, and program activities. Next, the Report outlines all stages of the evaluation, from planning of shared goals, methods, and evaluation activities, to analysis of the data.

The heart of this Report lies in the Findings section, which has been organized by shared goals identified by the Partnership. The section with an assessment of the Partnership’s progress in reaching deliverables outlined in its grant applications to the NTIA, as of January 2013. As this interim Report was written prior to the conclusion of the program (June 2013), these numbers offer a point of comparison for understanding the findings from OTI’s evaluation activities. The Findings section then addresses the first set of shared goals and answers participant-level questions of who attends KEYSPOTs, what needs are met by KEYSPOTs, and the impact of KEYSPOTs on participant broadband adoption, employment and education, and community engagement. The latter half of the Findings section answers Partnership-level questions around building capacity of the KEYSPOT partners and the functioning of the Partnership.

The Discussion and Conclusion sections synthesize these findings across goals to present overarching principles and lessons from the Philadelphia experience, comparing the model of digital literacy and broadband adoption to other program literature. For digital inclusion providers, researchers, policymakers, and funders, the Report recommendations provide actionable steps for developing meaningful and sustainable broadband adoption programs and policies in the future.
Poverty: Families at 200% of Poverty level
(ACS, 2010)
To properly evaluate the work of the Freedom Rings Partnership, it is critical to understand the socio-economic context in which this initiative has operated. This context remains profoundly challenging. After decades of population and job loss, Philadelphia faces high poverty and unemployment rates, poor educational outcomes, and an over-burdened municipal budget at the start of the 21st century. Philadelphia also lags behind the country and other large cities in Internet access and broadband adoption. One recent assessment estimates that by 2035 almost 40 percent of the city—six hundred thousand residents—will lack the skills to participate in a digital economy.\(^1\) This section outlines the initial setting in which the Partnership launched efforts to improve digital literacy and Internet access for Philadelphia’s most marginalized communities.

Profile of the City in 2010

Over the past two decades, Philadelphia has witnessed a pattern of changing demographics. In 2010, the population of the fifth largest city in the U.S. showed its first signs of growth since 1950—a gain of 0.6 percent since 2000.\(^2\) From 1990 to 2010, the city’s Hispanic population increased by 110 percent, while the number of White residents decreased by almost a third.\(^3\) According to the 2010 Census, Philadelphia’s 1,526,000 residents were 43 percent African-American, 41 percent White, 12 percent Hispanic and 7 percent Asian or Pacific Islander.\(^4\) Immigrants represented approximately 12 percent of the city’s population. Some 14 percent of Philadelphians had a disability.\(^5\) In comparison to similar cities, Philadelphia had relatively fewer young adults and more seniors as percentages of the overall population.\(^6\)

In 2010, Philadelphia faced stark poverty issues. One in four households fell below the poverty line, with higher rates for African Americans (31 percent) and Hispanics (41 percent).\(^7\) While the poverty rate remained steady from 2004 to 2010, the number of residents living close to the poverty line grew by almost 50 percent. Indeed, Philadelphia’s median annual household income in 2010 was among the lowest for large cities, at $34,400, and had varied little in recent years.\(^8\) This was partially the result of the city’s loss of jobs—almost 90,000 (more than one in ten jobs) between 1990 and 2010.\(^9\) Increasingly, the types

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**Background**

“This is a city that is struggling for employment, adequate education, enough health care, food. [We’re] like a lot of other cities, but... we’re in the top ten. We’re also the poorest of those top ten. We’ve got a huge number of folks who qualify for free lunch. We’ve got a fifth of the population that’s been incarcerated.”

Staff member at a Managing Partner of the Freedom Rings Partnership
of jobs available to Philadelphians focused on "Eds and Meds"—educational and health services—and required higher levels of education than the manufacturing jobs that once dominated the job market. Compounding this bleak jobs situation, in 2010, more than half of the adult population had low literacy skill levels, making reading basic instructions or filling out job applications difficult or impossible. After years of little change (although generally a percentage point above the national number), Philadelphia’s unemployment rate spiked after the start of the “Great Recession,” almost doubling between 2007 (6 percent) and 2010 (11.5 percent). The “Great Recession” and the accompanying subprime mortgage crisis also negatively affected homeowners in some of the city’s poorest neighborhoods, where median home values dropped by as much as 50 percent. Renters struggled as well—those with incomes under $35,000 (essentially Philadelphia’s median income) were much more likely to pay proportionately higher rents than their wealthier counterparts. Philadelphia had one of the lowest ratios of street-based homelessness to overall population in 2010: at that time the city’s public housing agency was the fourth largest in the country. The Philadelphia Housing Authority (PHA) served approximately eighty thousand people, including many of the residents in the neighborhoods targeted by FRP (of which PHA is a partner).

The recession also affected social services funding, from federal, state, and city governments, as well as philanthropic foundations. Spending cuts were especially ominous for the already troubled Philadelphia School District. While standardized test scores had been increasing incrementally (up by about 4 percent each year from 2005 to 2010), Philadelphia’s public schools faced a budget shortfall and steadily decreasing enrollment. These pressures on the educational system had a disproportionate effect on already disenfranchised demographics: most students were African-American (56.2 percent) or Hispanic (18.6 percent), and the vast majority was poor (80.6 percent). The same demographic groups were disproportionately represented among Philadelphians lacking high school diplomas (19 percent of the general population) and without college degrees (77 percent of the general population).

Broadband Adoption & Internet Access

When the FRP launched, Philadelphia ranked well below the national average in broadband adoption—as might be expected given the city’s challenging socioeconomic characteristics and the documented link between poverty and lack of Internet connectivity. In 2010, an estimated 55 percent of Philadelphia residents lacked home Internet access, and in certain neighborhoods with higher concentrations of poor African-American and Hispanic residents, as many as 80 percent of households did not have broadband at home. These neighborhoods were also characterized by lower rates of educational attainment—another factor associated nationally with lack of home broadband—than the city at large. Lastly, in Philadelphia (and mirrored in national trends), research has demonstrated that seniors are significantly less likely than younger groups to use the Internet. As a result, these communities often depended on public libraries to go online.

In an earlier effort to address disparities in broadband access, Philadelphia stood out as a pioneer among large cities by promoting municipal wireless. However, Wireless Philadelphia, as the 2004 effort was known, was largely unsuccessful. Connection speeds were slower than expected, the network was not completed, and in 2008 the project ended. The following year, the city rolled out a new initiative called Digital Philadelphia—envisioned as a “reset” of Philadelphia’s approach to telecommunications. Initial plans included using wireless networks to help bridge the digital divide, increasing city workers’ use of technology and access to the Internet, offering better and more municipal services online, and creating IT business enterprise zones.

City plans to address the digital divide are an essential part of efforts to keep pace with the ever-shifting digital
environment. Approximately 80 percent of Fortune 500 companies, such as Walmart, Comcast, and McDonald’s, now only accept job applications online. Government agencies and public health organizations increasingly send clients to the Internet to access records or apply for benefits. And in 2014, the GED will shift to an all-digital format—test-takers will have to take the exam online. As noted in seminal research about broadband adoption in low-income communities, while “until recently, a supplement to other channels of information and communication,” the Internet now “has become increasingly a basic requirement of social and economic inclusion.” Indeed, “access to the Internet is not a choice: it is a necessity, shaped by a complex array of barriers to access.” Those without digital literacy or reliable Internet face being left behind as the rest of the world progresses into a digital future.

Against the city’s socioeconomic changes and historical challenges to bringing broadband and its benefits to Philadelphia’s most underserved populations, the Freedom Rings Partnership launched in 2010. The Partnership is a diverse collection of community-based and service organizations that received funding to provide digital literacy and public computer centers to Philadelphians. The next sections explain the early history of this endeavor and establish the scope and nature of this evaluation.
<table>
<thead>
<tr>
<th>Managing Partners &amp; Host Site Issue Areas</th>
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<tbody>
<tr>
<td><strong>PCC</strong></td>
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<tr>
<td>Philadelphia Opportunities Industrialization Center (OIC)</td>
</tr>
<tr>
<td>2 PCCs, one mobile lab</td>
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<tr>
<td>GED programming, workforce readiness training, mobile lab with GED and job training</td>
</tr>
<tr>
<td><strong>PCC &amp; SBA</strong></td>
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<tr>
<td>People's Emergency Center (PEC)</td>
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<tr>
<td>20 PCCs</td>
</tr>
<tr>
<td>Homelessness, economic development, workforce readiness, domestic violence, services for immigrants, seniors, youth</td>
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<tr>
<td><strong>SBA</strong></td>
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<tr>
<td>Youth Outreach &amp; Adolescent Community Awareness Program (YOACAP)</td>
</tr>
<tr>
<td>Youth services, community organizing, health services</td>
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</table>
In September 2010, under mandate of the American Reinvestment and Recovery Act (ARRA), the National Telecommunications and Information Agency (NTIA) awarded a total of $18.2 million to a group of Philadelphia organizations under the Broadband Technology Opportunities Program (BTOP). An additional $8.9 million in matching funds provided by partners brought the total budget to $27.1 million. This group, later formalized as the Freedom Rings Partnership (FRP or “Partnership”), successfully applied for the funding under two BTOP grant categories: Public Computer Centers (PCC) and Sustainable Broadband Adoption (SBA). The Partnership had also submitted a request for approximately $31 million from the NTIA’s Comprehensive Community Infrastructure (CCI) division of BTOP to build a middle mile fiber network in the city, but this proposal was not successful.32

According to the NTIA, PCC projects would “expand public access to broadband service” by establishing public computer centers at community institutions, while SBA projects would “promote broadband demand” and provide “broadband education, awareness, training, access, equipment or support.” BTOP funding overall included a specific emphasis on reaching “underserved” or “vulnerable” populations.33

At the time of writing, the core Partnership management consists of eleven academic, nonprofit, and government institutions. The lead agencies (“Primes”) on the grants are the City of Philadelphia Office of Information Technology (OIT) for PCC and the Urban Affairs Coalition (UAC) for SBA.

Under the management of OIT, six “Managing Partners” provide public computer center facilities at their own sites, and also have created and manage additional public computer centers at community anchor institutions (referred to as “host sites”) throughout Philadelphia.

Under the management of UAC, six Managing Partners (three of which also receive PCC monies) provide digital literacy training and work to increase broadband adoption rates in the city.34 Prior to BTOP funding, each of these SBA partners had provided some digital literacy training. With the BTOP funding, these SBA partners supported and expanded training at their own sites, as well as at PCC sites and other Allied Organizations in
Grant Deliverables to the NTIA

As stated in the PCC and SBA grant applications, the Partnership has aimed to achieve the following goals:

**SBA**

<table>
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<tr>
<th>Training participants</th>
<th>15,000</th>
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<tbody>
<tr>
<td>Home subscribers</td>
<td>5,000</td>
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<tr>
<td>Business subscribers</td>
<td>50</td>
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</tbody>
</table>

| Netbooks distributed to Housing Authority residents | 5,000 |
| Reached by awareness campaign                      | 75,000 |

- ➜ program portal/website
- ➜ e-learning system

**PCC**

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<tr>
<th>Public computing centers</th>
<th>77</th>
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<tr>
<td>People per week</td>
<td>15,000</td>
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**NTIA Definitions of Grant Deliverables**

- **Training**: classroom-based, instructor-led, scheduled trainings.

- **Subscriber**: A household subscriber must have a paid or subsidized home broadband Internet connection. A household subscription may include more than one individual member of the household, but is still counted as a single household.

- **Awareness participant**: attendees at outreach events and participants who reference specific media channels (newspaper, magazine, website, etc) when describing how they heard about the program.

- **Awareness impression/target audience**: total number of intended target audience, including estimates of media market (online, tv, radio, newspaper, and other outreach) impression.
Freedom Rings Partnership Stakeholders

Primes

Managing Partners

UAC
- Drexel
- CCP
- PHA
- YOACAP
- ODAAT

OIT
- MMP
- PEC
- FIGHT

PPR
- FLP
- OIC

80+ Community Anchor organizations
Jointly, the public computer centers and digital literacy trainings are branded as the KEYSPO T Program. For purposes of clarity, this Report refers to the SBA and PCC grants as FRP programs and to the physical places where the FRP provides public computer access and digital literacy trainings as KEYSPO T s. SBA instructors and PCC lab assistants are known as “Webguides.”

Two different sources of data guided the development of the PCC deliverables. The Prime surveyed prospective collaborators during the grant writing process to understand their existing digital literacy program capacity, whether or not an existing computer lab needed to be updated, and where new potential sites could be hosted. These prospective partners then selected site locations based on data collected by the Knight Center for Digital Excellence, which showed areas of broadband need. A later analysis commissioned by OTI confirmed that the placement of computer centers matched areas of high broadband need.

To achieve the goal of five thousand new household Internet subscriptions, SBA partners have promoted the KEYSPO T Discount Broadband Plan as well as the Comcast Internet Essentials program. In May 2011, UAC (the Prime) started negotiations with Mobile Citizen, a vendor of Clear Wireless services, and Wilco Electronic Services, a minority-owned cable provider in Philadelphia, to create and implement a low-cost Internet plan for KEYSPO T participants (referred to in this Report as the "KEYSPOT Discount Broadband Plan"). The FRP contributed $125,000 to subsidize the program. A year later, at the end of June 2012, SBA partners piloted the program with Philadelphia Housing Authority (PHA). In November 2012, they finalized the eligibility criteria: any KEYSPO T participant without the Internet at home can purchase a wireless home Internet plan for $14.99 per month, with a subsidized modem included.

To achieve the goal of distributing five thousand netbooks, SBA partners Drexel University, Community College of Philadelphia, and the PHA created a separate training program for PHA residents. Community College of Philadelphia instructors, along with Drexel student interns, help PHA residents learn computer and Internet basics in two four-hour training sessions. After they complete eight hours of training, PHA residents can receive a netbook. Drexel oversees the management of the program and the distribution of the netbooks.

For the training deliverable, SBA partners set their goal by estimating an average of fourteen training hours per participant. To achieve the goal, each SBA partner implemented its own trainings and curriculum. To track learners’ progress and the different types of training, SBA partners proposed in their grant application the development of an e-learning management system.

Lastly, to achieve the awareness deliverable, Drexel led a Partnership-wide branding campaign to “promote broadband awareness in vulnerable populations.” In addition to traditional media channels, Drexel worked with partners to create the KEYSPO T website (www.phillykeyspots.org), a central repository for host site information and training schedules.

To manage the grants, the FRP Primes and Managing Partners set up a series of governance structures and meeting schedules. First, both grants held biweekly PCC Steering Committee meetings and SBA Steering Committee meetings where staff representatives from each Managing Partner would meet to discuss implementation successes and challenges, quality improvement, and general resource sharing.

The Partnership also created four sub-committees, or "Working Groups," focused on training, technology, awareness, and evaluation. Staff from Managing Partners had varying levels of participation in each of these Working Groups, depending on their own level of interest. On the SBA side, the Training Working Group discussed the training curriculum and digital literacy learning goals for participants. On the PCC side, the Training Working Group partners primarily discussed professional development activities and goals for Webguides. The Technology Working Group primarily focused on PCC grant needs, such as purchasing, installing, and
troubleshooting technology at the computer centers. The Awareness Working Group focused on the branding and public awareness campaign of the Partnership. Lastly, the Evaluation Working Group engaged partners in the development of OTI’s evaluation plan, which is discussed in the next section.

As proposed in the original grant applications, the FRP has sought to further strengthen its programmatic reach by developing several collaborations between the PCC and SBA partners. Several PCC sites offer SBA trainings, particularly those partners who receive both PCC and SBA funding. As the PCC grant focuses on establishing new public computer centers, SBA trainings serve as a natural complement to these centers. In addition to this diverse composition of BTOP-funded partners, the Partnership has also pursued collaborations with other entities such as senior centers, the School District of Philadelphia, the Mayor’s Commission on Literacy, and the Mayor’s Office of Reintegration Services for Ex-offenders, among other groups.

Compared with other recipients of PCC and SBA grants nationally, the FRP is one of the largest that is focused on a single metropolitan area. The dollar amount and quantity of project deliverables are outpaced by only a handful of BTOP awardees in other major U.S. cities, such as New York, Chicago, and Los Angeles. While many other large BTOP grant recipients utilize existing service networks, like a statewide library system, the FRP constitutes a diverse network of organizations that have differing missions and target populations. The Managing Partners and host sites (collectively “partners”) offer public health services, GED preparation and other continuing education programs to support new immigrants, independent living support services for people with disabilities, drug and alcohol addiction counseling, youth and seniors programming, and more (see p. 14). Members of the FRP work with those facing unemployment, homelessness and unstable housing, reentry following incarceration, low educational attainment, and other social dynamics common in Philadelphia. The provision of public broadband access and computer training complements this wide range of existing services and support networks for vulnerable populations.
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<td>3b What are the effects of KEYSPOT access and training on participants’ educational attainment?</td>
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<td>4 What are the effects of KEYSPOT access and training on community engagement?</td>
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<td>5 In what ways has the FRP been able to increase the capacity of its partners?</td>
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<td>6 How well has the FRP functioned?</td>
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About the Evaluators

Open Technology Institute (OTI) completed this evaluation as a named partner on the SBA grant and sub-contractor for the PCC grant.

OTI’s involvement in the FRP began when the Knight Center of Digital Excellence contracted OTI to assist Philadelphia partners in the formation of a BTOP proposal. OTI assisted with one unsuccessful suite of applications for the first round of NTIA Broadband Technology Opportunities Program funds, as well as the second, successful pair. In 2007, staff at OTI produced a report assessing Wireless Philadelphia, the City’s effort to bridge the digital divide with a citywide wireless network.

In order to complete the evaluation, OTI formed an interdisciplinary team of qualitative, quantitative, and geospatial analysts, as well as technologists with experience in developing databases and online tools. Two analysts based in Philadelphia served as the main liaison to the broader team.

For the writing of this Report, OTI relied on feedback from two independent, anonymous reviewers established in the field of digital inclusion evaluation and research. OTI also solicited feedback and input from Primes and presented drafts for review to the Evaluation Working Group.

Discovering Common Goals

Since 2011, Open Technology Institute (OTI) has developed an evaluation in collaboration with Primes and Managing Partners. The logic behind this collaborative approach relates to the diversity of stakeholders involved in the FRP and the inability of NTIA’s established metrics to capture the breadth of the project’s ambitions, achievements, and challenges. The Partnership’s work to establish shared goals and evaluation instruments was itself a formative and formidable process of synthesizing visions and synchronizing documentation. This Report refers to the evaluation as a partner-driven one, and it differs from top-down evaluations, where a funder or other institutional source of control dictates what metrics program implementers need to measure and achieve goals.

As the evaluator, OTI led the development of shared
goals, standardized indicators, and a comprehensive evaluation plan. OTI also created and implemented the necessary research tools and reporting platforms to assist the FRP in documenting progress towards NTIA grant deliverables.

For evaluation planning, OTI engaged in a two-step process that involved needs assessments and facilitated discussion. First, in the spring and summer of 2011, OTI interviewed all Managing Partners to distill each partner’s: (1) understanding of their own goals in providing public computer access or digital literacy trainings; (2) ideas for questions whose answers would demonstrate success and address challenges; (3) preferred evaluation methods for answering those questions. OTI also conducted a “Global Audit” of partners’ numerous existing evaluation instruments to determine if partners had common metrics between them.

Training literature (dated August 2011) produced by FIGHT for new digital literacy instructors (Webguides) reflected a refined definition:

**“An Adopter** is a person who has increased their computer skills or gained new computer skills in order to obtain information they need, perform transactions, and communicate more effectively and thereby improve his/her quality of life.”

**“Broadband Adopter:** An Adopter is a person who has increased their computer skills or gained new computer skills in order to obtain information they need, perform transactions, and communicate more effectively and thereby improve his/her quality of life.”

**“A Subscriber** is a person who has a paid or subsidized subscription to the Internet, who becomes an Internet user of a library, computer center or other public access point for no cost, or who gets wireless access to the Internet through handheld devices such as cell phones, smart phones, iPads, or netbooks. A Subscriber is someone who previously did not access the Internet in one of these ways.”

Reflecting this information back to the Evaluation Working Group (EWG), OTI then facilitated several discussions to help leadership agree upon both shared goals and evaluation instruments.

In the course of this process, partners extensively discussed NTIA subscription metrics and the definition of broadband adoption (see below). Several Managing Partners along with OTI questioned whether NTIA’s targets of increasing home subscribership and broadband demand adequately reflected the complexity of broadband adoption and broadband’s impacts.

Partners agreed that this definition (compared with the NTIA’s definition) more accurately reflected the type of work being done in Philadelphia, and thus adopted the expanded definition.

In July 2011, on a BTOP discussion list that OTI hosted and that included a wide variety of BTOP awardees from across the country, Philadelphia FIGHT—a partner responsible for managing one third of all KEYSPOTs in the Partnership—said:

**“Broadband Subscriber:** A person who obtains a 1) fully-paid, 2) subsidized or 3) free subscription to the Internet (for example becomes an Internet user of a library, computer center or other public access point for no cost) and uses a a) computer or b) handheld devices such as cell phones, smart phones, iPads, or netbooks for access to the Internet. A New Subscriber is someone who previously did not access the Internet in any of these ways prior to program participation.”
In December 2011, a total of six goals emerged from the needs assessments and collaborative discussions.

These shared goals (across both grants) include both participant-level outcomes as well as partnership-level ones, with the assumption that partnership dynamics interact with the ability of the FRP to help participants benefit from broadband technologies. Goals 1, 5, and 6 relate to the Partnership’s internal functioning and form the foundation for the participant-level outcomes of adoption (Goal 2), education and employment (Goal 3), and community engagement (Goal 4).

The goals also reflect long-term outcomes, such as positive changes in employment and educational attainment due to exposure to FRP programs, and short-term ones, such as increased digital literacy skills, workforce skills, and educational opportunities.

Due to the lack of standardization between diverse partners’ evaluation instruments as determined by the Global Audit, OTI led a process of developing Partnership-wide evaluation research instruments, including specific questions to be asked in surveys, focus groups, and interviews for review and approval by the EWG. One primary point of discussion was how the evaluation would fairly represent the range and diversity of programming offered by host sites. The Partnership never issued standard curricula or a set of trainings for host sites, and the host sites all serve different populations with varying levels of concern over data collection (e.g., people living with HIV/AIDS or women who are victims of domestic violence). Standardizing a set of indicators
across a non-standard program was a formidable challenge. Also of considerable debate was the difficulty in matching long-term goals with short-term indicators, particularly for measuring home subscriptions. For example, while trainings stimulate interest in subscription, actual subscriptions might not occur within a short time frame. Since these long-term shared goals would be difficult to capture both in the short time (two years) allotted for program evaluation and in light of environmental factors external to the Partnership’s work (e.g., an economic downturn), the EWG instead focused on measuring short-term indicators such as increased skills, increased knowledge, and improved opportunities in each of the goal areas.

Broadband’s positive socioeconomic and community effects presented additional challenges for measurement. For employment outcomes, the EWG members identified the need to use qualitative indicators such as stories of skills development and stories of entrepreneurship to measure progress. EWG members also recognized the difficulty in documenting improved educational outcomes—a long-term investment—in the short time allotted to FRP programs. Additionally, due to sensitivity of collecting data on minors, OTI excluded youth from this evaluation, thereby limiting the scope of evaluation to adult educational impacts. As a result, members discussed collecting stories of how adult participants access and connect with educational opportunities provided by KEYSOTPs, in addition to any stories of participants using KEYSOTPs to advance their education. For community engagement indicators, OTI queried Managing Partners and Primes about their examples and interpretation of community engagement. The resulting range of activities included attendance at a community meeting at a KEYSOTP, peer-led learning, and using technology for community-focused work.

As for increasing broadband adoption, partners agreed on the expanded definition of adoption noted previously. Nevertheless, the EWG struggled to arrive at indicators due to differences in the nature of NTIA grant deliverables for the two programmatic sides of the FRP. PCC Managing Partners did not need to include a focus on home broadband subscription as an indicator, while SBA Managing Partners and the SBA Prime did. For the SBA side, capturing specific subscription numbers was challenging, given that there were no publicly available datasets of subscription rates that matched the time frame of the evaluation. Also, even though KEYSOTP partners promoted the Comcast Internet Essentials program, Comcast was unwilling to share the number of subscribers to the program. After careful deliberation, the EWG arrived at a set of indicators that reflect a range of activities related to a spectrum of adoption. The group agreed that qualitative and quantitative measures would prove useful to track and focused on gathering information from the Workstation User Survey, focus groups, and interviews.

In order to track progress towards these shared goals using the indicators agreed upon by the EWG, OTI converted each goal into an answerable question or questions.

After the Partnership approved the final evaluation plan in April 2012, OTI submitted and received IRB exemptions for the plan by the Institutional Review Boards at the New America Foundation and Philadelphia FIGHT (April and May 2012). Then, after being certified by NTIA as having met criteria for an exemption from IRB review under the Common Rule for the Protection of Human Subjects (June 2012), OTI carried out a revised data collection plan across a total of seven months, July 2012-January 2013.

It should be noted that throughout the evaluation planning and implementation process, the entire team routinely solicited feedback from Primes and EWG to help design or approve evaluation instruments and their deployment. For example, OTI drafted a sampling plan and set of questions for the Workstation User Survey (explained below), which the EWG reviewed, amended, and sanctioned to fit its needs and concerns. As well, OTI produced quarterly formative evaluation reports, which contained preliminary data and analysis so that the Partnership could reflect on its progress and make any needed changes per preliminary findings.
Identifying Key Data Sources

To complete the evaluation, OTI targeted four main populations: key leadership in the Partnership (staff at Primes, Managing Partners, and host sites), key leadership affiliated though not funded by BTOP (staff at Allied Organizations), frontline staff (Webguides), and participants.

Evaluators also relied on several key documents to piece together the history and examine FRP milestones including monthly reports (written by Managing Partners, and also referred to throughout as “Partners’ Monthly Reports”), NTIA reports (written by Primes, and also referred to throughout as either “Primes’ Quarterly Report to the NTIA” or “Primes’ Annual Report to the NTIA”), and American Recovery and Reinvestment Act (ARRA) reports. These documents contain information such as the number of PCC users, PCC training hours, SBA training hours and participants, and home broadband subscription data.

Collecting & Analyzing Data

To measure the indicators agreed upon by the partners, OTI drew from Partnership documents and queried staff and participants using a variety of quantitative and qualitative methods, outlined below. Detailed information regarding each evaluation instrument, such as response rates, composition of focus group participants, and protocols for quoting individuals, can be found in the appendices.

**Workstation User Survey (WUS):** In collaboration with the EWG, OTI developed two versions of an adult participant survey, known as the Short and Long WUS. The Short WUS collected demographic information from KEYSPOT participants on an ongoing basis at PCCs via a computer script that opened the survey in a web browser whenever a participant logged into the computer. For SBA partners, instructors shared a unique link for classroom participants to fill out during trainings. The Long WUS collected the same demographic information, but also posed additional questions on how the participant traveled to the center or training, reasons for coming, frequency of Internet use, and home subscription status. OTI deployed this survey by using the same process described previously. The Long WUS was deployed for two weeks, one week in October 2012 and one week in December 2012. For both versions of the survey, only participants 18 years or older were invited to complete the survey. Youth-serving host sites did not deploy the WUS, including all of the Philadelphia Parks and Recreation sites.

OTI analyzed both the Short WUS and Long WUS data for this report to understand target populations’ demographics and broadband adoption characteristics.

**Geospatial analysis (GIS):** OTI mapped WUS participant data to examine demographics and compare neighborhoods of KEYSPOT participants with areas where broadband subscription rates are low. Internet Service Providers must report this information annually to the FCC (in Form 477). At the time of the writing of this Report, Form 477 data serves as the most accurate baseline for assessing citywide broadband subscription rates.

**Standardized Exit Survey (“Exit Survey”):** At the direction of the SBA Prime and in collaboration with partners, OTI designed an online Exit Survey for classroom-based, instructor-led trainings, as defined by the NTIA. The Exit Survey assessed the FRP’s impact on individual participants, specifically asking about job skills, educational opportunities, broadband use and access, and interest and intent to purchase home subscription after training.

**Focus groups with participants:** OTI gathered stories from participants through focus groups. Discussion topics included reasons why participants attended KEYSPOTs, the impact of KEYSPOTs on participant employment and education, community engagement, and adoption, as well as general reflections on participants’ KEYSPOT experiences.

**Focus groups with Webguides:** At the request of Managing Partners, OTI examined the role of Webguides, who functioned as frontline staff and simultaneously were served by the FRP. These focus
groups with Webguides explored two themes: Webguides’ own professional experiences within the Partnership and their observations of students and computer center attendees.

**Interviews with Partnership staff (Primes, Managing Partners, and host sites):** OTI interviewed these staff members to understand their perspectives on how the Partnership functioned and influenced partners’ organizational capacity. OTI also queried staff about what types of outcomes they observed for participants. It was important to interview all three levels of the Partnership staff, from Primes to Managing Partners and host sites, in order to fully capture the varied experiences of participating in the multi-stakeholder Partnership.

**Interviews with staff at Allied Organizations:** OTI interviewed Allied Organizations that did not receive BTOP funding but worked with the Partnership in some capacity. As described previously, the Partnership strengthened its work through collaboration with other diverse community-based organizations in Philadelphia. OTI solicited feedback from Managing Partners for suitable candidates to interview. Interviews focused on the organizations’ external perspectives of the Partnership and its achievements and challenges.

**Primes’ Reports to NTIA:** All Managing Partners track key outputs for the FRP programs in Partners’ Monthly Reports, which the Primes then review and compile into Primes’ Quarterly and Annual Reports to the NTIA. OTI relied on Primes’ Quarterly Reports to track key outputs for each grant: (1) SBA training hours, training participants, subscribers, netbook distribution, and number of participants exposed to outreach and awareness materials, and (2) PCC sites and average users per week. OTI also examined the Primes’ 2011 and 2012 Annual Reports to the NTIA to determine the range of training hours and topics offered by PCC and SBA programs.

Finally, over the course of the project, partners expressed interest in creating a visual of the relationships built within the Partnership, as well as with organizations outside of the Partnership. OTI developed an initial list of partnerships from a participatory exercise with partners during a March 2012 meeting. In January 2013, OTI solicited partner feedback about additional partnerships to include. Using Gephi, an open source data visualization software program, OTI mapped this list of internal and external partnerships. Though this analysis was not included in the initial evaluation plan, creating this visual aligned well with Goals 5 and 6 (increased partner capacity and Partnership functioning). The visual represents an initial attempt to demonstrate the internal dynamics and widespread reach of the Partnership (see Appendix H, also p. 50).

By creating a mixed methods approach to evaluating FRP impacts, OTI aimed for a rich, textured understanding of the Partnership and its progress towards shared goals.

The timeline (see p. 29) demonstrates when each of these evaluation activities occurred, along with some key Partnership milestones.

### Doing the Analysis

OTI conducted quantitative analysis using PSPP, an open-source version of SPSS, a statistical software package, and Excel. Maps were created using ArcGIS. Where appropriate, OTI ran chi-square tests and t-tests to determine statistical significance between demographic groups and home broadband subscription rates.

OTI conducted qualitative analysis using a team of coders and reviewers to code, summarize, and extrapolate key themes according to three factors:

- **Frequency of the theme,** as determined by number of stories or number of people
- **Saturation of the theme,** meaning that the theme came up across all focus groups or interviews
- **Triangulation of theme,** meaning that the theme came up across different participant groups (KEYSPOT participants, trainers, staff, Allied Organizations)
Reporting Results
To focus attention on the FRP and its successes and challenges, this Report first presents a section on the most recent progress made on NTIA deliverables. Then, OTI synthesizes and presents quantitative and qualitative findings by the Partnership’s shared goals. As indicated by the methods alignment table on page 20 and as mentioned in the Discovering Common Goals section above, all but one goal—which relates to increased capacity—rely on both quantitative and qualitative data. The Report uses this structure to demonstrate the holistic impact of the FRP in any given area. Quantitative findings may provide a quick assessment of a particular goal, but qualitative data furnish the rich and more nuanced meaning behind the numbers and paint a more comprehensive picture of the Partnership’s impact. In addition, qualitative instruments provide answers to exploratory evaluation questions, produce meaningful themes that do not reduce experiences of participants or staff to rigid categories, and allow participants and staff to speak in their own language.

As a rule, to maintain the anonymity of sources of qualitative data, this Report refers to interview or focus group subjects with general identifiers, such as “interviewee,” “staff person,” “staff member” (for interview subjects), Webguides (for focus group subjects who work as frontline staff), and participants. To minimize the invasiveness of data collection, OTI did not ask for

<table>
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<tr>
<th>Shared Goal</th>
<th>Evaluation Questions</th>
<th>Selected Indicators</th>
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<tr>
<td>Partners attract and meet needs of target populations.</td>
<td>1a: Who participates at KEYSPOTS?</td>
<td>Demographic profile of KEYSPOT participants</td>
</tr>
<tr>
<td></td>
<td>1b: What participant needs are met through KEYSPOTS?</td>
<td>Reasons for using KEYSPOTS</td>
</tr>
<tr>
<td>Participants adopt broadband.</td>
<td>2: What are the effects of KEYSPOT access and training on broadband adoption?</td>
<td>Number of subscriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stories of participants overcoming fears, finding relevance, sharing broadband benefits with others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Range of Internet access options and use</td>
</tr>
<tr>
<td>Participants increase their educational attainment and improve their employment status.</td>
<td>3a: What are the effects of KEYSPOT access and training on participants’ employment status?</td>
<td>Stories of educational attainment and workforce development</td>
</tr>
<tr>
<td></td>
<td>3b: What are the effects of KEYSPOT access and training on participants’ educational attainment?</td>
<td>KEYSPOT training outcomes</td>
</tr>
<tr>
<td>BTOP sites serve as hubs for community engagement.</td>
<td>4: What are the effects of KEYSPOT access and training on community engagement?</td>
<td>Stories of community building and support at KEYSPOT</td>
</tr>
<tr>
<td>Partnership strengthens the capacity of partners to advance a collective agenda.</td>
<td>5: In what ways has the FRP been able to increase the capacity of its partners?</td>
<td>Stories about staff development, technical infrastructure, resource sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New internal and external collaborations</td>
</tr>
<tr>
<td>Partnership functions well.</td>
<td>6: How well has the FRP functioned?</td>
<td>Stories about building the partnership, communications</td>
</tr>
</tbody>
</table>
demographic information from participants during focus groups; they are simply referred to here as “participants.”

Limitations

OTI faced limitations in conducting this evaluation. Some were common to collaborative evaluations and some unique to the field of digital literacy and broadband adoption.

First, the process of developing shared goals and indicators across diverse partners was a time-intensive process that shortened the time available for actual data collection and analysis. Negotiating and creating a Partnership-wide evaluation plan was a challenge given the FRP’s many diverse stakeholders, each with their own data collection processes. This timeline was further restricted by the unclear NTIA process for certifying the evaluation plan as being exempt from Human Subjects Review. When the NTIA did certify the plan, OTI adjusted its timeline and revised the scope of the original proposed evaluation activities to focus on primary data collection and analysis. As mentioned previously, data collection ran from July 2012 through January 2013, the latter months of the funding cycle.

Second, the scope of the Human Research Subjects protocol—approved by two separate Independent Review Boards—limited the ability to collect data from all program participants. The protocol specified that evaluators could not collect any information from individuals under 18, despite the fact that many KEYSPOts serve youth. In an effort to minimize this limitation, OTI interviewed staff from youth-serving organizations to indirectly collect information on the program’s impact for this population. The section on progress on NTIA deliverables does include all youth usage of public computer centers and trainings. Youth organizations, specifically Philadelphia Parks and Recreation, also developed its own tracking protocols separate from this evaluation.

Third, OTI did not systematically examine the impact of the awareness campaign on stimulating broadband demand. Drexel, the main Managing Partner spearheading the awareness campaign effort, tracked events and impressions in order to fulfill NTIA reporting requirements.

Fourth, like any impact measurement tools, the ones the Partnership chose had limitations. Self-selection and social desirability bias are problems that skew both quantitative data and qualitative data towards positive outcomes, particularly among participant findings. Generally, people who participate in evaluation research express very positive reviews of their experiences; for participants who had average or negative experiences, they may not feel compelled to fill out a survey or participate in a discussion to share those experiences. In all of OTI’s evaluation instruments, participants were encouraged to provide honest answers, as no identifying information was ever collected, but the problem of social desirability bias still occurs.

In focus group research, this problem is compounded by a “group think” phenomenon where participants tend to agree with one another, and participants who have differing opinions may hesitate to speak. To mitigate this problem, OTI moderated focus groups with probing questions designed to elicit differing opinions. Additionally, recruitment of Webguides took place with the help of staff at Managing Partners, some of whom told OTI that they intentionally suggested names of individuals with varied opinions of KEYSPOts and FRP programs. Thus, Webguide focus groups were not as prone to group consensus.

Beyond these common biases in research, this evaluation encountered challenges with Partnership-wide creation and implementation of the surveys. Given that these tools were collaboratively developed, OTI did not collect data deemed unessential, including education or income level of participants and participant addresses. The lack of this information then limited the types of possible analysis, particularly for geospatial work which requires more granular data than ZIP code for reliable analysis. In terms of implementation, some partners chose not to use one or both surveys. Fewer Managing Partners and KEYSPOts used the Exit Survey compared to the WUS, likely because it was created later in the evaluation
process and the survey did not load automatically on computer terminals for participants. As both surveys were deployed online with a computer, these surveys also self-select for participants who have a basic familiarity with typing and keyboard skills. These issues all limit the representativeness of the quantitative findings.

Finally, while the FRP is ambitious and large in its scope, this evaluation design is not longitudinal, does not follow a cohort population, and therefore does not measure pre- and post-effects of the FRP’s programs. With this short-term design, it does not track any long-term indicators, such as number of participants who received jobs after attending a KEYSPOT, or number of participants who apply to college as a result of KEYSPOT. Similarly, it cannot attribute any changes in citywide employment, economic indicators, home subscription rates, or other statistics directly to the program. This report focuses solely on the short-term impacts of the program on participants, with the understanding that a variety of external factors (e.g., funding of digital inclusion programs, funding of other social services and community-based programs, economic crises, etc.) influence long-term effects and cannot be observed until much later.
In this section of the Report, OTI first presents an updated look at the Partnership’s progress on achieving its NTIA deliverables. Then, OTI presents findings from primary data collection related to each of the six goals to provide a more comprehensive picture of the FRP’s success bringing broadband and its benefits to Philadelphia’s most underserved communities. Findings related to KEYSPOT target populations and their needs come first, thereby providing context to the three participant-level goals focused on KEYSPOT effects on broadband adoption, jobs and education, and community engagement. This section ends by addressing the two final Partnership-level goals related to capacity and the functioning of the FRP.

Each goal is presented as a question, followed by a summary of the findings and methods used to validate the findings statements. As mentioned in previous sections, many of the evaluation instruments used for this Report represent a narrow view of the population surveyed, making it difficult to draw general conclusions about KEYSPOT participants, Webguides, host sites, or Allied Organizations. However, where findings that pertain to these populations triangulate within and between qualitative and quantitative data, the results are generally strong. A full audit of the representativeness of the Findings for each goal is available in Appendix I.

Because of the wealth of data, questions pertaining to who participates (Goal 1) and how well the Partnership has functioned (Goal 6) are subdivided into categories that provide a more refined and complex portrait of participants and the FRP.

### Methodologies and Populations Represented

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Total Organizations Represented</th>
<th>Host Sites represented</th>
<th>Total Number of Responses or Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>WUS Data (Short and Long)</td>
<td>8 of 9 Managing Partners</td>
<td>54 of estimated 60 sites who serve adults</td>
<td>3148 Adult Responses (46% Response Rate)</td>
</tr>
<tr>
<td>Long WUS/GIS</td>
<td>8 of 9 Managing Partners</td>
<td>43 of estimated 60 sites who serve adults (OTI did not collect this information)</td>
<td>538 Adult Responses (51% Response Rate)</td>
</tr>
<tr>
<td>Standardized Exit Survey (SES)</td>
<td>7 of 9 Managing Partners</td>
<td></td>
<td>105 Adult Responses (93% Response Rate)</td>
</tr>
<tr>
<td>Participant Focus Groups</td>
<td>4 of 9 Managing Partners</td>
<td>11 of 80+ Host Sites</td>
<td>28 KEYSPOT Adult Participants</td>
</tr>
<tr>
<td>Webguide Focus Groups</td>
<td>8 of 9 Managing Partners</td>
<td>13 of 80+ Host Sites</td>
<td>13 Webguides</td>
</tr>
<tr>
<td>Interviews with Partnership Staff</td>
<td>9 of 10 Managing Partners*</td>
<td>5 of 80+ Host Sites</td>
<td>18 Staff Interviews</td>
</tr>
<tr>
<td>Interviews with: Allied Organizations</td>
<td>6 Allied Organizations</td>
<td>(Not Applicable)</td>
<td>7 Allied Organization Staff Interviews</td>
</tr>
</tbody>
</table>

*10 Managing Partners includes one managing partner who ceased operations earlier in the Partnership. One managing partner did not respond to requests for interviews.
Progress On NTIA Deliverables

A review of the FRP’s grant deliverables to the NTIA forms part of the Partnership’s process of assessing its shared goals. The Partnership felt these deliverables provided a narrow view of broadband adoption and its impacts but, nevertheless, monitored achievement of these deliverables. The section below reports on the progress as of January 2013.

Public Computing Centers

The Partnership has opened 79 public computer centers—two more than promised. The latter half of 2011 witnessed a rapid increase in number of computer centers openings. Openings slowed down at around the midpoint of the grant period.

In terms of its weekly attendance numbers, the number lies below PCC partners’ stated target of serving 15,000 users per week. As of January 2013, the PCCs collectively served 4,654 visitors per week. This number peaked in July 2012 (5,359 visitors, or nearly 36 percent of its target).

Sustainable Broadband Adoption

The SBA grant was responsible for key outputs related to three areas: subscriptions, training, and awareness. For each of these issues, they tracked key outputs as defined by the NTIA.

SBA partners partially met its subscription targets. For example, partners demonstrated steady progress in the distribution of netbooks. As of January 2013, the Drexel/PHA/CCP program had given out 4,253 of the 5,000 netbooks to program participants enrolled in their trainings.

In-home and business subscription numbers remained low (see p. 22 for a fuller discussion of subscription metrics data collection). However, a noticeable increase in numbers took place in January 2013, not long after the finalization of the FRP Discount Broadband Plan with Wilco/Mobile Citizen.

SBA partners met and exceeded their training targets. By January 2013, they had served 21,470 trainees with a total of 200,766 training hours. SBA partners hit their target of 15,000 trainees by July 2012, nearly a year before the conclusion of the grant. On average, they provided about nine hours of structured training per participant, fewer than the proposed fourteen hours per training.57

SBA also exceeded awareness targets, reaching more than 460,000 people through marketing and advertising of KEYSPOt programs on a variety of traditional and new media platforms. Drexel, the SBA partner that led the awareness campaign, completed the construction of the Partnership’s portal (www.phillykeysports.com) in January 2012. Between January and December 2012, the site attracted 88,363 visits, 27 percent of which count as new visits, according to site analytics.
Who participates at KEYSPOTs?

Demographic Characteristics

- KEYSPOTs primarily serve African Americans, and age and gender are well represented across KEYSPOT users.
- KEYSPOTs draw from existing participant constituencies in their communities, and use their digital literacy programming to attract new target populations.
- Personal recommendation and reputation play a significant role in attracting target populations to KEYSPOTs.
- KEYSPOT participants primarily come from the North, Southwest, and West Philadelphia neighborhoods that the Partnership initially targeted.

Broadband Adopter Profile

- Most KEYSPOT participants do not subscribe to broadband at home, primarily due to cost barriers.
- For those able to afford home broadband, home subscriptions do not necessarily equate with use.
- In addition to cost issues, participants just starting out at KEYSPOTs are fearful of technology.
- Participants also start out at KEYSPOTs with significant (non-digital) learning challenges.
- Despite fears and learning challenges related to technology, KEYSPOT participants feel the Internet and digital literacy are highly relevant to their daily lives.

Demographic Characteristics

KEYSPOTs primarily serve African Americans, and age and gender are well represented across KEYSPOT users.

The Workstation User Survey (WUS) demonstrates that eight out of ten adult participants identified as African-American or Black. Nearly half of all WUS respondents were African-American women (47 percent). Fourteen percent identified as being of Hispanic ethnicity. Approximately 8 percent of respondents identified as White with 3 percent identifying as multi-racial.

Across the Partnership, gender was evenly represented between women and men. Fifty-six percent of WUS respondents identified as women, 42 percent as men, and 2 percent as “other or self-defined.” An examination of WUS data by each Managing Partner shows that some partners serve mostly women or mostly men. For example, the Drexel/Community College of Philadelphia/Philadelphia Housing Authority program overwhelmingly serves women, whereas YOACAP and Philadelphia FIGHT host sites see primarily male participants.

KEYSPOT computer centers and trainings attract participants from a wide range of ages. From the WUS data, the average age of adult respondents was 42, with a range from 18 to 98. The average age of Exit Survey respondents was slightly older at 51, with a range from 18 to 98.
KEYSPOTs draw from existing participant constituencies in their communities, and use their digital literacy programming to attract new target populations.

Because partners represent and collaborate with diverse service organizations, they reach constituencies who already trust and visit those institutions, such as people who are homeless, veterans, under/unemployed, disabled, former prisoners reentering society, living with HIV, and youth. In interviews, staff at several Managing Partners and the Primes reported that the placement of KEYSPOTs helped them reach target populations in surrounding areas. One staff interviewee at a Managing Partner used the business term of “warm-market” relationships, saying, “It’s easier to implement a new project or a new technology if you already have relationships. We already had the population to be served, and they were already comfortable in our environment.” A staff member at another partner organization concurred, “It’s really the community organizations that know their people the best. In that way, you’re able to have a wide reach and a deep meaningful reach.”

In a small, though notably vocal number of instances, interview and focus group material revealed the way in which neighborhood dynamics factor into partners’ ability to meet target populations. One Allied Organization’s staff person said she tried to implement a program at a neighborhood KEYSPOT, but was unable to attract the desired target audience because of unspoken neighborhood boundaries. She said, “Philadelphia really is one of those places that they say is a city of neighborhoods. If you walk five blocks in one direction, you’re in a very different neighborhood. Some people didn’t like to leave their neighborhood, so making that link didn’t work.” Knowing one’s neighborhood in the process of siting PCCs is equally important. One Webguide noted the changing demographics in his neighborhood and commented, “The choosing of the sites is critical... does the community really need or want this? I felt like [my KEYSPOT] was in a neighborhood that was in an upswing... and didn’t really need those services.”

Personal recommendation and reputation play a significant role in attracting target populations to KEYSPOTs.

Nearly one third of Exit Survey respondents learned about KEYSPOTs through word of mouth. In focus groups, participants frequently spoke of being recruited as well as recruiting friends and family to KEYSPOT trainings. Interviews with staff revealed similar information. As a staff person at a Managing Partner elaborated, “In this
subculture here, word travels fast and a person’s word is the best advertisement you got. Knowing that, all I needed was a few people to have a few good experiences.” Public relations efforts, such as newspaper ads and flyers, played a moderately significant role in attracting participants: according to the Exit Survey, nearly 25 percent of respondents said they learned about their training through newspaper ads or flyers.

KEYSPOT participants primarily come from the North, Southwest, and West Philadelphia neighborhoods that the Partnership initially targeted.

According to the map of KEYSPOT WUS respondents, high concentrations of KEYSPOT users came from North, Southwest, and West Philadelphia (see p. 36). During the initial grant implementation stage, the Partnership targeted these areas for KEYSPOT placement based on low broadband subscription rates. When comparing the map of WUS respondents to the geographic distribution of broadband subscription rates according to FCC data, similarities appear. This indicates that KEYSPOTs are reaching areas with low broadband adoption rates.

### Broadband Adopter Profile

**Most KEYSPOT participants do not subscribe to broadband at home, primarily due to cost barriers.**

As indicated by WUS and Exit Survey data, approximately one third of KEYSPOT participants reported having Internet at home (Exit Survey: 36 percent, WUS: 33 percent). The examination of home subscription by age, ethnicity, or race yielded no statistical differences. However, gender appeared to correlate with home broadband adoption: WUS data showed that women are more likely than men to have Internet at home (36 percent versus 27 percent).

The examination of home subscription by type of KEYSPOT involvement revealed that training participants were more likely to have home Internet (39 percent) than participants who frequent KEYSPOTs merely for computer and Internet use (27 percent), such as to search for a job, study or learn, or read information online.

Cost for hardware and connectivity served as a significant barrier to home broadband use. WUS respondents cited lack of a computer (57 percent) and cost (30 percent) as the most common deterrents to home Internet access. Cost issues were evident among those respondents who selected “other” barriers (6 percent) in relation to home Internet subscription. Write-in answers revealed that homelessness or not having one’s own home was another key factor for lack of home Internet. No WUS respondents selected the option “It’s a waste of time” to explain lack of a home subscription.

Qualitative findings also confirmed cost barriers.
Percent of WUS respondents by ZIP Codes

(WUS, n=2868)
In all interviews with staff at Managing Partners and across all three participant focus groups, cost was the primary reason cited by participants for failing to adopt broadband in the home. In one of the participant focus groups, a participant said, “I’m [on] a very strict budget and I thought to try it. But it’s kind of difficult.” Many participants struggled to meet basic needs. As a staff person at a Managing Partner described, “People are just surviving. They’re not living. They’re not existing. They’re just surviving. If you’re talking about Maslow’s hierarchy of needs—food, clothing, shelter, and water—it’s not even met.”

**For those able to afford home broadband, home subscriptions do not necessarily equate with use.**

Half of focus group participants who mentioned having home Internet or personal computers before frequenting a KEYSPOT admitted to not using these tools. Common among these participants was the story that a lack of digital literacy skills limited their use of the technology. They reported having purchased subscriptions in the home for their children and grandchildren, not for themselves. As one participant said, “I just want to become computer-literate because every time I need something done, I need to go to my grandkids, or one of my children, to ask them to do things for me. They always say, ‘You need to learn computers, so you don’t have to sit and wait for somebody to do something for you.’” In the same focus group, another participant said, “I also had mine years before, because whenever my children, or my grandchildren come over, they always bring their computers. So they need to be on the Internet.”

**In addition to cost barriers, participants just starting out at KEYSPOTs are fearful of technology.**

Many KEYSPOT training participants come with little or no knowledge about computers and the Internet. In two out of three focus groups with participants, first-time computer users expressed feeling extremely fearful of computers. Describing his initial experience with computers, a participant shared, “I used to shake when I first started... Man—it was rough.” Webguides regularly observed participants’ trepidation. As one Webguide said, many new users worry “that at the touch or click of a button something will blow up and explode. It’s just so much power in that one button.”

**Participants also start out at KEYSPOTs with significant (non-digital) learning challenges.**

At two Managing Partners, one Prime, and one Allied Organization, staff interviewees highlighted low literacy skills, or the inability to read, as a barrier to becoming digitally literate. One staff person at an Allied Organization focused on adult literacy said, “We have such a high level of literacy issues in the city [and] how do you address that when you’re also trying to address needs around digital capabilities?”

**Despite fears and learning challenges related to technology, KEYSPOT participants feel the Internet and digital literacy are highly relevant to their daily lives.**

A majority of focus group attendees stressed the critical need to learn or stay up-to-date with changing technology and the Internet. As one participant stated, “If you don’t know computers, you are lost.” Another participant added, “In today’s society, you absolutely need a computer. That was one of the things I was trying to impress [on] new people where I lived, that our lives are just computer-oriented now, whether we like it or not.”

Others expressed the relevance of digital literacy in terms of self-sufficiency and fulfillment of personal goals. Focus group conversations revealed the importance of developing digital skills to avoid dependency on grandchildren or members of a younger generation for Internet-related communications and transactions. Another set of participants discussed reasons for enrollment in a training, including getting up to speed with secure online banking and improving technology skills in order to advance at work.
While participants use KEYSPOTs primarily for training and workforce development, they also have many varied reasons for frequenting KEYSPOTs. Apart from digital literacy and computer and Internet access, participants access a wide range of programs while visiting KEYSPOTs. KEYSPOT participants are very satisfied with how programs meet their needs.

While participants use KEYSPOTs primarily for training and workforce development, they also have many varied reasons for frequenting KEYSPOTs.

When asked to pick one main reason for coming to the KEYSPOT, 42 percent of WUS survey respondents selected training and 17 percent selected job-related efforts. Participants were less likely to cite other reasons such as “to use a social networking site” or watching online media as their primary reason for attending a KEYSPOT.

Qualitative data echo survey results. Nine out of a total of eleven interviewees at Managing Partners and a majority of interviewees at host sites highlighted how job readiness and finding work depends on access to technology and digital literacy. As a KEYSPOT host site staff member said, “It’s rare that you can just go somewhere and submit a [job] application right there on the spot—everybody tells you to go online.” Participants and Webguides also emphasized workforce development and basic computer skills as key motivators for attendance. In all three focus groups with participants, individuals shared stories of using KEYSPOTs for a range of workforce development activities, including writing resumes, searching or applying for jobs, gaining skills for a current job, starting or promoting a business, bartering services, and joining LinkedIn.

The primacy of workforce-related usage aside, participants also shared many other motivations in focus groups. One participant noted several goals met by the KEYSPOTs, “Filling out [job] applications, finding [family] that I’ve been looking for for a long time, and getting my schoolwork done. Trying to get my education, my GED. It helps me accomplish a lot of things.”

One focus group participant shared a story about addiction and the role of the KEYSPOT program in his recovery. KEYSPOTs helped this individual to apply to university and subsequently become a certified recovery specialist (explained in more detail in Goal 3b). While speaking, this participant also described a deeper role that the KEYSPOT plays in his life: “This computer class opened up a lot of doors and allowed me to exercise my brain. I mean we’re talking about somebody who came from thirty years of addiction. My plan was only to go [to treatment] and just try to stop [using], not knowing that it would work... But filling the void with the computer class, having something to do to motivate me... [It] changed my life.”

Apart from digital literacy and computer and Internet access, participants access a wide range of programs while visiting KEYSPOTs.

Host sites fulfill diverse participant needs with a range of services, such as workforce development programs, educational trainings, case management, substance abuse recovery, health education, media advocacy, and youth
leadership programs. All host site interviewees discussed how they were able to refer participants from core services of the organization to KEYSPOT services. Across all three focus groups, participants spoke about discovering digital literacy trainings while benefiting from another social service, and vice versa. Exit Survey data also speak to the importance of onsite promotion: 32 percent of respondents reported learning about a KEYSPOT through the host organization itself.

Similarly, the KEYSPOTs exposed community members to the organizations’ other offerings. All partners interviewed said constituents were drawn to labs and subsequently connected to other organizational programs. A staff person at one host site said the KEYSPOT helped engage youth, facilitating other programs such as a sports program or a movie night. Meanwhile, a staff member at a Managing Partner said, “[A person] may not stop to get tested [through our STD program], but they’ll stop for a computer training. They’ll stop to find about GED classes. Well, we didn’t have this before the Partnership.” Another Managing Partner interviewee said, “[The] goal is to use technology in a smart and relevant way so that, within the seventy KEYSPOTs... in the multitude of nonprofit agencies we’re working with, [technology is] advancing their own anti-poverty efforts, instead of being this separate thing where people could just take a computer class and there’s no other context.”

KEYSPOT participants are very satisfied with how programs meet their needs.

Of Exit Survey respondents, 90 percent said that they learned what they wanted to learn. Additionally, 86 percent of respondents said that they would come back to the center, compared to 9 percent unsure if they would. This finding is also reflected in the WUS data which shows that 60 percent of survey respondents had been to the host site before. An overwhelming number of respondents (95 percent) said that they would recommend the center to family or friends. This mirrored enthusiastic focus group responses, with all participants consistently saying that they would recommend KEYSPOTs and a few even sharing stories of family and friends that they had already recruited.

Also, in each participant focus group, at least one participant expressed interest in learning more about KEYSPOTs locations in the city, prompting group discussion about KEYSPOT map distribution. In two of the three focus groups, participants shared their printed maps with others who did not know about the maps and wanted more information.

Why are people using KEYSPOTS?

*(Long WUS, n=531)*
KEYSPOTs provide an essential access point to the Internet.

When learning new computer and Internet skills, participants rely on supportive KEYSPOT Webguides who use creative teaching strategies and alleviate participant anxieties.

KEYSPOTs increase the digital literacy skills of participants and stimulate an interest in continued learning.

Though Primes’ Quarterly Reports to the NTIA indicate the FRP as not yet having met its SBA broadband goals, quantitative and qualitative data suggest KEYSPOT participants credit trainings with influencing them to buy home subscriptions.

For those participants who own home computers and have Internet subscriptions prior to attending a KEYSPOT, trainings help them use these items.

**KEYSPOTs provide an essential access point to the Internet.**

Almost seven out of ten Exit Survey respondents access the Internet at a KEYSPOT, public library, or other public access point. Half of all Exit Survey respondents reported utilizing only one way to access the Internet, and for 30 percent, they only access public computers or labs to get online.

More than half of all WUS respondents said that they go online everyday (55 percent). Only 7 percent said that they never go online. Those who had Internet at home (33 percent) were much more likely to use Internet everyday (70 percent) compared to those who did not have it at home (47 percent). Of those who did not have Internet at home, nearly half of respondents used the Internet everyday.

**When learning new computer and Internet skills, participants rely on supportive KEYSPOT Webguides who use creative teaching strategies and alleviate participant anxieties.**

In focus groups, participants repeatedly underscored the importance of a patient, knowledgeable, and fun trainer.

From the Webguide perspective, nine out of thirteen instructors discussed their strategies for dealing with learning challenges in the classroom, such as trainings that consist of students with mixed skill levels. Mixed skill level classrooms risked alienating able or advanced learners and leaving beginners behind. One participant explained the difficulties of being in a mixed skill classroom, “When [the trainer] gives an assignment, [one of the advanced students is] just sitting there and [the trainer’s] like, ‘Oh you finished already over here?’ Well, I feel intimidated because I’m still asking questions.” Meanwhile, advanced students find it frustrating to wait for beginners to catch up, preventing the class from moving forward.

Over time, Webguides increased their use of peer teaching to keep advanced users from getting bored and supporting those with lower skill levels. One participant noted how her trainer avoided this issue by scheduling with students and “once the class was filled up, the class was closed. So everyone started together.” Webguides also dealt with this challenge by letting quick-learning students progress to the next task, while providing handouts or one-on-one support to those struggling.
KEYSPOTs increase the digital literacy skills of participants and stimulate interest in continued learning.

Focus group data demonstrate the cumulative effects of digital literacy: while all participants shared stories of digital literacy progress, a third of participants specifically articulated excitement and eagerness to expand their basic skills and take other classes. One participant shared, “Once I learned how to create a document, I got excited about it. [I thought,] ‘This isn’t that hard!’” Similarly, another participant expressed, “I know the difference between the modem and the keyboard, and the screen now. I learned that. Now I want to know more, so I’m trying [a typing program].” Other digital skills of interest included different blogging platforms, web design, and intermediate/advanced computer classes.

Interviewees at Managing Partners also observed positive changes in student progress. “[There were] individuals who had been incarcerated for twenty-some years, so they weren’t even introduced to personal computers or laptops or smartphones,” said a staff member at a Managing Partner. Describing the experience of formerly incarcerated individuals as they confronted new technology, he explained, “Once they came out, they were like, ‘Wow.’ To be part of the program—they learned how to type, they learned how to maneuver and get online for the first time. It was huge.”

Though Primes’ Quarterly Reports to the NTIA indicate the FRP as not yet having met its SBA broadband goals, quantitative and qualitative data suggest KEYSPOT participants credit trainings with influencing them to buy home subscriptions.

As reported in the previous section, Progress Towards NTIA Deliverables, the SBA program has reached 19 percent of its target for household subscriptions and 34 percent of business broadband subscribers.

Though subscription targets are below target, some OTI data suggest that KEYSPOT use does directly lead to purchase of home Internet subscriptions. In focus groups, five participants (out of a total of eighteen queried) said they acquired a subscription following a KEYSPOT training. Though out of reach for many participants, home subscriptions were an object of interest. Of Exit Survey respondents who do not have Internet at home, 87 percent said the training made them want to get Internet at home, and 45 percent said they are “very likely” to sign up for Internet at home in the next six months, indicating fairly high levels of interest.

### Total Number of Internet Access Points

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<th>Number of Access Points</th>
<th>Frequency</th>
<th>Percent</th>
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<tr>
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<table>
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<tr>
<th>Internet Access Locations (Exit Survey, n=102)</th>
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<tbody>
<tr>
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<td>----------------</td>
</tr>
<tr>
<td><strong>Public Access</strong></td>
</tr>
<tr>
<td>Home**</td>
</tr>
<tr>
<td>Work/school</td>
</tr>
<tr>
<td>Anywhere, using a smartphone</td>
</tr>
<tr>
<td>Cafe/restaurant</td>
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* Responses do not add up to 100% because participants can select multiple choices.

** Of those who said they used Internet at home, 25% of them also reported accessing the Internet anywhere using a smartphone. This may explain why a higher percentage of people use Internet at home compared to people who say they have Internet at home (36%).
For participants who own home computers and have Internet subscriptions prior to attending a KEYSPOt, trainings help them use these items.

All participants who had computers and Internet at home before attending a KEYSPOt acquired and improved their digital literacy skills to use technology for personal reasons. For example, one participant transformed from a non-user to a user with basic Internet and computer skills. Describing her path to using a personal computer, she said, “I got a 12-year-old grandson, and he’d be saying ‘Dang grandma, you bought a computer now, you don’t know how to use it yet?’ I started making him sit on a computer and do work for me. He’d be showing me, and then I get mixed up. So I said, ‘Well, I’m going to take a class, and I’m going to surprise him.’ Well, I am surprising him. I’m not finished.” Several others expressed the same trajectory.

“[The trainers] met everybody at [their] level...that’s a gift you have to have - to have that patience because... people just weren’t getting it...[the trainers] took their time and they extended themselves. Like on a day when it wasn’t a computer class, they still said you know what, we want to come up tomorrow, we’ll show you.”

“I like this KEYSPOt because I love the teachers. They are friendly. They are nice, and they help you with everything. Even though it’s not that many teachers, they try their best to get around to help everyone that is in the room.”

Select Participant Quotes about Supportive Digital Learning & Teaching (Focus Groups)
Participants use KEYSPOTs for job seeking and job preparation.

Within a short time span, KEYSPOTs can help participants find jobs.

KEYSPOTs help participants keep their job skills current.

By virtue of hiring a corps of Webguides, the Partnership is itself an engine of job creation.

As indicated previously, “To look (or apply) for a job” was the second most common reason for KEYSPOT use among respondents to the WUS. The Primes’ Annual Report to the NTIA for 2012 revealed that a substantial percentage of training hours were devoted to workplace skills. For PCCs, approximately 13 percent of their total training hours were Microsoft Office trainings. About 10 percent of SBA trainings focused on Microsoft Office, certified training programs like the International Computer Driver’s License, and job readiness trainings.

When viewed alongside focus group data, the effects of KEYSPOTs on job seeking and job preparation come into focus. Participants stressed the critical importance of learning computer skills when applying for a job.

Job preparedness also featured in observations shared by staff in focus groups and interviews. “Whether it be getting them an IT essentials certification, or getting them comfortable enough so that they know how to write a cover letter, [or] comfortable sitting in a job interview. I feel like those goals are being met constantly,” a staff member at a Managing Partner said.

Across all three participant focus groups, participants routinely told stories of accessing a jobs database or uploading resumes online within the context of becoming more comfortable with computer skills, such as using a mouse, typing, or web surfing. One participant relayed a story during a focus group about an on-site visit by prospective employers, “I’ve been out of the workforce

“I want to really get good on my basics first before I go to the next level of web design or office work, that’s what I want to get into. I want to work.”

“I had a job interview and one of the tests was an Excel test and I passed. I passed the test from remembering... the little [KEYSPOT] class I had to bring me up to date.”

Select Participant Quotes about Workforce-Related KEYSPOT Impacts (Focus Groups)
for two years now. And I’ve been looking. When you go to this KEYSPOT, you get the opportunity to meet with companies. [One company] came out, and you got to meet directly with the HR person as opposed to having to put it online, and hope that someone contacted you regarding a job.”

Statements that credited KEYSPOTS with helping in job seeking and preparation surfaced in comparisons of KEYSPOTS to a different state-sponsored workforce development resource, and other similar employment services. One participant said, “I needed job coaching that the [state resource] doesn’t provide because a lot of [their staff] do not take time out with you. They just sit there. You have to figure this out for yourself.” Another participant shared that when he tried to apply for a job at the state resource, the woman assisting him left him waiting for some time, “I wasted a whole forty minutes, trying to fill one application and never even got it done.”

**Within a short time span, KEYSPOTS can help participants find jobs.**

While job seeking featured highly among Exit Survey respondents (60 percent), about a third of these job seekers credited KEYSPOTS with helping them find a job. Similarly, interviews yielded few stories about job acquisition. Three out of nine staff interviewees at Managing Partners and three out of five staff interviewees at host sites mentioned the direct effects of their work on employment. For example, one of the interviewees shared stories about working with the unemployed, “They come on a regular basis, and eventually, they end up getting jobs and moving out, which is the best part.”

**KEYSPOTs help participants keep their job skills current.**

Focus group data reveal ways in which the employed use KEYSPOTs. One participant explained that because her supervisor allowed her to train during the workday, she had relied on KEYSPOT trainings to perform better at work. Two participants wanted help improving their businesses, specifically through learning Microsoft Excel and desktop publishing. One shared that she used the KEYSPOT to create flyers and advertising materials which helped her acquire new customers at her store.

Two other participants emphasized skills-building for new entrepreneurial prospects, such as bartering services through the Internet and using knowledge acquired at KEYSPOT trainings to help start a business.

**By virtue of hiring a corps of Webguides, the Partnership is itself an engine of job creation.**

The most recent PCC Prime’s Quarterly Report to the NTIA (Q4 2012) reported creating or maintaining 77 part-time lab assistant positions and 11 full-time managing positions. Similarly, according to data from ARRA reports, the SBA program created or maintained the equivalent of 45.5 full-time positions, including management and training positions.

Qualitative data also illuminate the ways in which the Partnership provided a path to KEYSPOT employment. In focus groups, three out of thirteen Webguides mentioned being unemployed prior to being hired as KEYSPOT instructors. Other discussion revealed that the Partnership employed Webguides with varying levels of digital literacy from diverse backgrounds, such as youth health counselors and librarians. One Webguide spoke about being a KEYSPOT student who was singled out by her instructors to apply for the Webguide positions. She described having deep fears of computer viruses and even did not know how to use a mouse before the training. With the help of her instructor, she not only progressed quickly, but also demonstrated a propensity to help her classmates. After she finished the course, the KEYSPOT later offered her a job as a Webguide. Four staff interviewees at Managing Partners recounted similar stories of hiring former participants into their organizations.

Reflecting on the significance of KEYSPOT hires, one Webguide described the impact of such direct job-creation as important “not only for Philadelphians to learn the digital world, but also for us as employees, because the last thing we need to do is add on to the unemployment rate.”
What are the effects of KEYSPOT access and training on participants’ educational attainment?

KEYSPOTs provide educational trainings and opportunities for adult participants.

Few adult participants shared stories of using KEYSPOTs to help them advance their own education.

KEYSPOTs provide educational trainings and opportunities for adult participants.

According to the Primes’ Annual Reports to the NTIA for 2012, 5 percent of all PCC training hours focused on GED training and an additional 4 percent of participants focused on college preparation. Approximately 1 percent of SBA trainings and participants were for GED training.

Meanwhile, OTI’s quantitative data revealed different learning impacts. On the one hand, only 5 percent of WUS respondents selected this option as their main reason for coming (the fourth most popular choice). On the other hand, a sizeable majority (68 percent) of Exit Survey takers who completed SBA trainings for educational purposes said trainings helped connect them to educational opportunities.

Additional mentions of educational opportunities surfaced in both Webguide focus groups and a majority of interviewees at Managing Partners. For example, several Webguides shared stories of youth and adult learners who frequented KEYSPOTs to study or do research for homework assignments. One Webguide shared, "Parents come in and bring their kids, and then do homework. So I have a homework night."

Qualitative data reveal some evidence that KEYSPOTs help participants with educational advancement. Across the three participant focus groups, references to how digital literacy skills function as stepping-stones in advancing through educational programs occurred four times. One participant who came to a KEYSPOT through an addictions recovery program shared a personal story of how Webguides helped him overcome his initial fears of technology and encouraged him to enroll in university. Initially, he was a novice user, saying that he "could barely turn the computer on." College was never part of his life plans, but after being in a KEYSPOT program, that changed. "Where I’m at now in my life today, I wasn’t planning on going to college. But from being in that [digital literacy] class, I thought about it and [the teachers] said, ‘You should go for it.’ So I applied." Now, this KEYSPOT user attends a local university with the support of a Pell grant and has also been certified as a Recovery Specialist. The motivation and encouragement this participant received from supportive Webguides was critical to helping him advance his education.

“Parents come in and bring their kids, and then do homework. So I have a homework night.” – Webguide
Q: What are the effects of KEYSPOT access and training on community engagement?

Though participants do not explicitly state that they seek community through digital literacy and public Internet access, they find community, both on-site and online, at KEYSPOTS.

KEYSPOTS function as a home away from home that often provides a safe space for participants.

KEYSPOTS foster an environment of peer learning, giving participants the opportunity to connect with one another.

Though participants do not explicitly state that they seek community through digital literacy and public Internet access, they find community, both on-site and online, at KEYSPOTS.

Community-oriented KEYSPOT usage trailed workforce, education, and skills-based purposes: only 4.5 percent of WUS respondents selected “social networking” and 2.5 percent selected coming “to participate in their community” as their main reason for attending a KEYSPOT. Across all participant focus groups, however, according to several impassioned participants, community helped motivate attendance at KEYSPOTS. One participant said, “I had some good experiences with the class, bonding with people that had the same thing in common with me. So, I didn’t feel out of place, because other people were struggling with the same things I was struggling with.” Many participants spoke about returning to KEYSPOTS on multiple occasions due to the sense of community fostered at computer centers. In some instances participants complained about noisy public computer centers with too much socializing.

Though to a lesser degree, similar stories surfaced in Webguide focus groups. A Webguide explained, “I have a lot of people coming in just for the community. They make friends there.”

Across all three participant focus groups, several participants offered powerful stories of virtually connecting with family, friends, and colleagues, particularly through using Facebook. One participant shared a story of another KEYSPOT student’s emotional Facebook experience, “We were sitting there doing a lesson, and she got real disturbing news from her Facebook. By her being friends with somebody on Facebook, she was able to find out that her stepchildren’s mom had passed away. It was emotional because she was really close to that lady by taking care of her kids... I wouldn’t want to learn none of that off the computer. But it’s better to know than not to know.” One participant recalled how Facebook allowed her to keep in touch with her church group who had traveled to Malawi to provide healthcare to local residents. Another participant described a more active use of Facebook during the 2012 election, “I was using my Facebook as sort of a platform, not to tell just people in Philly... but people all over the country. ‘Go and vote. Do your thing.’

Both Webguide focus groups and a majority of interviews with staff members at Managing Partners also revealed a number of detailed accounts of how participants connected with online virtual communities. One Webguide spoke about a Spanish-speaking participant who applied newly minted computer skills to use Skype and reach out for the first time in years to her son in another country. A staff person at a Managing Partner said, “We had [a story] of a father getting on Facebook and communicating with his children for the first time in twenty years.”
KEYSPOTs function as a home away from home that often provides a safe space for participants.

In interviews and focus groups, the creation of a comfortable space for learning surfaced as a recurrent theme. An interviewee from a host site stated, “We [try to be] a welcoming place [where] they can feel at home... I think that’s a big part of learning—that you’re comfortable learning and there’s a sense of order and accomplishment.”

In focus groups, participants shared six prominent stories that revealed that the KEYSPOT “was a very relaxed and supportive environment.”

KEYSPOTs also occasionally functioned as sanctuaries that sheltered individuals from the problems or dangers in their daily lives. Focus group conversation yielded several accounts of this, both from the perspective of participants and Webguides. For example, one participant in transitional housing said, “Especially when I’m stressed out from work or something, I use [the KEYSPOT] as a respite.” One Webguide brought a video game console to a KEYSPOT as a reward for youth who completed their homework, saying, “Parents don’t want [their children] out too late and traveling around the area. So [many] times, you get a lot people that come through the [KEYSPOT]... for a total of five hours. They love the games.”

KEYSPOTs foster an environment of peer learning, giving participants the opportunity to connect with one another.

Qualitative data show the significance of peer learning—both spontaneously generated and intentionally structured—in creating a sense of belonging among participants. The theme of giving and receiving help from classmates throughout the learning process came up in all three participant focus groups. Participants spoke about finding “buddies” who exchanged class material during absences and shared computer and Internet knowledge with one another. “KEYSPOTs are people-friendly. You get to meet different people from all walks of life that want to help you,” one participant said.

In addition to spontaneous moments of peer support, five out of thirteen Webguides mentioned in focus group conversation the use of peer learning exercises. Often they introduced peer learning as a way to leverage the skills of advanced students for the purpose of aiding less knowledgeable ones. One Webguide established a “bartering program,” based on his knowledge of participants, to deal with different skill levels. Younger participants paired with older participants to improve their digital skills. In return, the older participants taught non-digital lessons to the younger participants like playing the piano. According to the Webguide, this technique connected students, helping to bridge generational and digital divides simultaneously.
The Partnership increases the staffing capacity of Managing Partners and host sites through planned professional development activities.

KEYSPOT trainings increase the digital skills of organizations internal and external to the Partnership.

BTOP funding allowed partners to upgrade their IT, freeing up time and resources to better serve target populations.

Collaboration in the form of participant referrals, resource sharing, and networking increased partners’ overall capacity to improve service delivery.

Partners use KEYSPOTs to further their own organizational goals, specifically for employment, education, and community engagement.

However, across both focus groups, several Webguides described pressures to take on multiple roles with insufficient capacity to do so. One Webguide said, “[With] this grant, the onus [is] placed on the instructor to be a curriculum developer, a teacher, a program administrator, and an outreach specialist. That’s too much to do when you’re supposed to be at a site for twenty hours a week.” Another added that he juggles the role of “human filter” for any inappropriate content participants might try to look up while simultaneously trying to manage an entire room of people and their needs.

KEYSPOT trainings increase the digital skills of organizations internal and external to the Partnership.

A vocal minority of interviewees emphasized how they or their organizations took advantage of KEYSPOT offerings to improve the digital literacy of their own staff, despite the fact that KEYSPOTs’ primary audience is novice users. One staff interviewee at a Managing Partner reported that one of the KEYSPOTs he manages has been able to train their own staff and volunteer board through the FRP and as a result improved their capacity. Another interviewee from a different Managing Partner recounted a similar story, explaining that her organization gives “our development team classes on Photoshop because it helps with some of the publications that they produce.” One Allied Organization interviewee discussed how access to computers and trainings through the KEYSPOT programs supported the members’ work to ameliorate living conditions in a high-crime,
impoverished area of Philadelphia. She also described how KEYSPOT resources critically supplement her group’s programs.

**BTOP funding allowed partners to upgrade their IT, freeing up time and resources to better serve target populations.**

BTOP funding focused Managing Partners’ and host sites’ attention to technology improvements, allowing all stakeholders to better serve their constituents. All seven interviews with staff at host sites emphasized how involvement in the FRP allowed them to update technology and enhance IT support. Such improvements reduced staff time spent on troubleshooting. “We’ve had about a dozen computers. We basically have the same number. It’s just that we have ones that work now,” said one host site staff member. A few host site staff interviewees recounted the ways in which upgrades made participant use of computers more productive. Staff interviewees at two Managing Partners also mentioned the benefits of IT upgrades. However, during focus groups, some Webguides noted a lack of adequate space, computers, and printers to accommodate program participants.

**Collaboration in the form of participant referrals, resource sharing, and networking increases partners’ overall capacity to improve service delivery.**

The Partnership Visualization (next page) demonstrates more than 400 linkages between 208 organizations. These linkages represent instances where organizations made referrals, promoted services, shared resources, and conducted outreach events.

Referrals between KEYSPOTs helped participants access needed services. As revealed in one focus group, a Webguide took the initiative to establish a referral system, allowing a handful of KEYSPOTs to easily point participants to other sites’ services, digital or otherwise. Additionally, a majority of Webguides across both focus groups talked about making and benefiting from referrals. Five staff members at Managing Partners also shared stories of referring participants to other sites for services. A Managing Partner interviewee stated, “We have a number of individuals who are trying to get their GED, so we refer them into [a partner’s] GED program. [Meanwhile] we’re doing a computer training [at the partner’s site]. [so the collaboration] helps us, it helps [the partner], and it helps the individual.” In another interview, a staff member at a Managing Partner described how collaboration with a nearby host site helped bolster attendance. However, no systematic, partnership-wide referral system grew out of these efforts.

More generally, managing Partners shared physical, human, and technical resources to improve their services. From the informal surveys used to create the Partnership Visualization, stories regularly surfaced about shared spaces for computer trainings and special events, such as sites for regular SBA training and pop-up KEYSPOT labs. One staff member at a Managing Partner spoke about loaning equipment due to a shipment delay at the beginning stages of the Partnership. Staff at Managing Partners also referred trainers and volunteers to each other’s programs as needed; this resulted in some Webguides finding multiple employment opportunities between several Managing Partners. Technical resources that partners shared included English language learning and GED curricula, youth policies for public labs, and software licenses for career readiness computer programs.

External to the FRP, Managing Partners engaged in collaborations with other community organizations to increase service delivery. One staff person at a Managing Partner said that the BTOP grants helped his organization expand its services throughout Pennsylvania after collaborating with a local partner with connections throughout the state. “We’ve been able to really grow what we do. We’ve been able to do a lot with more people and more organizations.” The Partnership Visualization also maps the less formal collaborations that took place between partners and a wide array of non-BTOP funded groups—including nonprofits, Community Development Corporations, Neighborhood Advisory Councils, city agencies and commissions, state and federal government-run social services, and a technology-focused media outlet. Work with these Allied Organizations introduced the
Partnership to new communities and additional networks of social service organizations. As a result, the FRP was able to reach more target populations.

**Partners used KEYSPOTs to further their own organizational goals, specifically for employment, education, and community engagement.**

A majority of staff interviewees at Managing Partners, host sites, and Allied Organizations connected the FRP’s programmatic work to organizational missions. For example, staff at two employment-focused Allied Organizations said referrals to FRP programs enhanced their own operations. One interviewee, whose organization has partnered with more than thirty other host sites, said, “We make sure that the KEYSPOT information is in our career resource center. Our staff has the information. So when they’re working one-on-one with job seekers that are in need, we let them know that the KEYSPOTs are in their community.”

Partner organizations that work on educational outcomes also credited involvement in the FRP with furthering their organization’s mission. Several interviewees mentioned the ways in which KEYSPOTs help youth with homework, as well as adults with GED training. An interviewee at a Managing Partner credited BTOP funding with allowing him to implement a GED training program that mixed in-class instruction and online training for adult learners. Additionally, this staff person reported finding new funding for collaboration with another Managing Partner and host site to offer GED training and better serve the educational needs of adult learners. Several other interviewees at Managing Partners also discussed clients’ use of sites to pursue the GED.

As for organizations with missions focused on community engagement, interviews with staff revealed that digital literacy skills and public computer access helped them to collectively engage their constituents and tackle local problems. A staff member at a Managing Partner discussed his organization’s effort to use KEYSPOTs to connect their Spanish-speaking clientele with other communities in the neighborhood, “There’s
been a number of folks from the neighborhood [slowly] coming in and getting to know the [Spanish-speaking] community through the community center and new relationships being built through that.” This same organization trained community leaders to challenge local anti-immigration sentiment; KEYSPOT students produced an immigrant rights radio show and podcast. At a host site, a staff interviewee discussed the goal of connecting digital literacy with social issues. He said, “We want a place where you learn how to use the machine. We want a place where people can interact. We also encourage people to get involved in advocacy on broader issues. [The KEYSPOT] brings people in, so we’re trying to get those people to fight for themselves around whatever issues are going on at the time.”
Overall Assessment

While a majority of Managing Partners had a positive assessment of the Partnership, many also felt that given more time, the Partnership would have had improved functioning and a greater impact.

Challenges and Successes

The Partnership faced operational challenges and lacked unified direction and goals during the implementation stage.

Some Managing Partners felt challenged by hierarchical decision-making tied to one programmatic side of the FRP, while praising the more supportive management on the other.

Overall, host sites are satisfied with Managing Partners’ oversight.

Sustainability

At all staff levels of the FRP, people strongly support the continuation of digital literacy training and public computer centers.

Partners face formidable challenges in planning and securing the resources to sustain these programs.

Overall Assessment

While a majority of Managing Partners had a positive assessment of the Partnership, many also felt that given more time, the Partnership would have had improved functioning and a greater impact.

In seven of eleven interviews with staff at Managing Partners and Primes, interviewees agreed that the FRP functioned effectively as a Partnership. Interviewees cited examples of feeling respected and heard, referring clients to one another, working through challenging discussions, and uniting under one shared goal of “bridging the digital divide” through a diversity of programming and organizations. One staff member said, “I really appreciated the Partnership; I still do. Everybody is engaging and everybody gets to speak their mind, and nobody blows up at each other, even though there are disagreements. The group really works more to find a way to make things work and be inclusive versus just pushing ideas out the way and doing what they want to do. I feel like, in that way, it’s really made us a strong partnership. It’s given me a new way to look at partnership.” To many, this Partnership represented the first time that organizations across the city collaborated on digital divide issues.

A vocal minority of staff members at Managing Partners felt that their side of the grant was an effective partnership, but they could not say the same for the FRP, given the more top-down management style of the other side of the grant (see Finding 6C). For one staff member at a Managing Partner, “It’s always in my mind that the Freedom Rings Partnership has two halves. And that’s always been the distinction. I would say [that one grant] I feel is the ideal definition of ‘partnership.’ I can’t say the same on [the other grant]. I think we have too many strong entities. As much as we try to paint a picture of one Freedom Rings Partnership, it’s not one.” Three others echoed this sentiment.

Many interviewees also felt that with additional time, the Partnership could have had a greater impact. In terms of meeting the Partnership goals, interviewees at Managing Partners and Primes celebrated stories...
of KEYSPOTS’ short-term educational and economic impacts on participants, such as getting people connected to GED trainings, learning workforce skills, finding jobs, as well as learning basic computer skills. All staff persons interviewed at Managing Partners attributed this success to the FRP’s coupling of digital literacy and social services and the diversity of the Partnership. A staff person at a Managing Partner said, “Because of the plethora of resources, and the diversity of all the organizations that are involved, we’re able to make connections and really serve the population well... Even though the end goal is core Internet basics [training], we also address the other needs for the population.”

However, the issue of time came up in six interviews with Managing Partner and Primes staff as being a challenge to Partnership health and impact. In terms of Partnership health, two interviewees commented on how over time, roles and Partnership-wide activities became more clearly defined, but it was a challenge to deal with in the early stages of planning. Similarly, one interviewee commented, “Not all partnerships have to be long-lived, but I think this one would’ve benefited from another year or two... With this much start up required, we’ve barely had time to form and get used to each other and begin to learn how to work together.” As the timeline of planning and implementation activities demonstrated (see p. 29), the Partnership took on ambitious goals within a two-year time frame. Staff interviewees at three Managing Partners commented that the Partnership truly succeeded in laying a foundation for future success. Much more work remains. One interviewee summed up, “I believe we are doing a good job for a young program. But it really takes a long

“You can’t fix the digital divide overnight when it took years and decades to develop. I’m not saying it’s gonna take a decade. I’m just saying it needs more time than the time that’s been allotted.”

“The concept of this Partnership and delivering [digital literacy training] is needed. Absolutely needed: it’s the way technology is moving... It’s just the way of the world from here.”
time for it all to come into focus. There is a ton yet to do.”

Challenges and Successes

The Partnership faced operational challenges and lacked unified direction and goals during the implementation stage.

Staff interviewees representing six Managing Partners described several challenges that negatively impacted the implementation of their programs. These included delays in initial payments, lack of clear direction and shared goals early on, and a slow start to branding and advertising. One staff person at a Managing Partner shared, “After the initial contracts were signed, it was almost six months before we were actually able to get our money for laptops and equipment.” The Primes, for their part, have suggested that staff interviewees may interpret these issues as delays, but payment processes are established and expected routines and should be acknowledged as such. Over time, partners created more structure and direction in their FRP work. Many staff members discussed the challenge of trying to get their own programs implemented to meet the NTIA deliverables, so felt limited in their ability to set up Partnership shared goals in the beginning.

Some Managing Partners felt challenged by hierarchical decision making tied to one programmatic side of the FRP, while praising the more supportive management on the other.

Nearly half of the interviewees at Managing Partners described discomfort with the top-down management style of one grant program in the earlier stages of implementation, indicating a lack of transparency in decision-making, lack of mutual respect, or micromanagement. For example, one staff member at a Managing Partner organization felt frustrated, claiming a Prime mandated an earlier budgetary timeline without considering the needs or perspectives of the other organizations. The Primes, for their part, have suggested that these criticisms represent only one side of typically complex partnership dynamics.

Despite management struggles, three interviewees at Managing Partners remarked on the positive encouragement of the Prime and the improvement of Primes–Managing Partner relations throughout the grant implementation. One Managing Partner staff person said partners worked through many challenges and attributed the tensions he encountered with the Prime to the lack of clarity from the NTIA. He said, “Those tensions may not have been there if some of the guidelines and flexibility of the grant were more clearly defined in the beginning.”

Six out of eleven interviews with staff at Managing Partners lauded the ways in which the other Prime interacted with partners and worked in a flexible manner. Three of the six Managing Partner staff interviewees concurred that the Prime gave them the support to adjust program deliverables, such as training requirements, and program deadlines. As one person said, rather than working with “heavy handed insistence that that money has to be spent by this date or else,” the Prime prioritized the implementation of quality programs within flexible deadlines. Another staff person at a different Managing Partner added, “Whatever their request is, it’s done in such a professional way, and it’s just an inclusive feeling. They are pretty good with what they do. It’s a good thing, because you can focus your mind on other things. I feel comfortable that they are handling those things.”

Overall, host sites are satisfied with Managing Partners’ oversight.

Four staff persons positively assessed Managing Partners’ oversight, with one offering a mixed opinion. As explained by one host site staff member, its Managing Partner “structured the relationships with the subcontractors in a way that enables us to flex our muscles in what we do. At the same time, [we are] always in dialogue with them and [they are] really open in terms of things that needed to be modified or revised or just considered, as we’re moving forward with other plans.” Some host site interviewees referred to decision-making early on in the Partnership, but most said that they did not think it was necessary for them to be deeply involved. As another staff person said, “[We] didn’t feel included, didn’t feel excluded.” A couple interviewees indicated feeling trusted
BTOP has “expanded our capacity, in a way that a lot of grants do to a lot of organizations. Once the grant is over, you sort of scale back close to where you were originally.”

“[We’re] trying to figure out different uses for KEYPOTS... like fee for service—which is what might start happening with some of the KEYPOTS turning into GED testing sites. You do get a stipend per student that takes the GED. So it’s like an income generator.”

“As we evaluate different sites... the sites in place [now] might not need to continue together, and that’s not necessarily a bad thing.”

“[A] lot of these agencies that have KEYPOTS now will be able to absorb them or continue them in some capacity or other. They have this infrastructure. They have this equipment. They’re going to continue to use it.”

“The partnership should actually get bigger once it ends.”

“The Managing Partners on the PCC side...already laid the groundwork for a professional development association for a digital literacy providers that we’re calling the ‘Technology Learning Collaborative.’ It’s going to include staff from non-profit organizations across the city that have computer labs... they could be KEYPOTS or non-KEYSPOTS...We’re going to try to continue... professional development opportunities, like mini conferences, meetups... It’s not anything that’s funded right now.”

“[The] City government and the Mayor would be amiss to not see the value that this has offered for the City. I think...with the importance of technology access and broadband Internet to what makes a healthy economy and a healthy civic life today, I think there’s an important role for City government in best sustaining things like these computer centers and these training programs.”
to make their own decisions about their KEYSPOTs. The one mixed review centered on claims of inadequate support from a Managing Partner for development of a new digital literacy class.

Sustainability

At all staff levels of the FRP, people strongly support the continuation of digital literacy training and public computer centers.

In all of the interviews with staff at Managing Partners, host sites, and Allied Organizations, staff persons talked about the importance of continuing programs.

Similarly, in focus groups, Webguides expressed strong concerns about discontinuing programs. “We’re already scratching the surface of closing the digital divide. So what are you going to do? Pull that away now? That makes no sense at all,” said one Webguide. Another Webguide characterized FRP programs as putting “a glimmer of light in an impoverished community.” These frontline workers described how the programs have changed the lives of people in the communities by helping them find work or educational opportunities through digital learning, escape homelessness, deal with addiction, or provide a safe space for community.

Partners face formidable challenges in planning and securing the resources to sustain these programs.

Staff members at the Primes and Managing Partners organized sustainability forums to guide sustainability planning conversations, bringing together staff at host sites, Managing Partners, and Allied Organizations to discuss potential strategies after BTOP funding ends. However, in interviews with Managing Partners, there was a lack of consensus over possible directions, as demonstrated by a range of suggested directions for the future of the program. As one staff person at a Managing Partner said, “We’ve created this wonderful infrastructure. What parts of it can we and should we preserve, so that the hard work that’s been happening for the past two years doesn’t go down the tube?”

Though a wide range of opinions were expressed, interviewees at four Managing Partners speculated about future ways to link digital literacy and educational attainment, discussing efforts to make GED training available to participants and preparing for online-only proctoring of GED tests. One of these interviewees said, “One of the things that a lot of KEYSPOTs have expressed great interest in is trying to figure out how to become a GED testing site and how to train their lab managers in proctoring the test, and trying to build in preparatory training for people to take the test.” From staffing to participant training to adapting the physical spaces, staff at KEYSPOTs are readying their sites for the GED transition.

Some partners remarked on the difficulty of looking for additional funding. One challenge may be the prospect of competition between partners, mentioned by three Managing Partner interviewees. As one interviewee said, “We’re very fragmented, because everybody is out for their own survival. Everybody’s out to seek funding that will keep their program running.”

However, seven staff members described an interest in collaborating on grants and/or seeking funding to continue the entire partnership. An interviewee at a Managing Partner explained, “In the sustainability meetings that we’re having, we’re talking about grant language together, we’re talking about grassroots fundraising programs together. We’re talking about, how do you build earned income revenue streams together.” In the absence of continued or adequate funding, many partners also voiced the opinion that the Partnership and the community connections made across the diverse organizations will continue. One staff person at a partner organization said, “[The Partnership] will carry on in positively splintered ways.” Another interviewee at a Managing Partner said, “[We’re] trying to preserve the professional ties that we have established within the Partnership.” A third interviewee at a Managing Partner noted, “Regardless of what happens with the Partnership, we’re always going to have good and strong relationships with everyone that’s around the table right now.”
These next sections attempt to explain the significance of the findings in relation to the FRP’s progress towards NTIA deliverables and shared goals. Additionally, this section aims to point out both expected and unexpected findings and their connections to other research on underserved communities in Philadelphia and digital inclusion efforts nationwide.

**Mixed Success in Reaching NTIA Deliverables**

Overall, the FRP demonstrated partial success in meeting its NTIA deliverables. It succeeded in establishing public computer centers, exceeding awareness targets, and serving training participants, but fell short of broadband subscription targets and public computer center usage.

Once partners overcame planning and implementation challenges, achievement of several deliverables occurred quickly. Even before the FRP launched the official KEYSPOT awareness campaign in January 2012, grantees on the SBA side of the Partnership already met their goal of reaching 75,000 participants with outreach materials. By January 2013, the SBA program engaged more than 460,000 participants through an aggressive citywide advertising and outreach campaign. In a single year, the KEYSPOT program generated nearly ninety thousand visits, more than a quarter of which constituted new visits. As for its participation goals, the SBA program met the deliverable of serving 15,000 training participants in June 2012, one year ahead of schedule. On the PCC side of the Partnership, by July 2012, grantees had established 76 of the 77 planned public computer centers.

These trends in monthly data suggest that the Partnership will achieve the SBA training hours deliverable before the end of the grant. The Partnership reached its SBA participation goal at a faster rate than its training hours goal, meaning that many participants did not complete fourteen hours of structured training (the original estimated length, see p. 18), and most likely opted for one-on-one tailored instruction rather than structured classes. As the evaluation findings demonstrate, the FRP still improved participants’ digital literacy and community engagement through peer learning techniques and one-on-one tailored instruction. The model of providing individualized training with trusted instructors (in this case, KEYSPOT Webguides) effectively moves participants from non-users of technology to confident active learners, particularly when working with vulnerable populations who may not be able to commit to the traditional classroom model of training, given transient work schedules and competing life needs.

The SBA program demonstrated mixed success in meeting its broadband subscriber targets, which consists of distributing netbooks and increasing both home and business broadband subscriptions. Monthly data show a consistent increase in netbook distribution over time. Rates for home and business subscription increased, though in a less predictable pattern than rates of netbook distribution. A marked leap in home subscription occurred in January 2013, just a few months after the Partnership finalized the KEYSPOT Discount Broadband Plan. This increase, along with trends in fulfilling other NTIA deliverables, suggests that had the program developed and implemented the plan earlier in the grant, it may have been on track to fulfilling its subscriber numbers. Since the original subscriber metrics were intended to be achieved
in conjunction with the unfunded CCI grant, this delayed development of a subscription plan, and subsequent delay in generating subscriptions, is unsurprising.

Other than operational issues, participant barriers to home subscriptions, such as lack of hardware and cost of Internet, presented challenges to the FRP in meeting grant subscription goals. While the FRP developed the netbook distribution and low-cost broadband plan to address these participant barriers, the netbook program is limited to Philadelphia Housing Authority residents and the KEYSPOT Discount Broadband plan may still be too costly for vulnerable populations. In addition, another challenge may stem from NTIA’s flawed programmatic expectations of generating new broadband subscriptions through awareness and training efforts (see Discovering Common Goals, p. 22 for more discussion of subscription definition limitations). Given the complexity of learning and use patterns of new users targeted by FRP programs (see Adoption Discussion, p. 61), when broadband adoption encompasses a much wider set of activities and meaningful outcomes, home broadband subscriber numbers represent too narrow an indicator of program success.

The PCC program’s lack of success in meeting its participation targets may stem from a variety of participant, Partnership, and externally related factors. The expected weekly rate of 15,000 participants may simply be too high of an estimate; partners recorded 5,500 actual visitors per week as the highest rate. Partners never articulated a precise timetable for when they expected to have all public computer centers operational, and delays on establishing contracts and opening centers may have led to lower than expected usage numbers. Also, survey data and focus group material demonstrate that KEYSPOT users are often repeat visitors, in some cases developing attachment to particular terminals at public computer centers. The case of repeat use implies that rates may plateau until repeat users recommend and/or awareness campaigns draw in a new set of users. Overall, the participation rates reported by the PCC Prime do not provide a fine-grained look at different KEYSPOTs and which ones were consistently frequented—or packed, as many focus group participants reported—and which ones were empty.

Finally, the mixed success of the Partnership in meeting its NTIA deliverables suggests the need for additional research to explain why some indicators were easily met and others were not. For example, the launch and execution of marketing and outreach may correlate with the early accomplishment of the SBA program in reaching participation targets, but does not explain why the PCC program was unable to reach its usage targets. Further research could include a site-level analysis to understand the usage patterns in order to see which sites with lower usage than anticipated perhaps drove down the overall attendance average. While this Report did not assess the direct impacts of the outreach campaign, the differences in participation/usage rates raises the question of awareness campaign’s effects, both in influencing program usage as well as its overall impact on stimulating broadband interest and demand.

Success of an Embedded Approach in Reaching Target Populations

The success in reaching target populations is demonstrated both in terms of demographics and participants’ “broadband adopter profiles”—basic characteristics related to use (or non-use as the case may be) of broadband technologies. A simple GIS analysis provides the most compelling results. While survey data paint a narrow socioeconomic portrait of participants based only on gender, age, and race, and not educational attainment status or income information, the geographic data from the WUS helped to map users. Many participants came to the computer centers from neighborhoods known for high levels of poverty and low educational attainment.

As for adoption characteristics, WUS and Exit Survey data reveal rates of non-adoption of home Internet that exceed both national and local statistics—only one third of adult KEYSPOT residents have Internet at home (WUS=33 percent, Exit Survey=36 percent). This rate is fairly consistent among demographic groups such as gender, age, and race. In comparison, research by the FCC and Pew Internet & American Life Project shows
that approximately 65 percent of American adults have high-speed Internet connections at home, and that seniors, minorities, and low-income populations are less likely to have home broadband compared to others.\textsuperscript{60} Also, 2010 FCC data demonstrates that non-adoption rates in select Philadelphia census tracts are as high as 80 percent, with an estimated non-adoption rate of 55 percent throughout the city.\textsuperscript{61} This Report echoes the more pronounced broadband disparities identified for Philadelphia and further underscores the success of FRP programs in connecting to underserved populations with much more challenging obstacles to in-home broadband use than previously estimated.

The success of placing digital literacy in established and trusted community groups and service providers affirms previous national research on broadband and low-income communities, which identified the role of community anchor institutions whose supportive staff help underserved populations use technologies. The work in Philadelphia speaks to a broad set of institutions able to connect with historically marginalized communities.

\textbf{The Power of Social Support in Helping Philadelphians Adopt Broadband}

The FRP’s successful approach to embedding digital literacy and public computer access in existing community-based and social service networks also ties to the evaluation’s findings related to increasing adoption. With regards to this FRP goal, the major success story is about the importance of social processes and context for stimulating broadband use: by taking an active role in welcoming new users to online worlds, FRP programs are making a difference in participants’ lives.

Individuals start off with personal interest in digital technologies, even though they may also be fearful of technology or face learning barriers. The supportiveness of staff encourages new users, and the comfortable, safe, and purposeful KEYSPOT environment contribute to participants’ ability to progress and become knowledgeable about computers and the Internet. A sense of community develops alongside participants’ involvement at KEYSPOTs through connections made on site as well as contacts made virtually. An abundance of digital learning takes place at KEYSPOTs, motivating participants to learn and use computers and the Internet.

The findings in this Report directly speak to existing broadband adoption research. With regards to home broadband subscriptions, which the FRP considers as one among several forms of broadband adoption, the findings here portray a different profile of non-use, not found in one heavily cited national study on broadband use. This research, for example, stated that non-users (of home broadband Internet) reported “lack of need or interest as their primary reason for not having home broadband Internet access.”\textsuperscript{62} However, both qualitative and quantitative data presented here speak to the primary issue of cost—not just of Internet connectivity but also hardware, and echo other research focused on cost issues.\textsuperscript{63} In addition, the fact that no WUS respondents selected “waste of time” as a reason for not getting home broadband also challenges claims that non-users do not see the relevancy of technology. High rates of daily use of Internet for both KEYSPOT participants with and without home Internet also support the assertion that participants find broadband relevant to their lives. Meanwhile, qualitative data suggest that interest is high: KEYSPOT users start off with a base interest and recognition of the value and relevance of digital communications to daily life. As expressed in a study on low-income populations and broadband, “broadband access is a pre-requisite of social and economic inclusion, and low-income communities know it” (emphasis added).\textsuperscript{64}

The data in this Report overwhelmingly points to the role of social support in helping novice users adopt broadband technologies. A story of broadband adoption emerged through these findings, where participants overcome their fear of technology with the support of a helpful Webguide, increase their interest in digital learning, and develop feelings of satisfaction and comfort in KEYSPOT settings. Participants become part of a deeply social process through gaining familiarity with and using broadband technologies in ways that make sense to them. Adoption relies on social support structures, so if new users have unequal access to dedicated staff for digital literacy
Individuals exist in a state of non-use (either due to cost, lack of know-how or both).

Motivated by social circumstance, individuals spark an interest in being digitally literate.

Intermediary organizations (such as Community Anchor Institutions) couple digital learning and computer access with other social service offerings.

Individual interest, coupled with intermediary organizations' engagement strategies draw individuals to digital literacy.

Individuals move to a state of meaningful broadband use and elect to use broadband.

Individuals use broadband technologies in settings that they find most appropriate to their personal needs and contexts.

Staff at these organizations help individuals overcome fear of technology and give individuals space to further develop personally relevant goals for digital learning.
programs, then digital inequalities are unlikely to change. The Partnership has an equal appreciation of the diverse contexts in which new users enter digital worlds, meaning that it does not value technology use in public or private spaces differently. The initial work of Managing Partners to expand the definition of broadband adoption challenges the assumption that home use is more important than digital learning at, for example, a KEYSPOT. Though other research on social support systems and broadband use has tended to delineate between home broadband adoption and computer and Internet use at trusted institutions like libraries and community-based organizations, this Report avoids dichotomies between adoption in and outside of the home.

The FRP’s success with regards to its first and second goals suggests a model of broadband adoption implicit in the expanded definition chosen by the Partnership at the outset of the evaluation planning process. This model is premised on the interaction between personal motivations and social support networks. This model echoes what other researchers and evaluators have said about broadband adoption and the importance of social setting, including the unique benefits that community anchor institutions bring to an individual’s encounter with broadband.

With that said, the FRP’s story of broadband adoption success is incomplete. First, the indicators used for this evaluation included a broad definition of adoption, ranging from all types of digital learning to all forms of Internet access. Each piece of this model is key to understanding broadband adoption. However, it may be helpful in the future to identify specific types of digital learning to differentiate those that are more effective at stimulating relevance and interest in home broadband use specifically. Second, the evaluation plan did not establish a way to track how FRP programs directly affected home subscriptions, which would have required significant resources and external collaboration with Internet Service Providers. This Report does not capture the secondary effects of the programs in increasing broadband awareness and potentially increasing subscription rates for mobile or home broadband, statistics that are generally kept proprietary by Internet Service Providers, as was the case with the Comcast Internet Essentials program. Accordingly, the Partnership sought to approximate such information by assessing interest and participant self-assessment of the likelihood of subscription (see also Discovering Common Goals, p. 22, on the development of adoption metrics).

Finally, and more broadly speaking, the evaluation of the KEYSPOT Model of Adoption will need fine-tuning in the future if other providers or partnerships are interested in replicating Philadelphia’s efforts. The pairing of quantitative and qualitative data for the analysis of (an expanded definition of) broadband adoption is important but difficult to execute. As written about in one study of broadband use, a more nuanced understanding of broadband adoption depends on the examination of quantitative metrics, such as the number of home subscriptions, but also real-world data and feedback. This has been the norm for this evaluation: the analysis of focus group data and interview material often speaks to experiences that are nuanced and difficult to capture. Additional research is needed to standardize these experiential indicators and help locate reliable ways to match between quantitative metrics and qualitative ones. It may be helpful to explore other reliable methods beyond interviews or focus groups. For example, observational research forms a core part of people-centered studies of computers and information systems and can provide non-invasive ways of capturing the practices and experiences of new users when trying technologies for the first time.

Unanticipated KEYSPOT Success in Building Communities

Given the FRP’s innovative approach to embedding digital literacy services in existing community-based and social service networks, it is not surprising that the FRP had clearer results in spurring community engagement than in stimulating employment or improving educational attainment for participants. As alluded to previously, public computer centers and classroom settings help to cultivate a collective sense of belonging among KEYSPOT participants. This culture of belonging refers to both what happens on-site, such as participants...
bonding as they discover broadband together, and what occurs virtually, like when participants connect with social networks online. Though survey data indicate that community reasons were not participants’ main reasons for KEYSPOT usage, qualitative data clearly indicate that the comfortable and safe environments for digital learning keep participants coming back to sites.

The degree of community connection revealed in this evaluation complements other qualitative studies that discuss effects of digital inclusion efforts on community health. One study of a digital inclusion project for a poor urban community found that residents’ discussions of the community resources website reflected important indicators of social cohesion and civic-mindedness; the online project itself cultivated and fostered community as KEYSPOTs have done with digital inclusion trainings and computer labs. Another study found a strong connection between building digital capacity and increasing community control of its collective well-being—what the authors refer to as digital human capital. Previous research on cybercafés and community informatics in developing countries also highlight the qualitative, community-building effects of providing digital access, in both offline and online communities.

Interim Impacts of KEYSPOTs on Employment and Educational Attainment

As for partnership goals related to broadband’s positive socioeconomic effects, more time is needed to ascertain KEYSPOT effects on educational attainment or employment. Nonetheless, the evaluation shows some promise that the FRP is on that path.

In terms of employment impacts, KEYSPOTs laid a foundation for future improvements in employment status of participants. Both quantitative and qualitative data demonstrate how participants mainly used KEYSPOTs for job search and preparation. Given the larger backdrop of Philadelphia’s high unemployment rate in 2010, it is unsurprising that workforce development reasons drive participant use of KEYSPOTs. Additionally, KEYSPOTs provided professional development opportunities and led to direct employment effects, though only for a handful of individuals, who started as students and were then hired as Webguides. This suggests that while digital literacy may not immediately lead to the creation of a new class of information workers ready for Philadelphia’s digital economy, the Partnership nonetheless may be developing the conditions for eventual employment in the city’s digital future.

The collective Partnership-wide impact on educational attainment is similar to impacts on employment: KEYSPOTs provided pathways towards educational attainment. Partners with a specific focus on educational attainment used BTOP funds to expand their educational offerings, though dedicated training hours for GED and other formal learning opportunities were modest. Meanwhile, a high percentage of participants who were seeking educational opportunities reported that trainings did connect them to educational opportunities. On the Exit Survey, participants self-defined what “educational opportunities” meant to them, so taking a basic computer training class may have been an educational opportunity on its own, even though it was not necessarily a class on college financial aid. (This is also an artifact of the survey only targeting adults.) Similarly, partners, participants, and Webguides shared numerous stories about learning (digital and otherwise), though they all were virtually silent on the matter of formal educational success stories. While the time frame of the evaluation limits the ability of the FRP to document improvements in formal educational attainment, it is clear that participants improved their knowledge of digital skills and felt that KEYSPOTs helped them improve their general education.

Assessing the Partnership, Its Successes, and Challenges

The assessment of Partnership-level goals tells a complex story. The findings most clearly demonstrate evidence of increased capacity as a result of FRP programs. However, in relation to the health of the Partnership, findings point more to the need for additional research rather than definitive conclusions. Without a clear baseline of expectations of what a well-functioning partnership looks like, progress is difficult to interpret, even when
change has taken place. Nevertheless, the evolution of the Partnership since 2010 has had positive impacts, most clearly on the ability of the FRP to serve Philadelphia’s most underserved and help usher broadband and its benefits to these communities.

**Increased Capacity to Do More**

On the whole, partners saw their organizational capacities improve. For host sites, BTOP funding provided much needed staffing support and new training opportunities. Historically, these organizations have had many different programs and have been unable to fully staff computer labs. With the funding to hire Webguides and access to Partnership-wide resources for digital literacy training, updated hardware, and technical support, organizations were free to focus on organizational mission and core programming. The Partnership also increased the capacity of staff at Managing Partners and Webguides to implement digital inclusion and training programs through resource sharing and professional development opportunities, such as the Training Roundtables and Sustainability Forums. KEYSPOTs represent an unprecedented opportunity to expand operations for Managing Partners and develop a new class of digital literacy trainers and computer assistants for the 21st century.

A clear innovation of the Partnership has been to use technology as a linking force between organizations. Whereas other digital inclusion partnerships might revolve around a traditional issue area such as healthcare, workforce development, community advocacy, or literacy, FRP partners connected to one another on the issue of broadband access, and the Partnership elevated the role and centrality of technology in the work that partners do. Partners, who would have otherwise remained in their separate communities and fields of practice, connected to one another and to other organizations as a result of their common mission to bridge the digital divide. Through these connections, partner organization were better equipped to meet their target populations.

**Initial and Ongoing Impediments to the Partnership**

Like many partnerships that are starting off, the FRP experienced common challenges to successful grant implementation. A significant amount of time, energy, and resources went into planning and sorting out how the Partnership could work together. Operationally, the Partnership did not always function smoothly. For example, delays in contracts tied up the distribution of funding, which in turn impacted the launch of new trainings, computer labs, and outreach efforts. Partners also suffered from communication and coordination issues. Given that some partners had not previously worked together, the initial stages of the grant meant getting to know one another and cultivate trust.

Particularly on one side of the Partnership, management style of one Prime was perceived as top down (as opposed to shared or consensus based, which was more the case with the other grant). One potential motivating cause of the initial difficulties involves the Partnership’s lack of explicitly shared goals or a unified vision, which could have functioned to clarify organizational roles. Given the number of partners and the scope and breadth of the Partnership goals, these operational challenges are unsurprising and to be expected.

Many of the initial challenges subsided as partners developed shared goals and fell into routines for designing, implementing, and eventually improving FRP programs. However, some challenges persisted. Among these, the most notable ones were coordination and communication. For example, some staff established a referral system (which was not an NTIA deliverable). But while Managing Partners and host sites evidenced spontaneous or organic forms of knowledge sharing and referral systems, partners lacked an intentionally designed and efficiently run system of collaboration that could have improved interactions with participants.

These challenges would be easier to interpret had the FRP identified clear expectations at the outset of what a well-functioning partnership entails. However, in the absence of such benchmarks, it is difficult to
speculate on the significance of the transformation of the Partnership over time. What the challenges broadly speak to are the complexities of a large and diverse partnership. The wide variety of programs and services offered by more than eighty partner organizations is hard to visualize and utilize to the fullest extent. While some PCC goals are easy to measure (e.g., how many computer centers were opened), sustainable broadband adoption is a much more nuanced and difficult concept to grasp or achieve as a measurable goal for community-based organizations. Having consensus around shared goals in such a large Partnership is difficult to acquire under the best of circumstances, and in this case, the difficulty was compounded by the two-year time frame of the BTOP grants, which staff interviewees found too restrictive for Partnership formation as well as program impact.

Challenges that bear on the Partnership’s health or functionality are also difficult to interpret due to external factors, particularly the funding structure and program timeline as determined by NTIA. As one staff member explained, the FRP inherited some of its program design and implementation problems from less-than-clear directives from the NTIA. Within a two-year grant, partners spent significant amounts of time on planning and developing Partnership structures and working protocols, leaving less time for actual program implementation and therefore, less time to see long-term impacts on outcomes. The evaluation planning process mirrored the overall process of program implementation: needs assessment and evaluation planning took one year and several months, while actual data collection only spanned seven months. Issues related to funding and sustainability also depend on external factors. How to fund FRP programs may have less to do with internal dynamics and more to do with economic trends and their impact on federal, state, local, and philanthropic budgets. The variation in staff sentiments about the future of the FRP likely results from the complex interplay of specific inter-partner struggles, the effects of a large and diverse partnership, and the absence of identified future funding prospects.

Between the challenges of managing a large and diverse partnership and external factors related to the grant administration, the Partnership demonstrates the overall difficulty of being “shovel ready” in this line of work. As one model of team development illustrates, group collaboration typically goes through three stages—“forming” the group, “storming” or working through group arguments, and “norming” or coming to shared goals—before the group actualizes project goals (“performing”). As seen with the FRP, allocated time for the early stages of project planning is an important factor when undertaking an ambitious project whose impacts are hard to pinpoint and disaggregate.
Paving a Path for Future Research

Though this Report has attempted to provide a rich and complex understanding of the Freedom Rings Partnership and its progress towards shared goals, several additional gaps (other than those already mentioned previously) contribute to an incomplete portrait here. The most obvious path for future research pertains to broadening the scope of the evaluation: a full assessment of the FRP’s progress toward shared goals should take place at the conclusion of the project in August 2013. Due to external factors, this Report only represents a portion of the FRP’s lifecycle.

Other areas for future research that can address the limited scope of this evaluation concern youth populations and awareness or outreach efforts. Having excluded youth from the pool of participants that survey instruments could query for this evaluation, this Report could not assess FRP programs’ educational impacts on young people, especially those related to partner organizations with youth- and education-related missions. Future research into the activities and experiences of young people at KEYSPOTs would help to broaden an understanding not only of information related to educational attainment, but may also shed light on issues in digital literacy (e.g., intergenerational learning), the nature of public computer centers and their use (e.g., differences in computer center experiences when participants are a mixture of young and old), and processes of bringing broadband into the home (e.g., whether and how young people influence technological purchases in the home). 76

Research on the impact of specific programs on broadband subscription status would demonstrate which programs are more effective at stimulating demand for broadband, including home broadband, public broadband, and mobile broadband. Mobile broadband use is growing in urban populations and as more people own smart phones and tablets, it is an important mode of broadband to examine. The future of any digital inclusion initiative will depend on continued tracking of publicly available datasets on home broadband subscriptions, and on the opening up of proprietary data collected by Internet and mobile service providers.

A future evaluation would do well to specifically analyze the efficacy of awareness campaigns and their impact on program attendance and broadband subscription rates for residents and businesses. Though some interviews and focus group material speak to the influence of outreach campaigns on increasing attendance, this Report does not systematically examine impacts of the awareness campaign, program specific or otherwise. Of particular interest would be differences in the effects of outreach for the KEYSPOT low-cost Internet plan and the Comcast Internet Essentials program given the different awareness strategies and reach between the two programs. For example, a comparative content analysis of the campaigns’ outreach materials would establish the messaging contained in each program. Subsequently, researchers could conduct an impact analysis of awareness materials on program usage and citywide rates of subscription. A retrospective study of outreach materials and media hits can also be conducted to examine the topic of “digital divide” and its salience in the news media as an agenda-setting topic for policy discussion.

The findings regarding broadband adoption and broadband’s positive socioeconomic effects speak to
the need for deeper research about the interconnection between adoption goals and other basic needs. As this evaluation has shown, participants view digital literacy as integral to participating economically and socially in the modern world. At the same time, digital, educational, and economic needs are co-dependent: the learning challenges that confront new digital users interact with the financial barriers to access. Outside the United States, a body of research and program evaluation has already begun to look at the intersection of digital and other human needs. This same body of research also points out the difficulty of separating out broadband adoption goals from those related to broadband’s positive socioeconomic effects: individuals must have access to education, shelter, food, and other basic needs in order to take advantage of digital resources, which in turn can have an impact on the delivery and quality of basic needs. Applied to the FRP, a holistic framework like the one used in this emergent body of work can help explain the complexity of digital inclusion efforts that target underserved populations.

Lastly, to further understand the impact of the Partnership on each participating partner, it would be interesting to follow-up with each organization involved with the FRP to see where the digital inclusion work stands post BTOP funding and whether or not the partners still work together in some capacity. This evaluation documented the planning and implementation phases during BTOP funding, but due to external factors, is unable to study the close-out procedures and future health of the organizational relationships developed during this time frame. Following up with the Managing Partners from the FRP as well as host sites of KEYSPOTs would be the most definitive story on whether or not the Partnership succeeded in increasing capacity and advancing a common agenda.

Recommendations and Lessons Learned

The experiences of the FRP and the findings discussed here generate several recommendations and lessons for both the FRP and other digital inclusion efforts.

Based on the findings presented in this Report, OTI offers the following recommendations to the members of the Partnership:

➜ Create a formal (e.g., FRP-wide) user-friendly resource sharing system that assists partners in referring participants to KEYSPOTs and exchanging best practices around curriculum, peer learning, and mixed skills classroom strategies for trainers.

➜ Develop a Neighborhood Working Group to focus on connecting and promoting KEYSPOTs, host sites, and Allied Organizations’ services (digital and non-digital) at the neighborhood level, through, for example, the creation of neighborhood-specific listservs or the hosting of local gatherings.

➜ Create a Community Engagement Working Group to focus on ways to increase and improve community experiences at KEYSPOTs, including a roundtable on community engagement models that connect participants to on-site and offline community.

➜ Develop a strategic outreach plan for continued collaborations with citywide services and community hubs to better coordinate the creation of new partnerships.

➜ Serve as a capacity-building network to support and consult with other community organizations on how to embed digital literacy into traditional programming. Seek external funding or develop an earned-income model to provide these resources and services.

➜ Conduct an anonymous survey of Managing Partners and KEYSPOT sites to capture overall attitudes and feelings about future partnership sustainability and operations.
Philadelphia’s KEYSPOt experience can also inform future partnerships focused on broadband adoption and inclusion with these lessons:

- Digital literacy trainers and public computer lab assistants must be knowledgeable, friendly, and above all, patient, particularly for the population of novice users who are fearful of new technologies.
- Programs should incorporate professional development opportunities for their digital literacy trainers, including trainings that address the rapidly changing pace of technology.
- For large collaborations, partnership-wide tasks, such as evaluation, awareness, and technical support should be established at the very beginning stages of planning and revisited periodically throughout the grant period.
- For grants that require a partnership structure, funders should realistically allocate more time for partnership building.

Looking Forward

The Philadelphia Freedom Rings Partnership is an innovative, large-scale, and ambitious set of programs that address deeply rooted socioeconomic problems as well as opportunities related to broadband access and use. Within the short time frame of the BTOP grants, partners developed a massive network of community-based and social service organizations which laid a techno-social infrastructure for bridging the digital divide and harnessing broadband’s positive influence on workforce development, educational attainment, and community engagement. The Partnership accomplished this in spite of periodic decision-making, communication, and coordination challenges.

The attainment of these goals is neither easy nor immediate, and the FRP’s approach to digital inclusion illustrates unique ways in which foundational efforts can take place. The practice of embedding broadband adoption efforts within community-based and social service organizations effectively connects target populations to programs. The focus on social support has also influenced participants to positively view and engage with new digital technologies. These factors combine to tell the story of a KEYSPOt Model of Broadband Adoption that shows one path for how individuals historically on the wrong side of the digital divide can increase their broadband use. Connecting digital literacy to other pressing needs of target populations and doing so in a welcoming, supportive way is an effective means to cultivating personal and community interest in broadband.

Whether KEYSPOt broadband adoption will result in desired long-term outcomes is difficult to predict based on the evidence in this Report. For one, the effects of FRP programs on economic and educational betterment and community engagement will be increasingly difficult to disentangle, especially as time passes. These goals are also intertwined with one another. Second, as the findings around sustainability suggest, the duration of the FRP is under question, as BTOP funding sunsets and partners discuss and debate the need to continue the Partnership in its current form.

It is unlikely, though not impossible, that a funding opportunity such as BTOP will come along again to support as diverse and large an effort as the FRP. As Philadelphia waits for this next opportunity, the findings from our evaluation demonstrate that with an interdisciplinary approach to digital literacy, community programs can have a greater impact on vulnerable populations’ lives and holistically address several areas of need at once. The KEYSPOt experience shows that sustained, tailored support for new adopters is necessary to ensure that broadband technologies engage people in ways that are most relevant to their lives.
Comcast Internet Essentials is a national program which started Summer 2011, offering $9.99 per month home Internet plans for families with children who qualify for free lunch in school. Since January 2012, Comcast has expanded eligibility to include private and parochial schools, as well as children who qualify for reduced lunch. See http://www.internetessentials.com for more details.

OTI obtained details regarding the development of the KEYSPOT Discount Broadband Plan through personal e-mail correspondence with UAC and Drexel. Copies of the correspondence are on file with the authors of the report.

Greater Philadelphia Urban Affairs Coalition, Broadband Non-Infrastructure Application Submission to NTIA


Jackson and Gordon, "Building Community Broadband. This article provides further information about the history of the grant application process.

See also Breitbart, "The Philadelphia Story."

Other academic partners have also worked with the Partnership on research and evaluation projects, including Rutgers University (ethnographic research) and Temple University (GIS study).


In the original BTOP Round 2, Notices of Funding Availability (issued January 2010), the NTIA stated that SBA programs must report the number in the increase of households, businesses, and community anchor institutions subscribing to broadband service, and the methodology used to measure the increase. No definitive methodology was provided.

At the Community Broadband Adoption Impact and Sustainability Conference, in June 2011, a representative of the NTIA indicated the agency’s interest in understanding a continuum of broadband adoption, which suggests NTIA openness to expanded broadband adoption definitions. See http://cmeschange.net/2011/06/28/btop-users-subscriber-v-adopter/; however, the NTIA has never formally announced revisions to its definitions of users and subscribers.

Through the program data reported to the NTIA do include youth, the data is less robust and rich in detail compared to other data collection efforts.

At the time of this writing, UAC issued an email to the Evaluation Working Group describing discussions with the NTIA to revise its subscription methodology, "Based on the feedback from NTIA, [UAC is] exploring ways to revise [the methodology to more accurately capture the impact of the KEYSPOT program, including attributing a reasonable percentage of Comcast Internet Essentials subscribers in Philadelphia to the work of the Freedom Rings Partnership], looking to potential publicly available data sources, and/or even doing a survey." A copy of the correspondence is available with the authors of the report.


Originally, the evaluation plan included cohort focus groups with participants and Webguides, as well as two interviews with staff at different time periods. However, in light of the delays in getting the NTIA certification, OTI revised its methods to fit a compressed timeline and changed the cohort focus groups to be one-time groups in order to reach more participants and Webguides and decided on one interview with staff instead of two. The decision to modify the cohort design of the focus groups was also made due to the fact that we would have participant attrition over time.


To plan the original grant service areas, the FRP utilized a 2008 home broadband subscription dataset from the Knight Center for Digital Excellence. However, the methodology for data collection was never clear. As the FCC released its 2010 data in 2012, OTI uses this dataset as a more accurate representation of subscription rates during the KEYSPOT program time period.

Prior to receiving final NTIA certification to implement primary data collection, OTI analyzed these Partner Monthly Reports in developing formative Quarterly Evaluation Reports for the Partnership. Starting in Q3 2012, OTI focused its resources on implementing the primary data collection methods and analysis. For this Report, OTI did not systematically analyze the monthly reports as similar questions were asked using the primary data collection instruments.

In the first year and a half of the grant, Philadelphia Parks and Recreation (PPR) used a burdensome paper and Excel sheet system to monitor basic usage statistics. Starting in August 2012, PPR used Google Forms and Excel spreadsheets to track open access lab participants and training sessions. Data collected include participant gender, age, and length of lab use. More detail about PPR is on file with the authors of the report.


As of May 2013, Drexel and partners completed the creation of the e-learning system to serve as a resource sharing and participant tracking tool for trainers.

Email correspondence dated May 23, 2013 is on file with the authors.

Email correspondence dated May 23, 2013 is on file with the authors.


Federal Communications Commission, "Internet Access Services: Status as of December 31, 2010."

Exploring a Digital Nation, NTIA (p. vi).

See also Dailey et al, Broadband Adoption in Low-Income Communities.

Ibid. 14.


Ricardo Gomez and Shaun Pather, "ICT evaluation: Are we asking the right questions?" Electronic Journal of Information Systems in Developing Countries 50, 1 (2012). Gomez and Pathar discuss the importance and challenges of evaluating the ‘intangible outcomes’ of ICT projects in developing countries.

Baty Friedman, Human values and the design of computer technology. (Stanford: CSLI Publications, 1997).


Jackson and Gordon, “Building Community Broadband.” See also the History and Methodology section of this report.


APPENDIX A: Quantitative Methodology: Long-Form Workstation User Survey (WUS)

METHOD

OTI implemented the WUS in two different ways during the evaluation. The Short Workstation User Survey was an online survey which collected demographic information on KEYSPOT participants. The Managing Partners collectively determined the survey questions and method of administration for the WUS. Most notably, some Managing Partners had concerns around collecting information on participant education and income levels. These demographic characteristics were excluded from the survey. Additionally, partners agreed that no unique identifiers would be collected to track participants over time. Partners wanted the survey to be an ongoing data collection tool, so the Partnership worked with Cognis, the IT support for the partnership, to have all KEYSPOTS terminals automatically launch the survey upon participant log-in. For SBA partners using the survey, OTI shared custom survey links for each Managing Partner to use during their trainings.

Three KEYSPOTS piloted the WUS and provided feedback to OTI in July 2012, and additional refinements to the survey appearance and wording were made in September 2012. By the end of December 2012, 59 KEYSPOT sites sent in some data indicating that the survey was used at their sites, representing 8 of 9 managing partners. Philadelphia Parks and Recreation did not deploy the survey at their sites as their sites serve primarily youth and youth under 18 did not participate in this data collection. Other youth-only KEYSPOTS did not deploy the survey either.

For the Long WUS, from October 17 - 23 and December 5 - 11, 2012, OTI added questions to the Short WUS to assess other participant characteristics, such as mode of transportation to the KEYSPOT, main reasons for coming to a KEYSPOT, home Internet subscription, and frequency of Internet use. For the final report, OTI only analyzed data from the Long WUS as it contains these additional questions to assess both demographic and adoption characteristics of KEYSPOT characteristics. Also, it represents a time period in which most of the sites already had the survey running; one of the last sites implemented the survey in October. Participants in this long WUS dataset represent 43 sites across the city, representing 8 of 9 managing partners. There may be different explanations for why fewer sites are represented in the long WUS than the Short WUS. One reason is survey fatigue; for sites that ran the short WUS from the summer of 2012, their participants may have routinely closed out of the survey by the time of the long WUS deployments.

ANALYSIS

OTI used PSPP (an open-source software version of SPSS) and Excel to create frequency tables and run statistical tests of significance between demographic groups and home subscription rates. ArcGIS software was also used to map the WUS data by ZIP code.

Long WUS Response Rate:

A. 538 respondents who are over 18 and consent / 1055 respondents over 18 = 51.0%.
B. 538 respondents who are over 18 and consent / 1472 total respondents = 36.5%

LIMITATIONS

While a significant percentage of host sites serving adult participants ran the WUS during the long-form WUS deployment, there are still limitations in interpreting the findings, such as self-selection and social desirability bias. Given that the WUS is a survey administered via the computer, only participants who are confident in their mouse and keyboard skills are able to fill the survey out. This means that the WUS findings may not accurately represent novice users. Also, because this survey is
voluntary, it is more likely that participants who have
strong opinions (positive or negative) about KEYSPOTS
filled it out. For participants without strong opinions, they
may not want to take the time to fill out a survey only to
report on average experiences. Social desirability plays
a role in how participants fill out a survey as well; they
may be more likely to provide answers that they think
program staff want to hear rather than their true opinions.
For example, on the long form WUS, there is a question
around main reason for coming to the KEYSPOT. If a
participant’s main reason for going to the KEYSPOT is
to check out Facebook, he or she may not feel comfortable
selecting that answer given that it isn’t as “meaningful” as
searching for a job online.

With regards to survey design and implementation,
the WUS does not track individuals over time and it does
not represent anyone under 18. Also, since there are no
unique identifiers for survey responses, these data do
not reflect individual persons. Lastly, these surveys are
voluntary and participants can skip questions if they want
to, so some questions have missing data.

**LONG-FORM WORKSTATION USER SURVEY
QUESTIONNAIRE**

1. How did you get to this computer center today?
   - Using public transportation
   - In a car, truck, or other vehicle
   - By walking or biking
   - Other

2. What is the main reason you are here today?
   - To take a class
   - To send or read e-mail
   - To look (or apply) for a job online
   - To get news online
   - To shop online
   - To watch videos, play games, or listen to music
   - To study or learn (examples: to prepare for the
     GED or do homework)
   - To visit a government website (examples: to apply
     for benefits or pay a parking ticket)
   - To use a social networking site like MySpace,
   - Facebook, or LinkedIn
   - To create or work on your own online journal, blog,
     video, or audio
   - To participate in your community (example: to
     organize with neighbors)
   - To do any banking online
   - Other: __________________________

3. About how often do you use the Internet or email?
   - Several times a day
   - About once a day
   - 3-5 days a week
   - 1-2 days a week
   - Every few weeks
   - Less often
   - Never
   - Don’t know

4. Do you have Internet service at home? ☐ Yes ☐ No

5. If you answered “No” to Question #4, what is the
   main reason you do not have Internet at home?
   - Just don’t know how
   - Don’t have a computer
   - Can get online somewhere else
   - Cost (it’s too expensive)
   - It’s a waste of time (don’t need it)
   - It’s too difficult/frustrating
   - Worried about privacy or security
   - Other __________________________

6. Do you have any comments (about this computer
   center, the classes and programs offered here, this
   survey, etc)?

7. Have you been to this computer lab before?
   - Yes ☐ No

8. What is your zip code? __________

9. What is your gender? ☐ M ☐ F ☐ Other or self-defined
10. Are you of Hispanic, Latino, or Spanish origin?  
☐ Yes ☐ No

11. What is your race? Mark one or more boxes.  
☐ White  
☐ Black or African American  
☐ American Indian or Alaska Native  
☐ Asian  
☐ Native Hawaiian or Other Pacific Islander  
☐ Other race: ______________

12. What is your age? ___ Years

APPENDIX B: Quantitative Methodology: Standardized Exit Survey (SES)

METHOD

This online survey was administered at the end of a classroom-based, instructor-led training to capture information on participant outcomes and satisfaction. Questions from this survey related to the Partnership shared goals of increasing adoption, educational and workforce opportunities, and community engagement. The process of developing the exit survey was similar to the WUS, in that partners led the question development with the guidance of OTI. While many partners felt that for novice training participants, a paper and pencil survey would be better suited for their populations, they all agreed that an online survey administration would be less burdensome on the trainers and program managers. OTI developed the Google Form to share with managing partners to enable easy sharing of the participant data on the backend.

The Standardized Exit Survey was finalized in Spring 2012 and OTI shared custom links for each managing partner to use with their trainings. From July 2012 to December 2012, seven managing partners used the exit survey with some of their training participants. OTI emphasized that partners should not use this survey with youth, as youth were excluded from the evaluation. Trainers were encouraged to administer this survey at the last session of their class.

ANALYSIS

OTI used PSPP (an open-source software version of SPSS) and Excel to create frequency tables and graphs.

Standardized Exit Survey Response Rate:  
105 respondents who are over 18 and consent / 113 total respondents = 92.9%

LIMITATIONS

The main limitation of this instrument is low usage by trainers and therefore, limited representativeness of the Partnership. This instrument was not widely used across all trainings, perhaps due to its late development and difficulty in sharing the survey protocol with all of the trainers. Also, many partners have their own post-test evaluation surveys, and may have felt that adding another exit survey would have been too much for their participants. While the online administration of the form was supported by partners, this survey did not automatically launch upon logging into a computer like the WUS did for most participants, which may have led to decreased use. Ultimately, implementing this survey at the later stage of the evaluation planning process relied on too many layers of communication: OTI shared links with managing partners, who then shared them with trainers, who then had to direct their class to an online survey.

Like the WUS, the exit survey did not track individuals over time; this meant that with regards to home Internet subscription, OTI could only ask about participant interest and intent rather than actual behaviors. Also like the WUS, the exit survey deals with problems of self-selection and social desirability bias. Only those who are interested in providing their opinions (typically very positive or negative) will, and given that the
exit survey asks for participants' assessment of a training, they are more likely to provide positive feedback.

STANDARDIZED EXIT SURVEY QUESTIONNAIRE

1. What kind of training did you take today? Please choose one.
   a. Basic computer/Internet skills
   b. Job search/readiness
   c. Multimedia class
   d. GED
   e. Microsoft Office skills
   f. Certified training programs (like ICDL)
   g. Other (please describe: ______________________)

2. How did you learn about this training? Please choose one.
   a. Friend or family member
   b. Radio
   c. Newspaper
   d. Flyer
   e. SEPTA ad
   f. This center
   g. An event
   h. Other way

3. Have you completed a computer training or class before this one?
   a. Yes
   b. No

4. Did you learn what you wanted from this training?
   a. Yes
   b. No

5. Did this training help you learn job skills?
   a. Yes
   b. No

6. Did this training help you find a job?
   a. Yes
   b. No

7. Did this training help you connect to educational opportunities (like finding online classes, applying to college, or learning about financial aid)?
   a. Yes
   b. No
   c. I'm not looking for those opportunities.

8. Where do you use Internet? Check all that apply.
   a. At a coffeeshop or restaurant
   b. At home
   c. At this lab, another public computer center, or library
   d. At work or school
   e. Anywhere, using a smart phone
   f. I do not access the Internet

9. Did this training make you want an Internet connection at home?
   a. Yes
   b. No
   c. I already have Internet at home.

10. If you do not have an Internet connection at home, how likely are you [5] to sign up for one in the next six months?
    a. Very likely
    b. Somewhat likely
    c. Not likely at all
    d. I already have Internet at home.

11. Now that you have finished this training, will you come back to this center in the next six months?
    a. Yes
    b. No
    c. Not sure

12. Would you recommend this center to a family member or friend?
    a. Yes
    b. No
c. Not sure

13. What is your age? ______

APPENDIX C: NTIA Quarterly and Annual Reports

All Managing Partners track key outputs for the FRP programs in Partner Monthly Reports, which the Primes then review and compile into Primes’ Quarterly and Annual Reports to the NTIA. All NTIA Quarterly and Annual Reports are publicly available on the NTIA BTOP website: http://www2.ntia.doc.gov/.

ANALYSIS

OTI relied on Primes’ Quarterly Reports to track two key outputs for each grant: SBA training hours and participants, and PCC sites and average users per week. OTI also examined the Primes’ 2011 Annual Report to the NTIA (the most recent report available at the time of the report’s release) to determine the range of training hours and topics offered by PCC and SBA programs. At the time of the report writing, the Primes’ 2012 Report to the NTIA annual report was not available.

APPENDIX D: Qualitative Methodology: Focus Groups with Participants

METHODS

OTI developed an interview questionnaire for focus groups with participants who use the computer centers and/or training programs. In February 2012, OTI worked with the Primes to develop and finalize these scripts. OTI sought participants from sites affiliated with all eleven of the Managing Partners through fliers and/or in-person recruitment. To minimize the invasiveness of research, OTI did not collect participant demographics during the focus groups. OTI conducted three participant focus groups:

Four participants who used three KEYSPOTS operated by three different Managing Partners attended the focus group at the Independence Branch Library on July 16, 2012.

Fourteen individuals from West Philadelphia who used five KEYSPOTS operated by four different Managing Partners attended the focus group at the People’s Emergency Center’s Rowan House on September 25, 2012.

Ten participants who used six KEYSPOTS operated by four different Managing Partners attended the focus group at the Philadelphia OIC on November 9, 2012.

ANALYSIS

OTI used the following steps to manage and analyze the focus group information: Two coders created a participant codebook to categorize the focus group information by key topical themes, adding new codes as needed. Using a coding sheet, coders categorized statements/quotes under specific codes. Coders then analyzed and aggregated codes. The coders discussed discrepancies, deliberated, and ultimately harmonized differences to arrive at the same codes.

LIMITATIONS

Focus group methodology is limited in its representativeness, as only a small number of people can participate in each discussion. However, focus group data provides more in-depth accounts of participant experiences and program phenomenon than statistical snapshots of behavior, values, or beliefs. Given that OTI does not follow the same participants across participant focus groups, we are unable to track long-term outcomes such as jobs attainment or improved educational status.

Recruitment primarily took place on site, with OTI staff or partner staff (on behalf of OTI) asking for volunteers. As is the case with focus groups, the process of self-selection for participation means thoughts and opinions often reflect enthusiastic or positive assessments (especially for an evaluation that is framed as helping
to sustain KEYSPOTS and programs like it). Some participants came with a friend or a group of friends, potentially compounding a problem inherent in focus groups—namely, that they inspire consensus or group think, rather than disagreement or the expression of divergent views. In addition, the fact that the survey data indicate only a majority of African American participants and roughly equal representation across gender, whereas all three focus groups drew mainly African-American women, raises questions about representativeness. To respect concerns of invasiveness (a concern raised in needs assessments and in meetings of the Evaluation Working Group), the specific demographic profile of participants was not recorded; OTI identified race and gender by sight, not by asking participants to articulate race and gender themselves. This lack of precision introduces additional problems of context.

Since our focus groups are semi-structured, participants have the freedom to deviate from the main line of questioning. While typically a strength of qualitative research, the ability to explore themes conflicts with the hour and a half length of a focus group, and time constraints limit our ability to dive deeper into tangential conversations. Finally, each focus group represented unique circumstances that may have impacted the information shared, thus limiting the conclusions we can draw from the conversation. When the groups were held later in the day, we found that energy levels were low and sometimes it was difficult to get rich discussions on certain topics.

**PARTICIPANT FOCUS GROUP QUESTIONNAIRE**

1. What computer center(s) do you go to? What types of trainings did you attend?
   a. When did you first start going to a computer center/KEYSPOT
   b. Why do you go there?
2. What did you hope to get out of coming to the computer center(s)? (Probes: specific skills, job, education, health, benefits, sense of community)
   a. Do you feel like you are getting what you wanted?
   b. Is there more that you would like to learn? If so, what and why?
3. How easy or hard was it for you to get to centers? (Probes for stories: What made it easy? what made it hard? transportation, childcare, job scheduling)
4. How easy or hard was it for you to complete trainings? (Probes for stories: scheduling, don't have enough time/equipment to practice, forgot what I learned)
   a. What makes it hard to finish a training you started?
5. How did you feel about using a computer and the Internet before the training/coming to the lab? (Probes: nervous, excited, knew a little bit, knew a lot).
   a. Think about the first time you came to a KEYSPOT, or the first day or training. How did you feel?
6. Now that you’ve gone through this training/come to the lab, how do you feel about using a computer and the Internet?
7. How are you using the skills you learned? (Probes: email, social media, job applications, online classes, looking for health information)
8a. Now we want to learn a little bit about whether or not you have Internet at home or on your phone. Please raise your hand if this is true for you.
   a. For people who don’t have Internet at home, do you think you will sign up? Why or why not?
   b. I know some of you are looking for jobs, what would it take for you to get the Internet under
these conditions?

9. Do you feel comfortable/at home/safe at trainings/ at this computer center?

10a. We’re going to ask a few questions again, and please raise your hand if it applies to you.

Poll #1: How many people come to the labs/trainings for the community experience?

Poll #2: How many of you come to a lab to just focus on using the computer or getting a training? (explain: you just want to focus on your goal without distractions?)

10b: How have you used computers and/or digital skills to connect with or help your community? (Probe for stories: - neighbors, friends, church or school, family? Others who use this center?)

11. Thinking about everything we’ve talked about today, would you recommend the computer computer center you use to others? Why? (Probes: How well were these classes/labs designed for you? location, scheduling, facility, trainings offered).

12. Does anyone have any final comments they want to share before we wrap up?

APPENDIX E: Qualitative Methodology: Focus Groups with Webguides

METHOD

OTI developed an interview questionnaire for focus groups with Webguides who teach SBA digital literacy training classes or who staff the public computing centers. OTI sought Webguides from sites representing all Managing Partners through fliers and/or in-person recruitment. We did not survey Webguide’s demographics during focus groups. OTI conducted two focus groups with 13 individual webguides represented between the two groups:

Eleven Webguides attended the focus group at the Independence Branch Library on July 23, 2012, representing seven Partners and eleven different KEYSPOTS.

Eight webguides attended the focus group at the Independence Branch Library on November 2, 2012, representing five Managing Partners and eight different KEYSPOTS. Six of the Webguides present had attended the previous focus group, with two new Webguides in attendance.

ANALYSIS

OTI used the following steps to manage and analyze the focus group information: Two coders created a Webguide codebook to categorize the focus group information by key topical themes, adding new codes as needed. Using a coding sheet, coders categorized statements/quotes under specific codes. Coders then analyzed and aggregated codes. The coders discussed discrepancies, deliberated, and ultimately harmonized differences to arrive at the same codes.

LIMITATIONS

Focus group methodology is limited in its representativeness, as only a small number of people can participate in each discussion. However, focus group data provides more in-depth accounts of participant experiences and program phenomenon than statistical snapshots of behavior, values, or beliefs.

Indicators which rely on focus group material from Webguides provide a relatively representative snapshot of frontline staff, their experiences, and observations. Though focus groups tend to promote group think or consensus, recruitment of Webguides took place with the help of staff at Managing Partners, some of whom told OTI that they intentionally suggested names of individuals with varied opinions of KEYSPOTS and FRP programs. Thus, Webguide focus groups were not as prone (as is typically the case) to agreement. With that said, the analysis of Webguide focus groups had its flaws: for reasons of cost and time, OTI did not connect the thoughts and opinions of Webguides who participated in both discussions, meaning it was impossible to triangulate between statements made across conversation.

Also, since our focus groups are semi-structured,
participants have the freedom to deviate from the main line of questioning. While typically a strength of qualitative research, the ability to explore themes conflicts with the hour and a half length of a focus group, and time constraints limit our ability to dive deeper into tangential conversations. Additionally, each focus group represented unique circumstances that may have impacted the information shared, thus limiting the conclusions we can draw from the conversation.

WEBGUIDE FOCUS GROUP QUESTIONNAIRE

1. Which site do you work at? When did you start?
2. Describe where you work. (Probes: location, people served, classes/services offered)
3. Before this position, what was your situation like? (probes: life in general, prior employment history, school situation)
4. How did you hear about this job and how did you get hired?
5. Why did you accept the position?
   a. What did you want to get out of the job?
6. Why do you think participants come to your site?
7. How do you see your students making progress at your site?
   a. Adoption - increasing use of technology/more confident,
   b. Jobs/edu - new educational opportunities or students getting jobs,
   c. Community engagement - connecting with others online or on site
8. What do you see as challenges to participants achieving their goals? (Probes: schedules, transportation, childcare, competing life priorities)
9. What are some challenges of being a webguide? (probes: mixed-skills class, retention of students, issues working with students, technology problems, class setup, travel)
10. How have you addressed these challenges?
11. From your perspective, how do you think the KEYSPOTS can be improved?
12. What role does the Keyspot/computer site play in the community? What about creating community?
13. What do you feel like you have achieved or learned in this position so far?
14. How do you think this job will help you in the future? (Probe: employment opportunities, new job skills, connecting with new people, etc.)
15. Is there anything else that you would like to share about your experience as a webguide?

APPENDIX F: Qualitative Methodology: Interviews with BTOP Staff (Host Sites, Managing Partners, and the Primes)

METHOD

Altogether, OTI conducted 18 unique interviews with 20 interviewees representing 16 partners (five Host Sites, nine Managing Partners and the two Primes). With Managing Partners that received both a PCC and SBA grant, we gave the option of separate interviews with a Managing Partner staff person focused on each grant. Two host sites asked that an additional staff person participate in their interview, feeling that together they could better answer questions. In both instances, this meant a managerial-level interviewee and the Webguide that worked most closely with participants.

Interviews with Host Sites: OTI conducted interviews with seven interviewees at five host sites representing five Managing Partners. Three of the host sites are located in two of the three target geographic areas identified by the FRP (North and South). The remaining two Host Sites are located downtown and provide services citywide. In addition to their location, OTI chose Host Sites that served some of the target populations of priority to the FRP. The KEYPOTS are embedded within Host Sites who specialize and work directly with Spanish-speakers, seniors, youth, low-income community members and/or
individuals experiencing homelessness and unemployment. The questions OTI asked these Host Site staff revolved around the benefits, challenges and goals of the broader FRP and the impact they see of this program on participants.

Interviews with Managing Partners/Primes: OTI conducted interviews with 13 interviewees at 9 Managing Partners organizations and with two staff of the two Primes of the Sustainable Broadband Adoption (SBA) and Public Computing Center (PCC) grants. OTI interviewed one SBA grantee who later closed operations in the middle of the grant. One partner did not respond to interview requests and was not interviewed for this report. OTI asked the Managing Partners and Primes the same questions, covering the benefits, challenges and goals of the FRP and the impact they see of this program on participants.

ANALYSIS

OTI wrote a one-page summary document that describes a single interviewee’s answers to each of the questions in the interview scripts and that drew out illustrative quotes. Additionally, OTI reviewed each interview for major points made, then analyzed/elicited themes across these interviews based on this initial analysis. OTI wrote brief summaries for each group of sources (Host Sites and the Managing Partners/Primes). Each summary included a description of the interviews, a bullet-point list of key findings, with relevant quotes. Afterwards, OTI wrote a summary analysis across Host Sites, Managing Partners/Primes, and Allied Organizations.

LIMITATIONS

Indicators that rely on interview material with staff at Managing Partners and Primes provide an adequately representative snapshot of managerial-level attitudes, beliefs, and knowledge. Only one organization did not respond to interview requests.

Indicators that rely on interview material with staff at Host Sites are less representative than material with staff at Primes and Managing Partners or with Webguides. OTI asked staff at Managing Partners for contact names at Host Sites of interest and also created a list of potential interviewees based on our knowledge of the breadth of the Partnership. The snowball method of sampling tends to favor the selection of interviewees who share similar views as those who suggested them, while excluding those with dissenting or disparate views. Additionally, the total number of organizations represented in interviews is a fraction of the total number of Host Sites, which suggests the Final Report may exclude a wide swath of opinions and thoughts about the FRP.

**BTOP STAFF INTERVIEW QUESTIONNAIRE**

1. Tell me about your role in the Partnership.
   - What population do you serve?

2. What benefits have you experienced as a result of participating in the Partnership? (Probes: shared resources, shared knowledge, getting support from Partnership. Solicit actual examples)
   - What support did you want from the Partnership but did not receive?

3. What are challenges from participating in the Partnership? (Probes: reporting requirements, goals not the same, staff/org. capacity for implementation)
   - What support did you want from the Partnership but did not receive?

4. Were you included in decision-making for the Partnership? Please describe.

5. What are the Partnership’s most important goals?
   - How have the goals of the Partnership changed over time?

6. How do your organization’s goals overlap or differ from these shared goals?

7. How has being in the Partnership affected your organization’s ability to achieve your organization’s goals? Please share stories.

8. How has being in the Partnership affected your organization’s ability to achieve the Partnership’s shared goals? (Probes: jobs, education, community engagement, adoption). Please share stories.

9. To what extent have the Partnership’s goals been met? How so? Please share stories.

10. What does the term “partnership” mean to you?

11. Thinking about everything we discussed today,
how well does the Freedom Rings Partnership fit that description?
12. How effective is a partnership structure for managing the BTOP grant?
13. What are core competencies needed for a Partner to be successful (experience with budgets, management, training, scheduling, data management)?
14. How has your organization’s capacity to manage the program changed over time?
15. What do you think will happen to the Partnership after the BTOP grant ends? What do you want to happen to the Partnership? What can your organization best contribute to realize that vision?
16. What would you like to see happen with the KEYSPOTS / computer site after the grant ends?

APPENDIX G: Qualitative Methodology: Interviews with Allied Organizations

METHOD

OTI conducted interviews with 7 interviewees at six non-BTOP funded Allied Organizations that primarily collaborated with six BTOP-funded Host Sites and/or Managing Partners. Additionally, three of the Allied Organizations worked with the FRP more generally. OTI chose Allied Organizations that served the target populations of priority to the FRP, represented different geographic areas of Philadelphia, and whose collaborations equally represented PCC and SBA Managing Partners. These Allied Organizations have expertise with populations struggling with low-levels of education, high incarceration rates, neighborhoods with high crime, veterans, the unemployed, or on the wider impact of technology in Philadelphia. OTI asked allied organizations about KEYSPOT awareness as well as the benefits, challenges, goals and stories of impact of the FRP.

And one Allied Organization asked that an additional staff person participate in their interview, feeling that together they could better answer questions.

ANALYSIS

OTI wrote a one-page summary document that describes a single interviewee’s answers to each of the questions in the interview scripts and that drew out illustrative quotes. Additionally, OTI reviewed each interview for major points made, then analyzed/elicited themes based on this initial analysis. OTI wrote brief summaries for each group of sources (KEYSPOTS, BTOP staff, and Allied organizations). Each summary included a description of the interviews, a bullet-point list of key findings, with relevant quotes. Afterwards, we wrote a summary analysis across all three groups of sources.

LIMITATIONS

Indicators that rely on interview material with staff at Allied Organizations are less representative than material with staff at Primes and Managing Partners or with WebGuides. To know which organizations to reach out to for interviews, OTI asked Managing Partners and the Primes for recommendations. The snowball method of sampling tends to favor the selection of interviewees who share similar views as those who suggested them, while excluding those with dissenting or disparate views. Additionally, the total number of organizations represented in interviews is a fraction of the total number of Allied Organizations, which suggests the Final Report may exclude a wide swath of opinions and thoughts about the FRP.

ALLIED ORGANIZATION STAFF INTERVIEW QUESTIONNAIRE

1. Tell me about your organization and your role at your organization.
2. How did you first learn about the Freedom Rings Partnership?
3. Do you think that the community you serve knows about the Partnership/computer centers/trainings? Why or why not?
4. What is your impression of the Partnership?
5. From your perspective, what are its main goals?
a. Have you seen these goals change over time?
6. How have you or your organization contributed to these goals?
7. Are there any particular stories that describe how you helped the Partnership meet these goals?
8. How has your organization benefited from the Partnership?
9. How have program participants benefited from the Partnership?
10. How have underserved communities benefited from the Partnership?
11. What, if any, disadvantages or challenges have you observed of the Partnership?
12. How do you see your site’s involvement with the Partnership in the future?

APPENDIX H: Qualitative Methodology: Partnership Visualization

METHOD

OTI developed a visual representation of the Partnership’s many internal and external relationships with other stakeholders. This preliminary analysis was prompted by an exercise that OTI led during a March 2012 Partnership-wide celebration of accomplishments, where Managing Partners described different internal and external collaborations and drew lines between the partner agencies to indicate where connections had been made. To expand this initial list of partnerships, OTI further examined Partner monthly reports and specifically solicited additional feedback from Partners in January 2013. This data was organized using Excel spreadsheets.

For each relationship listed, OTI labeled them as “Internal” (within the same grant), “External” (external to the BTOP funding), or “Cross-grant” (PCC - SBA). For partners which had both sources of funding, unless the specific grant source was specified, their BTOP grant collaborations were labeled “Internal”. For multi-agency partnerships, each permutation of the partnership had to be listed. For example, if there was a partnership between Organization A, B, and C, the following list of partnerships was generated:

- A-B
- A-C
- B-A
- B-C
- C-A
- C-B

ANALYSIS

OTI used Excel to collect and manage the list of partnerships. OTI then used Gephi, an open-source visualization software, to create the Partnership map.

To indicate the relative importance of the collaborations, OTI weighted the collaborations with the following scores:

- Internal collaborations with a score of “1”
- External collaborations with a score of “2”
- Cross-grant collaborations with a score of “3”

Cross-grant collaborations were weighted most heavily for this analysis, because when viewed in the context of the BTOP grant proposals commitment to leverage the SBA and PCC work to each others’ benefit, such collaborations may have required more coordination and/or represent a richer form of partnership over other types of collaboration.

OTI then inputted this datasheet into Gephi which created the network map.

LIMITATIONS

There are several limitations to this preliminary analysis. First, the list of partnerships is constantly changing as FRP is a dynamic and ongoing partnership. This map only captures the Partnership at one moment in time. Second, Managing Partners provided OTI with lists of collaborations, but OTI did not systematically get partnerships from host sites themselves. This map best represents a macro-vision of the Partnership through a Managing Partner lens. To better represent the
Partnership, a series of visualizations can be done with host site level partnerships. Another limitation to this preliminary map is that the types of collaborations were never clearly defined. For example, host sites of KEYSPOT trainings and labs are by their very nature collaborations with KEYSPOT Managing Partners, but they are not included on this map. Several different types of visualizations may be most effective for demonstrating different aspects of the Partnership. This map is just a first step in testing a new methodology.

Sample partnership visualization spreadsheet

<table>
<thead>
<tr>
<th>Partner 1</th>
<th>Grant</th>
<th>Partner 2</th>
<th>Grant</th>
<th>Type of Collaboration</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org. A</td>
<td>PCC</td>
<td>Org. B</td>
<td>PCC</td>
<td>Internal</td>
<td>1</td>
</tr>
<tr>
<td>Org. A</td>
<td>PCC</td>
<td>Org. C</td>
<td>SBA</td>
<td>Cross-grant</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation Question</td>
<td>Finding Statement</td>
<td>Methodologies Used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------</td>
<td>--------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA: Who participates at KEYSPOTs?</td>
<td>A. KEYSPOTs serve primarily African Americans, and age and gender are well represented across KEYSPOT users.</td>
<td>WUS SES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. KEYSPOTs draw from existing participant constituencies in their communities, and use their digital literacy programming to attract new target populations.</td>
<td>Webguide Focus Groups Managing Partner Interviews Prime interviews Allied Organization Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Personal recommendation and reputation play a significant role in attracting target populations to KEYSPOTs.</td>
<td>SES Participant Focus Groups Managing Partner Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. KEYSPOT participants primarily come from the North, Southwest, and West Philadelphia neighborhoods that the Partnership initially targeted.</td>
<td>WUS GIS Analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. Most KEYSPOT participants do not subscribe to broadband at home, primarily due to cost barriers.</td>
<td>WUS SES Participant Focus Groups Managing Partner Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F. For those able to afford home broadband, home subscriptions do not necessarily equate with use.</td>
<td>Participant Focus Groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G. In addition to cost issues, participants just starting out at KEYSPOTs are fearful of technology.</td>
<td>Participant Focus Groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H. Participants also start out at KEYSPOTs with significant (non-digital) learning challenges.</td>
<td>Managing Partner Interviews Prime Interviews Allied Organizations Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. Despite fears and learning challenges related to technology, KEYSPOT participants feel the Internet and digital literacy are highly relevant to their daily lives.

1B: What participant needs are met through KEYSPOTS?

A. While participants use KEYSPOTS primarily for training and workforce development, they also had many varied reasons for frequenting KEYSPOTS.

B. Apart from digital literacy and computer and Internet access, participants access a wide range of programs while visiting KEYSPOTS.

C. KEYSPOT participants are very satisfied with how programs meet their needs.

2: What are the effects of KEYSPOT access and training on broadband adoption?

A. KEYSPOTS provide an essential access point to the Internet.

B. When learning new computer and Internet skills, participants rely on supportive KEYSPOT Webguides who use creative teaching strategies and alleviate participant anxieties.

C. KEYSPOTS increase the digital literacy skills of participants and stimulate interest in continued learning.

D. Though Primes’ Quarterly Reports to the NTIA indicate the FRP as not yet having met its SBA broadband goals, quantitative and qualitative data suggest KEYSPOT participants credit trainings with influencing them to buy home subscriptions.
E. For those participants who own home computers and have Internet subscriptions prior to attending a KEYSPOT, trainings help them use these items.

3A: What are the effects of KEYSPOT access and training on participants’ employment status?

A. Participants use KEYSPOTs for job seeking and job preparation.

B. Within a short time span, KEYSPOTs can help participants find jobs.

C. KEYSPOTs help participants keep their job skills current.

D. By virtue of hiring a corps of Webguides, the Partnership is itself an engine of job creation.

3B: What are the effects of KEYSPOT access and training on participants’ educational attainment?

A. KEYSPOTs provide educational trainings and opportunities for participants.

B. Few participants shared stories of using KEYSPOTs to help them advance their own education.

4: What are the effects of KEYSPOT access and training on community engagement?

A. Though participants do not state that they seek community through digital literacy and public Internet access, they find community, both onsite and online, at KEYSPOTs.
B. KEYSPOTs function as a home away from home that often provides a safe space for participants.

C. KEYSPOTs foster an environment of peer learning, giving participants the opportunity to connect with one another.

5: In what ways has the FRP increased partners’ capacity?
A. The Partnership increases the staffing capacity of Managing Partners and host sites through planned professional development activities.

B. KEYSPOT trainings increase the digital skills of organizations internal and external to the Partnership.

C. BTOP funding allowed partners to upgrade their IT, freeing up time and resources to better serve target populations.

D. Collaboration in the form of participant referrals, resource sharing, and networking increases partners’ overall capacity to improve service delivery.

E. Partners used KEYSPOTS to further their own organizational goals, specifically for employment, education, and community engagement.

6: How well has the FRP functioned?
A. While a majority of Managing Partners had a positive assessment of the Partnership, many also felt that given more time, the Partnership would have had improved functioning and a greater impact.

B. The Partnership faced operational challenges and lacked unified direction and goals during the implementation stage.
C. Some Managing Partners felt challenged by hierarchical decision making tied to one programmatic side of the FRP, while praising for supportive management on the other.

D. Overall, host sites are satisfied with Managing Partners’ oversight.

E. At all staff levels of the FRP, people strongly support the continuation of digital literacy training and public computer centers.

F. Partners face formidable challenges in planning and securing the resources to sustain these programs.