



National Telecommunications and Information Administration

Broadband Technology Opportunities Program
Evaluation Study

Order Number D10PD18645



Case Study Report Round 2

**Delaware Department of State
(Delaware Division of Libraries)**

Public Computer Center

Submitted December 19, 2013

ASR Analytics, LLC
1389 Canterbury Way
Potomac, MD 20854

Federal TIN: 20-1204680
DUNS: 15-108-3305
GSA Schedule #: GS-10F-0062R

Submitted to:

Shelita Saint-Louis, Contracting Officer
Cassandra Sterba, Contract Specialist
Acquisition Services Directorate
National Business Center
Department of the Interior

Table of Contents

- Executive Summary 1
- Section 1. Introduction 3
 - 1.1 What the Interviewees Told Us 3
- Section 2. Impacts..... 5
 - 2.1 Focus Areas 6
 - 2.2 Workforce and Economic Development..... 7
 - 2.3 Digital Literacy..... 12
 - 2.4 Education and Training 14
 - 2.5 Quality of Life/Civic Engagement..... 16
- Section 3. Recovery Act Goals 18
 - 3.1 Provision of Services..... 18
 - 3.2 Broadband and Economic Growth 22
- Section 4. Grant Implementation 23
 - 4.1 Facilitating Conditions 24
 - 4.2 Social Influence 25
 - 4.3 Effort Expectancy 26
 - 4.4 Performance Expectancy 27
- Section 5. Techniques, Tools, and Strategies 28
 - 5.1 Techniques, Tools, and Strategies..... 28
 - 5.2 Challenges 28
- Section 6. Conclusions..... 30
- Section 7. Quantitative Analysis 31
 - 7.1 Impact of the BTOP Grant on Employment 31
- Section 8. Next Steps for the BTOP Evaluation Study 33
- Notes..... 35
- Glossary..... 37
- Bibliography 39

List of Tables

Table 1. APEX Performance Results	17
Table 2. Facilitated Lab Attendees by Location	31
Table 3. Estimated Number of Jobs Attained as a Result of Facilitated Labs	32

List of Figures

Figure 1. Words Interviewees Used Frequently	4
Figure 2. Grantee Training Hours Categorized by Focus Area	6
Figure 3. Focus Area Statements Made by Interviewees.....	7
Figure 4. Cumulative Reported Job Offers as of March 31, 2013.....	8
Figure 5. DDL Workforce Development Training	9
Figure 6. Job and Career Accelerator Participation and Completed Résumés.....	10
Figure 7. DDL Digital Literacy Training.....	13
Figure 8. DDL Education Training	15
Figure 9. LearningExpress Sessions.....	16
Figure 10. DDL Quality of Life Training	17
Figure 11. Recovery Act Goals Statements Made by Interviewees	18
Figure 12. Cumulative Hardware and Connectivity Progress.....	19
Figure 13. Unique Wi-Fi Connections at Libraries.....	20
Figure 14. Facilitated Open Lab Patron Hours.....	21
Figure 15. Facilitated Lab Attendance.....	21
Figure 16. Direct Jobs Created by Grantee.....	22
Figure 17. Distribution of Grant Implementation Topics by UTAUT Dimension	24

Executive Summary

“We have people who tear up because they've been so frustrated. They know they need a résumé and they know they need to get on the computer. But they don't know how to do it, and they can't find anybody to help them. So now, all of a sudden, here we are.”
– Seaford Job Center Coordinator

The Delaware Division of Libraries (DDL), an agency within the Delaware Department of State, manages and facilitates citizen access to governmental, educational, and recreational information. DDL provides leadership and support for the timely development of all fifty-three of Delaware's libraries to ensure convenient access to and encourage the use of current information resources and reading materials by all Delawareans.

On September 30, 2010, the National Telecommunications and Information Administration (NTIA) awarded the Delaware Department of State a Broadband Technology Opportunities Program (BTOP) Public Computer Center (PCC) grant for \$1,899,929 to implement the Delaware Library Job/Learning Labs project. The goal of this project is to address the broadband access needs of economically vulnerable communities in Delaware, with a focus on the unemployed and underemployed who seek job-searching assistance from public libraries. To facilitate patrons' ability to obtain employment, DDL supplements job-seeking services with computer literacy training and GED courses, both of which are available in Spanish to accommodate the needs of the target population. DDL is responsible for the management of this grant under the Delaware Department of State. DDL proposed the following, with the results shown:

- Establish PCCs, called Job Centers, within four public library locations in the state; provide a lab coordinator; and provide computer equipment, including ten laptop workstations and other equipment at each location. DDL installed twelve workstations (ten standard and two compliant with the Americans with Disabilities Act [ADA]) and hired a coordinator to serve at each anchor location; and deployed an additional ninety-six laptop computers for use at seventeen satellite library locations.¹
- Provide videoconferencing capabilities and wireless networking at the four Job Centers and the remaining twenty-eight public libraries in the state. DDL installed the backend videoconferencing equipment, while installation of the endpoint equipment for thirty-two library locations is in process. As of the end of 2012, DDL installed four videoconferencing units at library locations.²
- Train 2,000 residents over the three-year project lifespan in the focus areas of workforce development and basic digital literacy. As of the end of 2012, DDL had provided training to 7,297 participants and facilitated lab services to 8,933 patrons.³

Job Center coordinators report that patrons are primarily unemployed, blue-collar workers between the ages of twenty and fifty with limited computer skills. Coordinators report that many patrons face significant barriers to obtaining employment, including limited education, limited computer skills, criminal records, prolonged periods of unemployment, and homelessness. The demographic characteristics of the users of the Job Centers are similar to those of the surrounding community.

This case study is one of fifteen performed by ASR Analytics, LLC (ASR) on a sample of eight PCC and seven Sustainable Broadband Adoption (SBA) grants. It is part of a larger mixed-methods evaluation of the social and economic impacts of BTOP.

The purpose of this case study is to:⁴

- Identify how the grantee maximized the impact of the BTOP investment.
- Identify successful techniques, tools, materials, and strategies used to implement the project.
- Identify any best practices, and gather evidence from third parties, such as consumers and anchor institutions, as to the impact of the project in the community.

This report further investigates the initial impacts reported by the grantee during the first round of visits and identifies additional impacts that occurred in the time between the site visits. The results presented in this report reflect the evaluation study team's observations at the time of the second site visit. This report includes both qualitative and quantitative components. It will serve as a basis for *Interim Report 2*, which will analyze data from fifteen case studies.

The evaluation study team collected the information presented here during two field visits to evaluate the social and economic impact of the DDL project. The evaluation study team originally met with representatives of DDL over a two-day period in November 2011, visiting four Job Center locations to meet with project and partner staff. ASR conducted a follow-up site visit with the grantee and partner staff from May 28-29, 2013. ASR visited the Georgetown, Seaford, and Dover Job Centers. The Wilmington Job Center was under renovation at the time of the site visit. ASR did not visit the temporary Wilmington Job Center established during construction. In addition to four Job Center coordinators, partner representatives, volunteers, and patrons, ASR met with the state librarian and the compliance specialist for the project.

In total, the evaluation study team performed six interviews. ASR transcribed these discussions. This information, and other information and reports provided by the grantee, was supplemented by Quarterly Performance Progress Reports (PPR), Annual Performance Progress Reports (APR), and other publicly available information.

The evaluation study team observed the following major impacts of the grant:

- More than 420 Job Center patrons had obtained job offers as of March 31, 2013.⁵
- The Delaware Center for Distance Adult Learning (DCDAL) staff estimated that twenty patrons earned general equivalency degrees (GED) within the last year and projects that more than forty will earn high school diplomas by the close of the current program cycle in September 2013.
- As of May 15, 2013, the Job Centers had facilitated eighteen pardon recommendations and seventeen expungements through a partnership with Advancement through Pardons and Expungements (APEX).⁶ Achieving a pardon restores a client's civil rights, including the right to vote. An expungement will effectively seal a client's criminal record within Delaware.
- As of March 28, 2013, DDL had provided more than 5,200 hours of digital literacy training, enhancing participants' ability to search and apply for jobs online and, in some cases, adding skills to participants' résumés, improving their qualification for employment.⁷

Without the BTOP grant, it is unlikely that the impacts or the services described above would exist. Current economic conditions affected the resources available at the Delaware Department of Labor (DDOL) and increased the number of Delaware residents requiring such services. To address statewide unemployment needs, DDOL refers unemployed persons to the Job Centers, which help to absorb the excess demand for employment-related services. DDL reports that without the BTOP grant, comparable training opportunities and resources would not be available at libraries. The BTOP grant helped to facilitate DDL's collaboration with state organizations serving vulnerable populations, enabling the provision of a wide range of training opportunities supporting the focus areas of Workforce and Economic Development, Digital Literacy, Education and Training, and Quality of Life/Civic Engagement. Additionally, grant funding supported the provision of new or improved broadband connectivity at thirty-two libraries across the state, sixteen of which did not have wireless access before the grant due to budgetary limitations. If not for the grant, some of the satellite libraries might not have obtained wireless as quickly.

Section 1. Introduction

On September 30, 2010, the National Telecommunications and Information Administration (NTIA) awarded the Delaware Department of State a Broadband Technology Opportunities Program (BTOP) Public Computer Center (PCC) grant for \$1,899,929 to implement the Delaware Library Job/Learning Labs project. The Delaware Division of Libraries (DDL) is responsible for the management of this grant under the Delaware Department of State. The goal of this project is to address the online access needs of economically vulnerable communities in Delaware with a focus on the unemployed and underemployed who seek job-searching assistance from public libraries.

Before BTOP, DDL created the Delaware Libraries Community Resources Exchange (CRE), a consortium of social service organizations, agencies, and public libraries. DDL drew from partners in the CRE initiative in selecting organizations to provide services under the grant. Through the grant period, partners contributing to project efforts included: the Bill & Melinda Gates Foundation, The Department of Technology and Information (DTI), The Christina Adult Education Program (CAE), the Delaware Center for Distance Adult Learning, Inc. (DCDAL), Delaware Economic Development Office (DEDO), Delaware Financial Literacy Institute, Literacy Volunteers Serving Adults (LVSA), Retired Senior Volunteer Program (RSVP), A Center for Relational Living, First State Community Action Agency, Division for the Visually Impaired (DVI), Sussex Technical High School, Sussex Economic Development Action Committee (SEDAC), and Habitat for Humanity. The Delaware Workforce Investment Board (DWIB) and Delaware Department of Labor (DDOL) provide referral support.

1.1 What the Interviewees Told Us

Figure 1 displays words used frequently by interviewees during discussions that took place with the evaluation study team. These interviewees included program management and representatives from four Job Center locations: Georgetown, Seaford, Wilmington, and Dover. The word cloud displays the 100 words used most frequently by the interviewees. The purpose of the word cloud is to provide a succinct visual summary of the conversations that occurred. Statements made by ASR Analytics, LLC (ASR) personnel during the interviews and focus groups were excluded from the analysis, as were common words, such as prepositions, articles, and conjunctions, which were identified using a standard “stop list.”

As shown in the word cloud, the respondents perceived the grant as being highly focused on “jobs,” specifically, helping “people” obtain employment by leveraging the “computers” and other resources available at the grant-funded Job Centers. These terms reflect the project’s goal of providing job-seeking assistance at public libraries in economically vulnerable communities. The frequency of terms such as “library,” “classes,” and “program” reflects the grant-funded provision of employment-related services now available at libraries throughout the state.

Section 2. Impacts

The most prominent impacts of the DDL grant relate to the focus area of Workforce and Economic Development. The primary focus of the grant was on the development of the Job Centers, which were based on an earlier model developed in 2009 at the Dover Library. The grant enabled DDL to extend this model by providing updated broadband access, upgraded equipment, and a wider scope of services established through partner relationships.

According to interviewees, the primary impacts include the acquisition of employment because of access to computers and broadband to facilitate job searching and lifelong learning, and in some cases, the improvement of digital literacy skills. The accounts provided by interviewees include the following:

- “Our libraries were doing a lot of computer training back in the 1990s...And at some point we stopped because it was like we had saturated the market. And then when the economy bombed, all these people came out of the woodwork, people who had never used a computer. It went deeper, because people were losing jobs and they had to learn that skill, because now you can only get jobs by applying online.”
- “These folks have spent a lot of time waiting in line at the unemployment office. Some people had to get assistance because they lost their job. Therefore, we really try to help people achieve quick success. For instance, they need a résumé but may not type or know how to use the computer. We help get a résumé done, a nice-looking résumé with a flash drive, and that just means the world to them.”
- “Lately, there has been a lot of job loss in our community, so the Job Center has been really beneficial for a lot of people. We have seen many people come through looking for a job, especially people that are not computer-savvy. In today’s world, most companies want you to apply online. Some patrons do not have basic computer skills, but they need to look for and apply for a job. It’s important that we can help them with that.”
- “We have a lot of people who committed crimes in the 1970s or 1980s. They were young, and now things are completely different, but they still cannot find jobs. Without the Job Center being able to link them to us or us going to Job Center and finding them, we wouldn’t be able to help them and they’d probably still have that barrier.”
- “I have a job now starting Monday because of all the tools and information, and the staff that helped me. And not only did I get this job, but I got a call yesterday for another job.”

While the activities of the Job Center might appear to be the responsibility of the DDOL, the DDOL is overworked and understaffed because of current economic conditions. State agencies in Delaware have undergone budget cuts that have reduced staffing resources to levels that are not sufficient to provide services with the depth and customization of those obtained at the Jobs Center. Simultaneously, prevailing economic conditions have increased the number of persons requiring employment-related assistance. The confluence of events has overburdened DDOL to the extent that it has taken to referring unemployed persons to the Job Centers for assistance that it cannot provide. Specific areas in which the Job Centers provide assistance that was unavailable at DDOL include the use of e-mail accounts other than Gmail and the use of USB drives for the maintenance of personal files, which allows users to maintain their résumés in a place and format they control. Although DDOL implemented recent improvements to e-mail functionality, an ongoing imbalance between staffing and needs continues.

Grant funding supported the provision of new or improved broadband connectivity at thirty-two libraries across the state. Sixteen of the satellite library locations did not have wireless access due to budgetary limitations. In Delaware, libraries operate independently, meaning that they rely on

county or local funding sources for operations. If not for the grant, some of the satellite libraries might not have obtained wireless connectivity within the period.

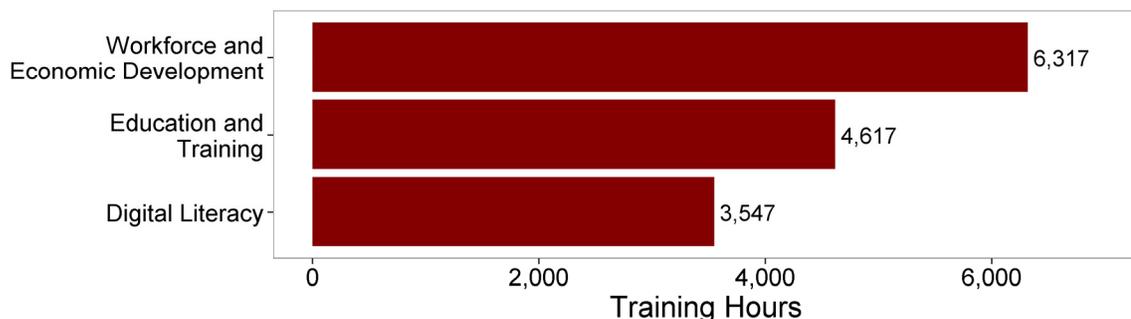
DDL reports that, without the BTOP grant, comparable training opportunities and resources would not be available at libraries. Additionally, the grant helped to facilitate DDL's collaboration with human service organizations within the state serving vulnerable populations. The collaboration helps to ensure the provision of a greater range of services to a wider audience, including veterans, disabled, homeless, people with criminal backgrounds, those with limited educational attainment, and those without transportation.

2.1 Focus Areas

This section describes the impacts of the DDL project in terms of five focus areas. In order to analyze where impacts should expect to be found for this project, ASR tabulated the training hours for DDL reported in the 2012 Annual Progress Report (APR) using the focus area categories described in *Interim Report 1*.⁸

The evaluation study team reviewed training hours as presented on the 2012 APR with DDL personnel responsible for reporting. The grantee confirmed overall allocation of hours to each focus group to be accurate. Training provided by the grantee falls into the categories of Workforce and Economic Development, Education and Training, and Digital Literacy, as shown in Figure 2.

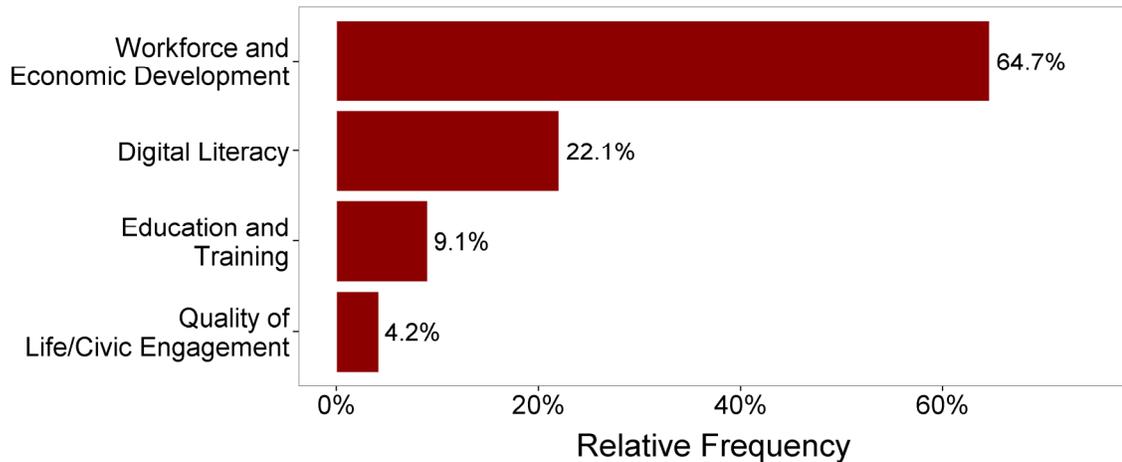
Figure 2. Grantee Training Hours Categorized by Focus Area



DDL delivered nearly 14,500 hours of training. Although the majority of hours reported are classified as "Other," the particular training opportunities fall within the Workforce and Economic Development category. DDL provided more than 6,300 hours of training in Workforce and Economic Development. It delivered about 4,600 hours of training in Education and Training and more than 3,500 hours in Digital Literacy.⁹

ASR also analyzed the statements grantees made during the interviews and focus groups and categorized them based on focus area, as shown in Figure 3. As illustrated below, most responses in the interviews related to Workforce and Economic Development.

Figure 3. Focus Area Statements Made by Interviewees



Just over 20 percent of conversation focused on Digital Literacy, while less than 10 percent of responses related to Education and Training. In addition, while DDL does not report training classified as Quality of Life/Civic Engagement, the grantee did address this area in the interview responses, suggesting that this was an area of impact. The statements made by interviewees reflect the project's intention to provide job-seeking assistance to the unemployed and underemployed, and to complement that service with training and resources related to Digital Literacy, Education and Training, and Quality of Life.

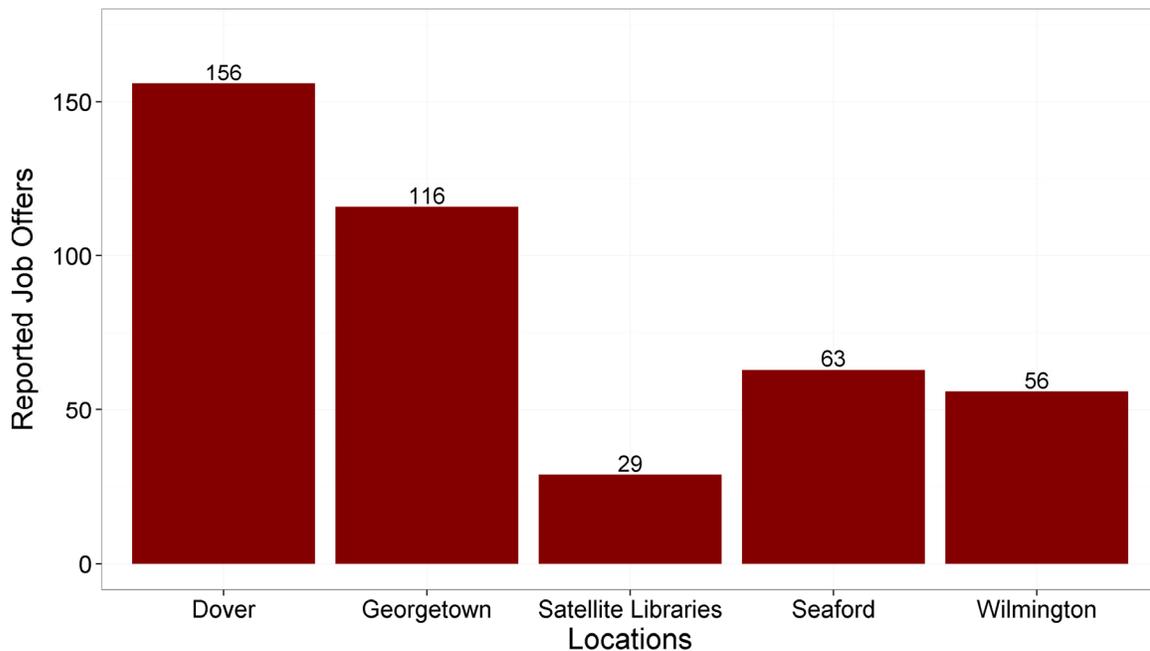
2.2 Workforce and Economic Development

"Without broadband, they can't get jobs, and it's as simple as that." – Georgetown Job Center Coordinator

This focus area includes activities intended to increase overall employment of the target population, or to assist employed members of that population in finding jobs that offer increased salaries, better benefits, or a more attractive career path, including self-employment. Workforce and Economic Development activities can be performed for one's own benefit, or they may be done on behalf of another person to assist with his or her employment situation. In order for project activities to be included in this category, it must be the intention of the grantee to assist members of the workforce in improving their employment outcomes, and project resources must be devoted to this purpose.

The clearest impact of the DDL Job Centers program is the extension of more than 420 job offers to Job Center patrons between July 2011 and March 31, 2013.¹⁰ DDL tracks the number of Job Center users who report receiving a job offer after using the Job Centers. Figure 4 presents the cumulative total job offers received over the grant period at each location.

Figure 4. Cumulative Reported Job Offers as of March 31, 2013



It is likely that the number of job offers received, as shown in Figure 4, understates the total number of job offers obtained by Job Center users for two reasons. First, while Job Center coordinators request that patrons notify staff upon receiving a job offer, there is no obligation on the part of patrons to report this information. As a result, some patrons simply stop using the Job Center when they find employment, without reporting the results of their successful job search. Second, some Job Center patrons report receiving multiple job offers within a short period. While some patrons take only one job offer, others have reported taking advantage of multiple job offers in order to make quicker progress out of a difficult economic situation. This lack of “double-counting” understates the benefits of the Job Center to patrons who work more than one job after a period of unemployment.

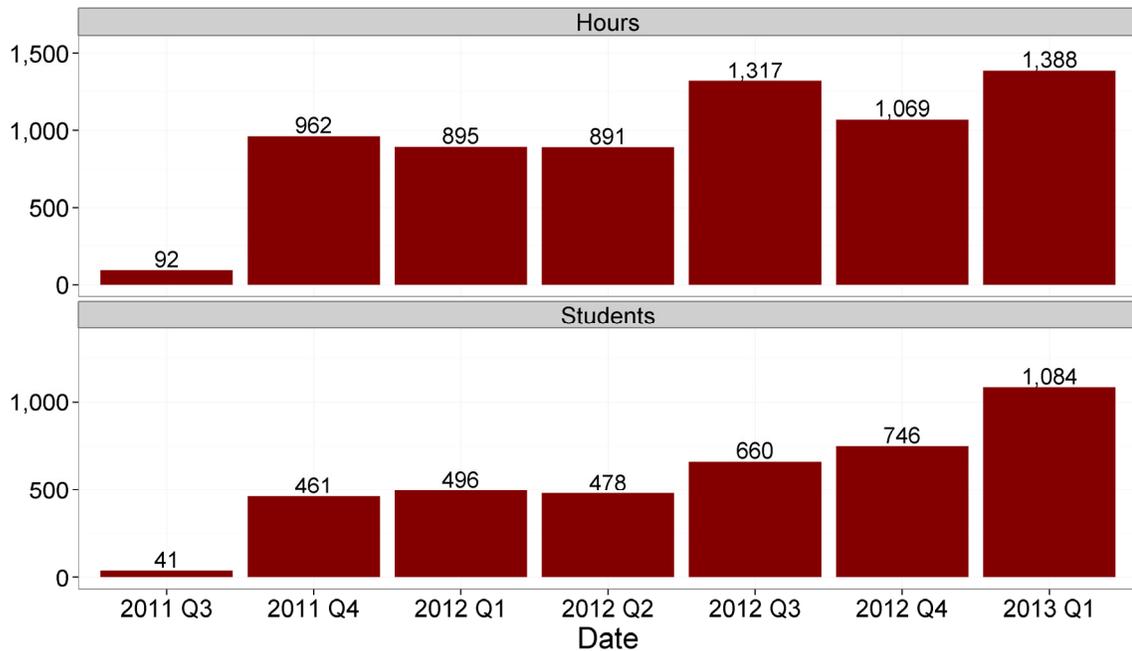
The total number of job offers reported in Figure 4 also understates the benefits of the program because it does not take into account the benefits to employers from having a qualified pool of applicants from which to select for open positions. Employers in areas served by the Jobs Center receive higher-quality résumés and more job applications than they would have received without the Job Centers. This enables employers to choose among a wider pool of qualified candidates and thereby increase successful matches. In addition, a greater influx of applications enables employers to fill open positions in a shorter period. A large, local employer, Perdue Chicken, has adopted the practice of referring applicants to the Jobs Centers in order to complete online applications. Perdue distributed printed guidance for Spanish-speaking applicants with contact information for Job Centers and libraries. These referrals illustrate the importance of the Job Centers, not only to the unemployed, but also to potential employers seeking qualified applicants.

Activities within the Job Centers are predominantly devoted to Workforce and Economic Development. DDL provided Workforce Development training statistics that the evaluation study team tabulated and analyzed. DDL also provided success stories collected over the duration of the grant. Job Center activities and resources achieved the following Workforce and Economic Development outcomes:

- DDL provided 6,614 hours of Workforce Development training to 3,966 patrons as of March 31, 2013.¹¹ The Job Centers offer classes and seminars that support employment-related objectives. The classes provide support in résumé creation, interview preparation, job seeking

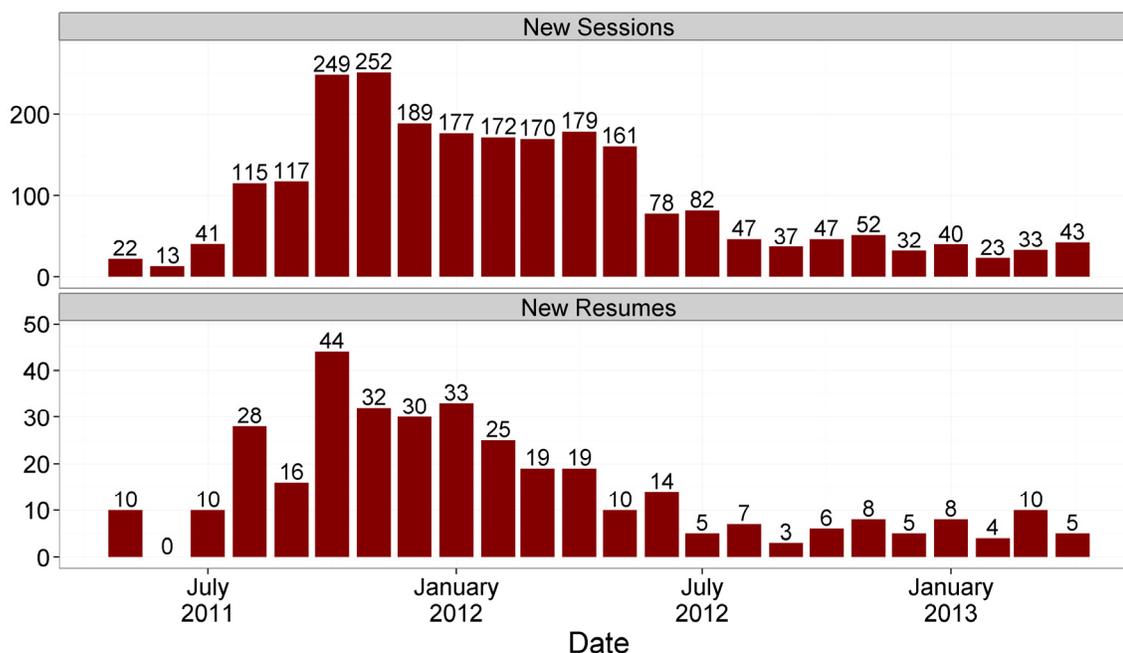
for those with a challenged background, and online job searching. Figure 5 presents DDL hours and attendance in Workforce Development training programs.

Figure 5. DDL Workforce Development Training



- DDL provided access to the LearningExpress Job and Career Accelerator (JCA) program. The JCA is an online program offering career development services, including assistance with résumés, cover letters, and job searching. Through April 2013, participants engaged in 2,371 JCA sessions and created 351 résumés using JCA, as shown in Figure 6.¹²

Figure 6. Job and Career Accelerator Participation and Completed Résumés



- The Job Centers participated in job fairs, hosted either at the PCC or in other locations. Job fairs sometimes focused on specific topics, including veteran, healthcare, and congressional jobs. For example, the Dover Job Center hosted nine job fairs in 2012 and 2013, some featuring an individual employer such as Coca-Cola, and others hosting a variety of employers.¹³ DDL staff reported that job fairs were an important source of employment for users of the Job Centers. Users of the Job Center were able to complete the steps necessary to obtain employment after locating leads at the job fair.
- Job Centers host recruiting events, where employers with open positions can conduct interviews on site and have qualified applicants complete online applications. These sessions enable prospective employers to observe Job Center users demonstrating digital literacy through use of the centers' resources. The Georgetown Job Center facilitated a seminar and recruiting session for disabled patrons. Recruiters were able to observe disabled attendees operate adapted workstations. A coordinator related that one person with a visual impairment received an accelerated job offer after representatives of a visiting firm observed his facility with the grant-funded computers in the job center. This individual used the workstation modified to be compliant with the Americans with Disabilities Act (ADA).

In addition to training opportunities, the Job Centers provide resources and services to facilitate patrons' ability to search for and obtain employment. Job Centers provide technical resources such as access to workstations and broadband in a productive environment, and offer the support necessary to ensure that patrons use those resources effectively to support their employment-related objectives. The services and resources providing the most significant benefits to those seeking employment include the following:

- Broadband and computer access at the Job Centers facilitates patrons' ability to apply for jobs. Because a majority of employers require the submission of online applications, access to computers and the Internet is necessary to apply for and obtain employment. Many Job Center patrons are unable to afford a home broadband subscription, as they are unemployed or underemployed. Access to these resources is also necessary for patrons to communicate electronically with potential employers in a timely manner. Additionally, Job Center computers

are available to patrons without time restrictions, enabling them to successfully complete job applications that may take longer than the time allotted on other publicly available computers. Job Center patrons reported receiving multiple job offers in a short period after they have begun using the Job Center. This phenomenon of multiple offers within a short period could indicate that Job Center patrons are qualified, and that employers are ready to hire qualified applicants, but that the online application and job search resources facilitated by the Job Center are required to make a successful match between qualified candidates and open positions.

- Job Center coordinators and volunteers ensure that patrons' résumés are of a high quality. Coordinators assist patrons in developing a résumé or in updating existing incomplete or outdated résumés. Résumé development services provided to unemployed persons at the Department of Labor required the use of one-size-fits-all résumé software. The Department of Labor sends clients to the Job Centers for résumé assistance, as it does not have adequate resources to provide patrons individualized assistance in creating résumés. Users of the Job Center stated that, after taking advantage of résumé design and improvement services offered at the Job Center, they attracted greater interest in their qualifications and received job offers from potential employers. The Job Centers continue to develop résumé designs to serve the needs of Job Center patrons. At present, the Job Centers are working to develop machine-readable résumé formats to facilitate scanning of résumés submitted by Job Center users.
- Job Center coordinators provide individualized assistance to facilitate the patrons' job search activities. Many Job Center patrons face significant barriers to obtaining employment, including limited education, limited computer skills, and unfamiliarity with interviews and résumés. Coordinators provide individualized assessment of patrons' skill levels. Patrons with limited computer experience may require additional assistance to create an adequate résumé or complete an application. For those with limited computer experience in seeking employment opportunities that do not require computer literacy, coordinators will populate applications or résumés on the patrons' behalf to expedite the process. For example, the Georgetown coordinator estimated completing more than fifty applications for positions at Perdue on behalf of patrons. As time permits, coordinators assist patrons in gaining self-sufficiency in relevant technologies. Coordinators also engage in mock interviews with patrons to prepare for job interviews with potential employers.

The Delaware Job Centers collaborate with community organizations to provide specialized employment-related services to patrons. Examples of such collaboration include the following:

- In the beginning of the grant period, DDL established a partnership with DEDO to offer entrepreneurship training opportunities and resources. DEDO provided training sessions that focused on topics such as obtaining funding in Delaware to start a business, overcoming challenged or criminal backgrounds, and finance-related topics. DDL continued its relationship with DEDO and the Grassroots Plus program for part of the grant duration. However, DDL and DEDO discontinued this partnership. As a result, there is limited information on the impact of Grassroots Plus.
- The Delaware Center for Enterprise Development (DCED) provided workshop sessions on some of the same topics DEDO formerly provided. The presenter who offered the DEDO seminars on finding a job despite a criminal or challenged background continued to offer sessions at the Dover and Wilmington Job Centers.
- DVI uses Job Centers to provide job-seeking services for clients who are visually impaired. The department has limited staff resources available to assist disabled patrons in job search efforts. Arranging sessions at the Job Centers has helped to provide job assistance to a greater number of disabled clients.
- First State Community Action, which provides services to low-income residents, brings groups of senior patrons to the Job Center to attend job-seeking classes. The Georgetown Job Center collaborates with First State Community Action to offer the Senior Job Club. A group of about ten participants visits the Job Center twice a week for computer training and job search assistance.

- The Modern Maturity Center in Dover, which assists seniors in obtaining job training, refers clients to Job Center classes.
- Clients of the Dover Interfaith Mission for Housing, a homeless men's shelter, visit the Job Centers to update résumés and participate in training courses.

DDL gathered success stories that describe the hiring of Job Center users and positive steps along the path to employment, such as the development of an effective résumé, the scheduling of a job interview, and the assembly of documentation necessary to complete the hiring process. Some of the success stories recorded by DDL Job Center Coordinators include:

- A patron recently obtained employment with the New Castle County Police. She persisted in her job search, despite being told repeatedly she was overqualified as a former IT manager.
- A patron obtained a position as assistant at a real estate office. He saw an advertisement for the position on a Job Center bulletin board. The patron credits the coordinator's help and encouragement as a determining factor in his ability to obtain the position.
- After hosting a Manpower Job Fair and interview session, five attendees received job offers with a manufacturing plant in Kent County.
- A Harrington Job Center patron is starting a new position as a security guard with Playtex/Energizer.
- A patron with limited English skills obtained employment with Mountaineer. Another patron, who served jail time for homicide, obtained a position with a home renovation company. Both patrons were without computer skills before coming to the Job Center and devoted substantial time and effort to securing employment.
- One patron obtained employment with a research firm. She expressed appreciation for the coordinator's assistance in updating and e-mailing her résumé.

2.3 Digital Literacy

"For most folks, it's a matter of learning about the computer that has really opened up opportunities. Many people did not even know how to type, and now they come in and they are almost totally independent on the computer. They get it. They can go in and revise their résumé, and these are folks who really didn't know how to turn the computer on." – Seaford Job Center Coordinator

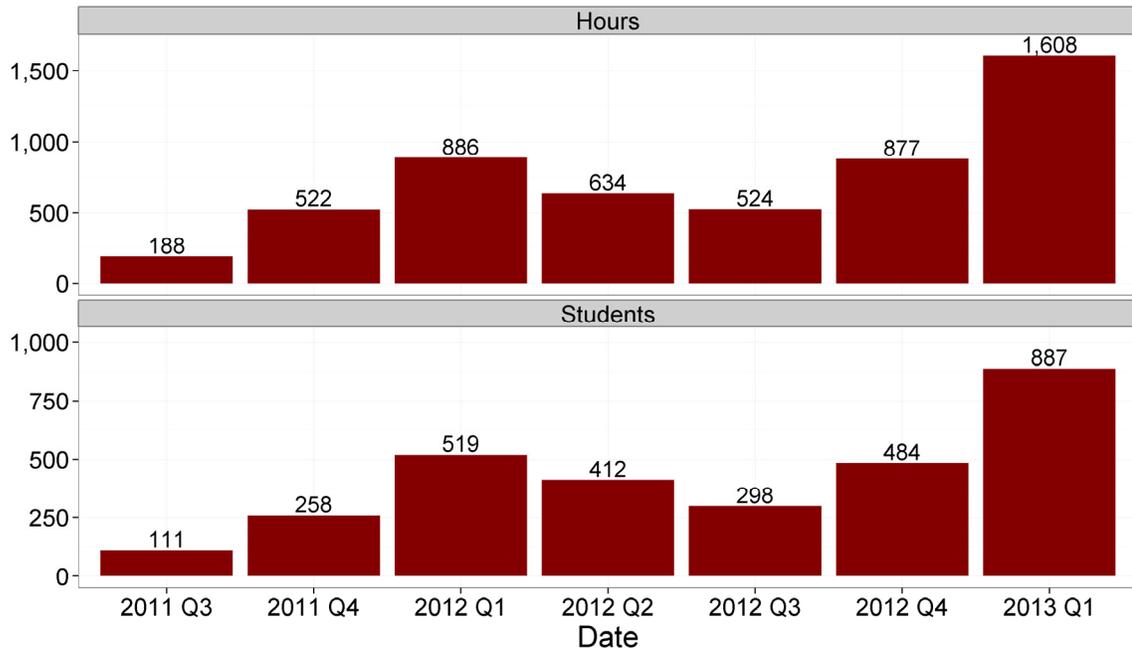
This focus area is fundamental to all the others. Digital Literacy defines a set of skills and abilities that enable an individual to interact with the digital aspects of culture, and to maintain a digital identity. In the National Broadband Plan, the Federal Communications Commission (FCC) defines digital literacy as "the skills needed to use information and communications technology to find, evaluate, create, and communicate information."¹⁴

Digital literacy skills support the acquisition of employment through two channels. Patrons develop and refine digital literacy skills, adding additional qualifications on résumés or obtaining more highly skilled positions. Digital literacy skills also enhance patrons' ability to search and apply for jobs online.

Job Center coordinators stressed the importance of basic digital literacy skills as necessary to effectively search for a job. To support patrons' acquisition of the skills, DDL offers Digital Literacy training opportunities. The primary training program comprises basic digital literacy lessons such as how to use a mouse, navigate to websites, and complete an online job application. DDL staff members report that Digital Literacy training has been largely successful in enabling the job search efforts of the patrons of the Job Center. A second popular course included training in Microsoft Word. DDL occasionally provides training in Microsoft Excel, Publisher, and other software to advanced students. Users completing training in Microsoft products often list these skills on their

résumé, enhancing their qualifications for some positions. The availability of this training is useful for professionals to improve their technical skill set during a period of unemployment. Figure 7 presents Digital Literacy training hours and participation. DDL delivered 5,239 hours of Digital Literacy training to 2,969 participants.¹⁵

Figure 7. DDL Digital Literacy Training



Digital Literacy training meets a range of needs. Some patrons have never used a computer, while others have intermediate skill levels. DDL collaborates with a variety of community entities, such as Sussex Technical High School and local senior centers, to offer the training courses. Some of the available Digital Literacy training courses include:

- Internet Searching
- Introduction to Computers/Basic Skills
- Introduction to Computers - Spanish/ESL
- 55+ Basic Computer Training
- Basic Keyboarding/Learn to Type
- Word Basics
- Excel Intermediate
- How to Use Publisher

Job Center staff members report that patrons' experience in the Job Centers affects their perception of computers' relevance, making a connection between digital literacy and employment success. Coordinators also report that after completing a training course, participants often opt to participate in additional training opportunities. For example, students completing intermediate Word training often participate in intermediate Excel. The coordinators direct patrons interested in advanced computer courses to the LearningExpress program or the Goodwill Community Foundation site.

2.4 Education and Training

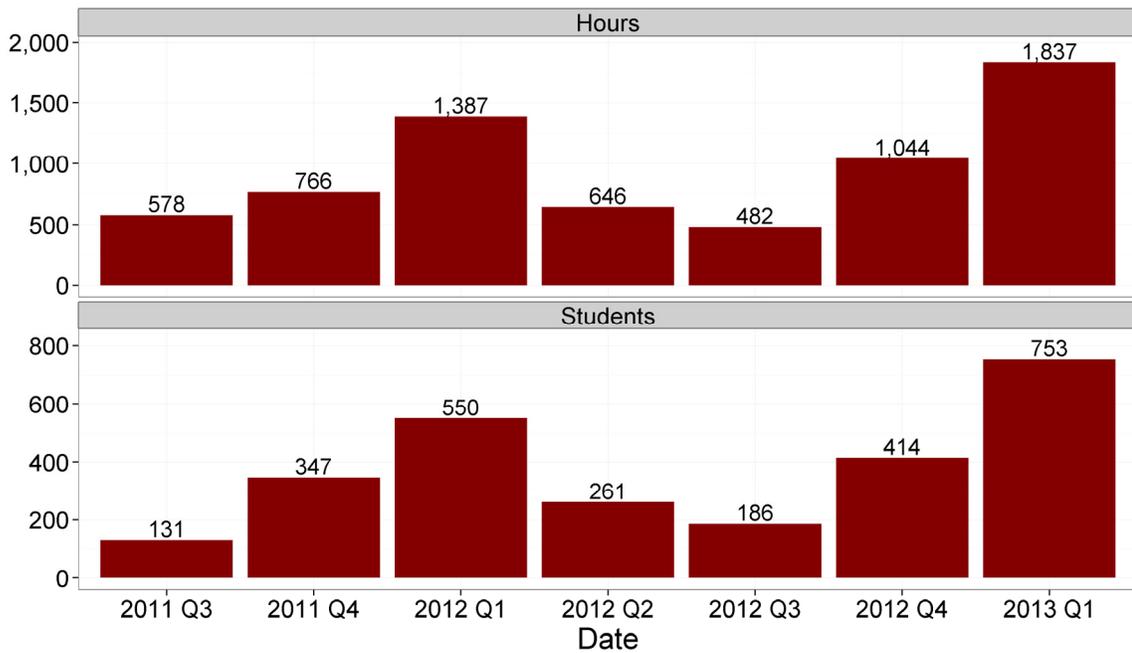
“We had a number of folks, young and old across all ethnic groups, who did not even have high school diplomas. As a result of the Job Center, we were able to help them obtain jobs, learn computer skills, and point them in the direction of obtaining, say, a GED.” – Seaford Job Center Coordinator

This focus area includes activities that lead to a certificate or diploma, typically awarded by an educational institution or that indicates the recipient has received training that is valuable for career advancement. Examples of certificates or diplomas include the following: community college degrees, four-year college degrees, advanced degrees, general equivalency degrees (GED), certifications in advanced software technologies such as network engineering, and other licenses or certifications that reflect knowledge of a particular subject at a level that would typically be taught at an educational institution.

Job Center patrons obtained GEDs and high school diplomas. DDL staff members estimate that twenty users obtained a GED and forty to fifty users obtained a high school diploma in the past year. DDL collaborated with CAE and DCDAL to provide training to those seeking a high school diploma or GED. Both organizations used the libraries and the Job Centers as part of their service delivery. DCDAL uses Job Centers to assist students in their distance education programs. Through the grant, DCDAL provides onsite instructors to support students in accessing and using DCDAL’s training materials and to offer tutoring. DCDAL uses the Job Centers to conduct placement testing and orientation for new enrollees in the GED and high school diploma programs. The Job Centers facilitate the completion of tests or assignments that may require a greater time allotment than available on other publicly available computers. Finally, libraries and Job Centers provide space for proctoring final examinations. Completion of these examinations in a proctored environment is required for graduation. While there are users who received degrees or GEDs through the program who did not use the Job Centers, the numbers are small. For the most part, individuals receiving diplomas through these programs used the Job Center as a resource.

In addition to GED preparation and testing, DDL’s Education training opportunities include English as a Second Language (ESL) instruction. Figure 8 presents Education training delivered by DDL and their partners. Over the course of the grant, DDL delivered 6,740 hours of Education training to 2,642 patrons.¹⁶

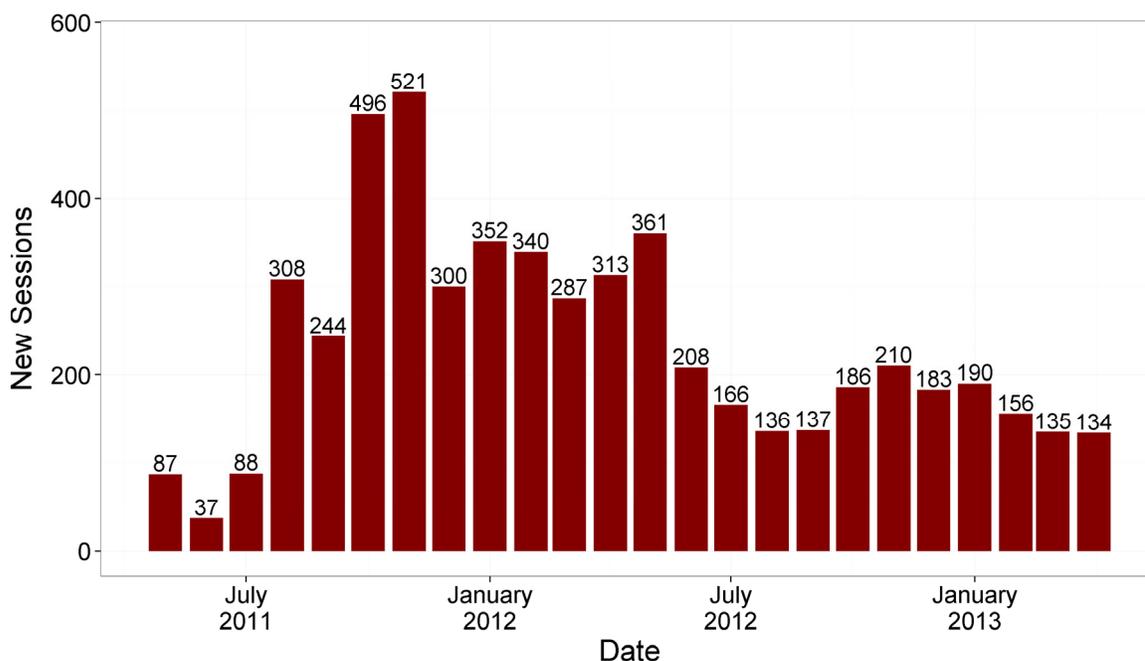
Figure 8. DDL Education Training



Sussex Technical High School Adult Division offers a substantial amount of ESL training. The course includes lessons in English grammar, vocabulary, reading, writing, and listening. The Seaford and Georgetown Job Centers also collaborate with Sussex Tech to offer GED and high school diploma services. Coordinators report that local community colleges offer GED programs, but charge a higher fee for the service, while the grant's education services are more affordable.

DDL also offers online Education training opportunities through LearningExpress, a web-based learning solution that provides users with access to a comprehensive collection of test preparation tools, skill-building materials, and career resources. Since it is web-based, Job Center users can access LearningExpress either in the Job Centers or from any other computer with Internet access. The grant funded DDL's purchase of a three-year license to access LearningExpress. DDL patrons engaged in 5,575 LearningExpress sessions.¹⁷ Figure 9 presents monthly LearningExpress usage data for all libraries.

Figure 9. LearningExpress Sessions



2.5 Quality of Life/Civic Engagement

“The APEX program is reaping some awesome benefits. It took about a year to get people through the process, and now those folks are actually getting the hearings and getting the pardons. Delaware’s not very forgiving of criminal records, even minor criminal records from years ago. So this is a huge thing for people who have the barrier of a criminal record.” – Georgetown Job Center Coordinator

The Quality of Life/Civic Engagement category includes activities that create stronger and more integrated communities, and those that promote interaction between citizens and their governments. DDL collaborated with state human services agencies to offer Quality of Life/Civic Engagement training and resources at the Job Centers. Such services address community needs by providing assistance in amending criminal records, preparing taxes, completing government forms, and obtaining government benefits.

Through the Job Centers, eighteen clients obtained pardons and seventeen earned an expungement.¹⁸ Obtaining a pardon restores a client’s civil rights, including the right to vote and hold public office. An expungement seals a client’s record, meaning a state background check will not return a criminal record. Achieving such outcomes helps clients with criminal histories by removing barriers to employment and education. The goal of the Advancement through Pardons and Expungement (APEX) program is to improve opportunities for individuals with criminal histories by assisting them through the pardon or expungement process. The APEX program uses the Job Centers to help patrons complete the pardon and expungement process. Before collaborating with the Job Centers, APEX found that potential clients struggled to locate its facility. Upon collaborating with the Job Centers, participation in the APEX program increased significantly. The APEX program has been in operation since February 27, 2012. During this time, 446 clients attended an orientation for the program and 203 had their criminal history reviewed. Table 1 presents other APEX performance statistics as of May 15, 2013.¹⁹

Table 1. APEX Performance Results

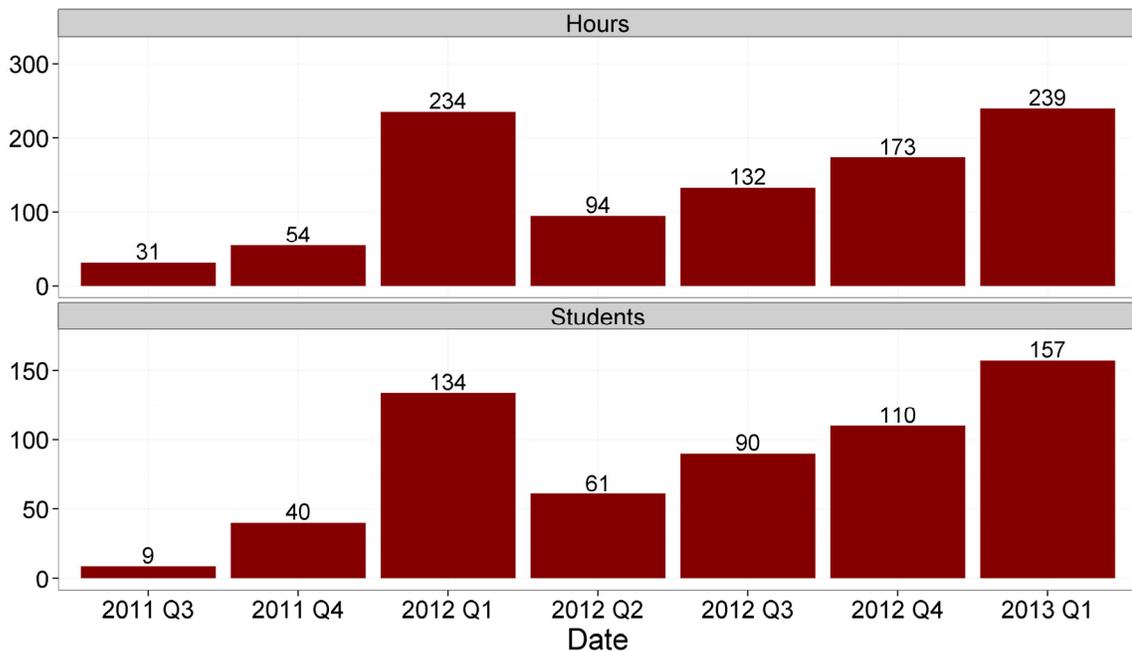
County	Pardon Applications Submitted	Pardon Hearings	Pardon Recommendations	Expungement Applications Submitted	Expungement Results Received	Expungements Granted
New Castle	6	0	0	2	1	0
Kent	55	21	17	16	12	12
Sussex	23	2	1	9	5	5
Total	84	23	18	27	18	17

Through the Job Centers, DDL offers additional Quality of Life/Civic Engagement services and training opportunities, including the following:

- Tax preparation seminars help patrons adapt to the increasing prevalence of tax forms requiring online completion and seminars on the Supplemental Nutrition Assistance Program (SNAP), a food benefits program. The Food Bank of Delaware hosts training sessions to assist clients in applying online for food benefits and food stamps.
- DDL provides financial literacy programs, including the Money School program, in collaboration with the Delaware Financial Literacy Institute. The Delaware Financial Literacy Institute uses the Job Centers to provide programs such as seminars on foreclosure, how to avoid probate, college-funding solutions, and how to survive a divorce financially.
- The Georgetown Job Center offers a citizenship class, assisting students in preparing for the U.S. Citizenship Test.

Figure 10 presents the aggregation of these training opportunities and courses of a similar nature. DDL delivered 957 hours of Quality of Life/Civic Engagement training to 601 participants.²⁰

Figure 10. DDL Quality of Life Training



Section 3. Recovery Act Goals

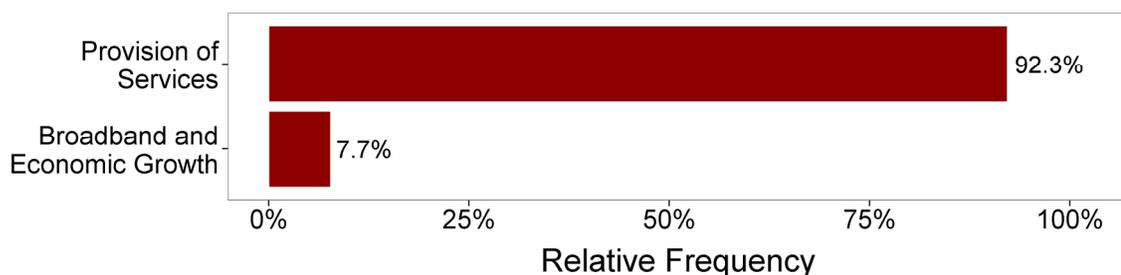
This section describes the activities and outcomes associated with Recovery Act goals. Of the five Recovery Act goals for the BTOP program as a whole, two relate most directly to PCC programs:

1. Provide broadband education, awareness, training, access, equipment, and support to
 - a. schools, libraries, medical and healthcare providers, community colleges and other institutions of higher learning, and other community support organizations
 - b. organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband services by vulnerable populations (e.g., low-income, unemployed, seniors)
 - c. job-creating strategic facilities located in state- or federally designated economic development zones
2. Stimulate the demand for broadband, economic growth, and job creation

Figure 11 presents the relative frequency of topics related to Recovery Act goals as discussed during interviews and focus groups. These topics were categorized by the two Recovery Act goals discussed above. The results provide another lens through which to view how the grantee met the requirements of the grant. More than 90 percent of the conversations with interviewees focused on providing services to increase access to and use of broadband in achieving employment-related goals. Less than 10 percent of discussions focused on broadband and economic growth.

The project focuses on providing services, such as upgraded workstations, broadband connectivity, and staff resources, to establish an environment conducive to job searching. While the project's intention is to assist the unemployed and underemployed in obtaining employment, accounts of success are often anecdotal, as many patrons discontinue their use of the Job Center upon earning a job. Thus, conversation focused on the services the Job Center offers to support successful job seeking.

Figure 11. Recovery Act Goals Statements Made by Interviewees

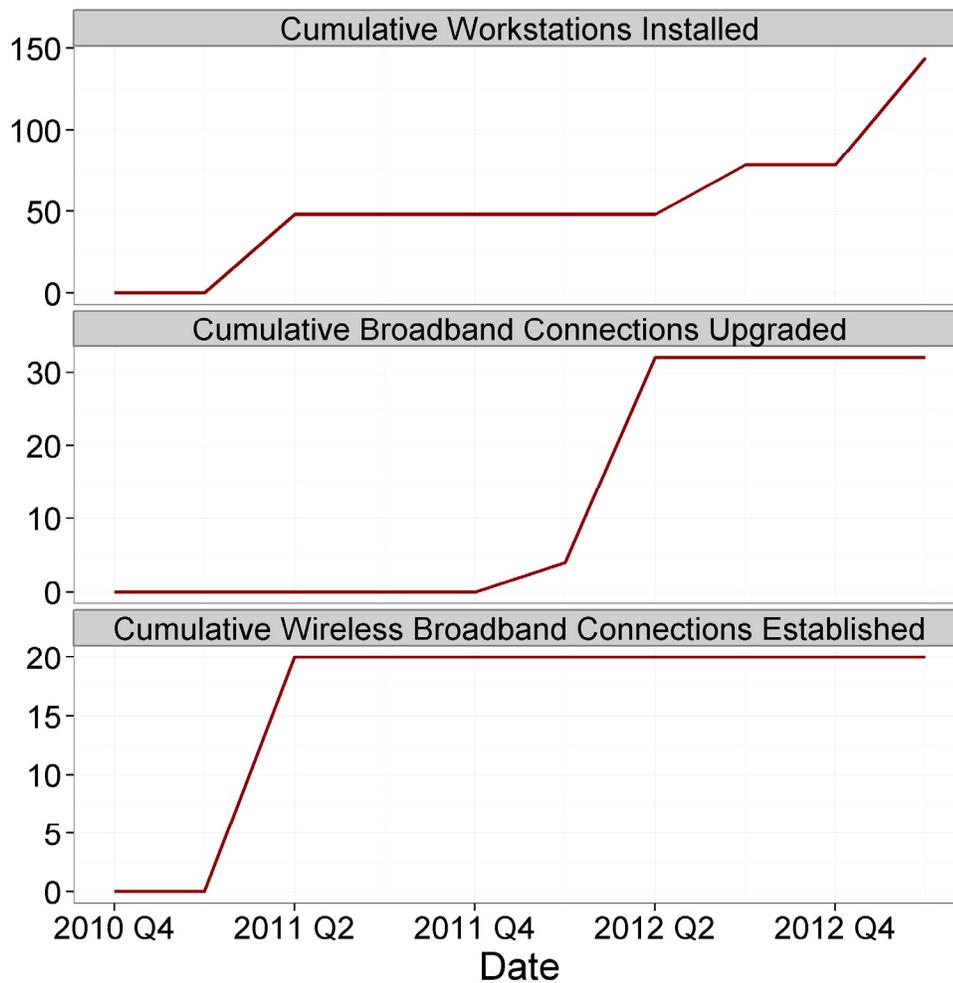


3.1 Provision of Services

“As time goes on, if they’ve been out of a job—some professionals have been out of a job going on two years or more—all of a sudden, the Internet becomes a massive luxury that they’re going to have to let go. So it’s nice that they can depend on the library and let go of another expense.” – Wilmington Job Center Coordinator

Under the grant, DDL equipped four Job Centers with a standard set of furniture, computers, a printer/scanner/copier/fax machine, and other equipment. Although located within the Dover, Seaford, Wilmington, and Georgetown public libraries, the Job Centers each have their own dedicated space, separated from the rest of the library. The grant funded twelve dedicated workstations exclusively for job search and lifelong learning at each of the Job Centers. Two of the twelve grant-funded computers are ADA-compliant workstations. As shown in Figure 12, in addition to these workstations, DDL distributed ninety-six grant-funded laptops to seventeen satellite libraries over the course of the grant period. DDL has purchased an additional fifteen computers, but as of March 31, 2013, had not yet deployed these to satellite locations.²¹

Figure 12. Cumulative Hardware and Connectivity Progress

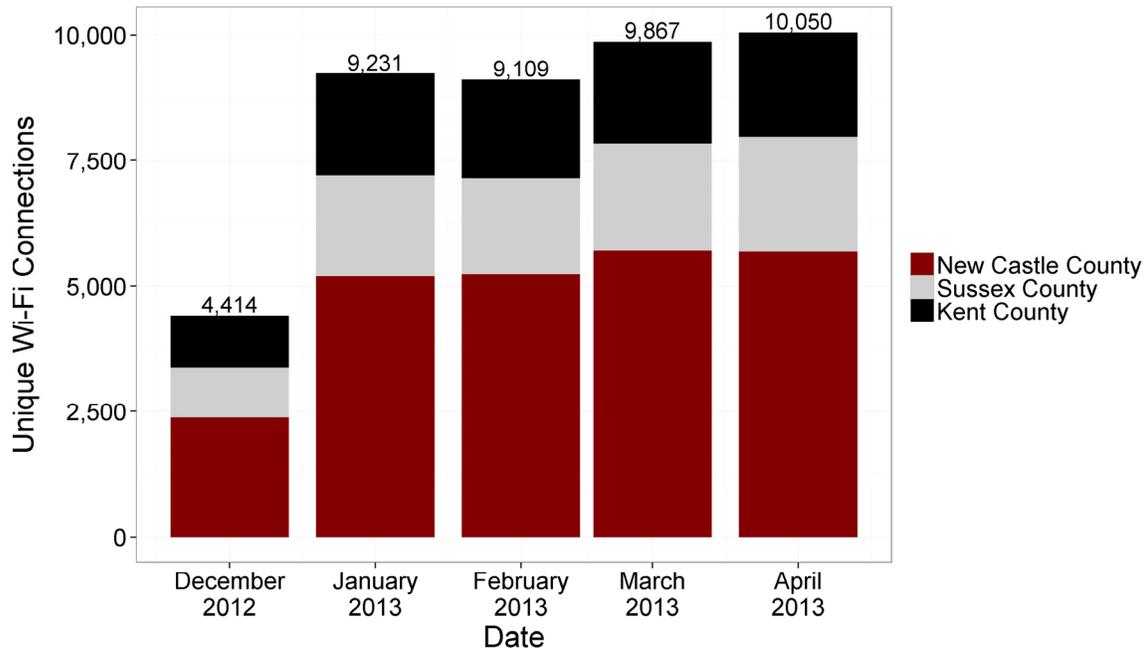


In contrast to other publicly available workstations, the grant-funded machines do not enforce time limits. During the grant period, the Dover Job Center acquired an additional ten workstations after the Dover Library moved to a new and improved location. However, if Job Center users are not using the machines, general library patrons receive timed access to the supplemental workstations. DDL also upgraded the service at all thirty-two library locations statewide to 100 Mbps using grant funding. Sixteen satellite libraries did not have wireless service before the grant. Before receiving the grant, slower service speeds precluded access to certain website and online applications.

Some patrons access libraries' Wi-Fi on personal devices such as laptops and phones. Coordinators report observing an increase in patrons bringing personal devices to the libraries and

Job Centers. Some users sit outside of the library when it is closed to access the free Wi-Fi service. Libraries collect data on the number of unique devices using Wi-Fi per month. Figure 13 presents these data.²² In the future, DDL will implement a system to collect the number of users agreeing to an acceptable use policy.

Figure 13. Unique Wi-Fi Connections at Libraries



Some Job Center and library staff report observing an increase in foot traffic since the installation of grant-funded upgrades, although there are no quantitative measures of this outcome. New and improved wireless capabilities enhanced library services. For example, improved wireless speeds support eBook programs. Users with personal devices are able to download eBooks directly using the wireless network, which was not possible before the grant-funded enhancements.

The DDL Director noted that the project has also served to further DDL's ability to meet its mission of providing lifelong learning to Delawareans. Job Center coordinators report that Job Center patrons learn about other library services while at the center. Many patrons take advantage of these services both for their personal use and for their children.

In addition to scheduled training classes, Job Centers provide facilitated walk-in assistance hours. The number of open hours provided weekly varies by Job Center location. Some coordinators provide extended hours of service. For example, the Georgetown coordinator provides twenty-eight hours of walk-in assistance per week. Figure 14 presents facilitated lab patron hours provided throughout the grant period.²³ Patron hours reflect the number of hours for which patrons attended the open lab.

Figure 14. Facilitated Open Lab Patron Hours

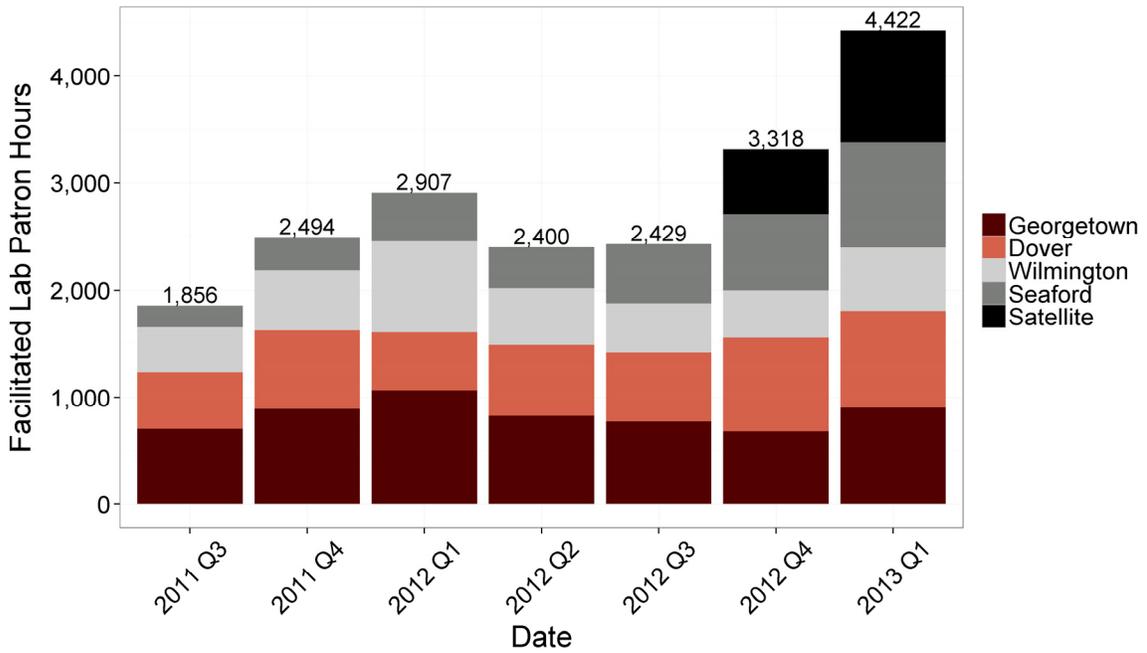
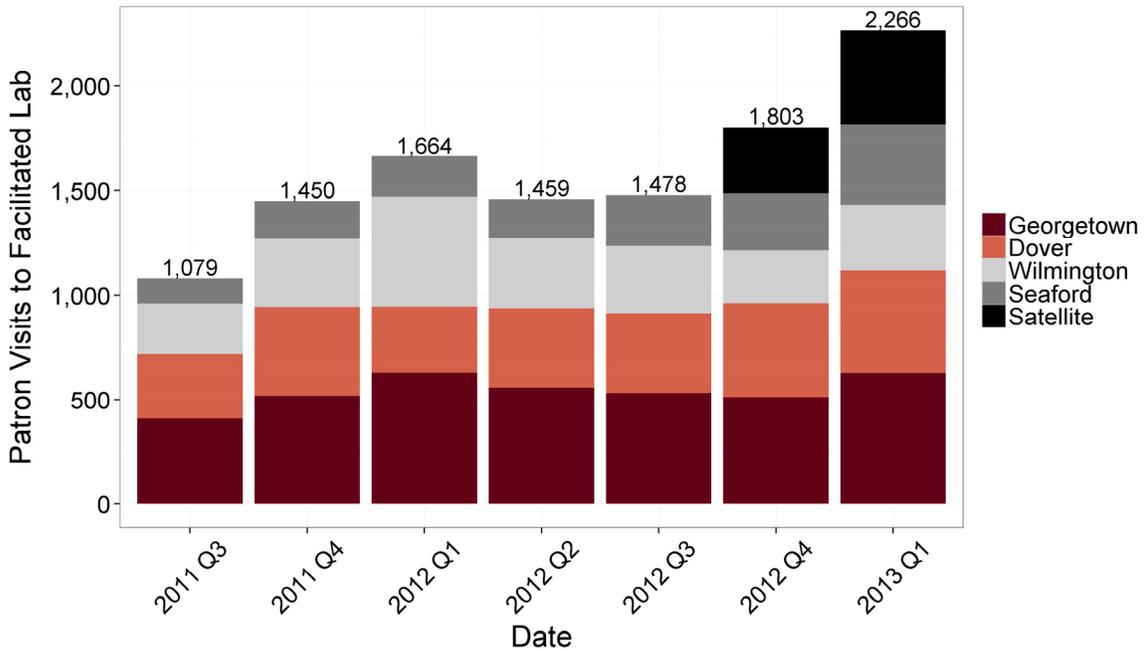


Figure 15 presents a count of lab patrons per quarter.²⁴ During ASR's first visit, DDL provided a voluntary hardcopy intake form to new patrons of the Job Center. During the time intervening, DDL found that the new intake form was too cumbersome and intrusive for most new job seekers. As a result, DDL streamlined the form and reduced the amount of information collected.

Figure 15. Facilitated Lab Attendance



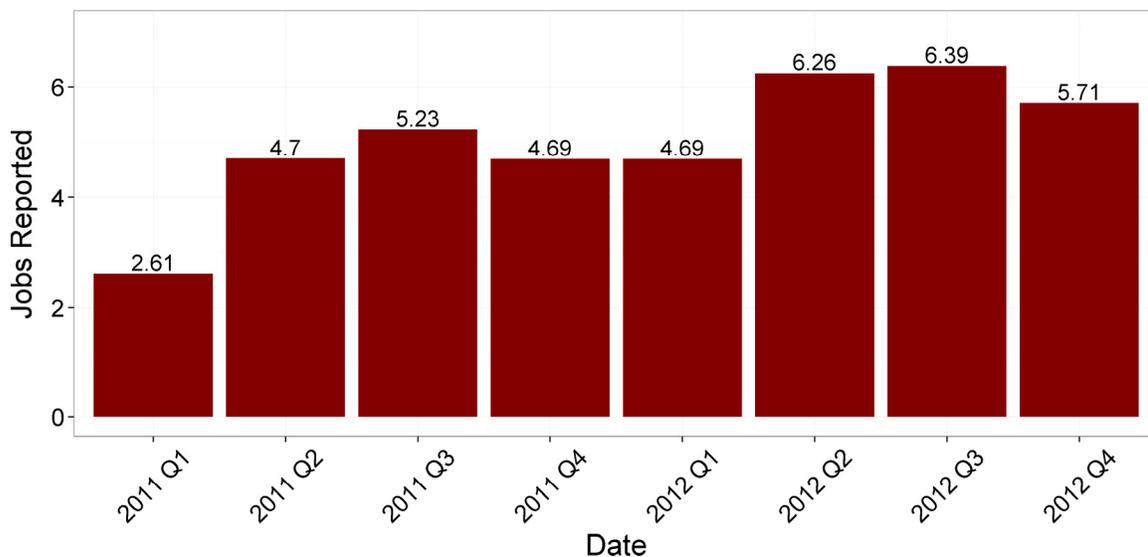
At some of the small libraries in the state, a limited number of librarians are on duty at a particular time. There are not enough staff resources available to support patrons in need of extensive employment-related assistance. A videoconferencing system will support the provision of Job Center training sessions at satellite libraries. However, the system is not yet in use. Although equipment has been installed at satellite locations, the state technology department must install software and security systems before activating it.

3.2 Broadband and Economic Growth

DDL addresses the online access needs of the unemployed and underemployed who seek employment-related assistance at public libraries. The resources and services available through the grant enabled more than 400 patrons to obtain job offers. Such resources fill a void in the availability of employment-related services at DDOL and provide patrons with lifelong learning opportunities, including Digital Literacy training, ESL, and GED courses. Job Centers enable patrons to improve their technical knowledge and skill sets, thereby enhancing their qualifications for employment. Providing Delaware residents with a means of access to online job applications also benefits employers by increasing the size of the qualified applicant pool. An influx of qualified applicants enables employers to fill empty positions more rapidly, enhancing company productivity. By enhancing the services available at thirty-two library locations, the project helps to support economic growth across Delaware.

As required by the Recovery Act, DDL reported quarterly on the number of jobs created as a direct result of the project. As shown in Figure 16, this has resulted in an average of five full-time-equivalent (FTE) positions over the course of the grant period.²⁵ Job Center coordinators were dedicated exclusively to the operation and management of the Job Centers. DDL hired six Job Center Coordinators on a contract basis. Over the course of the grant, some coordinators left for other employment opportunities. Grant funding also supports a contract position for a compliance and reporting officer. The number of Job Center coordinators had decreased to four as of the second site visit.

Figure 16. Direct Jobs Created by Grantee



It is important to note that the figure above displays only direct jobs created, and does not include indirect or induced job creation.

Section 4. Grant Implementation

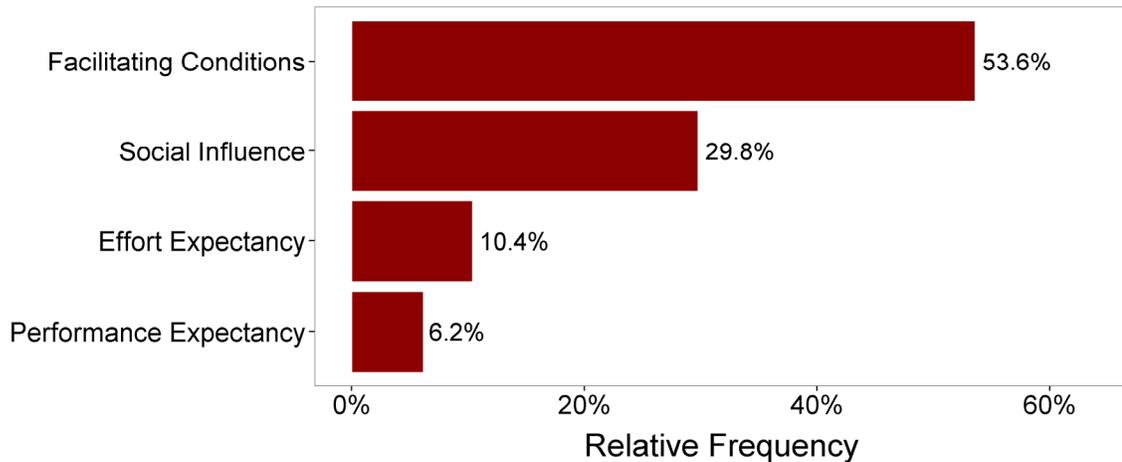
This section describes particular aspects of implementation of the DDL grant in order to understand the composition of activities and outcomes observed. The purpose of this section is twofold. First, defining a consistent set of categories for each of the grants in the study sample facilitates cross-case comparison and analysis. Second, presentation of the activities and outcomes for this grant by category simplifies understanding of the focus of the grantees' work. This analysis is based on qualitative observations made during the site visit.

ASR is using a theory-based evaluation approach to examine the social and economic impacts of the BTOP program. This permits deeper understanding of grant features in terms of theory, which helps to explain how the grant activities produce impacts. For the PCC and SBA grants, ASR uses theories of technology adoption to examine factors that shape the demand-side of broadband services. The key theory ASR employs is the unified theory of the acceptance and use of technology (UTAUT), a technology adoption model proposed by Venkatesh et al. (2003).²⁶ The model is among the top three most frequently cited articles published in the information systems field and the preeminent article explaining the adoption of information systems. The UTAUT model traces its history from theoretical constructs found in literature that have a bearing on a user's intention of technology adoption and use. The UTAUT model is derived from the leading theories of technology adoption, including the theory of reasoned action, technology acceptance model, motivational model, theory of planned behavior, a combined theory of planned behavior/technology acceptance model, model of personal computer use, diffusion of innovations theory, and social cognitive theory.

UTAUT explains technology acceptance by looking at a user's intention to use an information system and the user's long-term use of that technology. The UTAUT model combines concepts found in earlier models of technology use to posit a unified theory of information technology adoption and use. UTAUT includes four dimensions determining user intention and technology use: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Each of these dimensions is further classified into constructs constituting the dimension. The subsections below define and discuss each of these dimensions. Venkatesh empirically tested the model and reported that it was successful in explaining more variation in user adoption of technology than other adoption models tested.

Figure 17 presents the relative frequency of topics related to grant implementation as discussed during interviews and focus groups. These topics were placed in four categories, corresponding to the four UTAUT categories listed above. Most of the implementation topics discussed relate to Facilitating Conditions, although Social Influence was also a common topic of discussion. A relatively small percentage of responses pertained to Effort Expectancy and Performance Expectancy.

Figure 17. Distribution of Grant Implementation Topics by UTAUT Dimension



4.1 Facilitating Conditions

The Job Center is a one-stop-shop. I can do everything here. If I have a problem, the staff are right here to answer my questions. The staff at the Job Center are very knowledgeable, friendly, and caring. I can't say enough about the staff; they have been so much help to me and countless others in achieving our goals." – Dover Job Center Patron

This category captures the degree to which the technical infrastructure available to the user supports potential broadband adoption, and the degree to which there are organizational supports to adoption. This includes access to broadband technology, the extent to which users can choose to use broadband, the compatibility of broadband with their lifestyles and activities, and the cost of using broadband. This category also includes broadband connection, computers, workspaces, and clean and safe computer labs.

4.1.1 Support

- The Georgetown Job Center coordinator created a website that aggregates useful links for job searching. The page features links to local newspapers, job boards, the Department of Labor, and large-scale local employers, such as an outlet mall. Another page on the website features links to the job search pages for companies and organizations located in Delaware. This service helps users less familiar with computers efficiently navigate their job search.
- Coordinators use the information gained from new patron intake forms and personal interactions with their users to get to know clientele and provide information relevant to each patron's individual employment and lifelong learning needs. Depending on the patron's skill level, Job Center staff may provide more hands-on assistance in using computers.
- Volunteers provide additional support for Job Center patrons, teaching courses, facilitating walk-in hours, and providing patrons with guidance. Volunteers help coordinators to accommodate patrons' demand for services.
- Patrons report that Job Center coordinators and volunteers are extremely knowledgeable and provide effective guidance. In addition to assistance obtained in the Job Centers, patrons often call coordinators with questions and requests for advice and guidance in their employment-related efforts.

- Job Centers and libraries have access to DDL IT staff and in some cases have individual IT staff or access to county IT staff.

4.1.2 Equipment

- Senior patrons often use the ADA workstations, as the larger screen is easier to view.
- Job Centers offer adequate equipment to support disabled patrons' specific needs. When the Job Centers are closed, DVI will occasionally leverage the entire space to host sessions exclusive to their clients. For example, the Statler Center, a Buffalo, New York-based organization serving the visually impaired, hosted a session for DVI clients at the Georgetown Job Center.
- Job Centers distribute flash drives to patrons to store résumés and other important files. Job Center staff preload flash drives with introductory and support documents. Coordinators teach unfamiliar patrons how to use the flash drives during their initial introduction to the center. Coordinators report that the flash drives have been a successful element of the program and have distributed several thousand to date.
- The Job Centers offer free scanning and faxing services, whereas at other locations patrons would have to pay for those services.

4.1.3 Other

- The centralized Job Center locations are important for patrons with limited means of transportation because of income limitations or physical disabilities.
- The Georgetown coordinator created a résumé template, which he shares with other coordinators, to assist patrons in creating or updating their résumés. He is working toward creating another version of the template that is fully readable when uploaded by applicant tracking systems (ATS) for online job applications. This will help to ensure that the system does not scramble applicants' résumés, leading recruiters to discard the documents.
- Job Center and partner staff share job leads by e-mail. This helps staff providing services at multiple locations give better guidance to patrons. Job Center staff members alter tactics and resources depending on the particular community to ensure that the service they provide is applicable to patrons.

4.2 Social Influence

"They felt comfortable. They felt like people really wanted to help them...and that makes a difference. People feel good when you want to help them, when you go the extra mile to help them make a résumé, or to give them tips on how they can be successful. Just listening to their story, they're discouraged about not finding a job because of not having the information or the knowledge." – Delaware Division for Visually Impaired Staff Member

This category measures the degree to which potential adopters perceive that others will view them favorably or interact with them in a positive way if they adopt broadband technology. This includes friends and family members who might already be using broadband technology. It also includes measures of whether the use of broadband is considered a social norm for the social group to which the potential adopter belongs. Components of Social Influence include subjective norms, social factors, and the image associated with broadband use.

- Word of mouth is an effective means of informing residents about the Job Center services and affecting participation. Many social service agencies learned about the Job Centers through word of mouth and approached DDL to establish partnerships.

- Job Centers collaborate with assorted human service agencies that refer clients to them. For example, the Georgetown coordinator posts the weekly and monthly schedules in local shelters. Agencies will direct clients in need of technical or job-seeking assistance to the libraries. DDL also participates in networking events and mailing lists with groups of partners or community organizations. Job Center staff members refer clients in need of particular assistance to relevant social service programs.
- Job Centers conduct outreach and promote programs through several methods of advertisement. Delaware Area Regional Transit (DART) buses advertise Job Centers. Job Centers distribute brochures at libraries and job fairs. DDL advertises the Job Centers on the radio, billboards, and in community newspapers. Delaware Hispano Magazine published a full-page advertisement in Spanish for the Job Centers on the inside cover of its magazine.
- DVI staff members encourage their clients to use the Job Centers because they believe it helps clients recognize the value of using computers in their job search. Clients are able to observe other patrons effectively using computers to engage in job-seeking activities.
- The Job Centers provide an opportunity for patrons to network. Patrons share strategies, advice, job-searching tips, and job leads with one another. Some Job Centers have established job clubs, which serve as support groups for patrons who are unemployed or underemployed and actively seeking work.
- Volunteers promote Job Center services to other community organizations. For example, a Dover volunteer also volunteers at the Dover Interfaith Mission for Housing. He informs clients of Job Center services and persuades many to use the grant-funded services.
- Coordinators work with Rotary Clubs and local chambers of commerce to promote the Job Centers. They share information about computer training opportunities to encourage employers to share the information with their employees.

4.3 Effort Expectancy

"I think the most important thing that we're able to do here is to raise the self-esteem, the awareness of people, letting them know that they can, in fact, overcome the barriers that they are currently facing. It's all helping and assisting and supporting the patrons and their endeavors, and that just flows throughout the process." – Dover Job Center Volunteer

This category measures the expectations of the potential adopter regarding the difficulty of using broadband to achieve benefits in one or more of the focus areas described above. It includes preconceived ideas about the difficulty of using broadband technology and computers in general, and anxiety or concerns about the risks of broadband use. For PCCs, it indicates how the service model made using broadband to access information and services on the Internet easier.

- The Job Center atmosphere is a friendly, comfortable environment that limits the extent to which users feel pressured or crowded.
- Job Center patrons report developing strong support networks. Patrons provide each other with emotional support to help deal with issues related to unemployment and advise each other about applicable social services. Some patrons support each other with rides to the libraries and interviews. The support system helps to encourage patrons' perseverance in their job search.
- DVI staff reported that Job Centers and their staff are accommodating to the groups of clients they bring in for programming. Job Center staff members create an environment that is comfortable for patrons with visual impairments or other disabilities, helping to reduce any stress or fear associated with community facilities.
- The Job Centers offer a course entitled "The Stress of Being Unemployed" to assist patrons with the emotional and motivational aspects of job seeking. The same instructor also offers a

course to assist patrons in creating and implementing a job-seeking game plan and provides attendees with a job-seeking tool kit.

4.4 Performance Expectancy

“You have to treat it like a job. This is more like a career center than it is a job center. It spans the whole job-seeking process. It’s a one-stop shop” – Dover Job Center Patron

Performance Expectancy measures the degree to which a potential adopter believes that using the public computing center to gain access to broadband is beneficial for job searching or for an activity in another focus area. Aspects of Performance Expectancy include the perceived usefulness of the new technology, outcomes expectations, and the perceived relative advantage of the technology versus previously used technologies.

- Patrons visit Job Centers for two primary reasons. Some may need access to online resources, such as online applications and digital copies of résumés, while others may require digital literacy skills to obtain certain positions.
- Job Center staff members report that patrons visit the centers for a variety of reasons, although all relate to jobs, business, or lifelong learning.
- Some patrons with computers and Internet at home visit the Job Centers for the productive environment, on-site resources, and support of staff and other patrons.
- Although some patrons obtain interviews but do not receive any offers of employment, they continue to visit to the Job Center and use the services in their job searches.

Section 5. Techniques, Tools, and Strategies

This section describes successful techniques, tools, and strategies identified by the grantee. DDL noted many successful techniques, tools, and strategies that it developed over the course of the grant. The grantee also provided examples of techniques, tools, and strategies that did not work as expected.

5.1 Techniques, Tools, and Strategies

- Job Center personnel refer users to job sites such as Monster, Indeed, and CareerBuilder but accentuate the importance of using these tools exclusively as a means to gather leads, rather than for applications. Job Center users have found their personal information to be too widely shared after submitting it through some career websites. Jobs Center coordinators suggest finding leads through public websites and then following up with an Internet search for information on the company and open positions.
- Collaborating with community organizations enhanced the benefit of Job Centers, offering a wide range of services and support for patrons with differing needs.
- Job Center coordinators share resources and best practices, and work together to solve outstanding issues.
- Job Center staff members discuss transportation with patrons to ensure that patrons focus on geographically feasible employment opportunities.
- Job Center coordinators follow up on job leads, confirming the availability of opportunities with local employers.
- The Georgetown coordinator created a specific Gmail account to serve as a secondary address for patrons who have forgotten their passwords. The coordinator has patrons write their email address and passwords on a business card to store in their wallet or purse. He also provides patrons with a spreadsheet to keep track of usernames and passwords for different job application websites.
- Job Center coordinators emphasize the importance of providing support and encouragement to patrons. They explain that, to obtain employment, it is often necessary to demonstrate self-confidence during job interviews. Staff members assist patrons in successfully completing tasks or gaining skills to build confidence and ensure their success in obtaining employment.
- Weekly e-mails with job leads and training opportunities help to engage patrons.
- The library director recommends approaching Digital Literacy education by first determining what patrons want to achieve, then explaining how to leverage a computer to reach those goals. She explained this is more effective than simply telling patrons to attend a Digital Literacy class, which does not effectively explain the relevancy of the skills to those who have not used broadband.
- Job Center staff members explain that state senators are accessible and supportive of the Job Centers and want to ensure that the program continues.

5.2 Challenges

- During ASR's first visit, DDL indicated that it would employ ServicePoint to track patron information, visit statistics, training hours, and other data. DDL attempted to use the system, but found that the demands of data entry on Job Center coordinators interfered with their ability to

provide services to the users at the Job Centers. As a result, DDL discontinued the use of ServicePoint and returned to tracking information on users with spreadsheets. As a result, tabulations of ServicePoint data are not available.

- The need for the Job Centers exceeds the resources available to operate them. At present, there is a tradeoff between extending hours at the four main branches, which would offer the opportunity to expand services that have proven to be effective, and the opening of Job Centers at the twenty-eight satellite branches, where service is currently not available or offered by an itinerant Job Center coordinator.
- Many patrons face geographic limitations to using the Job Centers because of lack of a personal vehicle or the need to travel long distances to the Job Center. Limited public transportation options exacerbate this challenge. Some patrons walk significant distances. Not only do transit limitations affect patrons' use of the Job Centers, they also limit feasible employment opportunities.
- Although DDL installed video conferencing equipment, the system is not yet operational. When fully functional, the system will remotely deliver training programs provided at the Job Centers to satellite libraries. DDL is waiting on the state IT department to finalize the configuration of the overall system. These delays are attributable to a backlog of IT projects and limited IT staff resources.²⁷
- DDL introduced Evanced, an online calendaring system, to post programming hours and events at the Job Centers and libraries. The primary impediment to the effectiveness of the system is that many Job Center patrons do not have Internet access at home and thus view the online calendar only while at the Job Center.
- Additional staffing resources would enhance Job Center operations. Currently, the Job Centers are not in operation for the full duration of library service hours. Additionally, coverage during sick or vacation leave is challenging, as there are limited personnel resources. If a coordinator is unavailable, that particular center may have to operate under reduced hours or limit programmatic offerings.
- If given the opportunity to implement the project again, DDL would establish a steering committee of local business leaders and incorporate their perspective into Job Center services. Coordinators believe it would be useful to have more connection to local businesses.
- After the discontinuation of DEDO services, there was no program in place to provide entrepreneurship support or training. DDL believes there is a need for this type of service and is working to establish relationships with entities that can provide it.
- The Wilmington Job Center is currently operating in a temporary location while the new library is under construction. The space is small, crowded, and difficult to locate. Attendance has declined while operating in the temporary location. Library cards are required to enter the facility, whereas this is not required at other Job Center facilities. This can be a challenge for some patrons, as library cards require a photo ID and permanent address, which some patrons are unable to provide.

Section 6. Conclusions

The goal of the Delaware Library Job/Learning Labs project is to address the online access needs of economically vulnerable communities in Delaware, specifically focusing on unemployed and underemployed individuals seeking job-searching assistance. The grant established four Job Centers within four public library locations in Delaware. The grant provided upgraded workstations and equipment, new and improved connectivity, and qualified staff to support patrons' use of these technological resources. The Job Centers offer training opportunities, workshops and seminars, and open-lab hours during which staff members provide individualized assistance with lifelong learning and employment-related objectives.

The most prominent impact of the grant relates to Job Center patrons' ability to obtain employment. More than 420 patrons obtained a job offer because of grant-funded resources and services. Other notable impacts include patrons' achievement of GEDs and high school diplomas. Other patrons received pardons and expungements. Earning an academic credential or amending a criminal history helps to remove barriers to gaining employment.

Additional grant-funded activities supporting patrons' ability to obtain employment include the provision of Digital Literacy training, enabling unemployed persons to effectively search and apply for jobs online. Digital Literacy training provides participants with an enhanced digital skill set, enhancing their qualifications for positions.

Grant-funded services supporting patrons' employability include access to broadband and computers, training opportunities, and qualified staff to assist with résumés, job applications, and interviews. Facilitated access to computers and broadband for job-seeking purposes is a necessity for many patrons to search and apply for jobs online. Because many Job Center patrons are unemployed or underemployed, Job Center coordinators estimate that the majority do not have computer or Internet access at home, impeding their ability to obtain employment in an environment where online applications are becoming the standard. The availability of such resources at Job Centers not only improves patrons' employment-related outcomes, but also provides employers with a greater supply of applicants, reducing the period in which a position is open, and thereby enhancing the firm's productivity.

Without the grant, it is unlikely that the impacts or the services described above would exist. DDL reports that, without the BTOP grant, comparable training opportunities and resources would not be available at libraries. The grant helped to facilitate DDL's collaboration with human service organizations within the state serving vulnerable populations. The collaboration resulted in the provision of a wider range of training opportunities, including those that specifically target veteran, disabled, and homeless populations, and residents with criminal backgrounds, limited educational attainment, and no transportation options.

Section 7. Quantitative Analysis

DDL Job Centers and libraries provide facilitated walk-in assistance hours. DDL collected attendance data at these facilitated lab sessions for the duration of the grant. This section estimates the impact that the Job Centers' facilitated lab sessions had on attendees obtaining employment. Additionally, this section explores employment-related impacts by estimating the number of patrons of facilitated lab sessions who applied for a job and those who received an interview.

Table 2 shows the number of facilitated lab session attendees at DDL Job Center locations by quarter, and a quarterly attendance total for all facilitated lab sessions.²⁸

Table 2. Facilitated Lab Attendees by Location

Location	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	Total
Georgetown Library	409	518	630	558	532	512	628	3,787
Dover Library	309	426	316	380	382	450	489	2,752
Wilmington Library	243	325	524	334	320	251	315	2,312
Seaford Library	118	181	194	187	244	273	386	1,583
Satellite Libraries	0	0	0	0	0	317	448	765
Total	1,079	1,450	1,664	1,459	1,478	1,803	2,266	11,199

More patrons attended facilitated lab sessions at the Georgetown Library than any other library for the seven quarters the grant gathered data. This is likely due in part to the Georgetown Job Center coordinator keeping the facility open for extended hours. Satellite libraries did not provide facilitated lab sessions until the fourth quarter of 2012.

7.1 Impact of the BTOP Grant on Employment

This analysis uses results of the 2011 IMPACT Survey administered by the University of Washington Information School to estimate the employment-related impacts of DDL facilitated lab sessions.²⁹ This survey is an extension of the larger-scale U.S. Impact Study, conducted in 2009, which explored how and why library patrons across the United States use computers and the Internet at public libraries.³⁰ The 2011 DDL IMPACT survey analyzed the responses of 505 library patrons from 21 library systems in Delaware. Of the 505 survey participants, 502 had visited a library within the last year. The majority of respondents, 55 percent, reported visiting a library at least once a week, 35 percent visited one to three times per month, and 11 percent visited less than once a month. The survey found that 29 percent of Delaware library patrons used library technology resources to search for a job. About 20 percent of these job searchers reported finding new employment.³¹ This represents an increase from the 2009 U.S. Impact Study, where 11 percent of Delaware library patrons who used library resources to look for a job reported finding new employment.³² This increased success rate seen in the State of Delaware is also higher than the 16 percent of library job searchers nationwide who reported finding new employment.³³

Following the assumption that all attendants of the facilitated lab sessions are job seekers, estimated job attainment numbers are the product of the number of facilitated lab attendees and

the 20 percent success rate reported in the 2011 DDL IMPACT Survey. Table 3 contains the job attainment estimates of facilitated lab sessions attendants. For example, using this method, ASR estimates that 20 percent of the 558 facilitated lab attendees at Georgetown Library in the second quarter of 2012, 110 persons, found new jobs.

Table 3. Estimated Number of Jobs Attained as a Result of Facilitated Labs

Location	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	Total
Georgetown Library	81	102	125	110	105	101	124	748
Dover Library	61	84	63	75	76	89	97	545
Wilmington Library	48	64	104	66	63	50	62	457
Seaford Library	23	36	38	37	48	54	76	312
Satellite Libraries	0	0	0	0	0	63	89	152
Total	213	287	329	289	292	357	448	2,215

These estimates suggests that up to 2,215 facilitated lab attendees may have attained a job through the facilitated lab sessions provided by Delaware libraries. However, these calculations serve as an approximation and may overestimate the true employment-related impact of facilitated lab sessions. The number of facilitated lab attendees is not a count of unique persons. While 20 percent of attendees might find a job through facilitated lab sessions, job searchers may have to attend multiple sessions and thus appear more than once in the data. This could occur within one quarter or across several quarters.

Section 8. Next Steps for the BTOP Evaluation Study

In early 2014, ASR will deliver *Interim Report 2* to NTIA. This report will include a summary of the second round of case study visits to the fifteen PCC and SBA grants, allowing for an analysis of the impacts of the grants over time. *Interim Report 2* will also summarize the findings from case study visits to twelve Comprehensive Community Infrastructure (CCI) grants. These visits will take place in the fall of 2013 and result in a set of twelve case study reports delivered to NTIA over several months.

For the PCC and SBA projects, *Interim Report 2* will provide an update to and refinement of the analysis presented in *Interim Report 1*. For the CCI projects, *Interim Report 2* will summarize the activities underway by twelve CCI grantees and the impacts these projects intend to have on broadband availability and adoption for community anchor institutions, communities, and individuals.

Because of the unique financial structure of libraries in the State of Delaware, the continuation of funding for the DDL program is of special interest to the grantee. Delaware libraries are required to piece together funding from multiple sources in order to continue operations. Under the unique structure of Delaware's library system, county governments fund some libraries while other independent libraries, including Seaford and Georgetown, depend on local funding for operations. Without continued funding of the Job Centers, cuts to other services are necessary to pay for the ongoing operations and maintenance of the Job Centers. The Delaware State Librarian indicated strong support for the Jobs Centers based on their record of demonstrated effectiveness. However, given funding cuts by nearly all library financial supporters, continuation of the Jobs Centers service is contingent on cuts to other programs.

Given that DDL has secured funding to support the Job Centers through the end of 2013, and likely partway through 2014, activities for this period include the following:

- DDL presented before the state legislature in a request for additional funding. The State Librarian reported that the Delaware Department of State prioritizes the ability of libraries to equalize the access to technology, and is working to ensure there is funding available to support the continuation of services.
- With funding coming to a close, there is limited money available to pay for the continuation of partner services. DDL is hopeful that some partners will continue to provide services, acknowledging use of the Job Center or library space as an in-kind form of compensation. Coordinators are working within their communities to establish additional sources of funding to support the continuation of training programs.
- Coordinators are considering rolling out a special training course for users who have already completed computer training but are interested in revisiting many of the lessons. This will also help instructors identify the material that is particularly difficult for patrons to internalize.
- A representative of DEDO, a member of the Hispanic Commission for the State of Delaware, is working with DDL to establish additional Spanish language training opportunities at Job Center and library locations and working toward establishing business-related training specifically for the Hispanic community.
- DDL is establishing a Ready Reference tool for librarians to assist patrons with job-seeking and Internet-based resources. The tool will serve as a quick guide for librarians and include an overview of LearningExpress and JCA services, technical support, and other useful resources.

Job Center staff members will provide training sessions for librarians to introduce the reference guide.

- DDL would like to implement patron evaluations to ensure that, as the grant closes out, it can move forward to provide patrons with the most relevant resources and services.
- The state is working toward offering full coverage for replacement costs of library computers. Currently, libraries pay half of the replacement costs. This will help support smaller libraries that have been limited in their ability to replace outdated machines because of budget limitations.

In September 2014, ASR will deliver a *Final Report* that quantitatively and qualitatively measures the economic and social impact of BTOP grants (including CCI, PCC, and SBA). The centerpiece of the *Final Report* will be an assessment of how and to what extent BTOP grant awards have achieved economic and social benefits in areas served by the grantees. To the extent that such information is available, results from studies performed by the grantees will round out the conclusions presented.

Notes

¹ National Telecommunications and Information Administration, "Post-Award Monitoring (PAM) Database 2013-03-11" (Washington, D.C.: Distributed by National Telecommunications and Information Administration, 2013).

² National Telecommunications and Information Administration, "Post-Award Monitoring (PAM) Database 2013-03-11."

³ National Telecommunications and Information Administration, "Post-Award Monitoring (PAM) Database 2013-03-11."

⁴ National Telecommunications and Information Administration, "BTOP Evaluation Study," *Broadband USA Connecting America's Communities*, 2013.

⁵ Delaware Division of Libraries, "DDL Participation Statistics", 2013.

⁶ Advancement through Pardons and Expungements, "APEX Performance Statistics", 2013.

⁷ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13", 2013.

⁸ ASR Analytics, *Progress towards BTOP Goals: Interim Report on PCC and SBA Case Studies, Broadband Technology Opportunities Program Evaluation Study (Order Number D10PD18645)* (Potomac, MD, 2012).

National Telecommunications and Information Administration, "Post-Award Monitoring (PAM) Database 2013-03-11."

⁹ National Telecommunications and Information Administration, "Post-Award Monitoring (PAM) Database 2013-03-11."

¹⁰ Delaware Division of Libraries, "DDL Participation Statistics."

¹¹ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."

¹² Delaware Division of Libraries, "Summary Statistics", January 3, 2013.

¹³ Delaware Division of Libraries, "Job Fairs at the Dover Public Library Job Center", 2013.

¹⁴ Federal Communications Commission, *Connecting America: The National Broadband Plan*, 2010, <http://www.broadband.gov/plan/>.

¹⁵ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."

¹⁶ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."

¹⁷ Delaware Division of Libraries, "Summary Statistics."

¹⁸ Advancement through Pardons and Expungements, "APEX Performance Statistics."

¹⁹ Advancement through Pardons and Expungements, "APEX Performance Statistics."

²⁰ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."

²¹ Delaware Department of State, "Delaware Library Job/Learning Labs First Quarter Report, 2013," *Broadband USA Connecting America's Communities*, 2013, http://www2.ntia.doc.gov/files/grantees/10-42-b10599_state_delaware_dept_of_ppr2013_q1.pdf.

²² Delaware Division of Libraries, "Wireless Use in Delaware Libraries - Unique Devices - Cumulative", 2013.

- ²³ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."
- ²⁴ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."
- ²⁵ The Recovery Accountability and Transparency Board, "Recovery API," *Recovery.gov* (Washington, DC, March 20, 2013), <http://www.recovery.gov/FAQ/Developer/Pages/RecoveryAPI.aspx>.
- ²⁶ Viswanath Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View," *MIS Quarterly* 27, no. 3 (September 2003): 425–478.
- ²⁷ Delaware Department of State, "Delaware Library Job/Learning Labs First Quarter Report, 2013."
- ²⁸ Delaware Division of Libraries, "BTOP Cumulative Database Detail 4-4-13."
- ²⁹ Samantha Becker and Michael D Crandall, *Delaware Division of Libraries Survey Results*, 2011.
- ³⁰ Samantha Becker, Michael D Crandall, and Karen E Fisher, *U.S. Impact Study Web Survey Results: Aggregate Report for Web Survey Libraries in Delaware*, 2010.
- ³¹ Becker and Crandall, *Delaware Division of Libraries Survey Results*.
- ³² Becker, Crandall, and Fisher, *U.S. Impact Study Web Survey Results: Aggregate Report for Web Survey Libraries in Delaware*.
- ³³ Samantha Becker et al., *Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries*, 2010.

Glossary

Acronym	Definition
ADA	Americans with Disabilities Act
APEX	Advancement through Pardons and Expungement
APR	Annual Performance Progress Report
ASR	ASR Analytics, LLC
ATS	Applicant Tracking Systems
BTOP	Broadband Technology and Opportunities Program
CAE	Christina Adult Education
CCI	Comprehensive Community Infrastructure
CRE	Community Resources Exchange
DART	Delaware Area Regional Transit
DCDAL	Delaware Center for Distance Adult Learning
DCED	Delaware Center for Enterprise Development
DDL	Delaware Division of Libraries
DDOL	Delaware Department of Labor
DEDO	Delaware Economic Development Office
DTI	Department of Technology and Information
DVI	Division for Visually Impaired
DWIB	Delaware Workforce Investment Board
ESL	English as a Second Language
FCC	Federal Communications Commission
FTE	Full-Time-Equivalent
GED	General Equivalency Diploma
JCA	Job and Career Accelerator
LVSA	Literacy Volunteers Serving Adults
NTIA	National Telecommunications and Information Administration
PCC	Public Computer Center
PPR	Performance Progress Report
RSVP	Retired and Senior Volunteer Program
SBA	Sustainable Broadband Adoption
SEDAC	Sussex Economic Development Action Committee

Acronym	Definition
SNAP	Supplemental Nutrition Assistance Program
USB	Universal Serial Bus
UTAUT	Universal Theory of Acceptance and Use of Technology

Bibliography

- Advancement through Pardons and Expungements. "APEX Performance Statistics", 2013.
- ASR Analytics. *Progress towards BTOP Goals: Interim Report on PCC and SBA Case Studies. Broadband Technology Opportunities Program Evaluation Study (Order Number D10PD18645)*. Potomac, MD, 2012.
- Becker, Samantha, and Michael D Crandall. *Delaware Division of Libraries Survey Results*, 2011.
- Becker, Samantha, Michael D Crandall, Karen E Fisher, Bo Kinney, Carol Landry, and Anita Rocha. *Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries*, 2010.
- Becker, Samantha, Michael D Crandall, and Karen E Fisher. *U.S. Impact Study Web Survey Results: Aggregate Report for Web Survey Libraries in Delaware*, 2010.
- Delaware Department of State. "Delaware Library Job/Learning Labs First Quarter Report, 2013." *Broadband USA Connecting America's Communities*, 2013.
http://www2.ntia.doc.gov/files/grantees/10-42-b10599_state_delaware_dept_of_ppr2013_q1.pdf.
- Delaware Division of Libraries. "BTOP Cumulative Database Detail 4-4-13", 2013.
- . "DDL Participation Statistics", 2013.
- . "Job Fairs at the Dover Public Library Job Center", 2013.
- . "Summary Statistics", January 3, 2013.
- . "Wireless Use in Delaware Libraries - Unique Devices - Cumulative", 2013.
- Federal Communications Commission. *Connecting America: The National Broadband Plan*, 2010.
<http://www.broadband.gov/plan/>.
- National Telecommunications and Information Administration. "BTOP Evaluation Study." *Broadband USA Connecting America's Communities*, 2013.
- . "Post-Award Monitoring (PAM) Database 2013-03-11". Washington, D.C.: Distributed by National Telecommunications and Information Administration, 2013.
- The Recovery Accountability and Transparency Board. "Recovery API." *Recovery.gov*. Washington, DC, March 20, 2013.
<http://www.recovery.gov/FAQ/Developer/Pages/RecoveryAPI.aspx>.
- Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly* 27, no. 3 (September 2003): 425–478.