Broadband Technology Opportunities Program (BTOP) Quarterly Program Status Report

Submitted to the

Committee on Appropriations
United States Senate

the

Committee on Appropriations
United States House of Representatives

the

Committee on Commerce, Science and Transportation
United States Senate

and the

Committee on Energy and Commerce
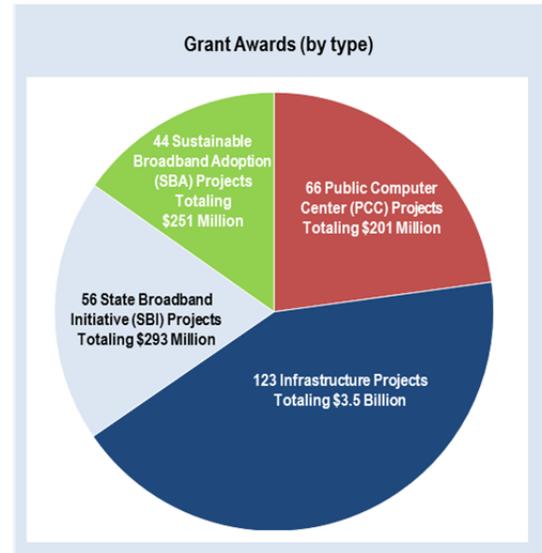United States House of Representatives

May 2015

National Telecommunications and Information Administration
U.S. Department of Commerce

I. INTRODUCTION AND BACKGROUND

Pursuant to Section 6001(d)(4) of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act) (Public Law No. 111-5), the National Telecommunications and Information Administration (NTIA) provides this Quarterly Report on the status of the Broadband Technology Opportunities Program (BTOP or Program). This Report focuses on the Program's activities from October 1 to December 31, 2014.

The Recovery Act appropriated $4.7 billion for NTIA to establish BTOP to increase broadband access and adoption; provide broadband access, training and support to schools, libraries, healthcare providers, and other organizations; improve broadband access to public safety agencies; and stimulate demand for broadband.[1] In 2009 and 2010, NTIA invested approximately $4 billion in 233 BTOP projects and $293 million in 56 State Broadband Initiative (SBI) projects benefitting every state, as well as five territories and the District of Columbia.[2]

As of December 31, 2014, 67 projects remained in active status, and 212 projects had completed their project activities.[3]

Grant Awards (by type)

44 Sustainable Broadband Adoption (SBA) Projects Totaling $251 Million

66 Public Computer Center (PCC) Projects Totaling $201 Million

56 State Broadband Initiative (SBI) Projects Totaling $293 Million

123 Infrastructure Projects Totaling $3.5 Billion

II. SUMMARY

This Quarterly Report focuses on the following areas of Program implementation and project oversight:

- **Program status and progress** of broadband projects, including closeout efforts, extensions, and Program expenditures.
- **State Broadband Initiative,** including the National Broadband Map and recipient progress.
- **Monitoring and grants administration** for broadband projects and the results of those efforts.

III. PROGRAM STATUS AND PROGRESS

A. Program Progress

From October through December 2014, NTIA's broadband grant recipients already exceeded the Program's FY15 subscriber and community anchor institution goals, and continue to make progress toward the miles

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[1] On August 10, 2010, Congress rescinded $302 million from BTOP, reducing the Program's funding to approximately $4.4 billion. *See* Pub. Law No. 111-226.
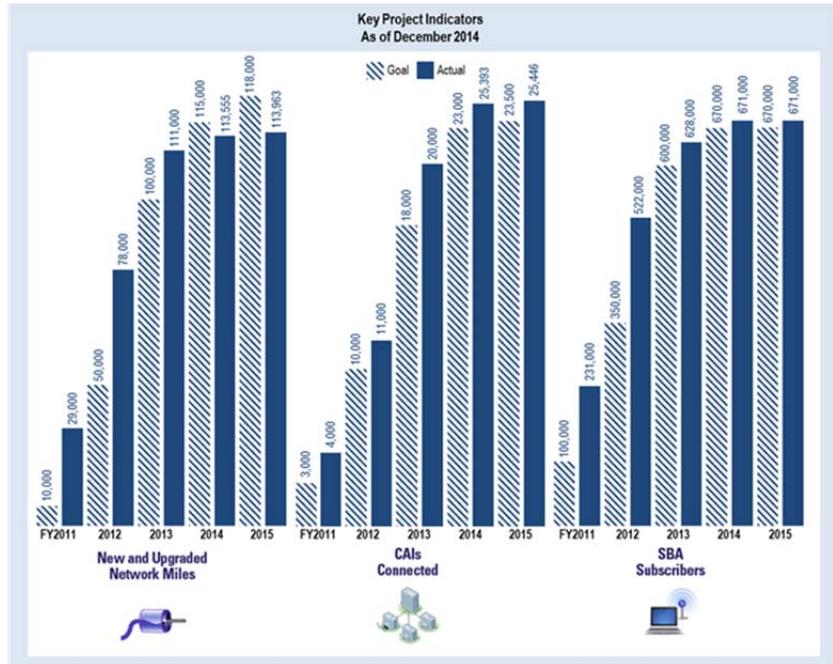
[2] The total number of BTOP awards announced by September 30, 2010 was 233. As of December 31, 2014, this number was 224, excluding awards to Leech Lake Band of Ojibwe (approximately $1.7 million), which ultimately did not accept its award; Education Networks of America, Inc. (approximately $14 million), the State of Wisconsin Department of Administration (approximately $22.9 million), the City of Tallahassee (approximately $1.2 million), and DigitalBridge Communications (three separate awards totaling approximately $4.2 million), each of which voluntarily terminated its project; and the Louisiana Board of Regents (approximately $80.6 million) and Trillion Communications, Inc. (approximately $59 million), which NTIA terminated for material noncompliance with their grant terms and conditions.

[3] Active awards include 55 SBI grants and 12 BTOP grants.

goal.[4] Grant recipients' quarterly progress reports, which were made public in February 2015, provide more granular details of these results.[5]

From October through December 2014, BTOP grant recipients:

- Deployed or upgraded 351 additional network miles. Since the program began, recipients have deployed more than 113,963 miles of new or upgraded network infrastructure.

- Connected 54 additional community anchor institutions. Thus far, recipients have connected approximately 25,446 total community anchor institutions.

- Generated a total of 671,000 new subscribers over the course of the program. Becaues all Sustainable Broadband Adoption (SBA) projects are either closed or in closeout, the projects did not generate any new subscribers this quarter.

Key Project Indicators
As of December 2014

B. Recipient Highlights

In January 2015, NTIA published ASR Analytics' "Final Report: Social and Economic Impacts of the Broadband Technology Opportunities Program." This new research study showed that BTOP resulted in billions of dollars in economic benefits to the communities served, including increased economic output and higher levels of employment. ASR Analytics identified six focus areas for assessing the social and economic impacts of the 27 BTOP projects included in the evaluation study sample: Workforce and Economic Development; Education and Training; Healthcare; Government Services; Quality of Life/Civic Engagement; and Digital Literacy. Of the six focus areas, ASR Analytics' research showed that the most prevalent impacts are within the Workforce and Economic Development, and Education and Training focus areas. Within these focus areas, improved productivity and efficiency (for both businesses and school administrators), and increased levels of education were the most frequent impacts. Below are highlights from the study:

Workforce and Economic Development
In researching workforce and economic development impacts, ASR Analytics concluded that Public Computer Center (PCC) and SBA projects helped reduce unemployment, while Comprehensive Community Infrastructure (CCI) projects improved productivity, helped stakeholders access new markets and, in a few cases, helped communities increase job growth. Overall, BTOP's total budget helped create approximately 79,000 year-long jobs and BTOP projects yielded approximately $12.9 billion in increased output. Every $1 BTOP recipients spent produced $2.81 in total output.

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[4] As NTIA continues to successfully close BTOP grant projects, the rate of progress towards the Key Product Indicators (KPIs) can be expected to slow.

[5] Quarterly reports for each BTOP and SBI project are *available at* http://www2.ntia.doc.gov/awards. Reports from recipients in the closeout process sometimes take longer than 30 days to be approved and posted.

The 15 PCC and SBA projects surveyed helped stakeholders and community residents acquire new digital literacy and job readiness skills, and also helped them search and apply for jobs online. For example, seven of the eight PCC projects and six of the seven SBA projects reported helping job seekers obtain employment. Based on economic analysis extrapolations, ASR Analytics found that more than 60,000 individuals searched for jobs using BTOP-funded PCCs (all PCCs, not just those surveyed). Research also showed that many participants in BTOP PCC and SBA training programs successfully started or improved entrepreneurial endeavors, including enhancing their web presence, increasing use of electronic communication tools, and using web-based tools. For all PCC BTOP projects, ASR estimates that more than 25,000 people started a business, more than 26,000 looked for new customers, and nearly 13,000 grew their businesses. For all SBA BTOP projects, ASR estimates that more than 600 people started a business, more than 600 looked for new customers, and more than 300 grew their businesses. In addition, BTOP adoption projects resulted in more than 6,400 new business broadband subscriptions, which produced nearly $63 million of productivity benefits for small business broadband subscribers.

CCI projects expanded broadband access throughout the country, giving organizations and businesses the opportunity to use inexpensive, high-speed access to achieve their goals. In addition, by giving these organizations the option to sign up for less expensive broadband service, they were able to devote additional resources to their business or use the savings to hire additional employees. Businesses were also able to increase their customer base by expanding operations, offering new products or services, or improving the quality of goods and services using web-based tools. BTOP's broadband infrastructure is expected to create more than 22,000 long-term jobs and generate $1.1 billion in additional household income each year.

Education and Training

ASR Analytics' research showed that the BTOP projects increased levels of education achieved, including helping participants obtain Certificates of High School Equivalency, and enroll in or graduate from a degree-conferring program. BTOP recipients also observed cases of improved student performance for K-12 students. For example, six of the eight PCC and five of the seven SBA projects in the evaluation study sample reported students achieving increased levels of education. In addition, students enrolled in K-12 schools improved their academic performance, earning higher grades and class rankings, and attended more challenging classes. CCI projects helped expand course or program offerings and increased productivity and efficiency for teachers and schools. Typically, the schools were able to expand access to online classes, with some community anchor institutions offering new on-campus courses. Students also experienced improved academic performance, and some schools were able to maintain or increase enrollment. The improved broadband connectivity helped educational institutions enhance services provided to students, including web resources and learning tools. Finally, K-12 schools connected under BTOP are expected to experience a cost difference of $2 billion annually, or approximately $268,000 per CAI from BTOP infrastructure investments.

C. Public Safety Projects

The Middle Class Tax Relief and Job Creation Act of 2012 authorized and provided funding to the First Responder Network Authority (FirstNet) to implement a nationwide public safety broadband network. Prior to the Act, NTIA awarded seven grants for public safety projects in 2010. Following the Act's passage in 2012, NTIA partially suspended the grants to allow FirstNet to evaluate them. Four recipients, Adams County Communications Center Inc. (ADCOM) in Colorado, New Jersey, New Mexico, and the Los Angeles Regional Interoperable Communications System Authority (LA-RICS), executed spectrum lease agreements with FirstNet. NTIA lifted the partial suspensions, enabling them to restart their projects. In addition to coordinating with NTIA, these recipients also communicate with FirstNet on a regular basis to ensure their projects are consistent with FirstNet's approach to designing the nationwide public safety broadband network. NTIA also closely coordinates with FirstNet regarding these projects. As of December 31, 2014, all four recipients are working on network design and construction activities.

During this quarter, LA-RICS continued network design activities and began construction at three LTE network sites. LA-RICS also continued community outreach activities, meeting with City and County of Los Angeles fire officials to discuss the impact of the new network on its workforce. New Mexico continued to work with federal partners, including the Department of Interior and the U.S. Customs and Border Control, and received final responses to its Request for Proposal for 700 MHz LTE equipment, services, and installation. ADCOM completed its fiber optic deployment and completed LTE installation for 16 sites. Additionally, ADCOM reached an agreement with the Denver International Airport (DIA) to expand the public safety network to the airport. NTIA also granted ADCOM a no-cost extension until September 30, 2015 to complete the DIA expansion. New Jersey continued development of site sharing agreements for state, local, and private organizations. New Jersey also worked with vendors to design the network deployment for LTE, microwave, trailers, satellite, and integration services for the Deployable Network Project.

While the City of Charlotte did not reach an agreement with FirstNet on a spectrum lease, the project remains active. Charlotte is moving forward with a modified project that does not require access to FirstNet's spectrum and began deploying communications to police and fire vehicles. During the first quarter of FY15, Charlotte installed dual-band routers in more than 250 police and approximately 17 fire vehicles. Additionally, Charlotte installed new infrastructure equipment in 27 of the 60 planned community anchor sites. Two recipients, Mississippi and Motorola, did not reach agreement with FirstNet on the terms of a spectrum lease and are in the process of closing out their awards.
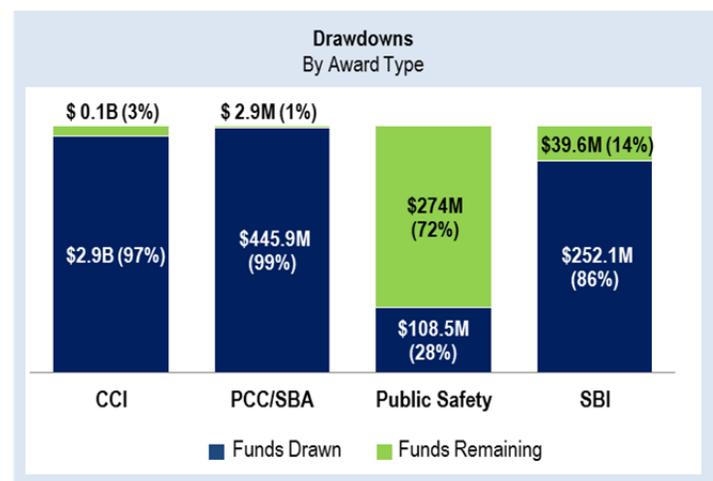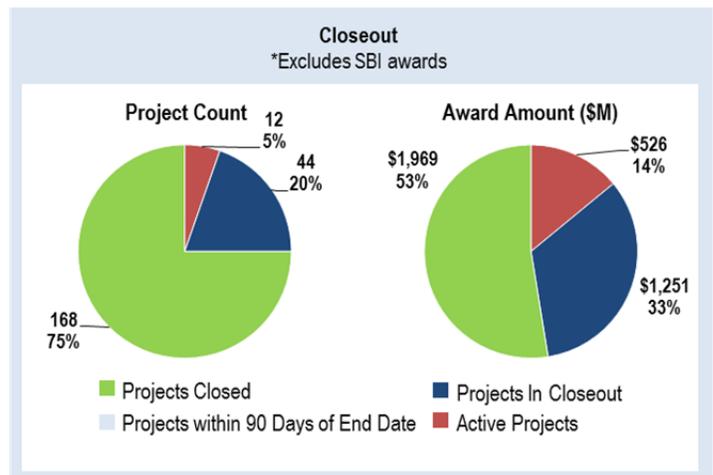
D. Program Status

1.   Closeout

As of December 31, 2014, NTIA helped 212 BTOP recipients complete project activities. NTIA will continue to work with the remaining 12 recipients to verify that they have met their grant requirements and formally close out these awards in the coming months. The 55 SBI awards will remain active until at least January 31, 2015.

Some grant recipients faced factors beyond their control that have caused project delays and hindered BTOP project deployment. NTIA extended the award period beyond September 30, 2013 for 32 grant recipients only after ensuring that they could complete their projects and deliver the projects' promised benefits.
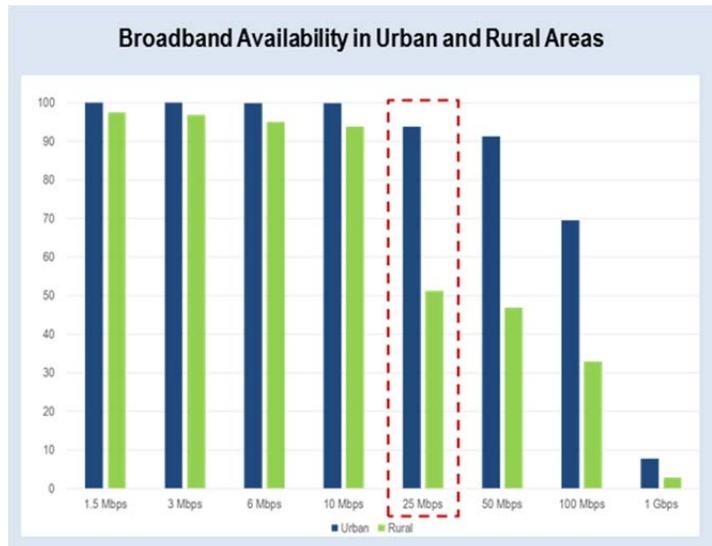
2.   Drawdowns

As of December 31, 2014, grant recipients drew down $3.65 billion, or 91 percent, of federal grant funds. Recipients will use the remaining federal grant funds to complete their projects. The majority of the remaining funds, 75 percent or $313.6 million, are allocated to the Public Safety and SBI programs.

Closeout
*Excludes SBI awards

Project Count
- 12 5%
- 44 20%
- 168 75%

Award Amount ($M)
- $526 14%
- $1,969 53%
- $1,251 33%

Legend:
- Projects Closed
- Projects within 90 Days of End Date
- Projects In Closeout
- Active Projects

Drawdowns
By Award Type

	CCI	PCC/SBA	Public Safety	SBI
Funds Remaining	$ 0.1B (3%)	$ 2.9M (1%)	$274M (72%)	$39.6M (14%)
Funds Drawn	$2.9B (97%)	$445.9M (99%)	$108.5M (28%)	$252.1M (86%)

- Funds Drawn
- Funds Remaining

IV. STATE BROADBAND INITIATIVE

The State Broadband Initiative (SBI) consists of the State Broadband Data and Development Program and the National Broadband Map.[6] These grants have two components. First, SBI collects and verifies broadband availability data that states collect from broadband providers, public data, and third-party datasets.[7] Second, SBI grants play a critical role in helping states and territories identify and address obstacles to broadband deployment and adoption. SBI supports state and local task forces and planning teams to expand broadband awareness and adoption and implements innovative applications to increase access to government services and information, including job resources.

In January 2015, the Federal Communications Commission (FCC) voted to change the definition of broadband by raising the minimum download speed from 4 Mbps to 25 Mbps, and the minimum upload speed from 1 Mbps to 3 Mbps.[8] The increased benchmark speeds reflect the Internet's increased importance and the need for faster Internet access. However, the new definition also shows that portions of America are still lacking the necessary broadband speeds to take full advantage of web tools and resources. SBI's most recent dataset showed that 100 percent of urban households and 98 percent of rural households in America had access to broadband download speeds of 3 Mbps or higher. At the higher 25 Mbps download speed, only 94 percent of urban and 51 percent of rural Americans have access to broadband under the

Broadband Availability in Urban and Rural Areas

new definition.[9] At the higher speed, the gap between urban and rural broadband access is more pronounced and shows the need for future investment in nationwide broadband access.

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V. MONITORING AND GRANTS ADMINISTRATION

A. Monitoring Activities

At this stage of the program, NTIA is managing a large quantity of grants in the process of "closing out" and a small number of active grants. Throughout the award period, NTIA proactively engages grant recipients to monitor project activities and compliance efforts and to protect taxpayer investments.[10] This engagement includes regularly communicating with recipients to ensure proper use of grant funds, identifying potential

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[6] The National Broadband Map is *available at* http://www.broadbandmap.gov.

[7] Broadband availability data are available in a number of different formats, including Application Programming Interfaces (APIs) and as files for download. Website users can compare availability and speeds across different geographic regions and can view the service area, speeds, technology, and demographic information for any broadband provider. Since its launch in 2011, the National Broadband Map has attracted more than 1,100,000 users and more than 100,000,000 API calls.

[8] The FCC's press release is *available at* http://www.fcc.gov/document/fcc-finds-us-broadband-deployment-not-keeping-pace.

[9] Dataset is *available at* http://www2.ntia.doc.gov/broadband-data.

[10] Since 2009, the Department of Commerce's Office of Inspector General (OIG) initiated 17 programmatic audits. Recommendations from these reports include minor process improvements that NTIA has incorporated into its oversight and monitoring activities.

risks affecting projects, and offering guidance to resolve issues promptly. Quarterly, grant recipients must report their financial, project performance, and ARRA-related activities. NTIA reviews these reports – the Federal Financial Report (FFR), Performance Progress Report (PPR), and ARRA Report – to monitor project progress against established baselines, expenditures of grant funds, and contribution of non-federal cost share. These initiatives continue as grant recipients transition their efforts to closeout activities and prepare for post-closeout obligations.

In addition, NTIA works closely with each recipient during the multi-month closeout process to review all applicable administrative actions and required documentation, including a review of the technical obligations, financial accounting, and grant administrative requirements before concluding the grant agreements between NTIA and grant recipients. For example, NTIA guides infrastructure recipients through the process of properly completing and filing UCC documentation to ensure that the Federal interest in grant funded equipment is protected.

B. Site Visits

NTIA uses site visits to monitor grant recipients and provide technical assistance through in-person meetings with project leadership and grant and financial management teams. This quarter, NTIA visited four infrastructure grant recipients responsible for $228.9 million in grant funds. To date, NTIA has conducted site visits to 182 recipients' projects, representing more than $3.91 billion of the BTOP and SBI portfolios.

During the first quarter of FY15, NTIA plans to visit additional recipients to monitor ongoing project activities and provide guidance regarding closeout procedures and compliance measures.

VI. NEXT REPORT

The next quarterly report to Congress will cover January 1 to March 31, 2015.

VII. ADDITIONAL PROGRAM MATERIALS

Additional BTOP materials are available at http://www2.ntia.doc.gov/, including press releases, Congressional testimony, information on grants awarded, and quarterly performance progress reports for each funded project.