Cross Agency Priority Goal: Broadband
FY2013 Q1 Status Update

Cross Agency Priority Goal Statement

As part of expanding all broadband capabilities, ensure 4G wireless broadband coverage for 98 percent of Americans by 2016.

Goal Leader

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Overview

President Obama has outlined a bold vision for enhancing America's competitiveness by investing in broadband infrastructure. "By connecting every corner of our country to the digital age, we can help our businesses become more competitive, our students become more informed and our citizens become more engaged," he said.   Broadband access provides a strong foundation for economic growth, job creation, and global competitiveness. Among other benefits, maximizing Americans' access to broadband technology can change how we deliver health care, improve public safety, and make government more efficient. This goal reinforces current efforts by federal agencies to deliver on the Administration's broadband commitment. Special attention will be directed to rural areas, which lag behind other parts of the country in broadband access. Achieving the goal of extending advanced 4G wireless coverage to 98 percent of Americans will strengthen the nation's broadband system – networks, devices, content, and applications – to provide the nation a competitive, affordable, and efficient technology infrastructure.

Strategies

Collaboration with Federal Partners to Advance Broadband Access and Adoption

This goal focuses on the implementation of a comprehensive plan to extend advanced 4G wireless coverage to 98 percent of Americans, which will strengthen the nation's broadband system – networks, devices, content, and applications – to provide the nation a competitive, affordable, and efficient technology infrastructure.

Advancing the Broadband CAP Goal is the result of the coordinated implementation of a number of White House-supported initiatives and legislation, along with the ongoing collaboration among a number of Federal agencies, most significantly the Department of Commerce's National Telecommunications and Information Administration (NTIA), the Department of Agriculture's Rural Utilities Service (RUS), and the Federal Communications Commission (FCC). Below are some of the principal White House and agency initiatives that support this goal:

1. *American Recovery and Reinvestment Act*:
    The American Recovery and Reinvestment Act of 2009 allocated approximately $7 billion for Federal grants and loans supporting broadband infrastructure projects, public computer centers, and programs to promote sustainable broadband adoption. Approval, oversight, and completion of these projects have been the responsibility of NTIA and RUS, which have collaborated on determining the most effective use of the funds. NTIA focused its investments on "middle mile" infrastructure - the segment of a telecommunications network linking a network operator's core network to the local network plant - to increase broadband capacity in communities without adequate broadband service. Middle mile infrastructure provides high-capacity broadband to community anchor institutions such as schools, libraries, health care facilities and community colleges while also enabling other commercial broadband operators to leverage the increased capacity to improve broadband services in their community. RUS focused its dollars on "last mile" investments - the final leg of delivering connectivity from a communications provider to a customer - in hard-to-serve rural and remote areas of the Nation. In July 2012, the NTIA and RUS administrators provided updates on the programs in congressional testimony. NTIA submitted its most recent quarterly report to Congress in December 2012. Testimony, reports, and additional information on these programs are available at http://www.broadbandusa.gov and http://www2.ntia.doc.gov/.

    Together these investments are game-changers in communities, achieving significant economic and social impact and enabling distance education, telemedicine, and other advanced applications. Additionally, a review of the agencies' execution of their responsibilities illustrates the ability of agencies to collaborate successfully on important Administration priorities:

    - NTIA, RUS, and the FCC hosted a public kickoff meeting in Washington, D.C. on March 10, 2009 to announce their initial implementation activities and respond to public inquiries. NTIA and RUS continued their public outreach through six additional Town Hall meetings across the U.S. in March.
    - On March 12, 2009, NTIA and RUS released a joint Request for Information (RFI) requesting public input on program strategy and execution, including funding focus, eligibility, and evaluation criteria for application review. NTIA and RUS received over 1,400 comments in the one-month RFI window.
    - RUS and NTIA worked closely from March until July 2009 on funding priorities and program strategies. In July 2009, NTIA and RUS released a joint Notice of Funding Availability (NOFA) outlining each programs' funding priorities, eligibility

requirements, evaluation process and criteria, and other requirements. Nearly two weeks after the NOFA release, NTIA and RUS released joint grant guidance and application for broadband infrastructure projects.

- The FCC provided guidance and collaborated with NTIA and RUS to develop its non-discrimination and interconnection policy for the Broadband Technology Opportunities Program (BTOP) and Broadband Initiatives Program (BIP), per the statutory requirement, to ensure alignment with broader Administration goals for non-discrimination and interconnection.
- In November 2009, NTIA and RUS released a second RFI, requesting public comment on funding priorities and the application process in order to inform the development of the second, and final, round of Recovery Act broadband funding. Over 225 comments were received and NTIA's analysis of the comments was shared with RUS.
- RUS hosted a joint website, www.broadbandusa.gov, for NTIA and RUS' broadband Recovery Act programs, including links to program information, the application portal, and application summaries. In 2010, NTIA launched its own portal.
- For the first round of funding, NTIA and RUS conducted ten joint public outreach workshops across the U.S. to provide overviews of each program's funding focus, the application process, review process, and to answer potential applicant questions.
- During the second round of funding, the agencies hosted an additional nine joint outreach workshops across the U.S.
- For both the BTOP and Broadband Initiatives Program (BIP) funding rounds, the Department of Commerce's National Technical Information Service (NTIS), on behalf of NTIA, hosted the application intake software system, EasyGrants, for RUS BIP and BTOP applicants. The USDA provided help-desk support during the application intake period.
- NTIA and RUS worked with the Advisory Council on Historic Preservation, Council of Environmental Quality, and the FCC, specifically the FCC's Section 106 Tribal Notification process and Tower Construction Notification System (TCNS), in order to develop a more streamlined environmental and historic preservation review of proposed BIP and BTOP projects.
- For Round 1 "Joint BIP-BTOP" applications, NTIA and RUS developed a mechanism to jointly review applications. Per the NOFA, RUS reserved the right to select from these joint applications prior to NTIA but worked closely with NTIA to allow for the facilitation of a concurrent review given time constraints associated with the Recovery Act timelines.
- During the Round 1 application review period, RUS hosted a joint RUS-NTIA Public Notice Filing Response (PNFR) system to allow, per the NOFA, broadband service providers to provide input to RUS and NTIA on pre-existing, incumbent broadband service availability, speeds, and/or adoption rates in applicants' proposed funded service areas (PFSA).
- In order for NTIA to assess broadband availability in Round 1 applicant PFSAs, the FCC granted NTIA access to its Form 477 database, which includes broadband service provider's self-reported broadband availability.

- RUS assessed the broadband availability in Round 1 by taking the information provided by incumbent service providers and providing it to field staff. The field staff then conducted on site verification of broadband availability for each successful award.
- NTIA launched www.broadbandmatch.gov in January 2010 prior to the opening of the second round of funding. BroadbandMatch was an online tool for applicants, community organizations, equipment and service providers, and others to express interest in partnering with other organizations to apply for broadband grant funds.
- NTIA and RUS successfully made all of their grant awards by the statutory deadline of September 2010.

2. *Presidential Memorandum: Unleashing the Wireless Broadband Revolution*:
In June 2010, President Obama issued a memorandum directing NTIA to work with other agencies to identify 500 megahertz (MHz) of spectrum, currently in either Federal or non-Federal hands, that could be repurposed for wireless broadband use within 10 years (http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution). This initiative to nearly double the amount of commercial spectrum will spur investment, economic growth, and job creation while supporting the growing demand by consumers and businesses for wireless broadband services. To further this goal, NTIA has issued reports describing how 210 MHz of spectrum now used by Federal agencies could be re-purposed and continues to work with agencies and other stakeholders. Reports are available on the NTIA website (http://ntia.doc.gov). In March, 2012, NTIA found that 95 MHz of prime spectrum, the 1755-1850 MHz band, can be repurposed for wireless broadband use once certain critical challenges are overcome. Toward that end, NTIA launched collaborative efforts between industry and government stakeholders to assess and recommend practical frameworks for the development of relocation, transition, and sharing arrangements and plans for 110 megahertz of federal spectrum in the 1695-1710 MHz and the 1755-1850 MHz bands.

3. *Universal Service Fund*:
With the support of the White House, the FCC adopted reforms to the Universal Service Fund (USF) to transition support to broadband deployment. The USF is a mechanism that has supported the provision of basic telephone service to rural and other high-cost areas of the country for decades. In its order, the FCC announced revisions that allowed for USF support to be made available for broadband services, including via a "Mobility Fund" targeted specifically to increasing access to wireless broadband. In May 2012, the FCC announced the competitive bidding procedures for the first phase of the Mobility Fund, which provides up to $300 million for support of wireless broadband (http://www.fcc.gov/document/mobility-fund-auction-procedures-and-filing-requirements). In July 2012, the FCC announced that another $115 million will be made available under the Connect America Fund, which should result in an estimated additional 400,000 residents and small businesses in 37 states gaining access to high-speed Internet within three years (http://www.fcc.gov/document/fcc-kicks-connect-america-fund).

4. *Middle Class Tax Relief and Job Creation Act of 2012*:
   This legislation, signed by the President in February 2012, included a number of provisions to promote wireless broadband coverage throughout the nation. In addition to setting deadlines for the FCC to conduct auctions authorizing the use of certain spectrum bands by wireless broadband providers, the legislation directed the FCC to implement incentive, or "reverse," auctions under which existing spectrum holders will be compensated for relinquishing spectrum. This spectrum, in turn, will be made available via more traditional "forward auctions" by the FCC for use by wireless broadband providers. On September 28, 2012, the FCC adopted a Notice of Proposed Rulemaking seeking comment on its proposed rules for the incentive auctions. The legislation also allocated spectrum and $7 billion towards the design and deployment of a nationwide wireless broadband network for the nation's first responders. Design and deployment of the network will primarily be the responsibility of the First Responders Network Authority ("FirstNet"), an independent authority within NTIA that holds a spectrum license from the FCC, in partnership with broadband providers and other commercial entities. Although the spectrum is intended for public safety use, FirstNet can approve leasing of excess capacity to commercial wireless broadband providers, subject to pre-emption by first responders when necessary. This may prove especially effective at expanding wireless broadband coverage in rural America.

5. *Executive Order: Accelerating Broadband Infrastructure Deployment:*
   In June 2012, President Obama issued an Executive Order directing a working group of Federal agencies to streamline the process by which broadband providers can seek to install wireless towers and other broadband infrastructure on Federal property, particularly in underserved communities (http://www.whitehouse.gov/the-press-office/2012/06/14/executive-order-accelerating-broadband-infrastructure-deployment). The working group consists of the Departments of Defense, Interior, Agriculture, Commerce, Transportation, Veterans Affairs, the Federal Communications Commission, Council on Environmental Quality, the Advisory Council on Historic Preservation and the National Security Staff. Each of these agencies plays a unique role in the management of federal lands, buildings, rights of way, and tribal/Indian trust lands, and each represents an opportunity to support the deployment of broadband infrastructure. The working group will assess federal infrastructure permitting and review processes and search for cross-agency coordination opportunities for consistent application of guidelines and processes.

Progress Update

Access to broadband capabilities continues to grow at a rapid rate despite tough economic conditions, confirming the progress being made on the path to achieving the President's goal of ensuring advanced wireless broadband coverage for 98% of Americans by 2016. The most recently available data indicates that 81% of Americans now have access to advanced wireless broadband, up from 36% in mid-2010, assuming that users of advanced wireless service should be able to enjoy minimum "real-world" download speeds (as opposed to advertised or "up to" speeds) of at least 6 megabits per second. When wired connections are included, the availability figure jumps to almost 96%. Of course, opinions differ on what constitutes minimum speeds for "broadband" or "4G" and, under any definition, those threshold speeds must and will increase to better serve the nation's needs. By any measure, however, the availability of high-speed access has grown steadily since the President's 2011 State of the Union Address when he announced the 98% goal. NTIA broadband grant recipients report that they have already connected over 10,000 anchor institutions such as schools, libraries, health care facilities, and community colleges to high-speed broadband so they can better serve their communities. Thousands of additional community anchor institutions are benefitting from increased availability and speeds through other commercial and public investments.

Substantive progress has been made on each of the strategies identified in the action plan, summarized below:

1. *American Recovery and Reinvestment Act*: BTOP recipients have drawn over $2.5 billion and are in various stages of completion, including some projects which are now complete. The program continues to deliver significant benefits to communities across America, deploying more than 86,000 of miles of broadband infrastructure and connecting almost 12,000 community anchor institutions such as schools, libraries, and hospitals to broadband. RUS has advanced over $1.6 billion of funding and has an additional $1 billion in active construction ready for funding.
2. *Presidential Memorandum: Unleashing the Wireless Broadband Revolution:* NTIA has taken several steps to identify spectrum currently held by federal users that can be made available for commercial wireless broadband use. NTIA led an interagency "fast track" evaluation of certain bands that could be reallocated without requiring relocation of federal systems and recommended reallocating 115 megahertz in the 1695-1710 MHz and 3550-3650 MHz bands for wireless broadband use on a shared basis. Further, in a report to the President in March 2012, NTIA determined that 95 megahertz in the 1755-1850 MHz band could be repurposed for wireless broadband use once certain critical challenges are overcome. As of the end of 2012, five industry/government working groups of NTIA's Commerce Spectrum Management Advisory committee continued to work to identify opportunities to share spectrum in the 1695-1710 MHz and 1755-1850 MHz bands to reduce repurposing costs, while maximizing the value of the spectrum to the economy. Also, the Department of Defense (DoD) continued working with industry to measure spectrum use of frequencies currently assigned to DOD to identify sharing opportunities. Further, NTIA initiated studies on the potential use of up to 195

megahertz by unlicensed broadband devices in the 5350-5470 MHz band and the 5850-5925 MHz band;

3. *Universal Service Fund*: On September 27, 2012, the FCC conducted the Mobility Fund 1 auction, awarding $300M to companies willing to build broadband networks in underserved and rural areas. [anything further to say here?]

4. *Middle Class Tax Relief and Job Creation Act of 2012*: As noted, the legislation allocated spectrum and $7 billion towards the design and deployment of a nationwide wireless broadband network for the nation's first responders called FirstNet. In August, 2012, the Department of Commerce appointed 12 individuals to fill open seats on the FirstNet Board (http://ntia.doc.gov/other-publication/2012/acting-secretary-rebecca-blank-announces-board-directors-first-responder-netw) and continued efforts to develop the rules under which state and tribal governments may seek planning grants to help inform the network design and deployment overseen by FirstNet. On October 1, 2012, NTIA issued a Notice of Inquiry on behalf of FirstNet to seek public comment on a conceptual network architecture and other topics (http://www.ntia.doc.gov/category/firstnet). As of December 31, 2012, the FirstNet board has held two formal meetings at which it adopted numerous resolutions advancing its goals.

5. *Executive Order: Accelerating Broadband Infrastructure Deployment:* As noted, this Executive Order established a working group to streamline the process by which broadband providers can seek to install wireless towers and other broadband infrastructure on Federal property, particularly in underserved communities. At its October 2012 meeting, the working group segmented its work into five categories: federal buildings, federal lands, environment compliance, and tribal resources and lands, and "Dig Once" policies. Agencies have been assigned to one or more of these focus areas as appropriate to the agencies' missions and are now studying the associated challenges and preparing recommendations for solving those challenges. In December 2012, the working group held an "Industry Day" where representatives of service providers, equipment vendors, tower companies, and other stakeholders presented their experiences and recommendations, which will also we incorporated in the working group's report due in June 2013.

Key Measures

Measure 1: Percent of population with broadband access (defined as download speeds >6 Mbps) via wireless technology (Target: 98% by 2016)
Measure 2: Percent of population with broadband access (defined as download speeds >6 Mbps) access via any technology

Timeframe	CY2010 Total	CY2011 Total	CY2012 As of 6/30/12	CY2012 Half 2	CY2012 Total	CY2013 Half 1	CY2013 Half 2	CY2013 Total
Access via Wireless Technology	62%	79%	81%	--	--	--	--	--
Access Via Any Technology	93%	95%	96%	--	--	--	--	--

Note: Due to reporting processes, these data lag by six to eight months

Supporting Measure:

Department of Commerce Agency Priority Goal: Number of miles of broadband infrastructure deployed or upgraded under the Broadband Technology Opportunities Program.
Target (end of FY13): 75,000 miles
To learn more see the DOC Priority Goal:
 http://my-goals.performance.gov/goal_detail/DOC/337

In addition, other contextual indicators may include the number of community anchor institutions adopting broadband (e.g. libraries, K-12 schools, etc.), as measured by National Broadband Map.

Milestones Accomplished to Date

Broadband Technology Opportunities Program
- By December 31, 2012 - Quarterly status report to Congress
    Complete – January 2013

- By September 30, 2012 - Reach 10,000 community anchor institutions connected with new or upgraded broadband service
    Complete (see http://www2.ntia.doc.gov/)

- By September 30, 2012 - Exceed 50,000 miles of broadband networks deployed
  Complete (see http://www2.ntia.doc.gov/). As of the end of FY 2012, BTOP recipients have deployed more than 78,000 miles of broadband infrastructure.

Broadband Initiatives Program
- As of September 30, 2012: Provided new or improved broadband service to 80,000 premises

- As of December 31, 2012: Placed approximately 40,000 miles of fiber and installed more than 500 wireless access points

- As of December 31, 2012: More than 120 projects are complete or providing broadband service

Public Safety
- By August 22, 2012 - Appoint Board of Directors for FirstNet, taking the first step of building the governance infrastructure of the broadband network for first responders
  Complete - August 20, 2012

- By September 30, 2012 - Release initial requirements for State and Local Implementation Grant Program for states/territories to plan for public safety broadband network
  Complete - August 21, 2012

- By September 30, 2012 - First meeting of FirstNet Board of Directors to begin designing and developing applications for public safety use
  Complete – September 25, 2012

- By December 31, 2012 – Conduct second meeting of the FirstNet Board of Directors
  Complete – December 11, 2012

- By December 31, 2012 – FCC to complete the transfer of the FirstNet spectrum license to the FirstNet Board. (Federal Register Vol. 77, No. 21, pages 68070-68071, November 15, 2012.
  Complete -- November 15, 2012

Spectrum
- By September 30, 2012 - 500 MHz initiative: establish five working groups under the Commerce Spectrum Management Advisory Committee (CSMAC) to facilitate relocation from 1695-1710 MHz and 1755-1850 MHz bands
  Complete - Groups began work on July 10, 2012

- By October 1, 2012 - FCC to conduct the Mobility Fund 1 auction, seeking to award $300M to companies willing to build broadband networks in underserved and rural areas
  Complete -September 27, 2012

- By December 31, 2012, deliver Third Interim Report on achieving the objectives of the "Presidential Memorandum: Unleashing the Wireless Broadband Revolution"
  - Complete -November 29, 2012

National Broadband Map
- By September 30, 2012 – Update National Broadband Map in order to keep public informed of broadband access progress
  Complete - July 25, 2012

Infrastructure Deployment Working Group
- Hold two meetings of interagency working group to begin developing a coordinated strategy to deploy broadband infrastructure on federal property
  Complete – July 31, 2012 and October 4, 2012
- Hold "Industry Day" meeting to hear experiences and recommendations from service providers, equipment vendors, tower companies and other stakeholders.
  Complete – December 12, 2012

Upcoming Milestones for Next Quarter

Public Safety

- By the end of FY13Q2, conduct third meeting of the FirstNet Board of Directors
- By the end of FY13Q2, publish final rules for State and Local Implementation Grant Program (SLIGP)

Infrastructure Deployment Working Group
- In FY13Q2, distribute to member agencies a refined implementation plan.
- In FY13Q2, engage with FirstNet to study ways of maximizing access to Federal property for public safety broadband infrastructure.
- Establish an internal web portal to host documents and streamline coordination for member agencies.

National Broadband Map
- By the end of FY13Q2, update National Broadband Map for 2012 first half data to keep public informed of broadband access progress

Spectrum
- By the end of FY13Q2, deliver report on the potential use of up to 195 megahertz of spectrum in the 5 GHz band by unlicensed broadband devices
- By the end of FY13Q2, publish rules for the Technical Panel and Dispute Resolution Board established by the Middle Class Tax Relief and Job Creation Act of 2012 to facilitate the

relocation of federal users from spectrum bands that can be used for commercial wireless broadband services.

- By the end of FY13Q2, submit report to President identifying 15 megahertz of spectrum between 1675 MHz and 1710 MHz for reallocation from federal use to non-federal use.

Longer-term Milestones

Infrastructure Deployment Working Group
- By the end of FY13Q2, distribute final procedures for broadband providers seeking access to Federal property

National Broadband Map
- By the end of FY13Q4, update National Broadband Map for 2012 second half data in order to keep public informed of broadband access progress

Spectrum
- By end of FY13Q4, FCC to conduct Tribal Mobility Fund Phase 1 auction to distribute $50 million in one-time support for deployment of mobile broadband to unserved Tribal lands.

- By end of FY13Q3, FCC to issue rules for Mobility Fund Phase 2 (ongoing support mechanism for mobile broadband.)

Contributing Programs and Other Factors

Department of Commerce
- National Telecommunications and Information Administration
  - Broadband Technology Opportunities Program

Federal Communications Commission
- National Broadband Plan
- Universal Service Fund Reforms

Department of Agriculture
- Rural Utilities Service
  - Broadband Initiative Program
  - Rural Broadband Loan Program
  - Community Connect Grants
  - Rural Telecom Loan Program

White House Executive Order: Accelerating Broadband Infrastructure Deployment
- Department of Defense
- Department of Interior
- Department of Agriculture

- Department of Commerce
- Department of Transportation
- Department of Veterans Affairs
- Federal Communications Commission
- Council on Environmental Quality
- Advisory Council on Historic Preservation
- National Security Staff

Additional References

Federal Communications Commission
http://www.fcc.gov/

National Telecommunications and Information Administration
http://www.ntia.doc.gov/

Broadband Technology Opportunities Program
http://www2.ntia.doc.gov/

RUS Broadband Initiatives Program
http://www.rurdev.usda.gov/utp_bip.html

Presidential Memorandum, Unleashing the Wireless Broadband Revolution
http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution

Executive Order: Accelerating Broadband Infrastructure Deployment
http://www.whitehouse.gov/the-press-office/2012/06/14/executive-order-accelerating-broadband-infrastructure-deployment

National Broadband Plan
www.broadband.gov/plan

National Broadband Map
www.broadbandmap.gov