#### ONE HUNDRED FOURTEENTH CONGRESS

## Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

#### **MEMORANDUM**

#### October 26, 2015

To: Subcommittee on Communications and Technology Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on "Breaking Down Barriers to Broadband Infrastructure Deployment"

On <u>Wednesday, October 28, 2015, at 10:00 a.m. in room 2123 of the Rayburn House Office Building</u>, the Subcommittee on Communications and Technology will hold a hearing entitled "Breaking Down Barriers to Broadband Infrastructure Deployment."

This is a legislative hearing to follow up the July 22, 2015, Communications and Technology Subcommittee hearing that examined and explored options to promote broadband infrastructure deployment. The hearing will examine multiple, bi-partisan legislative discussion drafts and a bill that are designed to streamline the permitting process to lower costs and improve broadband deployment.

#### I. BACKGROUND

#### A. Private Investment

The broadband industry continues to invest billions of dollars in broadband networks on a yearly basis. According to USTelecom, in 2013, cable, wireline, and wireless companies spent \$75 billion, with a total of over \$1.3 trillion spent since 1996. On the wireless side, CTIA's annual survey indicates that wireless providers had \$32.1 billion in capital expenditures in 2014.

<sup>&</sup>lt;sup>1</sup> USTelecom, *Broadband Investment* (online at www.ustelecom.org/broadband-industry/broadband-industry-stats/investment (accessed Oct. 26, 2015).

<sup>&</sup>lt;sup>2</sup> CTIA, *Annual Wireless Industry Survey* (online at www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey) (accessed Oct. 26, 2015).

The FCC reported that wireless broadband investment likely will continue at a rate of approximately \$35 billion a year from 2013 to 2017.

Of the thousands of Internet providers in the U.S., increasing numbers are providing service through fiber-optic cable, which provides faster speeds over longer distances than traditional copper-based DSL and cable technologies. For example, Google Fiber is offering 1 Gigabit per second (Gbps) service in select cities with expansion plans in the works. Reports estimate that Google spent \$84 million to provide its service to its first city, Kansas City, and that it would cost \$140 billion to build a nationwide fiber-optic network. The cost to consumers for Google Fiber generally is \$70 per month for Internet-only 1 Gbps service, with an option for free monthly basic Internet service for 7 years for a one-time \$300 fee.

#### **B.** Government Actions

#### 1. Broadband Technology Opportunities Program

The American Recovery and Reinvestment Act appropriated \$4.7 billion for NTIA to establish the Broadband Technology Opportunities Program (BTOP) to increase broadband access and adoption; provide training and support to schools, libraries, healthcare providers, and other organizations; improve broadband access to public safety organizations; and stimulate demand for broadband. Since 2009, NTIA has invested approximately \$4 billion in 233 projects and \$293 million in 56 State Broadband Initiative projects. Since the program began, BTOP grant recipients have deployed more than 113,963 miles of new or upgraded network infrastructure, connected approximately 25,446 community anchor institutions, and generated

<sup>&</sup>lt;sup>3</sup> Federal Communications Commission, 2015 Broadband Progress Report (rel. Feb. 4, 2015).

<sup>&</sup>lt;sup>4</sup> Broadbandnow, *Fiber-Optic Internet in the United States* (online at http://broadbandnow.com/Fiber) (accessed Oct. 26, 2015).

<sup>&</sup>lt;sup>5</sup> Google Fiber currently offers service in Austin, Kansas City, and Provo, UT. "Upcoming" fiber cities include Atlanta, Charlotte, Nashville, Raleigh-Durham, and Salt Lake City. "Potential" Google Fiber cities include San Antonio, Phoenix, San Jose, and Portland. *See* https://fiber.google.com/newcities.

<sup>&</sup>lt;sup>6</sup> It's Surprisingly Inexpensive for Google to Build Its Cable-Destroying Google Fiber Network, Business Insider (Apr. 8, 2013) (online at www.businessinsider.com/the-cost-of-building-google-fiber-2013-4).

<sup>&</sup>lt;sup>7</sup> Google Fiber, *Service Plans and Pricing* (online at https://support.google.com/fiber/answer/2657118?hl=en) Consumers also have the option to subscribe to Internet plus TV/video option for approximately \$120-130 per month (based on location).

<sup>&</sup>lt;sup>8</sup> National Telecommunications & Information Administration, *Broadband Technology Opportunities Program (BTOP) Quarterly Program Status Report* (May 2015).

<sup>&</sup>lt;sup>9</sup> *Id*.

671,000 new broadband subscribers. As of the end of 2014, 212 projects had been completed and 67 remain active. A recent report by ASR Analytics concluded that the BTOP program has resulted in billions of dollars in economic benefits to the communities served, including increased economic output and higher levels of employment.

#### 2. Broadband Initiatives Program

In 2009, as part of the American Recovery and Reinvestment Act, Congress provided the Department of Agriculture's Rural Utility Service (RUS) with \$2.5 billion to expand access to broadband services in rural America through the Broadband Initiatives Program (BIP). <sup>13</sup> With the expanded authority from the Recovery Act, RUS maximized its efforts by making grants, loans, and loan/grant combination awards, and has granted over \$2.33 billion in grants and \$1.19 billion in loans to 320 BIP projects. <sup>14</sup> Of the original projects, RUS indicates that 297 (92 percent) were for infrastructure, <sup>15</sup> and of those, as of March 31, 2015, 248 were complete or partially operational. <sup>16</sup> Additionally, based on reports from awardees, RUS estimates that 64,794 miles of fiber have been deployed, 1,845 wireless access points placed, and 230,323 broadband subscribers receiving new or improved service. <sup>17</sup>

### 3. Broadband Deployment on Federal Property

On June 14, 2012, President Obama released Executive Order 13616 to help facilitate broadband deployment on Federal lands, buildings, and rights of way, federally assisted highways, and Tribal lands... EO 13616 noted that the Federal Government "controls nearly 30 percent of all land in the United States, owns thousands of buildings, and provides substantial funding for State and local transportation infrastructure" which provides additional ways to help expand broadband infrastructure, and established the Broadband Deployment Federal Property Working Group to coordinate the effort. The Working Group provided a progress report to the Steering Committee on Federal Infrastructure Permitting and Review Process Improvement in

<sup>&</sup>lt;sup>10</sup> *Id*.

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>&</sup>lt;sup>12</sup> ASR Analytics, *Broadband Technology Opportunities Program Evaluation Study* (Sept. 15, 2014).

<sup>&</sup>lt;sup>13</sup> American Recovery and Reinvestment Act, at 118.

<sup>&</sup>lt;sup>14</sup> *Id.* Note: Due to program oversight, RUS indicated that it has rescinded 42 awards with a total of \$325 million returned to the Treasury after over the life of the program.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> *Id.* RUS reported that 68 projects were complete, with the remaining 180 partially operational as of Mar. 31, 2015.

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> Accelerating Broadband Infrastructure Deployment, Exec. Order No. 13616, 77 Fed. Reg. 36903 (June 14, 2012).

<sup>&</sup>lt;sup>19</sup> *Id*.

August 2013, and indicated it would continue to collaborate to implement additional actions, including efforts to incorporate "Dig Once"-related best practices and policies into broadband projects using highway rights-of-way. <sup>20</sup>

#### 4. Broadband Opportunities Council

On March 23, 2015, President Obama released a Memorandum on broadband deployment and adoption that addresses regulatory barriers to encourage investment and training by establishing the Broadband Opportunity Council (BOC). The BOC, co-chaired by the Secretaries of Commerce and Agriculture, is directed to consult with the FCC and other stakeholders to identify and assess regulatory barriers and opportunities to determine possible actions to support broadband deployment and adoption. The BOC released its report on September 21, 2015, and provides four overarching recommendations: (1) modernize Federal programs to expand program support for broadband investments; (2) empower communities with tools and resources to attract broadband investment and promote meaningful use; (3) promote increased broadband deployment and competition through expanded access to Federal assets; and (4) improve data collection, analysis and research on broadband.

#### 5. FCC Actions

The Telecommunications Act of 1996 modified the mission of the FCC to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans." Additionally, in 2009, as part of the Recovery Act, Congress directed the FCC to create a National Broadband Plan in order to ensure that all Americans have access to broadband. The FCC released its plan on March 17, 2010, and has taken numerous steps in

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> Memorandum for the Heads of Executive Departments and Agencies, Expanding Broadband Deployment and Adoption by Addressing Regulatory Barriers and Encouraging Investment and Training (*Expanding Broadband Presidential Memorandum*) (Mar. 23, 2015) (online at https://www.whitehouse.gov/the-press-office/2015/03/23/presidential-memorandum-expanding-broadband-deployment-and-adoption-addr).

<sup>&</sup>lt;sup>22</sup> Id. Additional members of the BOC include representatives from all of the other Executive Branch departments, as well as the EPA, GSA, SBA, Institute of Museum and Library Services, NSF, Council on Environmental Quality, OSTP, OMB, the Council of Economic Advisers, the Domestic Policy Council, the National Economic Council, National Security Council staff, and any other Federal agencies or entities as necessary.

<sup>&</sup>lt;sup>23</sup> *Id*.

<sup>&</sup>lt;sup>24</sup> Department of Agriculture, Department of Commerce, *Broadband Opportunity Council Report and Recommendations* (Aug. 20, 2015) (online at www.whitehouse.gov/sites/default/files/broadband\_opportunity\_council\_report\_final.pdf).

<sup>&</sup>lt;sup>25</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, §706.

<sup>&</sup>lt;sup>26</sup> American Recovery and Reinvestment Act of 2009, Sec. 6001, Pub. L. No. 111-5, 123 Stat. 115 (Recovery Act).

recent years to increase broadband deployment by: (1) establishing the Connect America Fund to reform the Universal Service Fund (USF) and intercarrier compensation systems to extend broadband infrastructure over a six year period to approximately 7 million of rural Americans who lack access to broadband; <sup>27</sup> (2) creating the Mobility Fund which is intended to expand advanced mobile broadband access to tens of thousands of road miles, and includes dedicated support for Tribal areas; <sup>28</sup> (3) modernizing the E-rate program to focus on providing support for high-speed broadband services to eligible schools and libraries sufficient to support digital learning and robust connectivity; <sup>29</sup> (4) adopting a new broadband service benchmark of 25 megabits per second (Mbps) download and 3 Mbps upload in order to facilitate broadband deployment; <sup>30</sup> (5) modifying tower siting rules to help promote deployment of the wireless infrastructure needed to provide advanced wireless broadband services; <sup>31</sup> (6) modifying pole attachment and rights of way rules to "streamline access and reduce costs for attaching broadband lines and wireless antennas to utility poles;" <sup>32</sup> (7) conducting the AWS-3 auction in February 2015, which generated record auction receipts of \$41.3 billion for 65 Megahertz (MHz) of spectrum, <sup>33</sup> and will result in new advanced wireless services to consumers.

#### II. SUMMARY OF LEGISLATION AND DISCUSSION DRAFTS

#### A. <u>Inventory and Accountability Discussion Draft</u>

EO 13616 and the BOC both recognize that Federal lands, buildings, and assets can be used as conduits for broadband deployment. Building off this prior work, the next steps include having an inventory of assets that can support broadband. The discussion draft would require all executive agencies to provide information to the NTIA on the locations of existing infrastructure and real property held by the Federal government. The database would be accessible to any

<sup>&</sup>lt;sup>27</sup> See Connect America Fund, et al., WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011), pets. For review denied sub. Nom., In re FCC 11-161, 753 F. 3d (10<sup>th</sup> Cir. 2014) (USF/ICC Transformation Order).

 $<sup>^{28}</sup>$  USF/ICC Transformation Order at  $\P$  295 et seq.

<sup>&</sup>lt;sup>29</sup> Federal Communications Commission, *Modernizing the E-Rate Program for Schools and Libraries*, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870 (2014) and *Modernizing the E-Rate Program for Schools and Libraries*, Second Report and Order and Order on Reconsideration, FCC 14-189 (rel. Dec. 19, 2014).

<sup>&</sup>lt;sup>30</sup> Federal Communications Commission, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, GN Docket No. 14-126, FCC 15-10, at ¶ 4 (rel. Feb. 4, 2015).

<sup>&</sup>lt;sup>31</sup> Federal Communications Commission, *FCC Boosts Wireless Broadband by Easing Infrastructure Burdens* (Oct. 17, 2014) (online at https://apps.fcc.gov/edocs\_public/attachmatch/DOC-330008A1.pdf ).

<sup>&</sup>lt;sup>32</sup> Federal Communications Commission, FCC Promotes Robust, Affordable Broadband by Reducing Costs and Delays in Access to Infrastructure (Apr. 7, 2011).

<sup>&</sup>lt;sup>33</sup> Federal Communications Commission, *Auction of Advanced Wireless Services (AWS-3) Licenses Closes Winning Bidders Announced for Auction 97* (Jan. 30, 2015) (DA 15-13).

entity that builds broadband infrastructure. Additionally, the discussion draft would require that all agency Senior Real Property Officers (SRPOs) track permitting applications for broadband infrastructure projects and report on the speed and efficiency of permit processing.

#### **B.** Pole Attachments Discussion Draft

This discussion draft would amend the Communications Act of 1934 to help better facilitate the deployment of broadband nationwide through the use of existing utility poles. As was recognized by the National Broadband Plan, access to these poles is critical to the success of broadband deployment. Among other things, this draft harmonizes some of the rates charged by pole owners and requires that states regulating their own poles do so on a non-discriminatory basis. Additionally, the discussion draft would open up federally owned poles to broadband deployers, and the draft would require the FCC to conduct a proceeding to review the costs associated with making ready for new infrastructure to be fixed to a pole.

#### C. The Broadband Conduit Deployment Act of 2015 (H.R. 3805)

The concept of "Dig Once" has been a subject of Congressional interest in the past, and was a component of Executive Order 13616. H.R. 3805, the Broadband Conduit Deployment Act of 2015, was introduced on October 22, 2015 by Representative Eshoo (D-CA) with strong bi-partisan support of 27 Representatives, and referred to the Committee on Transportation and Infrastructure. It requires an evaluation of the need for broadband conduit in covered highway construction projects and requires installation of broadband conduit beneath hard surfaces if the evaluation reveals a need within the next 15 years.

#### D. Streamlining NHPA and NEPA Discussion Draft

In order to site broadband infrastructure on a federal agency's property, that agency generally must first complete the reviews Congress mandated under the National Environmental Policy Act (NEPA).<sup>34</sup> and the National Historic Preservation Act (NHPA).<sup>35</sup> This discussion draft seeks to streamline those reviews, as they apply to broadband infrastructure, while ensuring that these fundamental reviews continue to protect our environment and historic places.

The draft would require that the FCC and the Advisory Council on Historic Preservation (ACHP) reach an agreement as to how the Commission can meet NHPA's requirements. In turn, the draft would allow ACHP to exempt other agencies from NHPA for broadband infrastructure projects that are approved as part of the ACHP's agreement with the FCC. The draft would also require the FCC to adopt timelines to ensure it is efficiently processing these reviews.

In addition, the discussion draft would require the Council on Environmental Quality (CEQ) to look for ways to streamline and accelerate the NEPA process for siting broadband infrastructure. The draft would then require the CEQ to implement any measures it found could help streamline and accelerate the NEPA process for broadband infrastructure.

#### E. Streamlining Siting with the DOI, Forest Service, and DOD Discussion Draft

This discussion draft would require three of the largest landholding government agencies to make more streamlined and consistent their approval process for siting broadband

<sup>&</sup>lt;sup>34</sup> 42 U.S.C. § 4332(2)(C).

<sup>&</sup>lt;sup>35</sup> 54 U.S.C. § 306108.

infrastructure on federal infrastructure or property. <sup>36</sup> In particular, this draft focuses on the Department of the Interior, the Forest Service within the Department of Agriculture, and the Department of Defense.

The draft would direct the agencies to make their processes for considering applications consistent across their different components, make their application processes more streamlined, and track the applications they receive. In addition, the draft would require the agencies to offer longer lease terms and makes lease renewal less onerous. The draft would also institute timelines for these agencies to ensure that they make relevant siting decisions in a timely fashion.

#### F. Common Forms and Standardized Fee Schedule Bill

Finally, this discussion draft seeks to improve upon the efforts Congress took to spur broadband deployment in Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012.<sup>37</sup> In specific, Section 6409 requires that the Government Services Administration (GSA) draft common forms, <sup>38</sup> draft master contracts, <sup>39</sup> and set common fees for agencies to use when allowing broadband companies to deploy infrastructure on government infrastructure or property. <sup>40</sup> The draft would require that the GSA finish its work required under Section 6409 and would mandate that agencies use those common forms, master contract, and fees.

#### III. WITNESSES

The following witnesses have been invited to testify:

#### Jeb Benedict

Vice President of Federal Regulatory Affairs and Regulatory Counsel Century Link

#### **Scott Bergmann**

Vice President of Regulatory Affairs CTIA - The Wireless Association

#### **Heather Burnett Gold**

President and CEO
Fiber to the Home Council Americas

<sup>&</sup>lt;sup>36</sup> See Congressional Research Service, Federal Land Ownership: Overview and Data (Feb. 8, 2012) (online at https://fas.org/sgp/crs/misc/R42346.pdf).

 $<sup>^{37}</sup>$  Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96,  $\S$  6409(c) (2012).

<sup>&</sup>lt;sup>38</sup> *Id.* at § 6409(b)(2); *see also* § 6409(c)(3).

<sup>&</sup>lt;sup>39</sup> *Id.* at § 6409(c)(1).

<sup>&</sup>lt;sup>40</sup> *Id.* at § 6409(b)(3).

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