



July 13, 2018

TO: Members, Subcommittee on Communications and Technology

FROM: Committee Majority Staff

RE: Hearing entitled “Realizing the Benefits of Rural Broadband: Challenges and Solutions.”

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## **I. INTRODUCTION**

The Subcommittee on Communications and Technology will hold a hearing on Tuesday, July 17, 2018, at 10:00 a.m. in 2123 Rayburn House Office Building. The hearing is entitled “Realizing the Benefits of Rural Broadband: Challenges and Solutions.”

## **II. WITNESSES**

- Mr. Justin Forde, Senior Director of Government Relations, Midco;
- Mr. Tom Stroup, President, Satellite Industry Association;
- Mr. John C. May, President, Ag Solutions and Chief Information Officer, Deere & Company;
- Jenni Word, RN, Associate Administrator and Chief Nursing Officer, Wallowa Memorial Hospital;
- Mr. Claude Aiken, President & CEO, Wireless Internet Service Providers Association; and,
- Ms. Suzanne Coker Craig, Former Commissioner, Town of Pinetops, Managing Partner, CuriosiTeens of Pinetops.

## **III. BACKGROUND**

High speed internet access, referred to as broadband, can be delivered through a variety of technologies, including fiber, coaxial cable, mobile or fixed wireless, satellite, or any combination thereof. Expanding broadband access and deployment, particularly in rural America, is a top priority for the Subcommittee to ensure its benefits are enjoyed by all Americans. The broadband industry is estimated to have invested \$1.6 trillion in private capital

since 1996.<sup>1</sup> This investment accounts for, in part, why broadband has revolutionized the way Americans communicate, conduct commerce, and participate in government.

Despite significant private sector investment, rural areas are still struggling to get reliable broadband access. It is estimated that 30.7 percent of Americans in rural areas lack access to fixed terrestrial broadband, as compared to 2.1 percent of those in urban areas.<sup>2</sup> The economics of providing broadband to rural areas are challenging given the vast distances, sparse populations, and often difficult topography. It is in these situations that federal programs are necessary to help close the digital divide.

There is overwhelming bipartisan agreement on the benefits of broadband technology and the urgent need to support its deployment in areas of the country that struggle to get reliable access. In March 2018, Congress passed RAY BAUM'S Act as Division P of the Consolidated Appropriations Act for Fiscal Year 2018 (FY18) (P.L. 115-141). A number of provisions included in RAY BAUM'S Act, as well as the broader FY18 funding measure, were based on stand-alone bills introduced by bipartisan members of the Communications and Technology Subcommittee, and members of the Energy and Commerce Committee more broadly.

This hearing will examine the accomplishments of the Subcommittee as it relates to rural broadband promotion and consider additional steps that may be taken to further close the digital divide.

#### **IV. CONGRESSIONAL EFFORTS TO INCENTIVIZE RURAL BROADBAND DEPLOYMENT**

Congress plays a key role in broadband policy, and the Subcommittee has focused on removing federal barriers to broadband deployment, increasing the amount of spectrum available for wireless broadband, and funding key initiatives through appropriate federal agencies.

On January 30, 2018, the Subcommittee held a hearing on 25 broadband infrastructure solutions.<sup>3</sup> In March 2018, a significant number of individual bills were enacted as part of RAY BAUM'S Act.<sup>4</sup> The individual bills, or relevant portions of the individual bills, related to broadband infrastructure deployment, spectrum availability, and broadband funding.

##### *Infrastructure:*

1. H.R. 1546, Rural Wireless Access Act. Introduced by Representatives David Loebsack and Ryan Costello, provisions from this bill were included in Section 505 to direct the Federal Communications Commission (FCC) to establish consistent

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<sup>1</sup> US Telecom: The Broadband Association, "Broadband Investment," <https://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment>.

<sup>2</sup> 2018 Broadband Deployment Report, Federal Communications Commission, <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>, p. 26.

<sup>3</sup> <https://energycommerce.house.gov/hearings/closing-digital-divide-broadband-infrastructure-solutions/>

<sup>4</sup> P.L. 115-141

- methods of data collection for mobile data service so that mobile service coverage in rural areas can be accurately measured.<sup>5</sup>
2. H.R. 4795, Communications Facilities Deployment on Federal Property Act. Introduced by Representative Mimi Walters, provisions from this bill were included in Section 606 to update and streamline commercial broadband deployment on federal property.<sup>6</sup>
  3. H.R. 4798, Inventory of Assets for Communications Facilities Act, and H.R. 4839, the Broadband Infrastructure Inventory Act. Introduced by Representatives Chris Collins and Ben Ray Lujan, respectively, provisions from these bills were included in Section 608 to add the suitability of federal real property to support communications facilities to an existing database of federal assets.<sup>7</sup>
  4. H.R. 4800, Broadband Conduit Deployment Act. Introduced by Representatives Anna Eshoo and David McKinley, provisions from this bill were included in Section 607 to direct the Secretary of Transportation to promulgate regulations to facilitate the use of rights-of-way on federal-aid highways to accommodate broadband infrastructure.<sup>8</sup>
  5. H.R. 4847, Broadband Deployment Streamlining Act. Introduced by Representatives Susan Brooks and Doris Matsui, provisions from this bill were included in Section 606 to institute a 270-day shot clock for federal agencies to either grant or deny applications for commercial broadband facilities on federal property.<sup>9</sup>

*Spectrum:*

6. H.R. 1814, Rural Spectrum Accessibility Act. Introduced by Representatives Adam Kinzinger and David Loebsack, provisions from this bill were included in Section 616 to direct the FCC to initiate a rulemaking to assess the potential for spectrum license holders to break-up their licenses in geographic areas so the spectrum may be used more efficiently by smaller, rural wireless providers.<sup>10</sup>

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<sup>5</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 505, p. 747-748.

<sup>6</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 606, p. 754-755.

<sup>7</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 608, p. 758-760.

<sup>8</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 607, p. 757-758.

<sup>9</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 606, p. 754.

<sup>10</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 616, p. 763-764.

7. H.R. 3685, Radio Consumer Protection Act. Introduced by Representatives Bill Flores and Gene Green, provisions from this bill were included in title V of Division E to include payments to FM broadcast stations through the TV Broadcasters Relocation Fund. Ensuring a smooth transition to relocate TV and FM broadcasters is critical to making broadcast spectrum won at auction by wireless carriers available for wireless broadband in both urban and rural areas.<sup>11</sup>
8. H.R. 4109, Spectrum Auction Deposits Act. Introduced by Representatives Brett Guthrie and Doris Matsui, provisions from this bill were included in Section 101 to allow the FCC to deposit upfront payments from bidders in federal spectrum auctions directly with the United States Treasury. This section was crucial to permitting the FCC to conduct further spectrum auctions necessary for wireless broadband in both rural and urban areas.<sup>12</sup>

*Funding:*

9. Congress included \$1 billion over two years for the TV Broadcaster Relocation Fund in title V of Division E. This funding addressed the shortfall of funds to relocate displaced broadcasters following the successful broadcast incentive auction, which auctioned TV broadcast spectrum for wireless broadband. In addition to TV broadcasters, the law also set up relocation funds for translators, low-power television, and radio stations, as well as a consumer education fund. Ensuring all affected broadcasters can relocate is important to making auctioned spectrum available for wireless broadband in both rural and urban areas.<sup>13</sup>
10. Congress included \$7.5 million for the National Telecommunications and Information Administration (NTIA) to reconstitute its broadband mapping coordination efforts in title I of Division B. Representatives Bill Johnson and Brett Guthrie introduced H.R. 4810 to have NTIA coordinate broadband mapping efforts across the federal government. Accurate broadband maps are necessary to identify unserved areas that should be targeted for federal support.<sup>14</sup>
11. Congress included \$690 million for expansion of broadband through the U.S. Department of Agriculture (USDA)'s Rural Utilities Service. Of the total \$690 million, \$600 million is specifically dedicated to conduct a new broadband loan and grant pilot program.<sup>15</sup>

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<sup>11</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division E, Section 511, p. 217.

<sup>12</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division P, Section 101, p. 734.

<sup>13</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division E, Section 511, p. 216-219.

<sup>14</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division B, Title I, p. 56.

<sup>15</sup> Consolidated Appropriations Act, 2018, (P.L. 115-141) <https://www.gpo.gov/fdsys/pkg/BILLS-115hr1625enr/pdf/BILLS-115hr1625enr.pdf>, Division A, Sec. 779, p. 52.

*Additional Committee Proposals:*

12. H.R. 3994, Advancing Critical Connectivity Expands Service, Small Businesses Resources, Opportunities, Access, and Data Based on Assessed Need and Demand (ACCESS BROADBAND) Act. Introduced by Representatives Paul Tonko and Leonard Lance, this bill would establish an office of Internet Connectivity and Growth at NTIA to coordinate and track federal funding for broadband across all agencies. This office would streamline the process of applying for federal funding for projects that expand broadband access. This bill was approved by the Subcommittee on June 11, 2018, and approved by the full Committee on July 12, 2018.<sup>16</sup>
13. H.R. 4881, Precision Agriculture Connectivity Act. Introduced by Representatives Robert Latta and David Loebsack, this bill would require the FCC, in cooperation with USDA, to form a task force to evaluate the best ways to meet the broadband needs of precision agriculture in the United States. The task force would focus on identifying and measuring gaps in broadband coverage, developing policy recommendations to speed deployment, and promoting integration of emerging technologies, global positioning systems (GPS), and Internet access, to assist farmers and ranchers in gaining the most efficient use of their land. The bill was approved by the Subcommittee on June 11, 2018, and approved by the full Committee on July 12, 2018.<sup>17</sup>
14. DISCUSSION DRAFT, National Telecommunications and Information Administration Reauthorization Act of 2018. On June 26, 2018, the Subcommittee held a hearing on a discussion draft to reauthorize NTIA through 2021. NTIA is responsible for advising the President on telecommunications and information policy, and its programs focus on expanding broadband Internet access and adoption in America, expanding the use of spectrum, and ensuring the Internet remains an engine for continued economic growth and innovation. The discussion draft, among other provisions, reasserts NTIA's authority over broadband mapping and builds upon the funding included in Division B of P.L. 115-141 and incorporates the provisions of H.R. 3994 (ACCESS BROADBAND Act)
15. H.R. 2903, Rural Reasonable and Comparable Wireless Access Act. Introduced by Representatives David McKinley and Peter Welch, this bill would direct the FCC to promulgate rules that establish a national standard for determining whether rural areas have reasonably comparable wireless and broadband services to those in urban areas. On March 22, 2018, the Subcommittee held a hearing on H.R. 2903 and several other bills.<sup>18</sup>

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<sup>16</sup> <https://energycommerce.house.gov/markups/energy-and-commerce-committee-vote-on-h-r-959-h-r-1676-h-r-3728-h-r-5385-h-res-982-h-r-2278-h-r-2389-h-r-1320-h-r-6140h-r-6032-h-r-2345-h-r-3994h-r-4881-and-h-r-5709/>.

<sup>17</sup> <https://energycommerce.house.gov/markups/energy-and-commerce-committee-vote-on-h-r-959-h-r-1676-h-r-3728-h-r-5385-h-res-982-h-r-2278-h-r-2389-h-r-1320-h-r-6140h-r-6032-h-r-2345-h-r-3994h-r-4881-and-h-r-5709/>.

<sup>18</sup> See, <https://energycommerce.house.gov/hearings/legislative-hearing-four-communications-bills-2/>.

## V. EXISTING FEDERAL PROGRAMS TO ADDRESS THE DIGITAL DIVIDE

The federal government currently operates programs to support broadband expansion to unserved areas. These programs are generally concentrated at the FCC and the Rural Utilities Service (RUS).

### *Federal Communications Commission:*

The FCC manages the Universal Service Fund (USF) through the Universal Service Administrative Company (USAC), a non-profit corporation designated by the FCC to administer the nearly \$10 billion USF. USF is supported by fees on interstate and long-distance telecommunications companies. USAC collects the fees and uses them to support four programs under the direction of the Commission:<sup>19</sup>

- High-Cost Fund (also called the Connect America Fund): This program supported phone service in high cost, typically rural areas. In 2011, the Commission began a multi-year process of updating the legacy high-cost program from one that supports telephony to one that supports broadband. In 2017, USAC disbursed roughly \$4.67 billion in High-Cost support.<sup>20</sup> Just this month, the Commission began a competitive “reverse auction” that will provide nearly \$2 billion for rural broadband deployment over the next decade. Once that auction is complete, the Commission will commence another competitive auction in 2019 that will provide up to \$4.53 billion in universal service support over 10 years to bring 4G LTE to millions of unserved Americans.
- Rural Health Care (RHC) Program: This program provides support to eligible rural health care providers and skilled nursing facilities that qualify for reduced rates on broadband and telecommunications services. In 2017, USAC disbursed roughly \$261 million in support of the RHC Program.<sup>21</sup> In FY 2017, the total number of RHC funding requests increased by 21.2 percent over FY 2016.<sup>22</sup> Just last month, the FCC increased the annual cap on program spending to adjust for inflation, raising it by 43 percent, to \$571 million.<sup>23</sup>
- E-Rate Program (schools and libraries): The E-Rate program is not exclusively rural; the program provides any eligible school and library with discounts to defray the costs of broadband and telecommunications services, as well as internal equipment. In 2017,

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<sup>19</sup> See, <https://www.usac.org/sl/default.aspx>.

<sup>20</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 2.

<sup>21</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 2.

<sup>22</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 8.

<sup>23</sup> See, *In the Matter of Promoting Telehealth in Rural America*, Report and Order. (WC Docket No. 17-310), FCC 18-82. Adopted June 19, 2018.

USAC disbursed roughly \$2.62 billion in E-Rate support.<sup>24</sup> In 2017, E-Rate provided funding to more than 104,722 schools and 11,475 libraries.<sup>25</sup>

- Lifeline: The Lifeline program is not exclusively rural; the program provides support to telecommunications companies that offer discounted services to eligible, generally low-income subscribers. In 2017, USAC disbursed roughly \$1.27 billion in Lifeline program support.<sup>26</sup>

Additionally, on January 31, 2017, the Commission announced the formation of the Broadband Deployment Advisory Committee (BDAC), which provides advice and recommendations for the Commission on how to accelerate broadband deployment by reducing regulatory barriers to infrastructure investment. The BDAC is comprised of representatives from industry, academia, state government, and non-profit organizations.

### *Rural Utilities Service*

RUS administers programs that provide infrastructure support to rural communities through direct loans and loan guarantees, as well as grants. The RUS Telecommunications Program supports broadband access in rural areas, but its operations are not coordinated with the FCC's USF programs. RUS Telecommunications Program includes:

- Farm Bill Broadband Loans: This program provides direct loans and loan guarantees to assist the construction, improvement, or acquisition of broadband facilities in eligible rural areas. In FY18, an appropriation of \$5 million supported a \$29.8 million loan level.<sup>27</sup>
- Telecommunications Infrastructure Loans: This program provides direct loans and loan guarantees to assist the costs of construction, maintenance, improvement, and expansion of telephone service and broadband in extremely rural areas. In FY18, an appropriation of \$863 million supported a \$690 million loan level.<sup>28</sup>
- Community Connect Grants: This program provides grants for broadband deployment in rural communities where it is not economically viable for the private sector to deliver service. In FY18, this program was funded at roughly \$30 million.<sup>29</sup>

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<sup>24</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 2.

<sup>25</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 7.

<sup>26</sup> See, <https://www.usac.org/res/documents/about/pdf/annual-reports/usac-annual-report-2017.pdf>, p. 2.

<sup>27</sup> See Lennard Kruger, "Broadband Loan and Grant Programs in the USDA's Rural Utilities Service,"

Congressional Research Service. Available at:

<http://www.crs.gov/Reports/RL33816?source=search&guid=75c9f1b4b53544a48804e1cf37aa83cb&index=1>, and, 2019 President's Budget, Rural Utilities Service. Available at: <https://www.obpa.usda.gov/31rus2019notes.pdf>

<sup>28</sup> *Supra*, note 27

<sup>29</sup> *Supra*, note 27

- Distance Learning and Telemedicine: This program funds end-user equipment and broadband facilities to link teachers and medical service providers in one area to students and patients in another, respectively. In FY18, this program was funded at roughly \$29 million.<sup>30</sup>

Section 779 of the FY18 Consolidated Appropriations Act (P.L. 115-141) included \$600 million for RUS to conduct a “new broadband loan and grant pilot program.” This money is in addition to the funding for the programs listed immediately above. In addition, the 2018 Farm Bill is expected to reauthorize several of these programs. Provisions by Committee members to be considered for inclusion in the bill include:

- Representative Leonard Lance proposal to coordinate funds amongst the RUS, FCC, and NTIA, as well as assessment of bandwidth constraints on rural broadband providers;
- Representatives Robert Latta and David Loebsack proposal on technology and connectivity needs for precision agriculture (similar to their legislation which was also reported by this committee); and
- Representative Kevin Cramer proposal on preventing overbuilding or otherwise duplicating broadband-capable infrastructure so funding assistance is focused on unserved areas first.

## **VI. STAFF CONTACTS**

If you have any questions regarding this hearing, please contact Sean Farrell, Tim Kurth, or Robin Colwell of the Majority Committee staff at (202) 225-2927.

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<sup>30</sup> *Supra*, note 27