

Broadband Loan and Grant Programs in the USDA's Rural Utilities Service

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Summary

Given the large potential impact broadband access may have on the economic development of rural America, concern has been raised over a “digital divide” between rural and urban or suburban areas with respect to broadband deployment. While there are many examples of rural communities with state of the art telecommunications facilities, recent surveys and studies have indicated that, in general, rural areas tend to lag behind urban and suburban areas in broadband deployment.

According to the FCC’s *2018 Broadband Deployment Report*, 30.7% of Americans in rural areas and 35.4% of Americans in tribal lands lack access to fixed terrestrial 25 Mbps/3 Mbps broadband, as compared to 2.1% of Americans in urban areas. The comparatively lower population density of rural areas is likely a major reason why broadband is less deployed than in more highly populated suburban and urban areas. Particularly for wireline broadband technologies—such as cable modem and fiber—the greater the geographical distances among customers, the larger the cost to serve those customers. Also, the terrain of rural areas can be a hindrance; for example, it is more expensive to deploy broadband technologies in mountainous or heavily forested areas.

Citing the lagging deployment of broadband in many rural areas, Congress and the Administration acted in 2001 and 2002 to initiate pilot broadband loan and grant programs within the Rural Utilities Service (RUS) at the U.S. Department of Agriculture (USDA). Subsequently, Section 6103 of the Farm Security and Rural Investment Act of 2002 (P.L. 107-171) amended the Rural Electrification Act of 1936 to authorize a loan and loan guarantee program to provide funds for the costs of the construction, improvement, and acquisition of facilities and equipment for broadband service in eligible rural communities. The RUS/USDA houses two assistance programs exclusively created and dedicated to financing broadband deployment: the Rural Broadband Access Loan and Loan Guarantee Program and the Community Connect Grant Program. Additionally, the Telecommunications Infrastructure Loan and Loan Guarantee Program (previously the Telephone Loan Program) funds broadband deployment in rural areas. Distance Learning and Telemedicine (DLT) grants—while not supporting connectivity—fund equipment and software that operate via telecommunications to rural end-users of telemedicine and distance learning applications.

The Consolidated Appropriations Act, 2017 (P.L. 115-31) provided \$4.5 million to subsidize a broadband loan level of \$27.043 million, \$34.5 million to Community Connect broadband grants, \$26.6 million for DLT grants, and \$3.071 million in loan subsidies for a total loan level of \$690 million for the Telecommunications Infrastructure Loan Program.

In the 113th Congress, the 2014 farm bill (P.L. 113-79, the Agricultural Act of 2014) amended Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to reauthorize the Rural Broadband Access Loan and Loan Guarantee Program through FY2018. With the 2014 farm bill expiring on September 30, 2018, the 115th Congress is expected to consider reauthorization of the broadband loan program.

Contents

Background: Broadband and Rural America.....	1
Rural Broadband Programs at the Rural Utilities Service	2
Pilot Broadband Loan and Grant Programs	3
Rural Broadband Access Loan and Loan Guarantee Program	4
Community Connect Broadband Grants	6
Telecommunications Infrastructure Loans and Loan Guarantees	7
Distance Learning and Telemedicine Program	8
Impact of Universal Service Reform on RUS Broadband Loan Programs	8
Task Force on Agriculture and Rural Prosperity	9
Appropriations.....	10
FY2016.....	11
FY2017.....	11
FY2018.....	13
FY2019.....	15
Past Criticisms of RUS Broadband Programs	15
Loan Approval and Application Process	15
Eligibility Criteria	16
Loans to Communities With Existing Providers	17
Follow-Up Audit by USDA Office of Inspector General.....	18
2014 GAO Report	19
Broadband Loan Reauthorization: 2008 Farm Bill	19
Restricting Applicant Eligibility	19
Definition of “Rural Community”.....	20
Preexisting Broadband Service	20
Technological Neutrality	21
P.L. 110-246	21
Eligibility and Selection Criteria	22
Loans to Communities With Existing Providers.....	22
Financial Requirements	22
Loan Application Requirements	23
Other Provisions	23
Implementation of P.L. 110-246.....	24
Broadband Program Reauthorization: 2012 Farm Bill.....	24
Broadband Program Reauthorization: 2013 and 2014 Farm Bills.....	26
Senate Bill, S. 954.....	26
House Bill, H.R. 2642	29
P.L. 113-79, the Agricultural Act of 2014	29
Legislation in the 114 th Congress	31
Legislation in the 115 th Congress	33

Tables

Table 1. Appropriations Funding for the Rural Broadband Access Loan and Loan Guarantee Program	5
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Table 2. Appropriations for the Community Connect Broadband Grants	6
Table 3. Recent and Proposed Appropriations for RUS Broadband Programs	10
Table A-1. Rural Development Telecom Awards, FY2009-FY2016	35

Appendixes

Appendix.	35
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Contacts

Author Contact Information	36
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Background: Broadband and Rural America

The broadband loan and grant programs at RUS are intended to accelerate the deployment of broadband services in rural America. “Broadband” refers to high-speed internet access and advanced telecommunications services for private homes, commercial establishments, schools, and public institutions. Currently in the United States, residential broadband is primarily provided via cable modem (from the local provider of cable television service), fiber-optic cable, mobile wireless (e.g., smartphones), or over the copper telephone line (digital subscriber line or “DSL”). Other broadband technologies include fixed wireless and satellite.

Broadband access enables a number of beneficial applications to individual users and to communities. These include ecommerce, telecommuting, voice service (voice over the internet protocol or “VOIP”), distance learning, telemedicine, public safety, and others. It is becoming generally accepted that broadband access in a community can play an important role in economic development.

Access to affordable broadband is viewed as particularly important for the economic development of rural areas because it enables individuals and businesses to participate fully in the online economy regardless of geographical location. For example, aside from enabling existing businesses to remain in their rural locations, broadband access could attract new business enterprises drawn by lower costs and a more desirable lifestyle. Essentially, broadband potentially allows businesses and individuals in rural America to live locally while competing globally in an online environment. A 2016 study from the Hudson Institute found that rural broadband providers directly and indirectly added \$24.1 billion to the U.S. economy in 2015. The rural broadband industry supported 69,595 jobs in 2015, both through its own employment and the employment that its purchases of goods and services generated.¹

Given the large potential impact broadband may have on the economic development of rural America, concern has been raised over a “digital divide” between rural and urban or suburban areas with respect to broadband deployment. While there are many examples of rural communities with state of the art telecommunications facilities,² recent surveys and studies have indicated that, in general, rural areas tend to lag behind urban and suburban areas in broadband deployment. For example:

- According to the FCC’s *2018 Broadband Deployment Report*, “the gap in rural and Tribal America remains notable: 30.7 percent of Americans in rural areas and 35.4 percent of Americans in Tribal lands lack access to fixed terrestrial 25 Mbps/3 Mbps broadband, as compared to only 2.1 percent of Americans in urban areas.”³

¹ Hanns Kuttner, Hudson Institute, *The Economic Impact of Rural Broadband*, April 2016, available at <https://s3.amazonaws.com/media.hudson.org/files/publications/20160419KuttnerTheEconomicImpactofRuralBroadband.pdf>.

² See for example, National Exchange Carrier Association (NECA), *Trends: A Report on Rural Telecom Technology*, 18 pages, December 2015, available at <https://www.neca.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=12331&libID=12351>.

³ Federal Communications Commission, *2018 Broadband Deployment Report*, In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket no. 17-199, FCC 18-10, adopted and released February 2, 2018, p. 22, available at <https://www.fcc.gov/document/fcc-releases-2018-broadband-deployment-report>.

- Also according to the FCC's *2018 Broadband Deployment Report*, "Rural and Tribal areas continue to lag behind urban areas in mobile broadband deployment. Although evaluated urban areas saw an increase of 10 Mbps/3 Mbps mobile LTE from 81.9% in 2014 to 90.5% in 2016, such deployment in evaluated rural and Tribal areas remained flat at about 70% and 64%, respectively. Approximately 14 million rural Americans and 1.2 million Americans living on Tribal lands still lack mobile LTE broadband at speeds of 10 Mbps/3 Mbps."⁴
- According to 2016 survey data from the Pew Research Center, 63% of adults in rural areas said they have a high-speed broadband connection at home, as opposed to 73% of adults in urban areas and 76% of adults in suburban areas.⁵
- The National Telecommunications and Information Administration (NTIA) Computer and internet Use Supplement to the Census Bureau's Current Population Survey found that a rural/urban gap remained in 2015, with 69% of rural residents reporting using the internet, versus 75% of urban residents. According to NTIA, the data "indicates a fairly constant 6-9 percentage point gap between rural and urban communities' Internet use over time."⁶

The comparatively lower population density of rural areas is likely the major reason why broadband is less deployed than in more highly populated suburban and urban areas. Particularly for wireline broadband technologies—such as cable modem, fiber, and DSL—the greater the geographical distances among customers, the larger the cost to serve those customers. Thus, there is often less incentive for companies to invest in broadband in rural areas than, for example, in an urban area where there is more demand (more customers with perhaps higher incomes) and less cost to wire the market area.

The terrain of rural areas can also be a hindrance, in that it is more expensive to deploy broadband technologies in a mountainous or heavily forested area. An additional added cost factor for remote areas can be the expense of "backhaul" (e.g., the "middle mile"), which refers to the installation of a dedicated line that transmits a signal to and from an internet backbone, which is typically located in or near an urban area.

Another important broadband availability issue is the extent to which there are multiple broadband providers offering competition and consumer choice. Typically, multiple providers are more prevalent in urban than in rural areas.⁷

Rural Broadband Programs at the Rural Utilities Service

Because private providers are unlikely to earn enough revenue to cover the costs of deploying and operating broadband networks in many unserved rural areas, it is unlikely that private investment

⁴ FCC summary of *2018 Broadband Deployment Report*, February 2, 2018, available at <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>.

⁵ Pew Research Center, *Digital Gap Between Rural and Nonrural America Persists*, May 19, 2017, available at <http://www.pewresearch.org/fact-tank/2017/05/19/digital-gap-between-rural-and-nonrural-america-persists/>.

⁶ U.S. Department of Commerce, National Telecommunications and Information Administration, "The State of the Urban/Rural Digital Divide," August 10, 2016, available at <https://www.ntia.doc.gov/blog/2016/state-urbanrural-digital-divide>.

⁷ See Table 2 in CRS In Focus IF10441, *Broadband Deployment: Status and Federal Programs*, by Lennard G. Kruger.

alone will bring service to these areas.⁸ To fill this gap, federal programs have been established to incentivize and subsidize broadband infrastructure investment in unserved and underserved rural areas. Programs at the RUS include

- *Farm Bill Broadband Loans*—funds the costs of construction, improvement, or acquisition of facilities and equipment needed to provide service in eligible rural areas.
- *Telecommunications Infrastructure Loans*—funds the construction, maintenance, improvement, and expansion of telephone service and broadband in extremely rural areas with a population of 5,000 or less.
- *Community Connect Grants*—funds broadband deployment into rural communities where it is not yet economically viable for private sector providers to deliver service.
- *Distance Learning and Telemedicine Grants*—funds end-user equipment to help rural communities use telecommunications to link teachers and medical service providers in one area to students and patients in another.

Table A-1 in the Appendix shows the total amount and number of awards provided by the RUS broadband programs for each state between FY2009 and FY2016.

In its April 2017 report, *Rural Broadband Deployment: Improved Consistency with Leading Practices Could Enhance Management of Loan and Grant Programs*, GAO reported that (according to RUS data) since FY2004, RUS has approved 704 broadband projects totaling almost \$8.6 billion in loans and \$144.8 million in grants to deploy telecommunications or broadband infrastructure networks in rural areas.⁹

Pilot Broadband Loan and Grant Programs

Given the lagging deployment of broadband in rural areas, Congress and the Administration acted to initiate pilot broadband loan and grant programs within the Rural Utilities Service of the U.S. Department of Agriculture. While RUS had long maintained telecommunications loan and grant programs (Rural Telephone Loans and Loan Guarantees, Rural Telephone Bank, and more recently, the Distance Learning and Telemedicine Loans and Grants) none were exclusively dedicated to financing rural broadband deployment. Title III of the FY2001 agriculture appropriations bill (P.L. 106-387) directed USDA/RUS to conduct a “pilot program to finance broadband transmission and local dial-up Internet service in areas that meet the definition of ‘rural area’ used for the Distance Learning and Telemedicine Program.”

Subsequently, on December 5, 2000, RUS announced the availability of \$100 million in loan funding through a one-year pilot program “to finance the construction and installation of broadband telecommunications services in rural America.”¹⁰ The broadband pilot loan program was authorized under the authority of the Distance Learning and Telemedicine Program (7 U.S.C.

⁸ Government Accountability Office, *Projects and Policies Related to Deploying Broadband in Unserved and Underserved Areas*, GAO-14-409, April 2014, p. 9, available at <http://www.gao.gov/assets/670/662711.pdf>.

⁹ Government Accountability Office, *Rural Broadband Deployment: Improved Consistency with Leading Practices Could Enhance Management of Loan and Grant Program*, GAO-17-301, April 2017, p. 2, available at <https://www.gao.gov/assets/690/684093.pdf>.

¹⁰ Rural Utilities Service, USDA, “Construction and Installation of Broadband Telecommunications Services in Rural America; Availability of Loan Funds,” *Federal Register*, Vol. 65, No. 234, December 5, 2000, p. 75920.

950aaa), and was available to “legally organized entities” not located within the boundaries of a city or town having a population in excess of 20,000.

The FY2001 pilot broadband loan program received applications requesting a total of \$350 million. RUS approved funding for 12 applications totaling \$100 million. The FY2002 agriculture appropriations bill (P.L. 107-76) designated a loan level of \$80 million for broadband loans, and on January 23, 2002, RUS announced that the pilot program would be extended into FY2002, with \$80 million in loans made available to fund many of the applications that did not receive funding during the previous year.¹¹

Meanwhile, the FY2002 agriculture appropriations bill (P.L. 107-76) allocated \$20 million for a pilot broadband grant program, also authorized under the Distance Learning and Telemedicine Program. On July 8, 2002, RUS announced the availability of \$20 million for a pilot grant program for the provision of broadband service in rural America. The program was specifically targeted to economically challenged rural communities with no existing broadband service. Grants were made available to entities providing “community-oriented connectivity,” which the RUS defined as those entities “who will connect the critical community facilities including the local schools, libraries, hospitals, police, fire and rescue services and who will operate a community center that provides free and open access to residents.”¹²

In response to the July 8, 2002, Notice of Funds Availability, RUS received more than 300 applications totaling more than \$185 million in requested grant funding. RUS approved 40 grants totaling \$20 million. The pilot program was extended into FY2003, as the Consolidated Appropriations Resolution of 2003 (P.L. 108-7) allocated \$10 million for broadband grants. On September 24, 2003, 34 grants were awarded to eligible applicants who did not receive funding during the previous year.

Rural Broadband Access Loan and Loan Guarantee Program

Building on the pilot broadband loan program at RUS, Section 6103 of the Farm Security and Rural Investment Act of 2002 (P.L. 107-171) amended the Rural Electrification Act of 1936 to authorize a loan and loan guarantee program to provide funds for the costs of the construction, improvement, and acquisition of facilities and equipment for broadband service in eligible rural communities.¹³ Section 6103 made available, from the funds of the Commodity Credit Corporation (CCC), a total of \$100 million through FY2007. P.L. 107-171 also authorized any other funds appropriated for the broadband loan program. The program was subsequently reauthorized by Section 6110 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246), and by Section 6104 of the Agricultural Act of 2014 (P.L. 113-79).

Beginning in FY2004, Congress annually blocked mandatory funding from the CCC. Thus—starting in FY2004—the program was funded as part of annual appropriations in the Distance Learning and Telemedicine account within the Department of Agriculture appropriations bill. Every fiscal year, Congress approves an appropriation (loan subsidy) and a specific loan level (lending authority) for the Rural Broadband Access Loan and Loan Guarantee Program. **Table 1**

¹¹ Rural Utilities Service, USDA, “Broadband Pilot Loan Program,” *Federal Register*, Vol. 67, No. 15, January 23, 2002, p. 3140.

¹² Rural Utilities Service, USDA, “Broadband Pilot Grant Program,” *Federal Register*, Vol. 67, No. 130, July 8, 2002, p. 45080.

¹³ Title VI of the Rural Electrification Act of 1936 (7 U.S.C. 950bb).

shows—for the life of the program to date—loan subsidies and loan levels (lending authority) set by Congress in annual appropriations bills.

Table I. Appropriations Funding for the Rural Broadband Access Loan and Loan Guarantee Program

	Direct Appropriations (subsidy level)	Loan Levels Estimated in Annual Appropriations ^a
FY2001 (pilot)	—	\$100 million
FY2002 (pilot)	—	\$80 million
FY2003	^b	\$80 million
FY2004	\$13.1 million	\$602 million
FY2005	\$11.715 million	\$550 million
FY2006	\$10.75 million	\$500 million
FY2007	\$10.75 million	\$500 million
FY2008	\$6.45 million	\$300 million
FY2009	\$15.619 million	\$400 million
FY2010	\$28.96 million	\$400 million
FY2011	\$22.32 million	\$400 million
FY2012	\$6.0 million	\$212 million
FY2013	\$4 million	\$42 million
FY2014	\$4.5 million	\$34.5 million
FY2015	\$4.5 million	\$24.1 million
FY2016	\$4.5 million	\$20.6 million
FY2017	\$4.5 million	\$27.0 million

Source: Compiled by CRS from appropriations bills.

- a. Actual loan levels for a fiscal year can vary from what is estimated in annual appropriations bill.
- b. Program received \$40 million composed of \$20 million from FY2002 plus \$20 million from FY2003 of mandatory funding from the Commodity Credit Corporation, as directed by P.L. 107-171. In the FY2004, FY2005, and FY2006 appropriations bills, mandatory funding from the CCC was canceled.

The Rural Broadband Access Loan and Loan Guarantee Program is codified as 7 U.S.C. 950bb. On July 30, 2015, the RUS published in the *Federal Register* the Interim rule (7 C.F.R. part 1738) implementing the Rural Broadband Access Loan and Loan Guarantee Program as reauthorized by the enactment of the Agricultural Act of 2014 (P.L. 113-79),¹⁴ and the interim rule was made final on June 9, 2016. There are a minimum of two application periods per year. Entities eligible to receive loans include corporations, limited liability companies, cooperative or mutual organizations, Indian tribes or tribal organizations, and state or local governments. Eligible areas for funding must be completely contained within a rural area (or composed of multiple rural areas). Additionally, at least 15% of the households in the proposed funded service areas must be unserved, no part of the proposed service area can have three or more incumbent service providers, and no part of the proposed service area can overlap with the service area of current RUS borrowers or of grantees that were funded by RUS.

¹⁴ Department of Agriculture, Rural Utilities Service, “Rural Broadband Access Loans and Loan Guarantees,” Interim rule, 80 *Federal Register* 45397-45413, July 30, 2015, available at http://www.rd.usda.gov/files/UTP_BBInterimRule.pdf.

The latest application period ran between July 25 and September 30, 2017, with the program setting its definition of minimum broadband speed at 25 Mbps down and 3 Mbps up for both mobile and fixed services.¹⁵ For the latest application information, see <http://www.rd.usda.gov/programs-services/farm-bill-broadband-loans-loan-guarantees>.

Community Connect Broadband Grants

The Consolidated Appropriations Act of 2004 (P.L. 108-199) appropriated \$9 million “for a grant program to finance broadband transmission in rural areas eligible for Distance Learning and Telemedicine Program benefits authorized by 7 U.S.C. 950aaa.” Essentially operating the same as the pilot broadband grants, the program provides grant money to applicants proposing to provide broadband on a “community-oriented connectivity” basis to currently unserved rural areas for the purpose of fostering economic growth and delivering enhanced health care, education, and public safety services. Funding for the broadband grant program is provided through annual appropriations in the Distance Learning and Telemedicine account within the Department of Agriculture appropriations bill. **Table 2** shows a history of appropriations for the Community Connect Broadband Grants.

Table 2. Appropriations for the Community Connect Broadband Grants

Fiscal Year	Appropriation
FY2002	\$20 million
FY2003	\$10 million
FY2004	\$9 million
FY2005	\$9 million
FY2006	\$9 million
FY2007	\$9 million
FY2008	\$13.4 million
FY2009	\$13.4 million
FY2010	\$17.9 million
FY2011	\$13.4 million
FY2012	\$10.4 million
FY2013	\$10.4 million
FY2014	\$10.4 million
FY2015	\$10.4 million
FY2016	\$10.4 million
FY2017	\$34.5 million

Source: Compiled by CRS from appropriations bills.

Eligible applicants for broadband grants include most state and local governments, federally recognized tribes, nonprofits, and for-profit corporations.

¹⁵ Department of Agriculture, Rural Utilities Service, “Rural Broadband Access Loan and Loan Guarantees Program,” Notice of Funds Availability (NOFA), 82 *Federal Register* 34473-34475, July 25, 2017, available at <https://www.gpo.gov/fdsys/pkg/FR-2017-07-25/pdf/2017-15497.pdf>.

Funded projects must serve a rural area where broadband service above a specified minimum speed does not exist, deploy free broadband service for at least two years to all community facilities, and offer broadband to residential and business customers. Up to 10% of the grant may be used for the improvement, expansion, construction, or acquisition of a community center that provides online access to the public.

On May 3, 2013, RUS issued a new final rule for Community Connect grants in the *Federal Register*.¹⁶ The final rule changes previous requirements related to matching funds, eligible communities, and application scoring criteria. The final rule also removes the previous definition of broadband service speed (200 kbps). A new threshold for broadband service speed and broadband grant speed (the speed the grantee must deliver) will be provided in an annual Notice of Funding Availability (NOFA) in the *Federal Register*. The NOFA will also specify the deadline for applications, the total amount of funding available, and the maximum and minimum amount of funding available for each grant.

On January 10, 2017, RUS issued a Notice of Solicitation of Applications (NOSA) establishing an application window for FY2017 Community Connect grants through March 13, 2017.¹⁷ The NOSA maintained the minimum threshold for speeds constituting broadband service at 4 Mbps download and 1 Mbps upload for both fixed and mobile broadband. The minimum broadband speed that an applicant must propose to deliver is 10 Mbps download, 1 Mbps upload for both fixed and mobile service to the customer. Further information, including application materials and guidelines, is available at <http://www.rd.usda.gov/programs-services/community-connect-grants>.

Telecommunications Infrastructure Loans and Loan Guarantees

The Telecommunications Infrastructure Loan and Loan Guarantee Program¹⁸ provides loans and loan guarantees for the construction, maintenance, improvement, and expansion of telephone service and broadband in rural areas. The program was first authorized in 1949 to finance rural telephone service. Since 1995, RUS has required that networks funded by this program offer broadband service as well.

Loans and loan guarantees are available only to rural areas and towns with a population of 5,000 or less. Also, the program cannot fund networks that duplicate similar services in the same area.

The program is authorized to provide several different types of financing, including

- direct Treasury rate loans, which bear interest at the government's cost of money (or the current Treasury rate). Thus, the interest charged varies with the Treasury rate. As Treasury rates increase, so does the cost to the borrower for these loans.
- guaranteed loans, which are provided to borrowers of a nongovernment lender or from the Federal Financing Bank (FFB). The interest rate charged on FFB loans is the Treasury rate plus an administrative fee of one-eighth of 1%. The terms of these loans may vary significantly and allow borrowers more flexibility in meeting their financing needs.

¹⁶ Department of Agriculture, Rural Utilities Service, "Community Connect Broadband Grant Program," 78 *Federal Register* 25787-25795, May 3, 2013, available at <http://www.gpo.gov/fdsys/pkg/FR-2013-05-03/pdf/2013-10502.pdf>.

¹⁷ Department of Agriculture, Rural Utilities Service, "Announcement of Grant Application Deadlines and Funding Levels," Notice of Solicitation of Applications (NOSA), 82 *Federal Register* 2940-2945, January 10, 2017, available at <https://www.gpo.gov/fdsys/pkg/FR-2017-01-10/pdf/2017-00194.pdf>.

¹⁸ For more information, see <http://www.rd.usda.gov/programs-services/telecommunications-infrastructure-loans-loan-guarantees>.

- hardship direct loans, which bear interest at a fixed rate of 5% per year. These loans are intended only for borrowers with extremely high investment costs in terms of per subscriber service. These borrowers also have a very low number of subscribers for each mile of telecommunications line constructed. This low subscriber density inherently increases the cost to serve the most sparsely populated rural areas. Because of the high cost of the investment needed, these borrowers cannot typically afford higher interest rate loans.¹⁹

The annual loan level for the Telecommunications Infrastructure Loan and Loan Guarantee Program is \$690 million. Currently, the 5% hardship loans are not offered—because of low interest rates, the Treasury and FFB loans can currently offer lower interest rates than the 5% offered by hardship loans.

Distance Learning and Telemedicine Program

The Distance Learning and Telemedicine (DLT) Program was established by the 1996 farm bill—the Federal Agriculture Improvement and Reform Act of 1996 (P.L. 104-127). Though initially providing both grants and loans, since FY2009 only DLT grants have been awarded by RUS.

DLT grants serve as initial capital assets for equipment and software that operate via telecommunications to rural end-users of telemedicine and distance learning. DLT grants do not support connectivity. Grant funds may be used for audio, video, and interactive video equipment; terminal and data terminal equipment; computer hardware, network components, and software; inside wiring and similar infrastructure; acquisition of instructional programming; and technical assistance. Eligible applicants include most entities in rural areas that provide education or health care through telecommunications, including most state and local governmental entities, federally recognized tribes, nonprofits, for-profit businesses, and consortia of eligible entities.

Impact of Universal Service Reform on RUS Broadband Loan Programs

RUS currently has three programs that provide or have provided loans for broadband infrastructure projects: the Rural Broadband Access Loan and Loan Guarantee program (also known as the Farm Bill broadband loan program), the Broadband Initiatives Program (BIP under the ARRA), and the Telecommunications Infrastructure Loan Program (established in 1949 as the Rural Telephone Loan and Loan Guarantee program).²⁰

Whereas RUS broadband loans are used as up-front capital to invest in broadband infrastructure, the Federal Communications Commission's (FCC's) Universal Service Fund (USF)—specifically, the high cost fund—has functioned as an ongoing subsidy to keep the operation of telecommunications networks in high cost areas profitable for providers. Many RUS telecommunications and broadband borrowers (loan recipients) receive high cost USF subsidies. In many cases, the subsidy received from USF helps provide the revenue necessary to keep the loan viable. The Telecommunications Infrastructure Loan Program is highly dependent on high

¹⁹ 2017 USDA Budget Explanatory Notes for Committee on Appropriations, p. 31-2, available at <http://www.obpa.usda.gov/31rus2017notes.pdf>.

²⁰ For more information on the RUS portfolio of telecommunications and broadband programs offering loans, loan guarantees, grants, and loan/grant combinations, see CRS Report R42524, *Rural Broadband: The Roles of the Rural Utilities Service and the Universal Service Fund*, by Angele A. Gilroy and Lennard G. Kruger.

cost USF revenues, with 99% (476 out of 480 borrowers) receiving interstate high cost USF support. This is not surprising, given that the RUS Telecommunications Infrastructure Loans are available only to the most rural and high cost areas (towns with populations less than 5,000). Regarding broadband loans, 60% of BIP (stimulus) borrowers draw from state or interstate USF support mechanisms, while 10% of Farm Bill (Rural Broadband Access Loan and Loan Guarantee Program) broadband borrowers receive interstate high cost USF support.²¹

The FCC, in an October 2011 decision, adopted an order that calls for the USF to be transformed, in stages, over a multiyear period—from a mechanism to support voice telephone service to one that supports the deployment, adoption, and use of both fixed and mobile broadband. More specifically, the high cost program is being phased out and a new fund, the Connect America Fund (CAF), which includes the targeted Mobility Fund and new Remote Areas Fund, is replacing it.²²

During this transition, the uncertainty surrounding the FCC's proposed methodology for distributing Connect America Fund monies has led many small rural providers to postpone or cancel investment in broadband network upgrades.²³ According to RUS, “demand for RUS loans dropped to roughly 37% of the total amount of loan funds appropriated by Congress in FY2012,” and that “[c]urrent and prospective RUS borrowers have communicated their hesitation to increase their outstanding debt and move forward with planned construction due to the recently implemented reductions in USF support and Inter-Carrier Compensation (ICC) payments.”²⁴

Task Force on Agriculture and Rural Prosperity

The Interagency Task Force on Agriculture and Rural Prosperity was created on April 25, 2017, by Executive Order 13790 and was charged with identifying legislative, regulatory, and policy changes to promote agriculture, economic development, job growth, infrastructure improvements, technological innovation, energy security, and quality of life in rural America. The first recommendation of the Task Force's report to the President is to expand e-connectivity in rural and tribal areas.²⁵

To help implement this recommendation, the Administration is requesting \$500 million in a discretionary add-on to the FY2018 appropriation which would fund a combination grant/loan program at USDA/RUS to deploy broadband in rural and tribal areas. The Administration is also

²¹ Jessica Zufolo, Deputy Administrator, RUS, *Overview of the RUS Telecommunications Loan and Grant Programs*, July 2011, Slide 7, http://www.narucmeetings.org/Presentations/Zufolo_7-2011.pdf.

²² For more information, see CRS Report R42524, *Rural Broadband: The Roles of the Rural Utilities Service and the Universal Service Fund*, by Angele A. Gilroy and Lennard G. Kruger.

²³ According to a January 2013 survey conducted by NTCA—The Rural Broadband Association, 69% of member companies responding to the survey had either cancelled or postponed \$492.7 million in broadband investments due to the uncertainty surrounding the transition to the FCC's Connect America Fund. See NTCA—The Rural Broadband Association, *Survey: FCC USF/ICC Impacts*, January 2013, available at http://www.ntca.org/images/stories/Documents/Advocacy/SurveyReports/FCC_USF_ICC_ImpactSurvey.pdf.

²⁴ Letter from RUS to the FCC, February 13, 2013, available at <https://prodnet.www.neca.org/publicationsdocs/wwpdf/21513usda.pdf>.

²⁵ U.S. Department of Agriculture, Agriculture and Rural Prosperity Task Force, Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity, October 21, 2017, pp. 17-20, available at <https://www.usda.gov/sites/default/files/documents/rural-prosperity-report.pdf>. The Task Force recommended that the Administration establish executive leadership to expand e-connectivity across rural America, assess the state of rural e-connectivity, reduce regulatory barriers to infrastructure deployment, assess the efficacy of current programs, and incentivize private capital investment.

requesting \$50 million for the National Telecommunications and Information Administration (NTIA) at the Department of Commerce to conduct an assessment, within 12 months, of the current state of broadband access nationwide, including identification of existing infrastructure, gaps, and opportunities for more efficient deployment. This information is intended to help RUS and other federal agencies more effectively target funding to areas where it will have the greatest impact.

Appropriations

The Rural Broadband Access Loan and Loan Guarantee Program, the Community Connect Grant Program, the Telecommunications Infrastructure Loan and Loan Guarantee program, and the Distance Learning and Telemedicine grant program are funded through the annual Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act. The appropriation provided to the rural broadband loan program is a loan subsidy which supports a significantly higher loan level. **Table 3** shows recent and proposed appropriations for the broadband loan program, the Community Connect grant program, the DLT grant program, and Telecommunications Infrastructure loans.

The Telecommunications Loan program has, for the most part, been self-sustaining, and set at an annual loan level of \$690 million with typically little or no annual appropriation or budget authority required to subsidize the loans.

Table 3. Recent and Proposed Appropriations for RUS Broadband Programs
(dollars)

	FY2017 (Admin. Request)	FY2017 (P.L. 115- 31)	FY2018 (Admin. Request)	FY2018 (H.Rept. 115-232)	FY2018 (S.Rept. 115-131)	FY2019 (Admin. Request)
Broadband Loans	0	4.5 million (27 million loan level)	4.5 million (27 million loan level)	4.5 million (27 million loan level)	4.5 million (27 million loan level)	4.5 million (23.1 million loan level)
Telecom Infrastructure Loans	3 million (690 million loan level)	3 million (690 million loan level)	0.863 million (690 million loan level)	0.863 million (690 million loan level)	0.863 million (690 million loan level)	0.863 million (690 million loan level)
Community Connect Grants	39 million	34.5 million	a	b	30 million	30 million
DLT Grants	35 million	26.6 million	a	b	26.6 million	23.6 million

Source: CRS, based on congressional budget documents.

- a. Transferred to the new \$162 million Rural Economic Infrastructure Program account, along with Community Facilities grants and Home Repair grants. Under proposal, USDA would have flexibility to allocate resources where significant impact can be made for economic infrastructure development.
- b. The House Appropriations Committee bill would provide \$122.7 million to the new Rural Economic Infrastructure Program Account, which would include Community Connect and DLT grants. The bill includes language requiring at least 15% of resources (\$18.4 million) be allocated to each program area within the account.

FY2016

The Administration's FY2016 budget proposal requested \$9.675 million to subsidize a broadband loan level of \$44.239 million. For the Community Connect grant program, the Administration requested \$20.372 million, which is about double the FY2015 level.

On July 14, 2015, the House Appropriations Committee approved the FY2016 Agriculture Appropriations Act (H.R. 3049, H.Rept. 114-205). The bill provided \$5.265 million to subsidize a loan level of \$24.077 million for the broadband loan program, and \$10.372 million for the Community Connect grant program. According to the bill report, priority for the broadband loan program is to promote broadband availability in those areas where there is not otherwise a business case for private investment in a broadband network. RUS is directed to focus on projects that bring broadband service to currently unserved households. Additionally, the committee noted that tribal communities continue to struggle with gaining access to broadband. USDA is encouraged to provide a report that identifies the specific challenges Indian Tribal Organizations (ITOs) have in gaining access to broadband and to provide a plan for addressing these challenges, including how the Community Connect program can assist ITOs.

On July 16, 2015, the Senate Appropriations Committee approved its version of the FY2016 Agriculture Appropriations Act (S. 1800; S.Rept. 114-82). The bill provided \$4.5 million to subsidize a loan level of \$20.576 million for the broadband loan program, and \$10.372 million for the Community Connect grant program. The committee recommended that the broadband loan program promote broadband availability in those areas where there is not otherwise a business case for private investment in a broadband network, and encouraged RUS to focus on projects that bring broadband service to currently unserved households. Additionally, the committee directed USDA to expedite implementation of the broadband provisions of the Agricultural Act of 2014, including the new authority to increase the minimum speeds available in rural communities. The committee also directed RUS and the FCC to coordinate on major policy decisions such as the FCC reforms of its universal service program (Connect America Fund).

The Consolidated Appropriations Act, 2016 (P.L. 114-113) provided \$4.5 million to subsidize a broadband loan level of \$20.576 million, and \$10.372 million to Community Connect broadband grants.

FY2017

The Administration's FY2017 budget proposal requested zero funding for the broadband loan program and \$39.492 million for the Community Connect broadband grant program. In the FY2017 budget justification, RUS stated that the budget request "shifts resources to the broadband grant program and the Distance Learning and Telemedicine grant program."²⁶ In 2017, RUS will focus its resources on the Broadband Opportunity Council (BOC) recommendation for a regulation rewrite of the traditional Telecommunications Loan Program to expand eligibility to allow applicants that would have been eligible for the broadband program to be eligible for this program. Currently the Telecommunications Loan program (formerly the Telephone Loan program dating back to 1949) maintains an annual loan level of \$690 million, and is only available to communities with populations of 5,000 or less.

²⁶ 2017 USDA Budget Explanatory Notes for Committee on Appropriations, p. 31-34, available at <http://www.obpa.usda.gov/31rus2017notes.pdf>.

According to RUS, funds for the broadband loan program will continue to provide loans in 2015 and 2016 for the costs of construction, improvement, and acquisition of facilities and equipment to provide broadband service to eligible rural communities. The funding in 2016 will provide for approximately three loans for the deployment of broadband infrastructure. No carryover funds will be available for 2017.

The FY2017 request of \$39.492 million for the Community Connect broadband grant program is almost four times the FY2016 level. According to RUS, funding will support approximately 7 broadband grants in 2016 and 19 broadband grants in 2017.

On April 19, 2016, the House Appropriations Committee approved the FY2017 Agriculture Appropriations Act (H.R. 5054; H.Rept. 114-531). The bill provided \$4.56 million to subsidize a loan level of \$20 million for the broadband loan program, and \$33 million for the Community Connect grant program. According to the bill report, priority for the broadband loan program is to promote broadband availability in those areas where there is not otherwise a business case for private investment in a broadband network. RUS is directed to focus on projects that bring broadband service to underserved households and areas. Additionally, the committee noted that tribal communities continue to struggle with gaining access to broadband. USDA is encouraged to provide a report that identifies the specific challenges Indian Tribal Organizations (ITOs) have in gaining access to broadband and to provide a plan for addressing these challenges, including how the Community Connect program can assist ITOs.

On May 19, 2016, the Senate Appropriations Committee approved its version of the FY2017 Agriculture Appropriations Act (S. 2956; S.Rept. 114-259). The bill provided \$4.5 million to subsidize a loan level of \$27.043 million for the broadband loan program, and \$10.372 million for the Community Connect grant program. Regarding the broadband loan program, the committee stated

Recognizing the positive changes the Agricultural Act of 2014 made to the Rural Broadband Access Loans and Loan Guarantees programs, the Committee continues to encourage the Department to implement a comprehensive rural broadband strategy including investment in advanced networks that will meet the needs of a 21st century economy. However, the Committee is concerned that the Department of Agriculture has not prioritized funding on cost-effectiveness on a per-household basis or on the affordability of the service being provided to consumers as factors in the awards process. The Committee believes that the best way to ensure that funds under this program are spent to promote affordable broadband availability in those unserved and underserved areas, where there is not otherwise a business case for private investment, is to prioritize awards that reach as many unserved and underserved Americans as possible for each dollar spent and to ensure that affordable service is provided by award recipients. As such, the Committee directs the Department of Agriculture to develop criteria for the consideration of awards under this program that include the cost-effectiveness of award proposals on a per-household basis and the affordability of broadband service to potential subscribers.

Regarding the Community Connect Program's Minimum Broadband Service benchmark, the committee expressed the concern that the program is not in step with current needs and industry standards, and encouraged USDA to increase the program's Minimum Broadband Service definition, which will enable more rural communities to be eligible for Community Connect grants.

The Consolidated Appropriations Act, 2017 (P.L. 115-31) provided \$4.5 million to subsidize a broadband loan level of \$27.043 million, \$34.5 million to Community Connect broadband grants, and \$26.6 million for DLT grants. The Explanatory Statement accompanying P.L. 115-31 directed that \$1.6 million of the funds for DLT grants be used to provide for upgrades to the equipment

and facilities of ambulances (and other emergency transportation vehicles) and to medical facilities, such as hospitals and community health centers.

For the Telecommunications Infrastructure Loan and Loan Guarantee program, the Administration requested a loan level of \$345 million in direct Treasury loans and \$345 million in FFB loans. The Administration requested an appropriation (budget authority) of \$3 million to subsidize the Treasury loan level, and \$11 million in budget authority to subsidize modification of existing Treasury loans (thereby offering current borrowers reduced interest rates).

Both the House and Senate Appropriations Committees (H.R. 5054/H.Rept. 114-531; S. 2956/S.Rept. 114-259) approved the Administration-requested FY2017 loan level (\$345 million for Treasury loans and \$345 million for FFB loans) and approved the budget authority request of \$3 million to subsidize the Treasury loan level. However, neither the House nor Senate Appropriations Committees approved the Administration's request for \$11 million to support loan modifications.

The Consolidated Appropriations Act, 2017 (P.L. 115-31) provided an appropriation of \$3.071 million for direct treasury loans to support a total loan level of \$690 million for the Telecommunications Infrastructure Loan Program.

FY2018

The Administration's FY2018 budget proposal requested the following for RUS broadband programs:

- Rural Broadband Access Loans—\$4.5 million in budget authority to subsidize a broadband loan level of \$27 million. According to the budget proposal, this funding level will provide for approximately 3 loans in FY2018.²⁷
- Telecommunications Infrastructure Loans—\$0.863 million in budget authority to subsidize a loan level of \$690 million (\$345 million for Treasury loans and \$345 million for FFB loans). The subsidy is for Treasury loans. According to the budget proposal, this funding level will provide for approximately 40 loans in FY2018.²⁸
- Community Connect and DLT grants—for FY2018, the Administration is proposing transferring Community Connect and DLT grants into a new \$162 million "Rural Economic Infrastructure Program," which will also include Rural Development Community Facilities grants and Home Repair grants. Up to \$80 million will be directed toward the Appalachian region. According to the Administration, the new account "combines the Rural Development grant programs into one account to provide the Administration with the flexibility to place resources where significant impact can be made for economic infrastructure development."²⁹

On July 12, 2017, the House Appropriations Committee approved the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2018

²⁷ 2018 USDA Budget Explanatory Notes for Committee on Appropriations, Rural Utilities Service, p. 31-34, available at <https://www.obpa.usda.gov/31rusexnotes2018.pdf>.

²⁸ Ibid., p. 31-34.

²⁹ 2018 USDA Budget Explanatory Notes for Committee on Appropriations, Rural Development, p. 28-18, available at <https://www.obpa.usda.gov/28rdexnotes2018.pdf>.

(H.R. 3268; H.Rept. 115-232). The bill provided \$4.521 million to subsidize a loan level of \$26.991 million for the broadband loan program. Funding provided for the broadband loan program was intended to promote availability in those areas where there is not otherwise a business case for private investment in a broadband network. The committee directed RUS to focus expenditures on projects that bring broadband service to underserved households and areas.

The House bill provided \$122.692 million for the new Rural Economic Infrastructure Account (24% below the Administration request), which would include both Community Connect and DLT grants, along with Community Facilities grants and Home Repair grants. The bill included language requiring at least 15% of the account resources (\$18.4 million) be allocated to each program area. The committee noted that tribal communities continue to struggle with gaining access to broadband service, and encouraged the Secretary to provide a report that identifies the specific challenges Indian Tribal Organizations (ITOs) have in gaining access to broadband service and provide a plan for addressing these challenges, including how the Community Connect program can assist ITOs.

Regarding telecommunications loans, the House matched the Administration proposal, providing a loan level of \$690 million (\$345 million in direct Treasury loans and \$345 million in FFB loans) with an appropriation of \$0.863 million to subsidize direct Treasury loans.

Additionally, the House Appropriations Committee report directed USDA to continue coordinating with the FCC, NTIA, and other related federal agencies to ensure that policies tied to one federal program do not undermine the objectives and functionality of another. The committee directed the department to prepare a report, in collaboration with the FCC and DOC, detailing areas of responsibility toward addressing rural broadband issues. The report shall include, but not be limited to, how the programs work complementarily to one another; how they address broadband issues in unserved and underserved areas, including tribal lands; identify barriers to infrastructure investment in rural areas and tribal lands; data speeds which fixed, wireless, and mobile broadband users in rural areas and tribal lands experience; and cost estimates to increase speeds to 25 Mbps in unserved communities and communities currently being served by speeds less than 25 Mbps.

On July 20, 2017, the Senate Appropriations Committee approved its version of the FY2018 agriculture appropriations bill (S. 1603; S.Rept. 115-131). The bill provided \$4.53 million to subsidize a loan level of \$27.043 million for the broadband loan program, \$30 million for the Community Connect grant program, and \$26.6 million for DLT grants. Unlike the House and the Administration request, the committee did not include funding for Rural Economic Infrastructure grants. For telecommunications loans, the Senate matched the House bill and the Administration proposal, providing a loan level of \$690 million (\$345 million in direct Treasury loans and \$345 million in FFB loans) with an appropriation of \$0.863 million to subsidize direct Treasury loans.

Regarding the broadband loan program, the committee encouraged RUS to focus expenditures on projects that bring broadband service to currently unserved households, and directed RUS to report back to the committee on administrative efforts to eliminate duplicative or overbuilding of broadband technology. The committee also recommended that USDA explore a pilot grant program to demonstrate the use of multistrand fiber-optic cable that exists as part of electrical transmission infrastructure to provide state-of-the-art broadband services to currently underserved rural schools and medical centers within a mile of the existing cable.

For FY2018, the RUS broadband programs are currently operating under a continuing resolution (P.L. 115-123) that expires on March 23, 2018. For the final FY2018 appropriation bill, the Administration has requested a \$500 million discretionary add-on to fund a combination grant/loan program at RUS to deploy broadband in rural and tribal areas.

FY2019

The Administration's FY2019 budget proposal requested the following for RUS broadband programs:

- Rural Broadband Access Loans—\$4.5 million in budget authority to subsidize a broadband loan level of \$23.149 million. According to the budget proposal, this funding level will provide for approximately 3 loans in FY2019.³⁰
- Telecommunications Infrastructure Loans—\$0.863 million in budget authority to subsidize a loan level of \$690 million (\$172.6 million for Treasury loans and \$517.4 million for FFB loans). The subsidy is for Treasury loans. According to the budget proposal, this funding level will provide for approximately 30 loans in FY2019.³¹
- Community Connect Grants—\$30 million, which will support approximately 13 broadband grants in FY2019.³²
- Distance Learning and Telemedicine Grants—\$23.6 million, which will support approximately 72 projects in FY2019.³³

Past Criticisms of RUS Broadband Programs

RUS broadband programs have been awarding funds to entities serving rural communities since FY2001. Since their inception, a number of criticisms have emerged.

Loan Approval and Application Process

Perhaps the major criticism of the broadband loan program was that not enough loans are approved, thereby making it difficult for rural communities to take full advantage of the program. As of June 22, 2009, the broadband loan program received 225 applications, requesting a total of \$4.7 billion in loans. Of these, 97 applications were approved (totaling \$1.8 billion), 120 were returned (totaling \$2.7 billion), and 8 are pending (totaling \$170 million).³⁴ According to RUS officials, 28% of available loan money was awarded in 2004, and only 5% of available loan money was awarded in 2005.³⁵

The loan application process has been criticized as being overly complex and burdensome, requiring applicants to spend months preparing costly market research and engineering assessments. Many applications are rejected because the applicant's business plan is deemed insufficient to support a commercially viable business. The biggest reason for applications being returned has been insufficient credit support, whereby applicants do not have sufficient cash-on-

³⁰ 2019 USDA Budget Explanatory Notes for Committee on Appropriations, Rural Utilities Service, p. 31-29, available at https://www.obpa.usda.gov/FY19explan_notes.html.

³¹ Ibid., p. 31-21.

³² Ibid., p. 31-30.

³³ Ibid., p. 31-29.

³⁴ Private communication, USDA, June 23, 2009.

³⁵ GAO, *Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, p. 33.

hand (one year's worth is required in most cases). The requirement for cash-on-hand is viewed as particularly onerous for small startup companies, many of whom lack sufficient capital to qualify for the loan. Such companies, critics assert, may be those entities most in need of financial assistance.

In report language to the FY2006 Department of Agriculture Appropriations Act (P.L. 109-97), the Senate Appropriations Committee (S.Rept. 109-92) directed the RUS "to reduce the burdensome application process and make the program requirements more reasonable, particularly in regard to cash-on-hand requirements." The committee also directed USDA to hire more full-time employees to remedy delays in application processing times.

At a May 17, 2006, hearing held by the Senate Committee on Agriculture, Nutrition, and Forestry, the Administrator of the RUS stated that RUS is working to make the program more user friendly, while at the same time protecting taxpayer investment:

As good stewards of the taxpayers' money, we must make loans that are likely to be repaid. One of the challenges in determining whether a proposed project has a reasonable chance of success is validating the market analysis of the proposed service territory and ensuring that sufficient resources are available to cover operating expenses throughout the construction period until such a time that cash flow from operations become sufficient. The loan application process that we have developed ensures that the applicant addresses these areas and that appropriate resources are available for maintaining a viable operation.³⁶

According to RUS, the loan program was initially overwhelmed by applications (particularly during a two-week period in August 2003), and as the program matured, application review times have dropped.³⁷ On May 11, 2007, RUS released a Proposed Rule which sought to revise regulations for the broadband loan program. In the background material accompanying the Proposed Rule, RUS stated that the average application processing time in 2006 was almost half of what it was in 2003.³⁸

Eligibility Criteria

Since the inception of the broadband grant and loan programs, the criteria for applicant eligibility have been criticized both for being too broad and for being too narrow. An audit report released by USDA's Office of Inspector General (IG) found that the "programs' focus has shifted away from those rural communities that would not, without Government assistance, have access to broadband technologies."³⁹ Specifically the IG report found that the RUS definition of rural area has been "too broad to distinguish usefully between suburban and rural communities,"⁴⁰ with the result that, as of March 10, 2005, \$103.4 million in loans and grants (nearly 12% of total funding awarded) had been awarded to 64 communities located near large cities. The report cited

³⁶ Testimony of Jim Andrew, Administrator, Rural Utilities Service, U.S. Department of Agriculture, "Broadband Program Administered by USDA's Rural Utilities Service," full committee hearing before the Senate Committee on Agriculture, Nutrition, and Forestry, 109th Congress, May 17, 2006.

³⁷ Rural Utilities Service, private communication, January 18, 2007.

³⁸ Rural Utilities Service, Department of Agriculture, "Rural Broadband Access Loans and Loan Guarantees," Proposed Rule, *Federal Register*, Vol. 72, No. 91, May 11, 2007, p. 26744.

³⁹ U.S. Department of Agriculture, Office of Inspector General, Southwest Region, *Audit Report: Rural Utilities Service Broadband Grant and Loan Programs*, Audit Report 09601-4-Te, September 2005, p. I, <http://www.usda.gov/oig/webdocs/09601-04-TE.pdf>.

⁴⁰ *Ibid.*, p. 6.

examples of affluent suburban subdivisions qualifying as rural areas under the program guidelines and receiving broadband loans.⁴¹

On the other hand, eligibility requirements have also been criticized as too narrow. For example, the limitation of assistance only to communities of 20,000 or less in population excludes small rural towns that may exceed this limit, and also excludes many municipalities seeking to deploy their own networks.⁴² Similarly, per capita income requirements can preclude higher income communities with higher costs of living (e.g., rural Alaska), and the limitation of grant programs only to underserved areas excludes rural communities with existing but very limited broadband access.⁴³

Loans to Communities With Existing Providers

The IG report found that RUS too often has given loans to communities with existing broadband service. The IG report found that “RUS has not ensured that communities without broadband service receive first priority for loans,” and that although RUS has a system in place to prioritize loans to unserved communities, the system “lacks a cutoff date and functions as a rolling selection process—priorities are decided based on the applicants who happen to be in the pool at any given moment.”⁴⁴ The result is that a significant number of communities with some level of preexisting broadband service have received loans. According to the IG report, of 11 loans awarded in 2004, 66% of the associated communities served by those loans had existing service. According to RUS, 31% of communities served by all loans (during the period 2003 through early 2005) had preexisting competitive service (not including loans used to upgrade or expand existing service).⁴⁵ In some cases, according to the IG report, “loans were issued to companies in highly competitive business environments where multiple providers competed for relatively few customers.”⁴⁶ At the May 1, 2007, hearing before the House Subcommittee on Specialty Crops, Rural Development, and Foreign Agriculture, then-RUS Administrator James Andrews testified that of the 69 broadband loans awarded since the program's inception, 40% of the communities approved for funding were unserved at the time of loan approval, and an additional 15% had only one broadband provider.⁴⁷

Awarding loans to entities in communities with preexisting competitive service raised criticism from competitors who already offer broadband to those communities. According to the National Cable and Telecommunications Association (NCTA), “RUS loans are being used to unfairly subsidize second and third broadband providers in communities where private risk capital already has been invested to provide broadband service.”⁴⁸ Critics argued that providing loans in areas

⁴¹ Ibid., p. 8.

⁴² Martinez, Michael, “Broadband: Loan Fund's Strict Rules Foil Small Municipalities,” *National Journal's Technology Daily*, August 23, 2005.

⁴³ GAO, *Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, pp. 33-34.

⁴⁴ Ibid., p. 13.

⁴⁵ Ibid., p. 14.

⁴⁶ Ibid., p. 15.

⁴⁷ Testimony of James Andrew, Administrator, Rural Utilities Service, U.S. Department of Agriculture, before the Subcommittee on Specialty Crops, Rural Development, and Foreign Agriculture, House Committee on Agriculture, May 1, 2007.

⁴⁸ Letter from Kyle McSillarow, President and CEO, National Cable & Telecommunications Association to the Honorable Mike Johanns, Secretary of the U.S. Department of Agriculture, May 16, 2006.

with preexisting competitive broadband service creates an uneven playing field and discourages further private investment in rural broadband.⁴⁹ In response, RUS stated in the IG report that its policies are in accordance with the statute, and that they address “the need for competition to increase the quality of services and reduce the cost of those services to the consumer.”⁵⁰ RUS argued that the presence of a competitor does not necessarily mean that an area is adequately served, and additionally, that in order for some borrowers to maintain a viable business in an unserved area, it may be necessary for that company to also be serving more densely populated rural areas where some level of competition already exists.⁵¹

Follow-Up Audit by USDA Office of Inspector General

In 2008, as directed by the House Appropriations Committee (H.Rept. 110-258, FY2008 Agriculture appropriations bill), the IG reexamined the RUS broadband loan and loan guarantee program to determine whether RUS had taken sufficient corrective actions in response to the issues raised in the 2005 IG report. The IG concluded “the key problems identified in our 2005 report—loans being issued to suburban and exurban communities and loans being issued where other providers already provide access—have not been resolved.”⁵²

Specifically, the follow-up IG report found that between 2005 and 2008, RUS broadband borrowers providing services in 148 communities were within 30 miles of cities with 200,000 inhabitants, including communities near very large urban areas such as Chicago and Las Vegas.

The IG report also found that since 2005 “RUS has continued providing loans to providers in markets where there is already competing service.”⁵³ Of the 37 applications approved since September 2005, 34 loans were granted to applicants in areas where one or more private broadband providers already offered service. These 34 borrowers received \$873 million to service 1,448 communities. The IG report found that since 2005, 77% of communities which were expected to receive service from a project financed by an approved RUS broadband loan had at least one existing broadband provider present, 59% had 2 or more existing providers, and 27% had 3 or more existing providers.⁵⁴

In an official response to the follow-up IG report, RUS fundamentally disagreed with the IG criticisms, stating that the loans awarded between 2005 and 2008 were provided “in a way entirely consistent with the statutory requirements of the underlying legislation governing administration of the program, the regulations and guidance issued by the Department to implement the statute, and the intent of Congress.”⁵⁵ Specifically, RUS argued that its May 11, 2007, Proposed Rule, and the subsequent changes to the broadband loan and loan guarantee statute made by the 2008 farm bill, both addressed concerns over loans to nonrural areas and to communities with preexisting broadband providers. However, the Final Rule based on the Proposed Rule and the 2008 farm bill had not yet been released and implemented during the

⁴⁹ Testimony of Tom Simmons, Vice President for Public Policy, Midcontinent Communications, before Senate Committee on Agriculture, Nutrition, and Forestry, May 17, 2006.

⁵⁰ *Audit Report: Rural Utilities Service Broadband Grant and Loan Programs*, p. 17.

⁵¹ Rural Utilities Service, private communication, January 18, 2007.

⁵² U.S. Department of Agriculture, Office of Inspector General, Southwest Region, *Audit Report Rural Utilities Service Broadband Loan and Loan Guarantee Program*, Report No. 09601-8-Te, March 2009, p. 9.

⁵³ *Ibid.*, p. 5.

⁵⁴ *Ibid.*, pp. 5-6.

⁵⁵ *Ibid.*, p. 14.

2005-2008 period examined by the IG, and RUS was compelled by law to continue awarding broadband loans under the existing law and rules.

During 2009 and 2010, the Rural Broadband Access Loan and Loan Guarantee program was in hiatus while RUS implemented the Broadband Initiatives Program (Recovery Act grants and loans) and developed new regulations implementing the 2008 farm bill. On March 14, 2011, the new rules were released. According to then-RUS Administrator Jonathan Adelstein, “this regulation and other measures taken by the agency have addressed all the concerns raised by the OIG,” and on March 24, 2011, “the OIG notified RUS that it has closed its audits of the RUS broadband loan program.”⁵⁶

2014 GAO Report

In May 2014, GAO released its report, *USDA Should Evaluate the Performance of the Rural Broadband Loan Program*.⁵⁷ In the report, GAO analyzed rural broadband loans awarded between the years 2003 and 2013. GAO found that of the 100 loans awarded (worth \$2 billion), 43% were no longer active due to 25 loans rescinded and 18 defaulted (RUS rejected 149 of the 249 applications received); that RUS loans can help promote limited broadband deployment and economic development, but performance goals do not fully align with the program’s purpose; and that FCC reforms of the Universal Service Fund and intercarrier compensation have created temporary uncertainty that may be hindering investment in broadband.

To address its findings, GAO made two recommendations to the Secretary of Agriculture: evaluate loans made by RUS through the broadband loan program to identify characteristics of loans that may be at risk of rescission or default; and align performance goals under the “enhance rural prosperity” strategic objective in the Annual Performance Report to the broadband loan program’s purpose, to the extent feasible.⁵⁸

Broadband Loan Reauthorization: 2008 Farm Bill

The 110th Congress considered reauthorization of the Rural Broadband Access Loan and Loan Guarantee program as part of the 2008 farm bill. The following are some key issues which were considered during the debate over reauthorization of the RUS broadband loan and loan guarantee program.

Restricting Applicant Eligibility

The RUS broadband program was criticized for excluding too many applicants due to stringent financial requirements (e.g., the requirement that an applicant have a year’s worth of cash-on-hand) and an application process—requiring detailed business plans and market surveys—that some viewed as overly expensive and burdensome to complete. During the reauthorization process, Congress considered whether the criteria for loan eligibility should be modified, and

⁵⁶ Testimony of Jonathan Adelstein, Administrator of RUS, before the House Subcommittee on Communications and Technology, Committee on Energy and Commerce, April 1, 2011, p. 8, <http://republicans.energycommerce.house.gov/Media/file/Hearings/Telecom/040111/Adelstein.pdf>.

⁵⁷ Government Accountability Office, *USDA Should Evaluate the Performance of the Rural Broadband Loan Program*, May 2014, 56 pp., available at <http://www.gao.gov/assets/670/663578.pdf>.

⁵⁸ Ibid., pp. 31-32.

whether a more appropriate balance could be found between the need to make the program more accessible to unserved and often lower-income rural areas, and the need to protect taxpayers against bad loans.

Definition of “Rural Community”

The definition of which communities qualify as “rural” had been changed twice by statute since the broadband loan program was initiated. Under the pilot program, funds were authorized under the Distance Learning and Telemedicine Program, which defines “exceptionally rural areas” (under 5,000 inhabitants), “rural areas” (between 5,000 and 10,000), and “mid-rural areas” (between 10,000 and 20,000). RUS determined that communities of 20,000 or less would be eligible for broadband loans in cases where broadband services did not already exist.

In 2002, this definition was made narrower by the Farm Security and Rural Investment Act (P.L. 107-171), which designated eligible communities as any incorporated or unincorporated place with fewer than 20,000 inhabitants, and which was outside any standard metropolitan statistical area (MSA). The requirement that communities not be located within MSA’s effectively prohibited suburban communities from receiving broadband loans. However, in 2004, the definition was again changed by the FY2004 Consolidated Appropriations Act (P.L. 108-199). The act broadened the definition, keeping the population limit at 20,000, but eliminating the MSA prohibition, thereby permitting rural communities near large cities to receive loans. Thus the current definition used for rural communities is the same as what was used for the broadband pilot program, except that loans can now be issued to communities with preexisting service.

The definition of what constitutes a “rural” community is always a difficult issue for congressional policymakers in determining how to target rural communities for broadband assistance. On the one hand, the narrower the definition the greater the possibility that deserving communities may be excluded. On the other hand, the broader the definition used, the greater the possibility that communities not traditionally considered “rural” or “underserved” may be eligible for financial assistance.

A related issue is the scope of coverage proposed by individual applications. While many of the loan applications propose broadband projects offering service to multiple rural communities, RUS identified a trend toward larger regional and national proposals, covering hundreds or even more than 1,000 communities.⁵⁹ The larger the scope of coverage, the greater the complexity of the loan application and the larger the possible benefits and risks to taxpayers.

Preexisting Broadband Service

Loans to areas with competitive preexisting service—that is, areas where existing companies already provide some level of broadband—sparked controversy because loan recipients are likely to compete with other companies already providing broadband service.

During reauthorization, Congress was asked to more sharply define whether and/or how loans should be given to companies serving rural areas with preexisting competitive service.⁶⁰ On the one hand, some argued that the federal government should not be subsidizing competitors for broadband service, particularly in sparsely populated rural markets which may be able only to

⁵⁹ Rural Utilities Service, private communication, January 18, 2007.

⁶⁰ The statute (7 U.S.C. 950bb) allows States and local governments to be eligible for loans only if “no other eligible entity is already offering, or has committed to offer, broadband services to the eligible rural community.”

support one provider. Furthermore, keeping communities with preexisting broadband service eligible may divert assistance from unserved areas that are most in need. On the other hand, many suburban and urban areas currently receive the benefits of competition between broadband providers—competition which can potentially drive down prices while improving service and performance. It is therefore appropriate, others argued, that rural areas also receive the benefits of competition, which in some areas may not be possible without federal financial assistance. It was also argued that it may not be economically feasible for borrowers to serve sparsely populated unserved communities unless they are permitted to also serve more lucrative areas which may already have existing providers.

Technological Neutrality

The 2002 farm bill (P.L. 107-171) directed RUS to use criteria that are “technologically neutral” in determining which projects to approve for loans. In other words, RUS is prohibited from typically valuing one broadband technology over another when assessing loan applications. As of November 10, 2008, 37% of approved and funded projects employed fiber-to-the-home technology, 17% employed DSL, 25% fixed wireless, 19% hybrid fiber-coaxial (cable), and 2% broadband over powerlines (BPL).⁶¹ No funding has been provided for projects utilizing satellite broadband.⁶²

While decisions on funded projects were required to be technologically neutral, RUS (through the Secretary of Agriculture) had the latitude to determine minimum required data transmission rates for broadband projects eligible for funding. According to the statute, “the Secretary shall, from time to time as advances in technology warrant, review and recommend modifications of rate-of-data transmission criteria for purposes of the identification of broadband service technologies.”

Some argued that the minimum speed thresholds should be raised to ensure that rural areas receive “next-generation” broadband technologies with faster data rates capable of more varied and sophisticated applications. On the other hand, significantly raising minimum data rates could exclude certain technologies—for example, typical data transmission rates for fiber and some wireless technologies exceed what is offered by “current generation” technologies such as DSL and cable. Proponents of keeping the minimum threshold at a low level argued that underserved rural areas are best served by any broadband technology that is economically feasible to deploy, regardless of whether it is “next” or “current” generation.

P.L. 110-246

The Food, Conservation, and Energy Act of 2008 became law on June 18, 2008 (P.L. 110-246). Section 6110, “Access to Broadband Telecommunications Services in Rural Areas,” reauthorized the RUS broadband loan and loan guarantee program and addressed many of the criticisms and

⁶¹ USDA, Rural Utilities Service, “FCC/USDA Rural Broadband Educational Workshop,” power point presentation, November 20, 2008, http://www.usda.gov/rus/telecom/broadband/workshops/FCC_USDABroadbandWorkshopNov20.pdf.

⁶² According to the GAO, satellite companies state that RUS’s broadband loan program requirements “are not readily compatible with their business model or technology,” and that “because the agency requires collateral for loans, the program is more suited for situations where the providers, rather than individual consumers, own the equipment being purchased through the loan. Yet, when consumers purchase satellite broadband, it is common for them to purchase the equipment needed to receive the satellite signal, such as the reception dish.” Satellite companies argue that in some rural areas, satellite broadband might be the most feasible and cost-effective solution. See GAO, *Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, pp. 34-35.

issues raised during the reauthorization process. The following summarizes broadband-related provisions that changed previous law.

Eligibility and Selection Criteria

- Defines rural area as any area other than (1) a city or town that has a population of greater than 20,000 and (2) an urbanized area contiguous and adjacent to a city or town with a population greater than 50,000. The Secretary may, by regulation only, consider not to be rural an area that consists of any collection of census blocks contiguous to each other with a housing density of more than 200 housing units per square mile and that is contiguous with or adjacent to an existing boundary of a rural area.
- Provides that the highest priority is to be given to applicants that offer to provide broadband service to the greatest proportion of households currently without broadband service. Eligible entities are required to submit a proposal to the Secretary that meets the requirements for a project to offer to provide service to a rural area and agree to complete build out of the broadband service within three years.
- Prohibits any eligible entity that provides telecommunications or broadband service to at least 20% of the households in the United States from receiving an amount of funds under this section for a fiscal year in excess of 15% of the funds authorized and appropriated for the broadband loan program.
- Directs the Secretary of Agriculture “from time to time as advances in technology warrant,” to review and recommend modifications in rate-of-data transmission criteria for the purpose of identifying eligible broadband service technologies. At the same time, the Secretary is prohibited from establishing requirements for bandwidth or speed that have the effect of precluding the use of evolving technologies appropriate for use in rural areas.

Loans to Communities With Existing Providers

- Prohibits the Secretary from making a loan in any area where there are three or more incumbent service providers unless the loan meets all of the following requirements: (1) the loan is to an incumbent service provider that is upgrading service in that provider's existing territory; (2) the loan proposes to serve an area where not less than 25% of the households are offered service by not more than 1 provider; and (3) the applicant is not eligible for funding under another provision of the Rural Electrification Act. Incumbent service provider is defined as an entity providing broadband service to not less than 5% of the households in the service territory proposed in the application. Also prohibits the Secretary from making a loan in any area where not less than 25% of the households are offered broadband service by not more than one provider unless a prior loan has been made in the same area.

Financial Requirements

- Directs the Secretary to consider existing recurring revenues at the time of application in determining an adequate level of credit support. Requires the Secretary to ensure that the type, amount, and method of security used to secure a loan or loan guarantee is commensurate to the risk involved with the loan or loan guarantee, particularly when the loan or loan guarantee is issued to a financially

- healthy, strong, and stable entity. The Secretary is also required, in determining the amount and method of security, to consider reducing the security in areas that do not have broadband service.
- Allows the Secretary to require an entity to provide a cost-share in an amount not to exceed 10% of the amount of the loan or loan guarantee.
 - Retains the current law rate of interest for direct loans—which is the rate equivalent to the cost of borrowing to the Department of the Treasury for obligations of comparable maturity or 4%.
 - Directs that loan or loan guarantee may have a term not to exceed 35 years if the Secretary determines that the loan security is sufficient.
 - In case of substantially underserved trust areas (for example, Indian lands), where the Secretary determines a high need exists for the benefits of the program, the Secretary has the authority to provide loans with interest rates as low as 2% and may waive nonduplication restrictions, matching fund requirements, credit support requirements, or other regulations.

Loan Application Requirements

- Allows the Secretary to require an entity that proposes to have a subscriber projection of more than 20% of the broadband service market in a rural area to submit a market survey. However, the Secretary is prohibited from requiring a market survey from an entity that projects to have less than 20% of the broadband market.
- Requires public notice of each application submitted, including the identity of the applicant, the proposed area to be served, and the estimated number of households in the application without terrestrial-based broadband. Authorizes the Secretary to take steps to reduce the costs and paperwork associated with applying for a loan or loan guarantee under this section by first-time applicants, particularly those who are smaller and start-up internet providers.
- Allows the Secretary to establish a preapplication process under which a prospective applicant may seek a determination of area eligibility. Provides that an application, or a petition for reconsideration of a decision on such an application, that was pending on the date 45 days before enactment of this act and that remains pending on the date of enactment of this act is to be considered under eligibility and feasibility criteria in effect on the original date of submission of the application.

Other Provisions

- Authorizes the Rural Broadband Access Loan and Loan Guarantee program at \$25 million to be appropriated for each of fiscal years 2008 through 2012.
- Requires that the Secretary annually report to Congress on the rural broadband loan and loan guarantee program. The annual report is to include information pertaining to the loans made, communities served and proposed to be served, speed of broadband service offered, types of services offered by the applicants and recipients, length of time to approve applications submitted, and outreach efforts undertaken by USDA.
- Section 6111 provides for a National Center for Rural Telecommunications Assessment. The Center is to assess the effectiveness of broadband loan

- programs, work with existing rural development centers to identify appropriate policy initiatives, and provide an annual report that describes the activities of the Center, the results of research carried out by the Center, and any additional information that the Secretary may request. An appropriation of \$1 million is authorized for each of the fiscal years 2008 through 2012.
- Section 6112 directs the Chairman of the Federal Communications Commission (FCC), in coordination with the Secretary, to submit to Congress a report describing a comprehensive rural broadband strategy. Requires the report to be updated during the third year after enactment.

Implementation of P.L. 110-246

During 2009 and 2010, the Farm Bill Broadband Loan Program was on hiatus as RUS implemented the Broadband Initiatives Program (BIP) established under the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). At the same time, final regulations implementing the broadband loan program as reauthorized by the 2008 farm bill were on hold and were being refined to reflect, in part, RUS experience in implementing BIP. Subsequently, on March 14, 2011, an Interim Rule and Notice was published in the *Federal Register* setting forth the rules and regulations for the broadband loan program as reauthorized by P.L. 110-246.⁶³ While the rule is immediately effective, RUS is accepting public comment before ultimately releasing a final rule. The application guide and all supporting materials for the Farm Bill Broadband Loan Program are available at http://www.rurdev.usda.gov/utp_farmbill.html.

Meanwhile, pursuant to Section 6112 of P.L. 110-246, the FCC released on May 22, 2009, its report on rural broadband strategy, entitled *Bringing Broadband to Rural America*.⁶⁴ The report made a series of recommendations including improved coordination of rural broadband efforts among federal agencies, states, and communities; better assessment of broadband needs, including technological considerations and broadband mapping and data; and overcoming challenges to rural broadband deployment.

Broadband Program Reauthorization: 2012 Farm Bill

As reauthorized by the 2008 farm bill, the Rural Broadband Access Loan and Loan Guarantee Program was authorized through FY2012. On April 26, 2012, the Senate Committee on Agriculture, Nutrition, and Forestry approved the Agriculture Reform, Food and Jobs Act of 2012 (S. 3240). Section 6104 of the act (Title VI, Rural Development) would have extended the RUS broadband program through FY2017. On June 20, 2012, the Senate agreed to amendment S.Amdt. 2457, offered by Senator Warner, that substituted an amended version of Section 6104. S. 3240 passed the Senate on June 21, 2012.

On April 25, 2012, the House Subcommittee on Rural Development, Research, Biotechnology, and Foreign Agriculture, Committee on Agriculture, held a hearing entitled, "Formulation of the 2012 Farm Bill: Rural Development Programs." Among those testifying were two witnesses representing the National Telecommunications Cooperative Association (NTCA), Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO),

⁶³ U.S. Department of Agriculture, Rural Utilities Service, "7 CFR Part 1738, Rural Broadband Access Loans and Loan Guarantees," 76 Federal Register 13770-13796, March 14, 2011.

⁶⁴ Michael J. Copps, Acting Chairman, Federal Communications Commission, *Bringing Broadband to Rural America: Report on a Rural Broadband Strategy*, May 22, 2009, 83 pp.

Western Telecommunications Alliance (WTA), and the National Cable and Telecommunications Association (NCTA).⁶⁵ Among the issues debated at the hearing was whether or not the rural broadband loan program should be modified to prohibit loans to projects serving areas with incumbent broadband service providers.

On July 9, 2012, H.R. 6083, the Federal Agriculture Reform and Risk Management Act of 2012 (FARRM), was introduced by Representative Lucas. Section 6105 of the act (Access to Broadband Telecommunications Services in Rural Areas) would have amended the current broadband statute (Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb)).

H.R. 6083 was marked up by the House Committee on Agriculture and approved on July 12, 2012. During the July 11 markup, the committee adopted an amendment offered by Representative Johnson of Illinois that instructs the Secretary to give priority to applicants that offer to provide broadband service not predominantly for business service, but where at least 25% of customers in the proposed service territory are commercial interests. The committee rejected an amendment offered by Representative Gibson that would have authorized loan-grant combinations.

The 2012 farm bill (S. 3240/H.R. 6083) was ultimately not enacted by the 112th Congress. However, Title VII of the American Taxpayer Relief Act of 2012 extended farm bill program authorizations, including the broadband program, by one year (through September 30, 2013).

Meanwhile, other introduced bills relating to the 2012 farm bill broadband program included the following:

- S. 1895, the Upstate Works Act introduced by Senator Gillibrand on November 17, 2011, would have extended the Farm Bill broadband loan program authorization through FY2017.
- S. 2275, the Broadband Connections for Rural Opportunities Program (BCROP) Act of 2012 introduced by Senator Gillibrand on March 29, 2012, would have amended the Rural Electrification Act to establish a broadband grant program, define an eligible rural area as under 50,000 population, provide refinements to the application process, establish a rural broadband clearinghouse website, and require reports to Congress on the effectiveness of all federal broadband assistance programs and policies.
- S. 2298, the Connecting Rural America Act introduced by Senator Brown of Ohio on April 18, 2012, would have amended the Rural Electrification Act to establish a broadband grant program, set the definition of an incumbent service provider as serving no less than 15% of the households in a service area (up from 5% in the current statute), establish transparency and reporting requirements, provide mandatory annual funding of \$20 million from the Commodity Credit Corporation, and in addition to funds otherwise made available, authorize \$25 million in annual appropriations through FY2017.

⁶⁵ Hearing testimony is available at <http://agriculture.house.gov/hearings/hearingDetails.aspx?NewsID=1567>.

Broadband Program Reauthorization: 2013 and 2014 Farm Bills

In the 113th Congress, 2013 farm bill legislation in the House and Senate included the broadband program reauthorization provisions contained in the 2012 farm bill. Both the House and Senate bills would extend the reauthorization of the RUS broadband program through FY2018.

Senate Bill, S. 954

On May 14, 2013, the Senate Committee on Agriculture, Nutrition, and Forestry reported the Agriculture Reform, Food and Jobs Act of 2013 (S. 954, introduced by Senator Stabenow). S. 954 was passed by the Senate on June 10, 2013. The Senate adopted S.Amdt. 998 (introduced by Senator Leahy), which expands pilot loan and grant projects to include ultra-high speed service (1 gigabit per second or higher downstream speeds). Section 6104 of S. 954 ("Access to Broadband Telecommunications Services in Rural Areas"), as passed by the Senate, included the following changes from the broadband provision in the then-existing statute (7 U.S.C. 950bb):

- **Broadband grants**—A new broadband grant program is added to the existing loan and loan guarantee program authorization. The bill specifies that the amount of any grant shall not exceed 50% of the development costs of the grant projects (e.g., 50% is set as the maximum federal cost share rate). However, the USDA Secretary has the authority to adjust that rate up to 75% if it is determined that the project serves a remote or low income area that does not have access to broadband service from any provider.
- **Definition of rural area**—Under S. 954, all rural development programs, including the broadband grant and loan program, would conform to a uniform definition of a rural area: any area that is not a city or town with a population greater than 50,000, and that is not an urbanized area contiguous and adjacent to a city or town with a population over 50,000. Because the current definition of a rural area eligible for broadband loans is towns with populations under 20,000, this new definition would increase the number of communities eligible for broadband assistance.
- **Definition of broadband service**—S. 954 establishes "the minimum acceptable level of broadband service" as at least 4 Mbps downstream and 1 Mbps upstream. At least once every two years, the Secretary may adjust this speed definition and may consider establishing different minimum speeds for fixed and mobile (wireless) broadband. The current statute states that from "time to time" the Secretary shall recommend modifications in speed criteria for broadband.

Project area eligibility—S. 954 lowers the maximum allowable number of incumbent providers in any part of an eligible service area from two to one. Additionally, S. 954 provides that an eligible area is one where no less than 25% of the households in the proposed service territory are unserved or have broadband service levels below the minimum acceptable level of broadband service (which is set at 4 Mbps/1 Mbps). Current statute states that eligible areas must (with some exceptions) have not more than one incumbent broadband provider in not less than 25% of households in the proposed service area. S. 3240 allows RUS to increase the 25% requirement if more than 25% of the project cost is being funded by a grant, or if there is one or more communities in the proposed service area with populations over 20,000. RUS can decrease the

25% requirement to 18% for service areas with a population less than 7,500, and to 15% for populations under 5,000.

- Evaluation period—S. 954 directs RUS to establish not less than two, and not more than four, evaluation periods for each fiscal year to compare and prioritize grant, loan, and loan guarantee applications. Under current statute, broadband loan applications are submitted and considered year-round—there is no set application or evaluation period.
- Priority setting—S. 954 directs RUS to give the highest priority to applicants that offer to provide broadband service to the greatest proportion of unserved rural households or rural households that do not have residential broadband service that meets the minimum acceptable level of broadband service, as certified by the affected community, city, county, or designee; or demonstrated on the broadband map of the affected state if the map contains address-level data, or the National Broadband Map if address-level data are unavailable. RUS shall provide equal consideration to all qualified applicants, including those that have not previously received grants, loans, or loan guarantees. After giving priority to the applicants described above, RUS shall then give priority to projects that serve rural communities with a population of less than 20,000, with a high percentage of low-income residents, that are isolated from other significant population centers, and that are experiencing outmigration. Current statute directs RUS to give highest priority to applicants that offer to provide broadband service to the greatest proportion of households that, prior to the provision of the broadband service, had no incumbent service provider.
- Transparency—RUS shall promptly post on its website an announcement that identifies each applicant; the amount and type of support requested by each applicant; and a list of the census block groups that the applicant proposes to service. RUS will provide not less than 15 days for broadband service providers to voluntarily submit information about the broadband services that the providers offer in the groups or tracts listed so that RUS may assess whether the applications submitted meet the eligibility requirements. If no broadband service provider submits this information, RUS will consider the number of providers in the group or tract to be established by reference to the most current National Broadband Map or any other data RUS may collect or obtain through reasonable efforts. Current statute requires that RUS publish a notice of each application, including the identity of the applicant, each area proposed to be served by the applicant, and the estimated number of households without terrestrial-based broadband service in those areas.
- Recipient and applicant reporting—The Secretary shall require quarterly reports from grant and loan recipients describing in detail the use of the assistance, and the progress toward fulfilling project objectives. RUS shall maintain a fully searchable database on the internet that contains a list of each entity that has applied for assistance, and the description status of each application. For each entity receiving assistance, the database shall provide the name of the entity, the type of assistance being received, the purpose for which the entity is receiving the assistance, and each quarterly report submitted. There is no requirement in current statute for quarterly reports or for RUS to post such information on the internet.

- **Deobligation**—S. 954 directs RUS to establish written procedures for recovering funds from loan defaults, deobligating awards to grantees that demonstrate an insufficient level of performance or wasteful or fraudulent spending, awarding those funds to new or existing applicants, and consolidating and minimizing overlap among programs. There is no comparable language in the current statute.
- **Report to Congress**—S. 954 adds requirements to the content of the annual report to Congress, including the number of residences and businesses receiving new broadband services; network improvements, including facility upgrades and equipment purchases; average broadband speeds and prices on a local and statewide basis; any changes in broadband adoption rates; and any specific activities that increase high speed broadband access for educational institutions, health care providers, and public safety service providers.
- **Broadband build-out data**—As a condition of receiving a grant, loan, or loan guarantee, a recipient shall provide to RUS address-level broadband build-out data that indicate the location of new broadband service that is being provided or upgraded within the service territory supported. These data will be included in the semiannual updates to the National Telecommunications and Information Administration's (NTIA's) National Broadband Map, and effective beginning on the date NTIA receives the data, NTIA shall use only address-level broadband build-out data for the National Broadband Map. RUS shall submit to NTIA any correction to the National Broadband Map that is based on the actual level of broadband coverage within the rural area, including any requests for a correction from an elected or economic development official. Not later than 30 days after the date on which the NTIA receives a correction submitted, NTIA shall incorporate the correction into the National Broadband Map. There is no comparable provision in current statute.
- **Pilot programs**—The Secretary may carry out pilot programs in conjunction with state and local governments and Indian tribes (which may be in partnership with other entities, as determined appropriate by the Secretary) to address areas that are unserved or have service levels below the minimum acceptable level of broadband service, or to provide a limited number of projects offering ultra-high speed service, defined as downstream speeds of 1 gigabit per second or higher. There is no comparable provision in the statute.
- **Market survey requirement**—S. 954 provides that survey information must be certified by the affected community, city, county, or designee; and demonstrated on the broadband map of the affected state if the map contains address-level data, or the National Broadband Map if address-level data are unavailable. The current statute has no such requirement for certification and demonstration of market survey information.
- **Terms and conditions**—In determining the term and conditions of assistance, the Secretary may consider whether the recipient would be serving an area that is unserved, and if so, can establish a limited initial deferral period or comparable terms necessary to achieve the financial feasibility and long-term sustainability of the project. There is no such deferral period authorized in the current statute.

Authorization—S. 954 authorizes the broadband grant, loan, and loan guarantee program at \$50 million per year through FY2018, with at least 1% to be used for conducting oversight and implementing the accountability measures and related activities authorized. S. 3240 does not specify how the authorized amount should be divided between grants, loans, and loan guarantees.

The current statute authorized the loan and loan guarantee program at \$25 million per year through FY2012, and did not set aside funding for administrative purposes.

House Bill, H.R. 2642

H.R. 2642, the Federal Agriculture Reform and Risk Management Act of 2013 (FARRM), was passed by the House on July 11, 2013. Section 5106 of H.R. 2642 (“Access to Broadband Telecommunications Services in Rural Areas”) would make the following changes to the current broadband loan statute:

- while continuing to provide that the highest priority is to be given applicants that “offer to provide broadband service to the greatest proportion of households that, prior to the provision of broadband service had no incumbent service provider,” H.R. 2642 additionally instructs the Secretary to give priority to applicants that offer to provide broadband service not predominantly for business service, but where at least 25% of customers in the proposed service territory are commercial interests;
- instructs the Secretary to include additional information in its public notice of each loan application, including the amount and type of support requested, and a list of the census block groups or tracts proposed to be served;
- requires the Secretary to establish a process under which an incumbent service provider may (but shall not be required to) submit not less than 15 days and not more than 30 days after the publication of the public notice, information regarding the broadband services that the provider offers in the proposed service territory, so that the Secretary may assess whether the application meets the eligibility requirements;
- in considering the technology needs of customers in a proposed service territory, the Secretary is directed to take into consideration the upgrade or replacement cost for the construction or acquisition of facilities and equipment in the territory; and
- reauthorizes the broadband loan and loan guarantee program through FY2018 at the current level of \$25 million per year.

P.L. 113-79, the Agricultural Act of 2014

On January 27, 2014, the conference report for the Agricultural Act of 2014 was filed (H.Rept. 113-333). The conference agreement was approved by the House on January 29, approved by the Senate on February 4, and signed into law (P.L. 113-79) by the President on February 7, 2014.

P.L. 113-79 amends Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to reauthorize the Rural Broadband Access Loan and Loan Guarantee Program through FY2018. P.L. 113-79 also includes provisions to redefine project area eligibility with respect to existing broadband service, increase the program’s transparency and reporting requirements, define a minimum level of broadband service, require a study on the gathering and use of address-level data, and establish a new Rural Gigabit Network Pilot Program. The conference agreement did **not** include the Senate bill proposal to create a new grant component to the existing broadband loan and loan guarantee program, nor did the conference agreement adopt the Senate bill’s broadening of the definition for eligible rural areas.

Specifically, Section 6104 of P.L. 113-79 makes the following changes to the Rural Broadband Access Loan and Loan Guarantee program:

- **Project area eligibility**—provides that an eligible area is one where not less than 15% of the households in the proposed service territory are unserved or have service levels below the minimum acceptable level of broadband service (which is set at 4 Mbps/1 Mbps).
- **Priority**—directs RUS to give the highest priority to applicants that offer to provide broadband service to the greatest proportion of unserved households or households that do not have residential broadband service that meets the minimum acceptable level of broadband service, as certified by the affected community, city, county, or designee; or demonstrated on the broadband map of the affected state if the map contains address-level data, or the National Broadband Map if address-level data are unavailable. RUS shall provide equal consideration to all qualified applicants, including those that have not previously received grants, loans, or loan guarantees. Also gives priority to applicants that offer to provide broadband service not predominantly for business service, but if at least 25% of customers in the proposed service territory are commercial interests.
- **Evaluation period**—directs RUS to establish not less than two evaluation periods for each fiscal year to compare loan and loan guarantee applications and to prioritize loans and loan guarantees to all or part of rural communities that do not have residential broadband service that meets the minimum acceptable level of broadband service.
- **Market survey requirement**—provides that survey information must be certified by the affected community, city, county, or designee; and demonstrated on the broadband map of the affected state if the map contains address-level data, or the National Broadband Map if address-level data are unavailable.
- **Notice requirement**—directs RUS to maintain a fully searchable database on the internet that contains a list of each entity that has applied for assistance, the status of each application, and a detailed description of each application. For each entity receiving assistance, the database shall provide the name of the entity, the type of assistance being received, the purpose for which the entity is receiving the assistance, and each semiannual report submitted.
- **Reporting**—requires semiannual reports from loan recipients for three years after completion of the project describing in detail the use of the assistance, and the progress toward fulfilling project objectives.
- **Default and deobligation**—directs RUS to establish written procedures for recovering funds from loan defaults, deobligating awards that demonstrate an insufficient level of performance or fraudulent spending, awarding those funds to new or existing applicants, and minimizing overlap among programs.
- **Service area assessment**—directs RUS to promptly post on its website a list of the census block groups that an applicant proposes to service. RUS will provide not less than 15 days for broadband service providers to voluntarily submit information about the broadband services that the providers offer in the groups or tracts listed so that RUS may assess whether the applications submitted meet the eligibility requirements. If no broadband service provider submits this information, RUS will consider the number of providers in the group or tract to

be established by reference to the most current National Broadband Map or any other data RUS may collect or obtain through reasonable efforts.

- Definition of broadband service—establishes “the minimum acceptable level of broadband service” as at least 4 Mbps downstream and 1 Mbps upstream. At least once every two years, the Secretary shall review and may adjust this speed definition and may consider establishing different minimum speeds for fixed and mobile (wireless) broadband.
- Terms and conditions—in determining the terms and conditions of assistance, the Secretary may consider whether the recipient would be serving an area that is unserved (or has service levels below the minimum acceptable level of broadband service), and if so, can establish a limited initial deferral period or comparable terms necessary to achieve the financial feasibility and long-term sustainability of the project.
- Report to Congress—adds requirements to the content of the annual report to Congress, including the number of residences and businesses receiving new broadband services; network improvements, including facility upgrades and equipment purchases; average broadband speeds and prices on a local and statewide basis; any changes in broadband adoption rates; and any specific activities that increase high speed broadband access for educational institutions, health care providers, and public safety service providers.
- Reauthorization—reauthorizes the broadband loan and loan guarantee program through FY2018 at the current level of \$25 million per year.
- Study on providing effective data for the National Broadband Map—directs USDA, in consultation with DOC and the FCC, to conduct a study of the ways data collected by RUS could most effectively be shared with the FCC to support the development and maintenance of the National Broadband Map. The study shall include a consideration of the circumstances under which address-level data could be collected by RUS and appropriately shared with the FCC.

Additionally, Section 6105 authorized a new Rural Gigabit Network Pilot Program. Specifically, USDA was authorized to provide grants, loans, or loan guarantees for projects that would extend ultra-high speed broadband service (defined as 1 gigabit per second downstream capacity) to rural areas where ultra-high speed service is not provided in any part of the proposed service territory. The pilot program was authorized at \$10 million per year for the years FY2014 through FY2018. However, no funding was appropriated for this pilot program over that period, and the Rural Gigabit Network Pilot Program was not implemented.

Legislation in the 114th Congress

Aside from appropriations bills, several bills were introduced into the 114th Congress that sought to impact the RUS broadband programs. These included the following:

- H.R. 3152 (Nolan), introduced on July 22, 2015, as the Rural Broadband Initiative Act, would amend the Rural Electrification Act of 1936 to establish an Office of Rural Broadband within the USDA. Under this bill, the new office would administer all rural broadband-related grant and loan programs previously administered by the RUS. Headed by an Under Secretary for Rural Broadband Initiatives, the office is directed to conduct extensive, nationwide outreach to rural areas; foster the development of a comprehensive rural broadband strategic

- vision; plan coordination of federal resources for state, regional, and local governments to assist citizens living and working in rural areas; assess all relevant technologies as the technologies are able to support in whole or in part rural broadband needs and requirements; serve as a single information source for all rural broadband programs and services administered by federal agencies, and coordinate the activities undertaken under federal rural broadband programs; and provide technical assistance to state, regional, and local governments to develop broadband deployment strategies. The Under Secretary is also directed to develop a comprehensive rural broadband strategy to be submitted to the President and Congress; convene a Rural Broadband Advisory Panel; and establish a comprehensive and interactive rural broadband web-based clearinghouse that describes options, opportunities, resources, successful public-private partnerships, comprehensive funding sources, and technology tutorials for rural broadband.
- H.R. 4160 (Huffman), introduced on December 2, 2015, as the Rural Broadband Infrastructure Investment Act, would amend Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to establish a broadband grant program to accompany the Rural Broadband Loan program. The bill would also make changes to the Telecommunications Infrastructure Loan and Loan Guarantee program—specifically raising the threshold for an eligible rural area from 5,000 to 20,000 population, and permitting USDA to give preference to loan applications that support regional telecommunications development.
 - H.R. 5897 (Stefanik), introduced on July 14, 2016, as the Precision Farming Act of 2016, would utilize loans and loan guarantees under the rural broadband access program to provide broadband service for agricultural producers. Also would provide universal service support for installation charges for broadband service for agricultural producers in order to improve precision farming and ranching.
 - H.R. 6336 (Pocan), introduced November 17, 2016, as the Broadband Connections for Rural Opportunities Program Act of 2016 (B-CROP), would amend Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to establish a broadband grant program to accompany the Rural Broadband Loan program. Also would raise authorization from \$25 million to \$50 million and would require grant and loan recipients to submit broadband buildout data which the USDA Secretary would submit to FCC's National Broadband Map.
 - S. 268 (Sanders), introduced on January 27, 2015, as the Rebuild America Act of 2015, would appropriate \$2.5 billion per year through FY2019 for the broadband initiatives program established under title VI of the Rural Electrification Act of 1936 (7 U.S.C. 950bb et seq.) to expand the access and quality of broadband service across the rural United States.
 - S. 3408 (Gillibrand), introduced September 28, 2016, as the Broadband Connections for Rural Opportunities Program Act of 2016 (B-CROP), would amend Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to establish a broadband grant program to accompany the Rural Broadband Loan program, and raises authorization from \$25 million to \$50 million and would require grant and loan recipients to submit broadband buildout data which the USDA Secretary would submit to FCC's National Broadband Map.

Legislation in the 115th Congress

With the 2014 farm bill expiring on September 30, 2018, and with the 115th Congress expected to consider reauthorization of the RUS broadband loan program in the 2018 farm bill, modifications to RUS broadband programs are a possibility. Aside from annual appropriations legislation, the following bills have been introduced, to date, into the 115th Congress that could impact the RUS broadband programs:

- H.R. 800 (Huffman), introduced on February 1, 2017, as the New Deal Rural Broadband Act of 2017, would establish an Office of Rural Broadband within USDA; authorize a “Breaking Ground on Rural Broadband Program” to make grants, loans, or loan guarantees to eligible entities for serving rural and underserved areas (\$20 billion to remain available until September 30, 2022); establish a Tribal Broadband Assistance Program (\$25 million for each of fiscal years 2017 through 2022); establish a broadband grant program to accompany the Rural Broadband Loan program; modify the Telecommunications Infrastructure Loan program by raising the threshold for an eligible rural area from 5,000 to 20,000 population and by permitting RUS to give preference to loan applications that support regional telecommunications development; and direct USDA to establish and maintain an inventory of any real property that is owned, leased, or otherwise managed by the federal government on which a broadband facility could be constructed, as determined by the Under Secretary for Rural Broadband Initiatives. Referred to the Committee on Agriculture, and in addition to the Committees on Natural Resources and Energy and Commerce.
- H.R. 1084 (Kelly of Illinois), introduced on February 15, 2017, as the Today’s American Dream Act, would direct GAO to submit to Congress a report on the efficiency and effectiveness of efforts by federal agencies to expand access to broadband service, including the RUS telecommunications and broadband programs. Referred to the Committee on Ways and Means, and in addition to the Committees on Education and the Workforce, Agriculture, Financial Services, Small Business, Energy and Commerce, the Judiciary, and Oversight and Government Reform.
- H.R. 4232 (Pocan), introduced on November 2, 2017, as the Broadband Connections for Rural Opportunities Program (BCROP) Act, would amend Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to establish a broadband grant program to accompany the Rural Broadband Loan program. Also would raise the broadband loan program authorization from \$25 million to \$50 million. Referred to the Committees on Energy and Commerce and on Agriculture.
- H.R. 4291 (Stefanik), introduced on November 7, 2017, as the Precision Farming Act, would utilize Rural Utilities Service loans and loan guarantees under the rural broadband access program to provide broadband service for agricultural producers, and would provide universal service support for installation charges for broadband service for agricultural producers in order to improve precision farming and ranching. Referred to the Committees on Energy and Commerce and on Agriculture.
- H.R. 4308 (Lujan Grisham), introduced on November 8, 2017, as the Rural Broadband Expansion Act, would authorize the Rural Utility Service’s Community Connect broadband grant program at \$100 million for each of fiscal

- years 2019 through 2023. Referred to the Committees on Agriculture and on Energy and Commerce.
- S. 1676 (Gillibrand), introduced on July 31, 2017, as the Broadband Connections for Rural Opportunities Program (BCROP) Act, would amend Section 601 of the Rural Electrification Act of 1936 (7 U.S.C. 950bb) to establish a broadband grant program to accompany the Rural Broadband Loan program. Also would raise the broadband loan program authorization from \$25 million to \$50 million. Referred to the Committee on Agriculture, Nutrition, and Forestry.

Appendix.

Table A-1. Rural Development Telecom Awards, FY2009-FY2016
(\$millions)

	2009-2014		2015		2016		TOTAL	
	Amount	# Awards	Amount	# Awards	Amount	# Awards	Amount	# Awards
AL	60.4	19	1.3	3	0.45	2	62.1	24
AK	149.4	40	3.8	7	1.4	4	154.6	51
AZ	46.4	25	0	0	0.21	1	46.6	26
AR	279.8	45	25.7	3	10.3	7	315.8	55
CA	46.2	27	0.46	2	2.1	7	48.7	36
CO	85.8	29	0.26	1	0.18	1	86.2	31
FL	49.4	6	0.35	2	0	0	49.8	8
GA	112.4	20	0.90	2	1.5	6	114.8	28
HI	1.7	5	0	0	0	0	1.7	5
ID	51.3	26	0.48	1	12.7	1	64.5	28
IL	155.8	33	0.15	1	0.62	2	156.6	36
IN	128.2	14	0	0	0.55	2	128.7	16
IA	290.2	53	40.9	6	15.2	2	346.3	61
KS	373.1	47	0.14	1	26.5	3	399.7	51
KY	321.8	42	0.56	3	0.97	3	323.4	48
LA	54.8	16	0	0	1.4	3	56.3	19
ME	23.4	44	2.7	7	1.6	5	27.8	56
MD	74.4	31	0.10	1	0	0	74.5	32
MA	0.50	1	0	0	0.64	2	1.1	3
MI	126.8	24	0.98	3	0.54	2	128.3	29
MN	327.4	63	30.9	4	7.8	7	366.1	74
MS	50.3	25	1.7	3	2.0	4	53.9	32
MO	214.8	56	0.67	3	0	0	215.4	59
MT	359.8	25	30.3	3	30.7	5	420.8	33
NE	153.2	34	4.2	2	0.31	2	157.7	38
NV	20.1	10	0.38	1	1.4	3	21.9	14
NH	3.9	8	0.92	2	5.5	1	10.3	11
NJ	0.32	2	0	0	0	0	0.32	2
NM	191.5	34	5.8	2	14.4	3	211.7	39
NY	64.8	42	0.48	2	0.22	1	65.5	45
NC	153.6	30	0	0	1.3	5	154.8	35
ND	376.6	39	60.3	5	55.3	2	492.3	46

	2009-2014		2015		2016		TOTAL	
OH	46.0	33	0.25	1	0.39	2	46.7	36
OK	308.6	74	22.9	4	4.5	6	336.1	84
OR	75.3	34	0.20	1	0.99	1	75.6	36
PA	4.4	18	0	0	1.0	4	5.4	22
PR	1.7	4	0	0	0	0	1.7	4
SC	205.4	21	14.0	6	1.3	4	220.7	31
SD	133.5	25	1.1	4	17.6	5	152.2	34
TN	235.9	38	0.63	2	3.5	8	240.1	48
TX	326.5	61	13.4	1	14.7	2	354.6	64
UT	22.2	15	0.33	2	0.30	1	22.8	18
VT	124.8	13	0	0	0	0	124.8	13
VA	103.8	28	3.4	2	2.4	3	109.6	33
WA	149.4	32	0.38	1	0.46	1	150.2	34
WV	48.3	19	0	0	1.2	3	49.5	22
WI	336.9	72	9.3	7	1.1	4	347.3	83
WY	54.1	10	0	0	0	0	54.1	10
VI	0.75	1	0	0	0	0	0.75	1
Western Pacific	122.8	7	0.49	1	0	0	123.3	8
TOTAL	6,648.7	1,420	280.9	102	244.2	130	7,174.0	1,652

Source: USDA, Rural Development, *2016 Progress Report*.

Notes: Includes the four RUS loan and grant programs: Rural Broadband Loan and Loan Guarantee Program, Telecommunications Infrastructure Loan and Loan Guarantee Program, Community Connect Grant Program, and Distance Learning and Telemedicine Grant Program. Data for 2009-2014 includes the 2009-2010 Broadband Initiatives Program funds appropriated by the American Recovery and Reinvestment Act (ARRA).

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