

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

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March 27, 2009

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Penny Hill Press

Congressional Research Service
7-5700
www.crs.gov
RL33816

CRS Report for Congress
Prepared for Members and Committees of Congress

c11173008

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.

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. Currently, RUS/USDA houses two assistance programs exclusively dedicated to financing broadband deployment: the Rural Broadband Access Loan and Loan Guarantee Program and the Community Connect Grant Program.

The 110th Congress considered reauthorization and modification of the loan and loan guarantee program as part of the farm bill. The Food, Conservation, and Energy Act of 2008 became law on June 18, 2008 (P.L. 110-246). Title VI (Rural Development) contains authorizing language for the broadband loan program.

Meanwhile, on May 11, 2007, RUS released a Proposed Rule seeking to revise the broadband loan program rules and regulations. Some key issues pertinent to a consideration of the RUS broadband programs include restrictions on applicant eligibility, how "rural" is defined with respect to eligible rural communities, how to address assistance to areas with preexisting broadband service, technological neutrality, funding levels and mechanisms, and the appropriateness of federal assistance. The final rule will reflect language in the enacted farm bill statute (P.L. 110-246). Ultimately, modification of rules, regulations, or criteria associated with the RUS broadband program will likely result in "winners and losers" in terms of which companies, communities, regions of the country, and technologies are eligible or more likely to receive broadband loans and grants.

On February 17, 2009, President Obama signed P.L. 111-5, the American Recovery and Reinvestment Act (ARRA). Broadband provisions of the ARRA provide a total of $7.2 billion, primarily for broadband grants. The total consists of $2.5 billion for RUS broadband loan, loan guarantee, and grant programs, and $4.7 billion to the National Telecommunications and Information Administration (NTIA) at the Department of Commerce (DOC) for a newly established Broadband Technology Opportunities Program.

This report will be updated as events warrant.

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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, broadband is primarily provided via cable modem (from the local provider of cable television service) or over the telephone line (digital subscriber line or "DSL"). Other broadband technologies include fiber optic cable, mobile wireless, fixed wireless, satellite, and broadband over power lines (BPL).

Broadband access enables a number of beneficial applications to individual users and to communities. These include e-commerce, 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. A February 2006 study by the Massachusetts Institute of Technology for the Department of Commerce's Economic Development Administration marked the first attempt to measure the impact of broadband on economic growth. The study found that "between 1998 and 2002, communities in which mass-market broadband was available by December 1999 experienced more rapid growth in employment, the number of businesses overall, and businesses in IT-intensive sectors, relative to comparable communities without broadband at that time."[1]

Subsequently, a June 2007 report from the Brookings Institution found that for every one percentage point increase in broadband penetration in a state, employment is projected to increase by 0.2 to 0.3% per year. For the entire U.S. private non-farm economy, the study projected an increase of about 300,000 jobs, assuming the economy is not already at full employment.[2]

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.

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,[3] recent surveys and studies have

[1] Gillett, Sharon E., Massachusetts Institute of Technology, *Measuring Broadband's Economic Impact*, report prepared for the Economic Development Administration, U.S. Department of Commerce, February 28, 2006, p. 4. Available at http://www.eda.gov/ImageCache/EDAPublic/documents/pdfdocs2006/mitcmubbimpactreport_2epdf/v1/mitcmubbimpactreport.pdf.

[2] Crandall, Robert, William Lehr, and Robert Litan, *The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data*, June 2007, 20 pp. Available at http://www3.brookings.edu/views/papers/crandall/200706litan.pdf.

[3] See for example: National Exchange Carrier Association (NECA), *Trends 2006: Making Progress With Broadband*, 2006, 26 p. Available at http://www.neca.org/media/trends_brochure_website.pdf.

indicated that, in general, rural areas tend to lag behind urban and suburban areas in broadband deployment. For example:

- A September 2004 Department of Commerce report, *A Nation Online: Entering the Broadband Age*, found that a lower percentage of Internet households have broadband in rural areas (24.7%) than in urban areas (40.4%), and that "while broadband usage has grown significantly in all areas since the previous survey, the rural-urban differential continues."[4] The report also found that broadband penetration rates are higher in the West and Northeast than in the South and Midwest.[5]
- A May 2006 report released by the Government Accountability Office (GAO) found that 17% of rural households subscribe to broadband, as opposed to 28% of suburban and 29% of urban households.[6] GAO also found that lower broadband subscription rates in rural areas are related to availability, not to a lesser tendency of rural households to purchase broadband service.[7]
- 2008 data from the Pew Internet & American Life Project indicate that while broadband adoption is growing in urban, suburban, and rural areas, broadband users make up larger percentages of urban and suburban users than rural users. Pew found that the percentage of all U.S. adults with broadband at home is 60% for suburban areas, 57% for urban areas, and 38% for rural areas.[8]
- According to the latest FCC data on the deployment of high-speed Internet connections (released January 2009), as of December 31, 2007, high-speed subscribers were reported in 99% of the most densely populated zip codes, as opposed to 90% of zip codes with the lowest population densities.[9]

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 and DSL—the greater the geographical distances among customers, the larger the cost to serve those customers. For example, in providing telecommunications services, investment per subscriber in rural systems averages $2,921 compared to $1,920 for urban.[10] 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.

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[4] U.S. Department of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration, *A Nation Online: Entering the Broadband Age*, September 2004, pp. 12-13.

[5] Ibid., p. 12.

[6] U.S. Government Accountability Office, *Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, GAO-06-426, May 2006, p. 12. Available at http://www.gao.gov/new.items/d06426.pdf.

[7] Ibid., p. 5.

[8] Horrigan, John B., Pew Internet & American Life Project, *Home Broadband Adoption 2008,* July 2008, p. 3. Available at http://www.pewinternet.org/pdfs/PIP_Broadband_2008.pdf.

[9] FCC, *High-Speed Services for Internet Access: Status as of December 31, 2007,* p.4. Available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-287962A1.pdf.

[10] Office of Management and Budget, Program Assessment Rating Tool (PART), Department of Agriculture PART Assessments, assessment year 2005, p. 262, available at http://www.whitehouse.gov/omb/budget/fy2005/pma/agriculture.pdf.

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 which transmits a signal to and from an Internet backbone which is typically located in or near an urban area.

Cable modem and DSL currently comprise about 84% of residential broadband deployment nationwide.[11] However, because of the challenges of deploying these technologies in low population density areas, other broadband technologies have been identified as perhaps offering potential in rural areas. These include mobile wireless (cellular), fixed wireless (WIMAX, wi-fi), satellite, and broadband over powerlines (BPL).

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."[12] The broadband pilot loan program was authorized under the authority of the Distance Learning and Telemedicine Program (7 U.S.C. 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.[13]

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

[11] *High-Speed Services for Internet Access: Status as of December 31, 2007,* Chart 6.

[12] 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.

[13] Rural Utilities Service, USDA, "Broadband Pilot Loan Program," *Federal Register*, Vol. 67, No. 15, January 23, 2002, p. 3140.

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."[14]

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.[15] Section 6103 made available, from the funds of the Commodity Credit Corporation (CCC), a total of $100 million through FY2007 ($20 million for each of fiscal years 2002 through 2005, and $10 million for each of fiscal years 2006 and 2007). P.L. 107-171 also authorized any other funds appropriated for the broadband loan program.

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 has approved an appropriation for the loan program which is used to subsidize a specific loan level (the total amount of lending authority). **Table 1** shows—for the life of the program to date—loan subsidies, loan levels (lending authority), and actual funds announced by RUS yearly for loan applications. Announced available funding typically exceeds yearly loan levels because large balances of unobligated money have been carried over from year to year.

[14] Rural Utilities Service, USDA, "Broadband Pilot Grant Program," *Federal Register*, Vol. 67, No. 130, July 8, 2002, p. 45080.

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

Table 1. Funding for the Rural Broadband Access Loan and Loan Guarantee Program

	Budget Authority (subsidy level)	Loan Level (lending authority)	Announced Available Funding for Loans and Loan Guarantees[a]
FY2003	$40 million[b]	$1.455 billion	$1.455 billion[c]
FY2004	$13.1 million	$602 million	$2.211 billion[d]
FY2005	$11.715 million	$550 million	$2.157 billion[e]
FY2006	$10.75 million	$500 million	$1.085 billion[f]
FY2007	$10.75 million	$500 million	$0.998 billion[g]
FY2008	$6.45 million	$300 million	$0.7929 billion[h]
FY2009	$15.619 million	$400 million	$0.594 billion[h]

a. Because all available funds were not awarded, unobligated balances were carried over from year to year.

b. Composed of $20 million from FY2002 plus $20 million for 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.

c. Rural Utilities Service, USDA, "Rural Broadband Access Loans and Loan Guarantees Program," *Federal Register*, Vol. 68, No. 20, January 30, 2003, pp. 4753-4755.

d. Rural Utilities Service, USDA, "Rural Broadband Access Loans and Loan Guarantees Program," *Federal Register*, Vol. 69, No. 60, March 29, 2004, pp. 16231-16232.

e. Rural Utilities Service, USDA, "Rural Broadband Access Loans and Loan Guarantees Program," *Federal Register*, Vol. 70, No. 42, March 4, 2005, pp. 10595-10596.

f. USDA, Rural Utilities Service, "Rural Development Utilities Programs," power point presentation, April 25, 2006. Available at http://www.usda.gov/rus/pasd/NARUC-2006April.ppt#322,1.

g. USDA, Rural Utilities Service, "Rural Development Telecommunications Program Overview," power point presentation, October 1, 2007. Available at http://www.usda.gov/rus/telecom/broadband/workshops/J.PontiMichiganPresentationOct12007.ppt..

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

The Rural Broadband Access Loan and Loan Guarantee Program is codified as 7 U.S.C. 950bb. Specifically, Treasury rate loans, 4% loans, and loan guarantees are authorized for entities providing broadband service for "eligible rural communities," defined as any area of the United States that is not contained in an incorporated city or town with a population in excess of 20,000 inhabitants.[16] RUS is required to be technologically neutral in determining whether or not to make

[16] Section 772 of the FY2004 Consolidated Appropriations Act (P.L. 108-199) changed the definition of an "eligible rural community" to be defined as "any area of the United States that is not contained in an incorporated city or town with a population in excess of 20,000 inhabitants." Accordingly, the March 29, 2004 Notice of Funds Availability for the Rural Broadband Access Loans and Loan Guarantee Program defined "Eligible Rural Community" as follows:

> The definition of eligible rural community in Section 601(b)(2) of the Rural Electrification Act (7 U.S.C. 950bb)(b)(2), qualifying for financial assistance under the Rural Broadband Access Loan and Loan Guaranty Program, has been amended by provisions in the Consolidated Appropriations Act, 2004, to mean any area of the United States that is not contained in an incorporated city or town with a population in excess of 20,000 inhabitants. Therefore, an applicant no longer must demonstrate that it is not located in an area designated as a standard metropolitan statistical area. This change supersedes and nullifies contrary provisions in regulations implementing the

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a loan, and is instructed to give priority to rural communities with no existing residential broadband service. Loans are used for financing new or improved existing broadband provider facilities. Loans cannot be used to finance installations or equipment at customers' premises.

On January 30, 2003, the RUS published in the *Federal Register* the regulation (7 C.F.R. part 1738) establishing the Rural Broadband Access Loan and Loan Guarantee Program, as authorized by P.L. 107-171.[17] According to the regulation, entities eligible to receive loans include corporations, limited liability companies, cooperative or mutual organizations, Indian tribes, and public bodies. Specifically **not** eligible are individuals, partnerships, and any entity serving 2% or more of the telephone subscriber lines in the United States. All applicants are required to demonstrate adequate credit support—a minimum of 20% of requested loan amount, including cash on hand equivalent to one full year of operating expense.[18]

To be eligible for 4% loans, applicants must be proposing to serve a community with no existing broadband service, a population of 2,500 or less, and a service area with population density of no more than 20 persons per square mile. Additionally, the community must be located in a county with a per capita income of less than or equal to 65% of the national per capita income.

As of November 20, 2008, the broadband loan program received 218 applications, requesting a total of $4.5 billion in loans. Of these, 92 applications were approved (totaling $1.8 billion) and 117 were returned (totaling $2.7 billion). Of loans approved, 53% were made to corporations, 37% to LLCs, 6% to cooperatives, 3% to municipalities, and 1% to a tribal authority.[19]

On March 25, 2008, RUS announced its largest loan ever, $267 million to Open Range Communications. The $267 million loan, accompanied by an over $100 million investment from the private sector, will enable Open Range to provide wireless broadband (Wi-Max technology) and satellite connectivity to 518 rural communities in 17 states.[20]

Applications for the Rural Broadband Access Loan and Loan Guarantee program are accepted at any time. The maximum loan amount for 4% loans is $7.5 million. There is no maximum for treasury rate loans, and the minimum level for all loans is $100 thousand. In 2003, the average loan was $11.2 million, while in 2006, the average loan was $44 million.[21] Loans are made for the term equal to the expected service life of financed facilities. Further information, including application materials and guidelines, is available at http://www.usda.gov/rus/telecom/broadband.htm.

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broadband program found at 7 CFR part 1738.

[17] Rural Utilities Service, USDA, "Rural Broadband Access Loans and Loan Guarantees," *Federal Register*, Vol. 68, No. 20, January 30, 2003, pp. 4684-4692.

[18] The cash-on-hand requirement is waived for companies with two previous years of positive cash flow.

[19] USDA, Rural Utilities Service, "FCC/USDA Rural Broadband Educational Workshop," power point presentation, November 20, 2008. Available at http://www.usda.gov/rus/telecom/broadband/workshops/FCC_USDABroadbandWorkshopNov20.pdf.

[20] USDA, *News Release*, "USDA Announces $267 Million Rural Broadband Loan," March 25, 2008. Available at http://www.rurdev.usda.gov/rd/newsroom/2008/RD_Broadband_Loans_3-25-2008.pdf.

[21] 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.

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." On July 28, 2004, RUS published its final rule on the broadband grant program, called the Community Connect Grant Program (7 C.F.R. part 1739, subpart A).[22] 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 (including the pilot grants of FY2002 and FY2003).

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

Source: Compiled by CRS from appropriations bills.

Eligible applicants for broadband grants include incorporated organizations, Indian tribes or tribal organizations, state or local units of government, cooperatives, private corporations, and limited liability companies organized on a for profit or not-for-profit basis. Individuals or partnerships are not eligible.

Funded projects must: serve a rural area of 20,000 population or less[23] where broadband service does not exist, serve one and only one single community, deploy free basic broadband service (defined as 200 kbps in both directions) for at least two years to all community facilities, offer basic broadband to residential and business customers, and provide a community center with at

[22] Rural Utilities Service, USDA, "Broadband Grant Program," 7 C.F.R. part 1739, *Federal Register*, Vol. 69, No. 144, July 28, 2004, pp. 44896-44903.

[23] A rural area is defined as "any area of the United States not included within the boundaries of any incorporated or unincorporated city, village, or borough having a population in excess of 20,000 inhabitants." (7 C.F.R. 1739.3)

least ten computer access points within the proposed service area while making broadband available for two years at no charge to users within that community center.

Since the inception of the RUS broadband grant program, $83.7 million in grant money has been awarded to 173 communities. Awardees must contribute a matching contribution equal to 15% of the requested grant amount.

RUS typically publishes an annual Notice of Funding Availability (NOFA) in the *Federal Register*, which specifies the deadline for applications, the total amount of funding available, and the maximum and minimum amount of funding available for each grant. Further information, including application materials and guidelines, is available at http://www.usda.gov/rus/telecom/commconnect.htm.

Other Broadband Programs

Prior to enactment of the American Recovery and Reinvestment Act (P.L. 111-5), which established the Broadband Technology Opportunities Program at the National Telecommunications and Information Administration/Department of Commerce, the Rural Broadband Access Loan and Loan Guarantee Program and the Community Connect Broadband Grants were the only federal programs *exclusively* dedicated to deploying broadband infrastructure.

There also exist other federal programs that provide financial assistance for various aspects of telecommunications development.[24] Though not explicitly or exclusively devoted to broadband, many of those programs are used to help deploy broadband technologies in rural areas. For example, since 1995, the RUS Rural Telephone Loan and Loan Guarantee program—which has traditionally financed telephone voice service in rural areas under 5,000 inhabitants—has required that all telephone facilities receiving financing must be capable of providing DSL broadband service at a rate of at least 1 megabyte per second.[25] An October 2006 survey of RUS traditional telephone loan program borrowers found that 92% of those borrowers were providing broadband to all of the telephone exchanges in their service territories.[26] The RUS Distance Learning and Telemedicine grants program is used to support deployment of broadband technologies specifically for telemedicine and distance learning applications. **Table 3** shows the number of customers receiving broadband due to USDA financing of telecommunications facilities.

[24] See CRS Report RL30719, *Broadband Internet Access and the Digital Divide: Federal Assistance Programs*, by Lennard G. Kruger and Angele A. Gilroy.

[25] In the Rural Electrification Loan Restructuring Act (P.L. 103-129, the 1993 farm bill), Congress amended the Rural Electrification Act to require that facilities financed under this program be capable of providing broadband service at the rate of 1 megabyte per second (7 U.S.C. 935(d)(3)(B)(iv)(I)(cc).

[26] USDA, Rural Utilities Service, Rural Development Telecommunications home page, http://www.usda.gov/rus/telecom/.

Table 3. Number of Customers Receiving New or Improved Telecommunication Services (Broadband) Through USDA Financing of Telecommunications Facilities

(millions)

FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
0.315	0.31	0.38	0.37	0.23	0.30	0.32	0.39	0.23

Sources: U.S. Dept. of Agriculture, *2006 Performance and Accountability Report*, November 2006, p. 82; U.S. Dept. of Agriculture, *FY2009 Budget Summary and Performance Plan*, p. 39.

Note: Customers are defined as access lines financed by the programs.

The other major vehicle for funding telecommunications development in rural areas is the Universal Service Fund (USF).[27] Subsidies provided by USF's Schools and Libraries Program and Rural Health Care Program are used for a variety of telecommunications services, including broadband access. While the USF's High Cost Program does not *explicitly* fund broadband infrastructure, subsidies are used, in many cases, to upgrade existing telephone networks. Regarding the USF High Cost Program, the Congressional Budget Office has found that "current policy implicitly provides funds for broadband in rural areas," adding that:

> Whether such upgrades are motivated by the intention to provide broadband or better conventional telephone service is not immediately clear. However, the fact that wireline carriers as a whole have been losing subscribers and long-distance revenue over the past half decade suggests that at least part of the new investment in local loops has been made with the expectation of generating revenue from broadband subscriptions.[28]

In the 110th Congress, legislation to reform universal service—which could have a significant impact on the amount of financial assistance available for broadband deployment in rural and underserved areas—was introduced. With none of this legislation enacted in the 110th Congress, further legislation regarding universal service could be considered by the 111th Congress. For more information on universal service, see CRS Report RL33979, *Universal Service Fund: Background and Options for Reform*, by Angele A. Gilroy.

In addition to federal support for broadband deployment, there are programs and activities ongoing at the state and local level. Surveys, assessments, and reports from the Alliance for Public Technology and the Communications Workers of America,[29] the California Public Utilities Commission,[30] the National Governors Association,[31] and the National Conference of State Legislatures[32] have explored state and local broadband programs. A related issue is the emergence

[27] For more information on the Universal Service Fund, see CRS Report RL30719, *Broadband Internet Access and the Digital Divide: Federal Assistance Programs*, by Lennard G. Kruger and Angele A. Gilroy.

[28] Congressional Budget Office, *Factors That May Increase Future Spending from the Universal Service Fund*, CBO Paper, June 2006, p. 25. Available at http://www.cbo.gov/ftpdocs/72xx/doc7291/06-16-UniversalService.pdf.

[29] See *State Broadband Initiatives: A Summary of State Programs Designed to Stimulate Broadband Deployment and Adoption*, A Joint Report of the Alliance for Public Technology and the Communications Workers of America, July 2008, 54 pages. State program database available at http://www.speedmatters.org/statepolicy.

[30] California Broadband Task Force, *The State of Connectivity: Building Innovation Through Broadband*, Final Report of the California Broadband Task Force, January 2008, 83 p. Available at http://www.calink.ca.gov/pdf/CBTF_FINAL_Report.pdf.

[31] NGA Center for Best Practices, *Issue Brief*, "State Efforts to Expand Broadband Access," May 20, 2008, p. 1. Available at http://www.nga.org/Files/pdf/0805BROADBANDACCESS.PDF.

[32] For a summary of selected state broadband bills, see http://www.ncsl.org/programs/telecom/
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of municipal broadband networks (primarily wireless and fiber based) and the debate over whether such networks constitute unfair competition with the private sector.

Criticisms of RUS Broadband Programs

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

Loan Approval and Application Process

Perhaps the major criticism of the broadband loan program is that not enough loans are approved, thereby making it difficult for rural communities to take full advantage of the program. As of May 1, 2007, the broadband loan program had received 198 applications, requesting a total of $4.3 billion in loans. Of these, 69 applications were approved (totaling $1.21 billion), 21 were in review (totaling $950 million), and 108 had been returned (totaling $2.14 billion).[33] According to RUS officials, 28% of available loan money was awarded in 2004, and only 5% of available loan money was awarded in 2005.[34]

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 is insufficient credit support, whereby applicants do not have sufficient cash-on-hand (one year's worth is required in most cases). The requirement for cash-on-hand is viewed as particularly onerous for small start up 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:

(...continued)

.2008BroadbandBills.htm.

[33] 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. Available at http://agriculture.house.gov/testimony/110/h70501b/Andrew.doc. A listing of approved and pending broadband loan applications is available at http://www.usda.gov/rus/telecom/broadband.htm.

[34] 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.

> 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.[35]

According to RUS, the loan program was initially overwhelmed by applications (particularly during a two week period in August 2003), and as the program matures, application review times have dropped.[36] On May 11, 2007, RUS released a Proposed Rule which seeks 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.[37]

Eligibility Criteria

Since the inception of the broadband grant and loan programs, the criteria for applicant eligibility has 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."[38] Specifically the IG report found that the RUS definition of rural area has been "too broad to distinguish usefully between suburban and rural communities,"[39] 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 examples of affluent suburban subdivisions qualifying as rural areas under the program guidelines and receiving broadband loans.[40]

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.[41] 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

[35] 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.

[36] Rural Utilities Service, private communication, January 18, 2007.

[37] 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.

[38] 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. Available at http://www.usda.gov/oig/webdocs/09601-04-TE.pdf.

[39] Ibid., p. 6.

[40] Ibid., p. 8.

[41] Martinez, Michael, "Broadband: Loan Fund's Strict Rules Foil Small Municipalities," *National Journal's Technology Daily*, August 23, 2005.

only to underserved areas excludes rural communities with existing but very limited broadband access.[42]

Loans to Communities With Existing Providers

The USDA Rural Broadband Access statute (7 U.S.C. 950bb) specifies that the program "shall give priority to eligible rural communities in which broadband service is not available to residential customers." 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."[43] 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).[44] 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."[45] At the May 1, 2007 hearing before the House Subcommittee on Specialty Crops, Rural Development, and Foreign Agriculture, 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.[46]

Awarding loans to entities in communities with preexisting competitive service has 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."[47] Critics argue that providing loans in areas with preexisting competitive broadband service creates an uneven playing field and discourages further private investment in rural broadband.[48] 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."[49] RUS argues that the presence of a competitor does not necessarily mean that an area

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

[43] Ibid., p. 13.

[44] Ibid., p. 14.

[45] Ibid., p. 15

[46] 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.

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

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

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

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.[50]

Issues During Reauthorization

The previous authorization for the Rural Broadband Access Loan and Loan Guarantee program expired on September 30, 2007. The 110th Congress considered reauthorization of the program as part of the farm bill. Any modification of rules, regulations, or criteria associated with the RUS broadband program will likely result in "winners and losers" in terms of which companies, communities, regions of the country, and technologies are eligible or more likely to receive broadband loans and grants.

On May 11, 2007, RUS released a Proposed Rule which seeks to revise regulations for the broadband loan program and address many of the criticisms of the program. Specifically, the Proposed Rule addresses: (1) funding in competitive markets and new eligibility requirements; (2) new equity and market survey requirements; and (3) new legal notice requirements to increase transparency.[51]

Congress considered approaches in the Proposed Rule as part of formulating the RUS broadband program reauthorization. The final rule will reflect language in the farm bill statute (P.L. 110-246). The following are some key issues which were pertinent to the debate over reauthorization of the RUS broadband loan and loan guarantee program.

Restricting Applicant Eligibility

The RUS broadband program has been 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 view as overly expensive and burdensome to complete. During the reauthorization process, Congress considered whether the criteria for loan eligibility should be modified, and whether a more appropriate balance can 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.

The Proposed Rule issued by RUS on May 11, 2007, would substantially modify applicant eligibility restrictions. First, the Proposed Rule would eliminate the requirement for a market survey for applicants proposing to serve 15% or less of a community.[52] Second, the existing "credit support requirement," would be replaced by an "equity requirement." Under the Proposed Rule, the equity requirement would be reduced from 20% to 10% for applicants proposing to serve areas where at least 40% of households have no broadband access or service from only one provider. Additionally, the current requirement for a year's worth of cash-on-hand would be

[50] Rural Utilities Service, private communication, January 18, 2007.

[51] 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.

[52] Ibid., p. 26750.

eliminated. Instead, once RUS has completed its review of the loan application, the applicant would be notified if additional cash requirements are needed to support the feasibility of the loan. This would be the case if RUS financial analysis indicates that cash from operations and previous cash infusions cannot sustain a positive cash position throughout the forecast period. Finally, the Proposed Rule seeks to give RUS the authority to modify or waive the provisions of the equity requirement as long as those modifications do not result in a projected negative cash position, and if those modifications are required to provide broadband in areas with no service or with only one existing broadband provider.[53]

Definition of "Rural Community"

The definition of which communities qualify as "rural" has 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.

The Proposed Rule released by RUS on May 11, 2007 would narrow the definition of an Eligible Rural Community. In addition to excluding cities or towns with populations over 20,000, the Proposed Rule would exclude communities located within an Urban Area, as defined by the Bureau of the Census as all territory, population, and housing units located within an urbanized area or an urban cluster. Also excluded is any area that has four or more existing broadband service providers (excluding the applicant).[54]

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

[53] Ibid., p. 26754.

[54] Ibid., p. 26751.

sees a coming trend towards larger regional and national proposals, covering hundreds or even more than a thousand communities.[55] 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

While the majority of broadband loans (and all broadband grants) are awarded to entities serving areas without preexisting broadband service, and while RUS is directed by statute to "give priority to eligible rural communities in which broadband service is not available to residential customers," a significant number of Treasury-rate loans have been awarded in areas with preexisting service. Loans to areas with competitive preexisting service—that is, areas where existing companies already provide some level of broadband—have 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.[56] On the one hand, one could argue that the federal government should not be subsidizing competitors for broadband service, particularly in sparsely populated rural markets which may be able only to support one provider. Furthermore, keeping communities with preexisting broadband service eligible may divert assistance from unserved areas that are most in need. On 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, it is argued, that rural areas also receive the benefits of competition, which in some areas may not be possible without federal financial assistance. It is 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.

The Proposed Rule released by RUS on May 11, 2007, would prohibit funding for any community where there are four or more Existing Broadband Service Providers. To be recognized as an Existing Broadband Service Provider, an incumbent service provider must provide evidence and certify to RUS that 10% of the households passed by their facilities are purchasing their broadband service.[57] Applicants would be required to prepare a legal notice stating the intent to offer broadband service in a particular community. The legal notice would be published on the RUS web page. Incumbent providers would then have 30 days to submit information to RUS which would be used to determine if the incumbent is classified as an Existing Broadband Service Provider.[58]

New market entrants and start-ups, as well as incumbent applicants seeking to expand their service area, are required to enter areas where at least 40% of households either have no broadband service or access to only one broadband service provider. According to RUS:

[55] Rural Utilities Service, private communication, January 18, 2007.

[56] 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."

[57] 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. 26749.

[58] Ibid., p. 26755.

> This requirement addresses the need to reach unserved or underserved areas while also permitting service to more lucrative areas, which may be served by up to three Existing Service Providers, in order to attract feasible loan proposals which are supportable from project revenues. Permitting service in areas with up to three Existing Service Providers addresses the need for applicants to leverage revenues from lower-cost users (typically those in more densely populated areas within a city or town) in order to provide service to rural households in higher cost areas, while excluding areas with higher levels of competition where loan feasibility is unlikely.[59]

Additionally, the Proposed Rule states that loans to incumbent service providers can be used to upgrade existing facilities without serving additional customers, as long as the upgrades enhance existing broadband service, and as long as there are no more than three other Existing Broadband Service providers in the area.[60]

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 are required to be technologically neutral, RUS (through the Secretary of Agriculture) does have 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 have 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 could argue that

[59] Ibid., p. 26749.

[60] Ibid.

[61] USDA, Rural Utilities Service, "FCC/USDA Rural Broadband Educational Workshop," power point presentation, November 20, 2008. Available at 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.

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.

Funding

Under the 2002 farm bill (P.L. 107-171), broadband loan subsidies were funded at a total of $100 million through FY2007 ($20 million for each of fiscal years 2002 through 2005, and $10 million for each of fiscal years 2006 and 2007). This $100 million was to be transferred from funds of the Commodity Credit Corporation (CCC). However, beginning in FY2004, Congress has annually blocked mandatory funding from the CCC, thus ensuring that the program was funded solely through annual appropriations.

During reauthorization, the 110th Congress considered whether the mandatory CCC funding mechanism provided in the 2002 farm bill should be retained, eliminated, or modified. Also at issue was whether the current funding levels for the RUS broadband programs are optimal. Given the relatively low utilization of the broadband loan program, should funding remain at current levels or below, or alternatively, if modifications are made to ensure fuller utilization, and given the need to bridge the digital divide, should funding be increased? A related issue was whether more money should be shifted from the broadband loan program to the Community Connect broadband grant program, in order to better address the need for broadband in lower income rural communities that may not be able to meet financial criteria necessary to qualify for loans.

Farm Bill Reauthorization

On January 31, 2007, former Secretary of Agriculture Mike Johanns released the Administration's 2007 farm bill proposal. The Administration proposal sought to reauthorize the Rural Broadband Access Loan and Loan Guarantee program and allocate $500 million in mandatory spending to reduce the backlog in a number of Rural Development loan and grant programs, including the broadband loan program.

Meanwhile, in the May 11, 2007 issue of the *Federal Register*, RUS released its Proposed Rule seeking to revise the broadband loan program rules and regulations (7 C.F.R. Part 1738). RUS accepted public comments on the Proposed Rule through July 10, 2007. The final rule will reflect language in the enacted farm bill statute (P.L. 110-246).

House Farm Bill

On May 1, 2007, the House Subcommittee on Specialty Crops, Rural Development and Foreign Agriculture held a hearing on the RUS broadband programs. Testimony was heard from RUS Administrator James Andrew and public witnesses.[63] On June 6, 2007, the Subcommittee on Specialty Crops, Rural Development and Foreign Agriculture, chaired by Representative McIntyre, approved proposals for sections under its jurisdiction of H.R. 2419, the Farm Bill Extension Act of 2007. Title VII (Rural Development) of the Subcommittee markup included provisions on the Rural Broadband Access Loan and Loan Guarantee Program and the

[63] Testimony is available at http://agriculture.house.gov/hearings/statements.html.

Community Connect Grant program. On July 19, 2007, the full committee approved H.R. 2419; on July 23, 2007, H.R. 2419 (H.Rept. 110-256, Part I) was reported (amended) as the Farm, Nutrition, and Bioenergy Act of 2007. H.R. 2419 was passed by the House on July 27, 2007. The following summarizes the broadband provisions (section 6023, section 6024, and section 6031), as passed by the House, which would change current law:

- Defines eligible rural community as any area of the United States that is not (1) included within the boundaries of any city, town, borough, or village, whether incorporated or unincorporated, with a population of more than 20,000; or (2) included within the urbanized area contiguous and adjacent to such a city or town.
- Prohibits loans to any community in which there are three or more incumbent service providers, unless the loan is to an incumbent service provider of the community, unless other providers in that community are notified of the application, and unless the application proposes to substantially increase the quality of broadband service and the provision of service to underserved households inside and outside the community. Incumbent service providers are defined as an entity providing service to at least 5% of the households in the service area proposed in the application. Also prohibits loans for new construction to any community in which more than 75% of households may obtain affordable broadband service, on request, from at least one incumbent service provider.
- Directs RUS to give priority, in the following order, to applications from eligible rural communities that have (i) no incumbent service provider; (ii) one incumbent service provider; or (iii) two incumbent service providers who, together, serve not more than 25% of the households in the service area proposed in the application.
- Directs RUS 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, particularly when the loan is issued to a financially healthy, strong, and stable entity. The Secretary shall consider reducing the loan security required in areas that do not have broadband service.
- Directs the Secretary to take steps to reduce the cost and paperwork associated with applying for a loan or loan guarantee by first-time applicants (particularly smaller and start-up Internet providers), while maintaining the ability of the Secretary to make an analysis of the risk associated with the loan.
- Allows loan recipients to decide over how many years to amortize the loan, up to 35 years, provided that the Secretary of Agriculture determines that the loans are adequately secure. In determining the loan term, the Secretary shall consider whether the recipient is or would be serving an area that is not receiving broadband services.
- States that an entity is not eligible for a loan if it serves more than 10% of the telephone subscriber lines installed in the United States. Not more than 25% of loans made in a single fiscal year may be approved for entities that serve more than 2% of the telephone subscriber lines in the United States.

- Authorizes for appropriation such sums as necessary for each of fiscal years 2008 through 2012. For each fiscal year, 10% of funding shall be reserved for entities serving eligible tribal communities. Amounts unobligated by June 30 of the fiscal year shall be made available to eligible entities in any state.
- Authorizes the Community Connect Grant Program through FY2012 at $25 million per year. Requires a matching contribution of 15%. Priority is given to grants that will enhance community access to telemedicine and distance learning resources.
- Requires detailed program reports from RUS to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry.
- Establishes a National Center for Rural Telecommunications Assessment.
- Requires USDA to submit a comprehensive rural broadband strategy to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry.

Senate Farm Bill

On October 25, 2007, the Senate farm bill, the Food and Energy Security Act of 2007, was approved by the Senate Committee on Agriculture, Nutrition, and Forestry. Title VI, "Rural Development and Investment" contains provisions (primarily section 6110, "Access to broadband telecommunications services in rural areas") which address reauthorization of the Rural Broadband Access Loan and Loan Guarantee Program. The bill was reported by the Committee on November 2, 2007 (S. 2302; S.Rept. 110-220). The Food and Energy Security Act of 2007 (H.R. 2419, as amended) was passed by the Senate on December 14, 2007. The following summarizes broadband-related provisions that would change current law:

- Defines rural area as any area other than (1) a city or town that has a population of greater than 20,000; (2) an urbanized area contiguous and adjacent to a city or town with a population greater than 50,000; and (3) any collection of census blocks contiguous to each other with a housing density of more than 200 housing units per square mile.
- Prohibits loans or loan guarantees for a project in any specific area in which broadband service is offered by three or more terrestrial service providers that offer services comparable to the services proposed by the applicant. Provider is considered to offer broadband service in a rural area if it offers service at not more than average prices compared with similar services offered in the nearest urban area. An eligible entity must offer broadband service to at least 25% of households not offered broadband service by a terrestrial broadband service provider and must agree to complete build out of broadband service proposed in application within three years after the loan is received.
- Directs Secretary to give priority to applicants that offer broadband to the greatest proportion of households that, prior to the provision of the service, had no terrestrial broadband service provider.
- Directs the Secretary to ensure that the type, amount, and method of security used to secure the loan is commensurate to the risk involved, particularly if the loan is issued to a financially-healthy, strong, and stable entity. Directs the

Secretary to consider the recurring revenues of the entity at the time of application in determining an adequate level of credit support.

- Requires an eligible entity to provide a cost share not to exceed 10% of the amount of the loan or loan guarantee requested. Recurring revenues, including broadband service client revenues, may be credited toward the cost share.
- In case of substantially underserved trust areas (for example, Indian lands), where more than 20% of residents do not have broadband service, 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.
- Directs the Secretary to include a notice of application on its website for a period of not less than ninety days; included on the website will be the name of the applicant, a description and geographical representation of the proposed area of broadband service, a map and numerical estimate of the households that have no terrestrial broadband service in the proposed service area of the project, and any other relevant information. Prohibits the Secretary from making proprietary information available.
- Directs the Secretary to establish, by regulation, procedures to ensure prompt processing of applications. Annual reports describing processing times and explanations for extensions are required. Time limits for responding to applications are prescribed, including that the Secretary shall make a decision whether to approve the loan not later than 180 days after a complete application is submitted.
- Directs that the Secretary may require an entity projecting a subscriber base of more than 20% of the service market to submit a market survey; the Secretary may not require a market survey from an entity proposing to serve less than 20%.
- For direct loans, directs the Secretary to determine interest rates at the lower of 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 30 years if the Secretary determines that the loan security is sufficient.
- Authorizes for appropriation $25 million for each of fiscal years 2008 through 2012.
- Establishes a National Center for Rural Telecommunications Assessment.
- Directs the Chairman of the FCC, in coordination with the Secretary, to submit an annual report to the House Committee on Energy and Commerce, House Committee on Agriculture, Senate Committee on Commerce, Science and Transportation, and Senate Committee on Agriculture, Nutrition, and Forestry describing a comprehensive rural broadband strategy.
- Directs GAO, not later than 30 months after enactment, to submit a study to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry which examines how RUS makes decisions in allocating federal broadband benefits, what economic forces prompt applicants to seek federal funding rather than relying on the private market, how RUS awards

impact the expansion of broadband infrastructure by the private sector; and to recommend what changes to federal policy are needed to further encourage technology expansion by private broadband service providers.

- "Connect the Nation Act." Directs the Department of Commerce to award grants encouraging state initiatives to improve broadband service. The grants would go to nonprofit organizations which would—working with state agencies—develop and implement statewide initiatives to identify, track, and map the availability and adoption of broadband services within states. Authorizes $40 million for each of fiscal years FY2008 through FY2012.

Conference Agreement and Public Law (P.L. 110-246)

On May 14, 2008, the farm bill conference report (H.Rept. 110-627) was approved by the House. The conference report was approved by the Senate on May 15, 2008. With respect to the broadband loan program, the conference agreement adopted much of the Senate amendment with modifications, while the definition of incumbent service provider was retained from the House bill. The conference agreement retained the provision establishing a National Center for Rural Telecommunications Assessment and the provision requiring the FCC and RUS to formulate a comprehensive rural broadband strategy. The conference agreement did *not* retain provisions related to establishing a broadband mapping and state grant program at the Department of Commerce ("Connect the Nation Act"), the GAO assessment of the RUS broadband programs, and authorization language for the Community Connect Broadband Grant program. The Food, Conservation, and Energy Act of 2008 became law on June 18, 2008 (P.L. 110-246). The following summarizes broadband-related provisions that changes previous law:

- 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.
- Prohibits the Secretary from making a loan in any area where there are more than 3 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 1 provider unless a prior loan has been made in the same 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.
- 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.
- 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.
- 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 pre-application 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.
- Retains the current law rate of interest for direct loans—which is the rate equivalent to the cost of borrowing to the Department of 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.
- 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.

- 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.
- Authorizes the Rural Broadband Access Loan and Loan Guarantee program at $25,000,000 to be appropriated for each of fiscal years 2008 through 2012.
- 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 $1,000,000 is authorized for each of the fiscal years 2008 through 2012.
- Directs the Chairman of the 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.

Appropriations

FY2008

The President's FY2008 budget proposal requested a $6.45 million (subsidy) to support a loan level of $300 million. Noting that this is a $200 million reduction from the FY2007 level, the budget documents stated that the "funding is sufficient to meet expected demand," and that

> Regulations are being changed to correct certain weaknesses that have become apparent since the program was established a few years ago. The new regulations will ensure that program funds are focused on rural areas that are lacking existing providers, and that applicants meet high enough standards to ensure long term success.[64]

The FY2008 budget proposal requested no funding for the Community Connect Broadband Grant program.

On July 19, 2007, the House Appropriations Committee approved the FY2008 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies appropriations bill (H.R. 3161; H.Rept. 110-258). The Committee approved $6.45 million to support a loan level of $300 million for the broadband loan program, and $17.82 million for broadband community connect grants (twice the FY2007 level). In report language, the Committee expressed concern over broadband loans to areas with existing providers, and directed the USDA Office of the Inspector General to conduct a comprehensive follow-up study reexamining the RUS broadband loan program. Specifically, the report is directed to detail: how many unserved households were included in approved RUS Broadband Loan Program applications; how many applications were

[64] U.S. Dept. of Agriculture, *FY2008 Budget Summary and Performance Plan*, p. 44.

granted to applicants proposing to serve areas where one or more private broadband providers already offered service; how many approved loans (and their total amount) have defaulted since the program's inception; and how many applicants who have been approved for loans have subsequently withdrawn from the program due to the eventually discovered infeasibility of the approved project.

In report language, the House Appropriations Committee also expressed concern over the administration of the broadband loan program, and noted USDA's failure to obligate available resources to fund broadband projects. According to the Committee, USDA will carry over $10.643 million from FY2007 to FY2008, which will support an additional program (loan) level of $495 million. Regarding the proposed RUS broadband loan program rule, the Committee "expects the Department to prioritize deployment of broadband service to households with no or limited broadband access." Finally, the Committee recommended $250,000 to the USDA Economic Research Service to research deployment of broadband service to households with no or limited access to broadband, and to study the economic impact of not having broadband on rural communities and their growth, community facilities, access to healthcare, and well being.

Also on July 19, 2007, the Senate Appropriations Committee approved its version of the FY2008 agriculture appropriations bill (S. 1859; S.Rept. 110-134). The Committee approved $10.643 million to support a loan level of $495 million for the broadband loan program, and $8.9 million for broadband grants.

On December 26, 2007, the President signed the Consolidated Appropriations Act, 2008 (P.L. 110-161). The bill provided $6.45 million to support a loan level of $300 million for the broadband loan program, and $13.4 million for broadband community connect grants. The Joint Explanatory Statement accompanying P.L. 110-161 directed USDA to evaluate and report on the potential of a combination loan/grant broadband program to expand the reach and more effectively utilize broadband resources.

FY2009

The Bush Administration's FY2009 budget proposal requested a $11.619 million (subsidy) to support a loan level of $297.923 million. The budget justification noted that available funding in recent years has significantly outpaced demand and that $495 million was carried forward to FY2008, in addition to the FY2008 funding. The Administration proposed a rescission of the FY2008 subsidy of $6.45 million, an unobligated balance that would otherwise be carried forward into FY2009. According to the budget justification, the program "routinely carries over the entire year's appropriations, so the funds are not necessary to support the program's demand."

As in past budget requests, the Administration proposed no funding for the Community Connect Broadband Grants (down from $13.5 million in FY2008). According to the budget justification, "building broadband infrastructure in rural America is expensive and requires extensive amounts of capital. A loan program is more suited to supporting this kind of activity."

On July 21, 2008, the Senate Appropriations Committee reported the FY2009 agriculture appropriations bill (S. 3289; S.Rept. 110-426). The Committee approved $11.618 million to support a loan level of $297.923 million for the broadband loan program, the same level as requested by the Administration. Unlike the Administration, the Committee would have provided $13.406 million for broadband grants.

The Omnibus Appropriations Act, 2009 (P.L. 111-8) appropriates $15.619 million to support a loan level of $400.487 million for the Rural Broadband Access Loan and Loan Guarantee Program, and $13.406 million for the Community Connect Grant Program.

The American Recovery and Reinvestment Act (P.L. 111-5)

On February 17, 2009, President Obama signed P.L. 111-5, the American Recovery and Reinvestment Act (ARRA). Broadband provisions of the ARRA provide a total of $7.2 billion, primarily for broadband grants. The total consists of $2.5 billion to RUS broadband loan, loan guarantee, and grant programs, and $4.7 billion to NTIA/DOC for a newly established Broadband Technology Opportunities Program.

The ARRA does not specify how the $2.5 billion is to be divided between the RUS grant and loan programs. Regarding projects applying for funding, the ARRA states that:

- at least 75% of the area to be served by a project receiving these funds shall be in a rural area without sufficient access to high speed broadband service to facilitate economic development, as determined by the Secretary of Agriculture;
- priority shall be given to projects that will deliver end users a choice of more than one broadband service provider;
- priority shall be given to projects that provide service to the highest proportion of rural residents that do not have access to broadband service;
- priority shall be given to borrowers and former borrowers of rural telephone loans;
- priority shall be given to projects demonstrating that all project elements will be fully funded, that can commence promptly, and that can be completed; and
- no area of a project may receive funding to provide broadband service under the Broadband Technology Opportunities Program at NTIA/DOC.

RUS is currently developing the rules, regulations, and application guidelines necessary to implement its portion of the ARRA broadband program.[65] On March 10, 2009, at a public meeting held by RUS, NTIA, and the FCC, RUS officials indicated that they would likely use the budget authority provided by the ARRA to support a program of grants, loans, loan-guarantees, and possibly loan-grant combinations. Still to be determined is how the $2.5 billion of budget authority will be divided between the various forms of assistance (e.g. loans, grants, loan guarantees, and loan-grant combinations). RUS anticipates at least three application rounds and expects to issue its first Notice of Funding Availability (NOFA) between April and June 2009.

[65]The latest developments on RUS implementation of the ARRA is available at http://www.usda.gov/rus/telecom/index.htm.

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