

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.

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 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 loans, grants, and loan/grant combinations, 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. On July 1, 2009, RUS and NTIA jointly released the first Notice of Funds Availability (NOFA) detailing requirements, rules, and procedures for applying for ARRA grants, loans, and loan grant combinations

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

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[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:

- April 2009 data from the Pew Internet & American Life Project indicate that while broadband adoption throughout the nation is growing – with home broadband adoption at 63% of adult Americans—broadband users make up larger percentages of non-rural users (67%) than rural users (46%).[4]
- 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.[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]

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.[8] 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 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.[9] However, because of the challenges of deploying these technologies in low population density areas, other broadband technologies have been identified as perhaps offering

[4] Horrigan, John B., Pew Internet & American Life Project, *Home Broadband Adoption 2009,* June 2009, p. 14. Available at http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf.

[5] 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.

[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] 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.

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

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."[10] 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.[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

[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.

[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.

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.

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** shows—for the life of the program to date—loan subsidies and loan levels (lending authority).

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

	Direct Appropriations (subsidy level)	Loan Levels Specified in Annual Appropriations
FY2001 (pilot)	—	$100 million
FY2002 (pilot)	—	$80 million
FY2003	[a]	$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 (request)	$38.495 million	$532 million
FY2010 (H.Rept. 111-181)	$28.96 million	$400 million
FY2010 (S.Rept. 111-39)	$38.495 million	$532 million

a. 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.

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

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.[14] RUS is required to be technologically neutral in determining whether or not to make 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.[15] 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.[16] Of loans approved, approximately 53% have been made to corporations, 37% to LLCs, 6% to cooperatives, 3% to municipalities, and 1% to a tribal authority.[17]

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.

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.[18]

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[14] 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 broadband program found at 7 CFR part 1738.

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

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

[17] 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.

[18] 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.

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.[19] 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.

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).[20] 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 (req)	$13.4 million
FY2010 (H.Rept. 111-181)	$17.9 million
FY2010 (S.Rept. 111-39)	$13.4 million

Source: Compiled by CRS from appropriations bills.

[19] 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.

[20] 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.

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[21] 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 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.[22] 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.[23] 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.[24] According to FY2010 budget

[21] 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)

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

[23] 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).

[24] USDA, Rural Utilities Service, Rural Development Telecommunications home page, http://www.usda.gov/rus/ (continued...)

documents, 85% of loans funded in FY2008 were used for fiber-to-the home (FTTH) broadband infrastructure, and more than 105 telephone exchanges will be upgraded to FTTH as a result of financing in FY2008.[25]

Another RUS telecommunications program, Distance Learning and Telemedicine grants, 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.

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	FY2010
0.31	0.31	0.38	0.37	0.23	0.30	0.36	0.78	0.37	0.35

Sources: U.S. Dept. of Agriculture, *2006 Performance and Accountability Report*, November 2006, p. 82; U.S. Dept. of Agriculture, *FY2010 Budget Summary and Performance Plan*, p. 51.

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).[26] 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.[27]

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.

(...continued)

telecom/.

[25] Rural Utilities Service, *2010 Explanatory Notes*, available at http://www.obpa.usda.gov/25rus2010notes.pdf

[26] 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.

[27] 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.

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,[28] the California Public Utilities Commission,[29] the National Governors Association,[30] and the National Conference of State Legislatures[31] have explored state and local broadband programs. A related issue is the emergence 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 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 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).[32] According to RUS officials, 28% of available loan money was awarded in 2004, and only 5% of available loan money was awarded in 2005.[33]

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-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.

[28] 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.

[29] 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.

[30] 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.

[31] For a summary of selected state broadband bills, see http://www.ncsl.org/programs/telecom/.2008BroadbandBills.htm.

[32] Private communication, USDA, June 23, 2009.

[33] 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.

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.[34]

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.[35] 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.[36]

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."[37] Specifically the IG report found that the RUS definition of rural area has been "too broad to distinguish usefully between suburban and rural communities,"[38] 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.[39]

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[34] 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.

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

[36] 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.

[37] 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.

[38] Ibid., p. 6.

[39] Ibid., p. 8.

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.[40] 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.[41]

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."[42] 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).[43] 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."[44] 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.[45]

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."[46] Critics argued that providing loans in areas with preexisting competitive broadband service creates an uneven playing field and discourages further private investment in rural broadband.[47] In response, RUS stated in the IG report that its

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

[41] 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.

[42] Ibid., p. 13.

[43] Ibid., p. 14.

[44] Ibid., p. 15

[45] 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.

[46] 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.

[47] Testimony of Tom Simmons, Vice President for Public Policy, Midcontinent Communications, before Senate (continued...)

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."[48] 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.[49]

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."[50]

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."[51] 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.[52]

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."[53] 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 non-rural 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

(...continued)

Committee on Agriculture, Nutrition, and Forestry, May 17, 2006.

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

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

[50] 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.

[51] Ibid, p. 5.

[52] Ibid, p. 5-6.

[53] 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. RUS pointed out that they have not approved any requests for loan assistance received since enactment of the 2008 Farm Bill on June 18, 2008.

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. 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. 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 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 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 towards larger regional and national proposals, covering hundreds or even more than a thousand communities.[54] 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.[55] 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 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, 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).[56] No funding has been provided for projects utilizing satellite broadband.[57]

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

[55] 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."

[56] 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.

[57] 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 (continued...)

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.

Broadband Loan Program Reauthorization (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 issues raised during the reauthorization process. The following summarizes broadband-related provisions that change 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.

(...continued)

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.

- 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 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.

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 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 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.

Other Provisions

- 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.
- 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 $1,000,000 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

The final RUS/USDA rule that will implement the Rural Broadband Access Loan and Loan Guarantee program, as modified by P.L. 110-246, is still pending and has not been released.

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*.[58] 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. According to Acting FCC Chairman Michael Copps, the report is "a prelude to, and a building block for" the national broadband plan which the FCC is developing and will deliver to Congress by February 17, 2010, as mandated by the American Recovery and Reinvestment Act (P.L. 111-5).

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.[59]

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 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

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

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

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 $13.4 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 provided $13.406 million for broadband grants.

The Omnibus Appropriations Act, 2009 (P.L. 111-8) appropriated $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.

FY2010

The Obama Administration's FY2010 budget proposal requested a $38.495 million loan subsidy to support a loan level of $532 million for the Rural Broadband Access Loan and Loan Guarantee Program, and $13.406 million for the Community Connect Grant Program.

On June 18, 2009, the House Appropriations Committee approved the FY2010 agriculture appropriations bill (H.R. 2997; H.Rept. 111-181). The Committee approved a $28.96 million loan subsidy to support a loan level of $400 million for the Rural Broadband Access Loan and Loan Guarantee Program, and $17.976 million for the Community Connect Grant Program. The House passed H.R. 2997 on July 9, 2009.

On July 7, 2009, the Senate Appropriations Committee approved its version of the FY2010 agriculture appropriations bill (S. 1406; S.Rept. 111-39). Matching the Administration request, the Committee approved a $38.495 million loan subsidy to support a loan level of $532 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, grant, and loan/grant combinations, and $4.7 billion to NTIA/DOC for a newly established Broadband Technology Opportunities Program.[60]

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

[60] For more information on ARRA broadband programs, see CRS Report R40436, Broadband Infrastructure Programs in the American Recovery and Reinvestment Act, by Lennard G. Kruger.

- no area of a project may receive funding to provide broadband service under the Broadband Technology Opportunities Program at NTIA/DOC.

According to the Administration's FY2010 budget proposal, USDA estimates that the $2.5 billion of budget authority will be apportioned as follows: $1.94 billion for grants and $485 million for loan subsidies to support $7.16 billion in direct loans. According to the budget summary, "the $2.5 billion in budget authority for broadband loans and grants provided by the Recovery Act will be administered under a series of notices to reflect the specific provisions of the Recovery Act, which differ from those of the 2008 Farm Bill."[61]

On July 1, 2009, RUS and NTIA jointly released the first Notice of Funds Availability (NOFA) detailing requirements, rules, and procedures for applying for ARRA grants, loans, and loan grant combinations.[62] The total amount available in this first funding round is $4 billion, including $2.4 billion (program level) under the RUS Broadband Initiatives Program (BIP), which will extend loans, grants, and loan/grant combinations to facilitate broadband deployment in rural areas; and $1.6 billion (budget authority) under the NTIA Broadband Technology Opportunities Program (BTOP), which will make available grants for deploying broadband infrastructure in unserved and underserved areas, enhance broadband capacity at public computer centers, and promote sustainable broadband adoption projects. **Table 4** compares the NOFA provisions for BIP and BTOP with similar provisions associated with the Community Connect Grant Program and the Rural Broadband Access Loan and Loan Guarantee Program.

Applications for ARRA grants, loans, and grant/loan combinations are being accepted between July 14 and August 14, 2009. Award decisions will be announced on or about November 7, 2009. A second and third funding round will open after the first round is concluded; all awards must be made by September 30, 2010.

[61] U.S. Department of Agriculture, *FY2010 Budget Summary and Annual Performance Plan*, p. 50, available at http://www.obpa.usda.gov/budsum/FY10budsum.pdf.

[62] Available at http://www.ntia.doc.gov/frnotices/2009/FR_BBNOFA_090702.pdf.

Table 4. Comparison of RUS and NTIA Broadband Programs

Community Connect Broadband Grants	Rural Broadband Access Loan and Loan Guarantee Program (2008 farm bill, section 6110 of P.L. 110-246)	Broadband Initiatives Program (BIP), Rural Utilities Service	Broadband Technology Opportunities Program (BTOP), National Telecommunications and Information Administration
Funding			
$13.4 million (FY2009)	$15.6 million (loan subsidy) $400 million (loan level) (FY2009)	$2.4 billion total for first round (program level), includes up to: —$1.2 billion for Last Mile projects ($400 million in grants for Remote Area projects, $800 million in loans and loan/grant combinations for Non-Remote projects); —$800 million in loans and loan/grant combinations for Middle Mile projects; and —$325 million for reserve fund.	$1.6 billion for first round (budget authority), includes up to: —$1.2 billion for broadband infrastructure grants (Last Mile and Middle Mile projects); —$50 million for Public Computer Center grants; —$150 million for Sustainable Broadband Adoption grants; and —$200 million for reserve fund.

Community Connect Broadband Grants	Rural Broadband Access Loan and Loan Guarantee Program (2008 farm bill, section 6110 of P.L. 110-246)	Broadband Initiatives Program (BIP), Rural Utilities Service	Broadband Technology Opportunities Program (BTOP), National Telecommunications and Information Administration
Existing Broadband Providers			
Grants go to projects serving a single community with no existing broadband provider.	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.	Same as NTIA/BTOP definition. Additionally defines "Remote Area" as an unserved, rural area 50 miles from the limits of a non-rural area.	Eligible "unserved areas" defined as where at least 90% percent of households lack access to terrestrial broadband service. Eligible "underserved areas" for last mile projects if at least one of the following factors is met: (1) no more than 50% of the households in the proposed funded service area have access to facilities-based, terrestrial broadband service at greater than the minimum broadband transmission speed; (2) no broadband service provider advertises broadband transmission speeds of at least 3 megabits per second (Mbps) downstream; or (3) the rate of broadband subscribership for the proposed funded service area is 40% of households or less. A proposed funded service area may qualify as underserved for middle mile projects if one interconnection point terminates in a proposed funded service area that qualifies as unserved or underserved for last mile projects.

Community Connect Broadband Grants	Rural Broadband Access Loan and Loan Guarantee Program (2008 farm bill, section 6110 of P.L. 110-246)	Broadband Initiatives Program (BIP), Rural Utilities Service	Broadband Technology Opportunities Program (BTOP), National Telecommunications and Information Administration
Definition of Broadband			
Defines "broadband transmission service" as 200 kilobits per second (kbps) in both the downstream and upstream connection between provider and consumer.	Any technology identified by the Secretary as having the capacity to transmit data to enable a subscriber to the service to originate and receive high-quality voice, data, graphics, and video. 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. The Secretary is prohibited from establishing requirements for bandwidth or speed that have the effect of precluding the use of evolving technologies appropriate for rural areas.	Same as NTIA/BTOP definition.	Two-way data transmission with advertised speeds of at least 768 kbps downstream and at least 200 kbps upstream to end users, or providing sufficient capacity in a middle mile project to support the provision of broadband service to end users.
Definition of Rural Area			
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.	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.	Any area, as confirmed by the latest decennial census of the Bureau of the Census, which is not located within: (1) a city, town, or incorporated area that has a population of greater than 20,000 inhabitants or (2) an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants. For purposes of the definition of rural area, an urbanized area means a densely populated territory as defined in the latest decennial census of the U.S. Census Bureau.	Same definition as used by BIP/RUS. Applications to fund broadband infrastructure projects in areas which are at least 75% rural are required to be submitted to BIP. BTOP may make awards to such applications NTIA determines to be meritorious after RUS has reviewed the application and determined not to fund it. All other applications for Broadband Infrastructure projects, as well as applications for Public Computer Centers or Sustainable Broadband Adoption projects, must be submitted to BTOP.

Community Connect Broadband Grants	Rural Broadband Access Loan and Loan Guarantee Program (2008 farm bill, section 6110 of P.L. 110-246)	Broadband Initiatives Program (BIP), Rural Utilities Service	Broadband Technology Opportunities Program (BTOP), National Telecommunications and Information Administration
Financial Obligation of Applicant			
Awardees must contribute a matching contribution equal to 15% of the requested grant amount. In-kind contributions for purposes that could have been financed with grant funds are allowed.	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. 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.	For grants (Last Mile Remote Area projects): funding up to 100%. For grants receiving greater than 80% of eligible costs, the Administrator must determine that the awardee has a specific financial need that justifies funding greater than 80%; all applicants must be able to generate a minimum current ratio[a] of one by the end of the forecast period and demonstrate a positive cash balance for each year of the forecast period. For loans: the applicant must be able to generate sufficient revenues to cover expenses, have sufficient cash flow to service debts and obligations as they come due, and meet the minimum Times Interest Earned Ratio (TIER)[b] requirement of one by the end of the forecast period, as determined by RUS.	Required to provide matching funds of at least 20% toward the total eligible project cost.. Applicants must document their capacity to provide matching funds. NTIA will provide up to 80% of total eligible project costs, unless the applicant petitions the Assistant Secretary for a waiver of the matching requirement and that waiver is granted by the Assistant Secretary based on the applicant's demonstration of financial need. In-kind contributions, including third party in-kind contributions, are non-cash donations to a project that may count toward satisfying the non-federal matching requirement of a project's total budget. In-kind contributions must be allowable project expenses.

a. "Current ratio" is defined as the applicant's current assets divided by the current liabilities.

b. TIER is defined as the ration of an applicant's net income (after taxes) plus (adding back) interest expense, all divided by interest expense (existing and any new interest expense including the interest expense associated with the proposed loan).

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