

Distribution of Broadband Stimulus Grants and Loans: Applications and Awards

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Summary

The American Recovery and Reinvestment Act (ARRA, P.L. 111-5) provided $7.2 billion primarily for broadband grant and loan programs to be administered by two separate agencies: the National Telecommunications and Information Administration (NTIA) of the Department of Commerce (DOC) and the Rural Utilities Service (RUS) of the U.S. Department of Agriculture (USDA). The NTIA grant program is called the Broadband Technology Opportunity Program (BTOP). The RUS broadband grant and loan program is called the Broadband Initiatives Program (BIP).

There are two rounds of ARRA broadband funding. The first round award announcements have concluded, and the announcement of second round awards began on July 2, 2010. As of September 9, 2010, 441 BTOP and BIP awards have been announced totaling $6.2 billion ($5.1 billion in grants, $1.1 billion in loans). Of this total, $3.1 billion has been awarded by BTOP, and $3.1 billion has been awarded by BIP. Additional BTOP and BIP awards will be announced through September 30, 2010.

This report focuses on the distribution of ARRA broadband funding with respect to project category, program, technology deployed, state-by-state distribution, and other factors. Based on first round applications and awards data, the following observations can be made:

- The amount of funding awarded in the first round was about 57% of the available funding levels published in the first round Notice of Funds Availability (NOFA).
- Of all broadband infrastructure projects awarded in the first round, middle mile projects received more funding than last mile projects (53% vs. 47% of total funding for infrastructure).
- Of all first round broadband infrastructure funding, most (70%) was awarded to projects serving predominantly rural areas. However, a breakdown of the project categories awards data shows that while all last mile projects have been rural, the majority of middle mile funding has been awarded to projects serving nonrural areas.
- Nonremote last mile rural projects were funded more heavily than remote area last mile rural projects.
- Public notice responses were filed by existing service providers for 71% of all funded first round infrastructure projects. Public notice responses were filed for 89% of all middle mile projects and 70% of last mile nonremote projects. By contrast, one out of the 13 (8%) last mile remote area applications received a public notice response from an existing service provider.

Congress will likely continue to monitor how the stimulus broadband grants and loans are being distributed. To the extent that Congress may consider whether certain broadband grant and loan programs should be expanded, the funding patterns and trends that emerge during rounds one and two could provide insights into whether such programs should be expanded, and if so, how these or similar programs might be fashioned within the context of a national broadband policy.

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Introduction

The American Recovery and Reinvestment Act (ARRA, P.L. 111-5) provided $7.2 billion primarily for broadband grant and loan programs to be administered by two separate agencies: the National Telecommunications and Information Administration (NTIA) of the Department of Commerce (DOC) and the Rural Utilities Service (RUS) of the U.S. Department of Agriculture (USDA).

The ARRA directed broadband grant and loan funding in the following way:

- $4.35 billion[1] to NTIA/DOC for a competitive broadband grant program including broadband infrastructure grants, competitive grants for expanding public computer capacity, and grants to encourage sustainable adoption of broadband service. The NTIA grant program is called the Broadband Technology Opportunity Program (BTOP).
- $2.5 billion to RUS/USDA for broadband grants, loans, and loan/grant combinations. The law states that 75% of the area to be served by an eligible project must be a rural area. A rural area is defined as any area not located within a city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or not located within an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants. The RUS broadband grant and loan program is called the Broadband Initiatives Program (BIP).

There are two rounds of ARRA broadband funding. The first funding round was announced with the release of a Notice of Funds Availability (NOFA) on July 1, 2009. The second funding round NOFAs were released on January 15, 2010. The announcement of second round awards began on July 2, 2010. The ARRA mandates that all funding must be obligated and awarded by September 30, 2010.

This report focuses on the distribution of ARRA broadband funding.[2] The following presents and analyzes first round applications and awards data as of April 28, 2010.

Round One Applications

On September 9, 2009, NTIA and RUS released data on applications received during the first round application period. In total, over 2,200 applications requested nearly $28 billion in funding for proposed projects reaching all 50 states, five territories, and the District of Columbia. The total amount of federal funding requested was seven times the amount available in the first funding round.

[1] Additionally, the ARRA directed $350 million to NTIA for funding broadband data gathering and implementation of the State Broadband Data and Development Grant program. A portion of this money was also allocated to the Federal Communications Commission for the purpose of preparing a National Broadband Plan. Both the state data grant program and the development of the National Broadband Plan are separate activities and are not discussed in this report.

[2] For a comprehensive discussion of the ARRA broadband programs, see CRS Report R40436, *Broadband Infrastructure Programs in the American Recovery and Reinvestment Act*, by Lennard G. Kruger.

Broadband grants and loans fall into several first round project categories. For BTOP, projects can be:

- *last mile*, defined as any broadband infrastructure project the predominant purpose of which is to provide broadband service to end users;
- *middle mile*, defined as a broadband infrastructure project that does not predominantly provide broadband service to end users and may include interoffice transport, backhaul, Internet connectivity, or special access (up to $1.2 billion in grants available for infrastructure consisting of last mile and middle mile projects);
- *public computer centers*, which provide broadband access to the general public or a specific vulnerable population (up to $50 million in grants available); or
- *sustainable broadband adoption*, which demonstrate a sustainable increase in demand for and subscribership to broadband services (up to $150 million in grants available).

For BIP, projects can be:

- *last mile remote area*, where "remote area" is a rural unserved area at least 50 miles from a nonrural area (up to $400 million in grants available);
- *last mile nonremote area* (up to $800 million in loans and loan/grant combinations available); or
- *middle mile* (up to $800 million in loans and loan/grant combinations available).

Tables 1 through 4 provide a breakdown of applications data with respect to program and project category.[3]

Table 1. Numbers of First Round Applications and Funds Requested by Project Category

	Number of Applications	Funds Requested, grants, $billions	Funds Requested, loans, $billions	Funds Requested, grants plus loans, $billions
Last Mile (BTOP Only)	114	1.78	N/A[a]	1.78
Last Mile Non-remote area	646	4.76	3.94	8.70
Last Mile Remote Area[b]	406	2.59	1.25	3.84
Middle Mile	372	7.84	1.31	9.15
Public Computer Centers	362	1.91	N/A	1.91
Sustainable Broadband Adoption	329	2.49	N/A	2.49
Total	2229	21.37	6.5	27.87

Source: Compiled by CRS from the Broadband USA Applications Database.

a. Not applicable.

[3] A searchable database is available at http://www.ntia.doc.gov/broadbandgrants/applications/search.cfm.

b. Remote area applications are self-identified by applicants. The actual number of applications legitimately qualifying as "remote area" was less, as determined by RUS.

Table 2. Percentage of First Round Applications and Funds Requested by Project Category

	Percentage of applications	Percentage of grant funding requested	Percentage of loan funding requested	Percentage of total funding requested
Last Mile (BTOP Only)	5%	8%	N/A[a]	6%
Last Mile Non-remote area	29%	22%	61%	31%
Last Mile Remote Area	18%	12%	19%	14%
Middle Mile	17%	37%	20%	33%
Public Computer Centers	16%	9%	N/A	7%
Sustainable Broadband Adoption	15%	12%	N/A	9%
Total	100%	100%	100%	100%

Source: Compiled and calculated by CRS from the Broadband USA Applications Database.

a. Not applicable.

Table 3. Number of First Round Applications Submitted by Project Category and Program

	BIP only	BIP/BTOP	BTOP only	Totals
Last Mile (BTOP Only)	N/A[a]	N/A	114	114
Last Mile Non-remote area	134	512	N/A	646
Last Mile Remote Area	224	182	N/A	406
Middle Mile	56	166	150	372
Public Computer Centers	N/A	N/A	362	362
Sustainable Broadband Adoption	N/A	N/A	329	329
Totals	414	860	841	2229

Source: Compiled by CRS from the Broadband USA Applications Database.

a. Not applicable.

Table 4. First Round Funding Requested by Project Category and Program

$billions

	BIP only			BIP/BTOP			BTOP only		
	Grants	Loans	Subtotal	Grants	Loans	Subtotal	Grants	Loans	Subtotal
Last Mile (BTOP Only)	N/A[a]	N/A	N/A	N/A	N/A	N/A	1.78	N/A	1.78
Last Mile Non-remote area	1.00	1.89	2.89	3.76	2.04	5.81	N/A	N/A	N/A
Last Mile Remote Area	0.78	0.59	1.38	1.81	0.65	2.46	N/A	N/A	N/A
Middle Mile	0.23	0.48	0.71	3.89	0.84	4.73	3.71	N/A	3.71
Public Computer Centers	N/A	N/A	N/A	N/A	N/A	N/A	1.91	N/A	1.91
Sustainable Broadband Adoption	N/A	N/A	N/A	N/A	N/A	N/A	2.49	N/A	2.49
Totals	2.01	2.96	4.98	9.46	3.53	13.0	9.89	N/A	9.89

Source: Compiled by CRS from the Broadband USA Applications Database.

a. Not applicable.

Rural vs. Nonrural Applications

Broadband infrastructure projects proposing to serve areas which are at least 75% rural[4] were required to be submitted to RUS/BIP. Broadband infrastructure projects include last mile and middle mile projects. If applicants chose, they could simultaneously submit an application to NTIA/BTOP, and NTIA had the option of making awards to those applications if RUS determined not to fund them. Therefore, broadband infrastructure applications submitted to BIP-only or to both BIP and BTOP can be classified as "rural," while broadband infrastructure applications submitted to BTOP-only can be classified as "nonrural." Applications submitted to BTOP/NTIA for broadband sustainable adoption grants and public computer centers grants address both rural and nonrural areas. However, based on the information available in the Broadband USA applications database, it is not possible to separate out "rural" from "nonrural" applications for adoption and computer center grants.

[4] Defined by RUS as 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.

Based on the Broadband USA applications database, the following percentage breakdowns can be derived:

- Of *all* broadband infrastructure applications (both last and middle mile), rural applications accounted for 82.8% of applications, 76.6% of the total money requested, and 67.6% of the total grant money requested for infrastructure.
- Of all *last mile* broadband infrastructure applications, rural applications accounted for 91.0% of applications, 87.6% of the total money requested, and 80.5% of the total grant money requested for infrastructure.
- Of all *middle mile* broadband infrastructure applications, rural applications accounted for 59.7% of applications, 59.4% of total money requested, and 52.6% of total grant money requested for infrastructure.

Remote vs. Nonremote Projects

Under BIP, a full grant award (as opposed to a grant/loan combination or a loan) was available only for projects proposing to serve a "remote area." A remote area was defined as a rural unserved area at least 50 miles from a non-rural area. A categorization of "remote" only applied to a portion of last mile rural broadband infrastructure project applications that applied to BIP or to BIP/BTOP. Thus *all* of the Last-Mile BTOP-only applications are "nonremote" because all BTOP-only broadband infrastructure applications are by definition nonrural. Additionally, the remote/nonremote categories do not apply to middle mile projects.

Based on the Broadband USA applications database, the following percentage breakdowns can be derived:

- Of all last mile infrastructure applications submitted to RUS (either BIP-only or BIP/BTOP), remote area applications accounted for 38.6% of applications, 30.6% of total money requested, 35.2% of grant money requested, and 24.0% of loan money requested.
- Of all last mile infrastructure applications submitted to RUS and NTIA (BIP-only, BIP/BTOP, and BTOP-only), remote area applications accounted for 34.8% of applications, 26.8% of total money requested, and 28.3% of grant money requested.

Grants vs. Loans

Only grants were available from BTOP, whereas grants and loans were available from BIP. Based on the Broadband USA applications database, the following percentage breakdowns can be derived:

- Of all broadband infrastructure applications, 72% of funds requested was for grant funding.
- Of all broadband stimulus applications, 77% of funds requested was for grant funding.

Round One Awards

The total amount available in the first funding round was set at $4 billion, consisting of up to $2.4 billion under the RUS Broadband Initiatives Program (BIP), and up to $1.6 billion under the NTIA Broadband Technology Opportunities Program (BTOP). Initially NTIA and RUS had expected to begin announcing awards in November 2009. However, because of the volume and complexity of the applications received, award announcements began in mid-December.

The first round award announcements are complete. NTIA and RUS announced awards for 150 projects, totaling $2.275 billion in federal funding. This includes 82 BTOP projects (totaling $1.206 billion) and 68 BIP projects (totaling $1.069 billion).

The following is a breakdown and analysis of awards data by project category and program, rural versus nonrural project areas, broadband technology deployed, whether public notice responses were filed by existing service providers, and state-by-state distribution of funding. Awards data are derived from NTIA and RUS press releases, BTOP project information,[5] and the Broadband USA applications database.[6]

Breakdown by Project Category and Program

Table 5, **Table 6**, and **Table 7** provide breakdowns of awards data by project category and program. As the tables show, the majority of first round infrastructure funding has gone to middle mile projects (53%), with last mile projects (remote and nonremote area) accounting for 47%. By contrast, the applications data show that of all infrastructure funding requested (see **Table 1** above), middle mile projects accounted for 39%, while last mile projects accounted for 61%.

BTOP infrastructure grants have been exclusively targeted towards middle mile projects. To date middle mile projects have accounted for 79% of all BTOP award funding. In the first round, BTOP funded eight last mile projects (nonremote last mile projects initially submitted to BIP).

By contrast, BIP grants and loans have been predominantly oriented towards last mile projects. There are 62 last mile (remote and nonremote) funded BIP projects, versus only 6 middle mile funded BIP projects. While the first round NOFA specified "up to $800 million" for BIP middle mile projects, to date, RUS has awarded only $167 million for middle mile. Of the BIP last mile projects, nonremote area projects are significantly more heavily funded (49 projects accounting for 82% of last mile project funding) than remote area projects (13 projects accounting for 18% of last mile project funding).

Finally, there is funding for the two non-infrastructure BTOP project categories: public computer centers and sustainable broadband adoption. The public computer centers category has received $57 million, which slightly exceeds the NOFA level of "up to $50 million."[7] By contrast, funding for sustainable broadband adoption stands at $110 million, less than the NOFA level of "up to $150 million." The ARRA requires not less than $200 million for public computer centers and not

[5] Available at http://www.ntia.doc.gov/broadbandgrants/projects.html.

[6] Available at http://www.ntia.doc.gov/broadbandgrants/applications/search.cfm.

[7] Both NTIA and RUS have the discretion to divert funding between categories, as long as they conform with the ARRA statute.

less than $250 million for sustainable broadband adoption. Thus, it seems likely that significantly more funding will be provided for public computer centers and sustainable broadband adoption in the second funding round.

Table 5. First Round Awards by Project Category

	Number of Projects	Federal Funds Awarded, grants, $millions	Federal Funds Awarded, loans, $millions	Federal Funds Awarded, grants plus loans, $millions	NOFA Level
Last Mile (BTOP Only)	0	0	0	0	up to $2 billion for BTOP last and middle mile and BIP middle mile
Middle Mile	47	1030.47	86.85	1117.32	
Last Mile Non-remote area	57	434.40	395.19	829.60	up to $800 million
Last Mile Remote Area	13	149.92	11.21	161.13	up to $400 million
Public Computer Centers	20	57.25	0	57.25	up to $50 million
Sustainable Broadband Adoption	13	109.88	0	109.88	up to $150 million
Total	150	1781.92	493.25	2275.18	up to $3.4 billion

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

Table 6. Percentage of First Round Awards by Project Category

	Percentage of funded projects	Percentage of grant funding awarded	Percentage of loan funding awarded	Percentage of total funding awarded
Last Mile (BTOP Only)	0%	0%	N/A[a]	0%
Middle Mile	31%	58%	18%	49%
Last Mile Non-remote area	38%	24%	80%	36%
Last Mile Remote Area	9%	8%	2%	7%
Public Computer Centers	13%	3%	N/A	2%
Sustainable Broadband Adoption	9%	6%	N/A	5%
Total	100%	100%	100%	100%

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

a. Not applicable.

Table 7. Funding Awarded by Project Category and Program

$millions

	RUS/BIP			NTIA/BTOP		
	Grants	Loans	Subtotal	Grants	Loans	Subtotal
Last Mile (BTOP Only)	N/A[a]	N/A	N/A	0	N/A	0
Last Mile Non-remote area	345.27	395.19	740.46	89.13	N/A	89.13
Last Mile Remote Area	149.92	11.21	161.13	0	N/A	0
Middle Mile	80.61	86.85	167.46	949.86	N/A	949.86
Public Computer Centers	N/A	N/A	N/A	57.25	N/A	57.25
Sustainable Broadband Adoption	N/A	N/A	N/A	109.88	N/A	109.88
Totals	575.8	493.25	1069.05	1206.12	N/A	1206.12

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

a. Not applicable.

Rural vs. Nonrural Awards

As discussed in the section above on rural versus nonrural applications, broadband infrastructure applications submitted to BIP-only or to both BIP and BTOP can be classified as "rural,"[8] while broadband infrastructure applications submitted to BTOP-only can be classified as "nonrural." **Table 8** shows the number of projects and funds awarded for all infrastructure projects, BIP projects, and BIP-BTOP projects. Based on the classification of BIP and BIP-BTOP projects as "rural," the data show that 81% of all funded infrastructure projects are "rural," and that 70% of infrastructure federal funding has been awarded to rural projects. To date, all funded last mile projects were submitted to BIP (and are therefore rural). On the other hand, 44% of funded middle mile projects can be classified as nonrural (submitted to BTOP only), and 55% of middle mile federal funding has been awarded to nonrural projects.

[8] According to the first round NOFA, all infrastructure projects proposing to serve an area at least 75% rural were required to submit to BIP or to BIP and BTOP jointly. All applications proposing to serve an area less than 75% rural were required to submit to BTOP only.

Table 8. Awarded Rural Projects as a Percentage of Total Infrastructure Projects

	Number of Projects	Funds Awarded ($millions)
Total infrastructure	117	2100.01
BIP projects	68	1069.05
BTOP projects that were initially submitted to BIP	27	392.76
Rural projects as a percentage of total infrastructure projects	81.27%	69.6%

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

Type of Technology

Broadband deployment can encompass a number of different types of technologies, including fiber, wireless, cable modem, DSL, satellite, and others. **Table 9** shows that of all infrastructure projects funded, about two-thirds are fiber projects, which is not surprising given the high number of middle mile projects funded in the first round. Additionally, given that most of the projects involving multiple technologies involve a deployment of both fiber and wireless technologies, it would be accurate to state that projects involving fiber account for about three-quarters of all infrastructure projects. Of last mile project technologies, 34 are fiber, 9 are multiple, 14 are wireless, 7 are DSL, 2 are cable modem, and 4 are unable to be determined from the public information that was released.

Table 9. Infrastructure Projects by Type of Technology

Technology	Number of awarded projects	Percentage of total infrastructure projects
Fiber	73	62%
Wireless	16	14%
DSL	7	6%
Cable modem	2	2%
Multiple[a]	15	13%

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

a. Primarily combinations of fiber + wireless broadband technologies.

Public Notice Responses From Existing Service Providers

After the first round applications were received, RUS and NTIA posted a 30-day public notice for the proposed service area of each broadband infrastructure application. Existing service providers were given an opportunity to respond to the public notice and indicate if they were already providing broadband service in the proposed area, and if they believed that the proposed project area did not meet the threshold of being unserved or underserved. Based on their assessment of

the public notice response from the existing service provider, the agencies could either reclassify the application from "unserved" to "underserved," reject the application, or continue to consider the application as it was submitted.

Table 10 shows the numbers of funded infrastructure projects for which public notice responses were and were not filed. While the presence of a filed response likely indicates that an existing service provider is providing some level of broadband service somewhere within the proposed service area, it does not necessarily mean that the area is not unserved or underserved, or that the existing service provider is providing adequate broadband service in terms of such factors as coverage, price, or speed. On the other hand, the lack of a public notice response does not necessarily indicate the absence of an existing service provider within the proposed service area; rather an existing service provider might simply have declined to file a public notice response within the 30-day period.

With these caveats in mind, the public notice response data in **Table 10** indicate that public notice responses were filed by existing service providers for 71% of all funded infrastructure projects. Public notice responses were filed for 89% of all middle mile projects and 70% of last mile nonremote projects. By contrast, one out of the 13 (8%) of last mile remote area applications received a public notice response from an existing service provider.

Table 10. Public Notice Responses Filed by Existing Service Providers

	Public Notice Response Filed (number of projects)	Public Notice Response Not Filed (number of projects)
Last Mile Remote Area Projects	1	12
Last Mile Nonremote Area Projects	40	17
Middle Mile Projects	42	5
Total Infrastructure Projects	83	34

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

State-by-State Breakdowns

The ARRA (P.L. 111-5) requires the NTIA to award not less than one grant in each state, to the extent practical. **Table A-1** in the Appendix shows a state-by-state breakdown of the distribution of round one grant and loan funding. **Table A-2** shows a state-by-state breakdown of round one BTOP funding, and **Table A-3** shows a state-by-state breakdown of round one BIP funding. To date, twelve of the funded projects involve a service area covering more than one state. In these cases, the award has been categorized with the principal recipient state, either as identified by RUS or NTIA, or based on the location of the applying organization. **Table A-4** shows awarded projects with service areas covering more than one state.

Round Two

On January 15, 2010, NTIA and RUS released NOFAs announcing the second and final round of ARRA broadband funding. A total of $4.8 billion is being made available, consisting of $2.6

billion for BTOP and $2.2 billion for BIP. Based on the agencies' experiences with the first round, and drawing on public comments collected from a November 16, 2009, Joint Request for Information (RFI),[9] both NTIA and RUS have streamlined the application process and have made significant changes to how the second round of BTOP and BIP will be structured and conducted. Highlights include the following:

- Unlike the first round, each agency has its own separate NOFA, and applicants have the option of applying to either BTOP or BIP, but not to both.
- NTIA/BTOP will primarily focus on middle mile broadband infrastructure projects, while RUS/BIP will focus primarily on last mile projects.
- BTOP is reorienting its infrastructure program towards Comprehensive Community Infrastructure (CCI) grants, which will support middle mile projects serving anchor institutions such as community colleges, libraries, hospitals, universities, and public safety institutions.
- BIP has eliminated the "Remote Last Mile" project category, and will offer a standard grant/loan combination (75% grant/25% loan) for all last mile and middle mile projects (unless waivers are sought).
- The first round requirement that eligible infrastructure projects must cover "unserved" or "underserved" areas is eliminated. In the second round, BIP projects must cover an area that is at least 75% rural and that does not have High Speed Access broadband service at the rate of 5 Mbps (upstream and downstream combined) in at least 50% of its area. Eligible BTOP projects require only an applicant that is an eligible entity, a fully completed application, and a nonfederal match of 20% or more. However, during the application evaluation, factors such as unserved and underserved areas, remoteness, and delivered speed will be considered.
- BIP has added three new grant programs: Satellite Projects, Rural Library Broadband, and Technical Assistance. RUS will publish a separate Request for Proposals for each of these programs.

Applications

On April 7, 2010, NTIA announced that it had received 867 applications for second round funding, totaling $11 billion in requested federal funding. The applications broke down as follows: 355 applications requesting a total of $8.4 billion for Comprehensive Community Infrastructure, 251 applications requesting $1.7 billion for Sustainable Broadband Adoption, and 261 applications requesting $0.922 billion for Public Computer Centers.[10]

On April 16, 2010, RUS announced it had received a total of 776 applications requesting nearly $11.2 billion in federal funds. Of that total, RUS received 30 middle mile applications requesting a total of $845.88 million.

[9] Department of Agriculture, Rural Utilities Service and Department of Commerce, National Telecommunications and Information Administration, "Broadband Initiatives Program and Broadband Technology Opportunities Program," 74 *Federal Register* 58940-58944, November 16, 2009.

[10] NTIA, "Commerce Announced Continued Demand for Funding to Bring Broadband to More Americans," April 7, 2010, available at http://www.ntia.doc.gov/press/2010/BTOP_Round2Applications_04072010.html.

Combined, NTIA and RUS received 1643 applications in the second round, requesting a total of $22.2 billion in federal funds. This is 26% less than the number of applications received by both agencies in the first round, and 21% less than the amount of federal funding requested in the first round.

Awards

The first wave of second round awards was announced on July 2, 2010; subsequent awards are being announced through September 30, 2010. As of September 9, 2010, $3.95 billion has been awarded in the second round (both BTOP and BIP), consisting of $3.32 billion in grants and $0.624 billion in loans. Second round BIP awards, as of September 9, 2010, stand at $2.04 billion; second round BTOP awards stand at $1.91 billion.

Total Awards First and Second Round Combined

As of September 9, 2010, 441 BTOP and BIP awards have been announced totaling $6.2 billion ($5.1 billion in grants, $1.1 billion in loans). Of this total, $3.1 billion has been awarded by BTOP, and $3.1 billion has been awarded by BIP. Additional BTOP and BIP awards will be announced through September 30, 2010.

Discussion and Concluding Observations

Based on the data presented above, the following observations can be made with respect to the first round awards:

- The amount of funding awarded in the first round was about 57% of the available funding levels published in the first round NOFA. While NTIA and RUS have the authority and discretion to shift money from the first to the second round, the shortfall suggests that significantly more money will likely be awarded in the second round. It also indicates that more money than was anticipated will likely be awarded under the second round criteria, which feature significant differences from the first round including: no requirement that eligible project service areas meet the first round definitions of "unserved" or "underserved," no last mile remote area grant set-asides, and the orientation of BTOP toward Comprehensive Community Infrastructure middle mile projects.
- Of all broadband infrastructure projects awarded, middle mile projects received more funding than last mile projects (53% vs. 47% of total funding for infrastructure). While the first round NOFA announced the intention of BTOP and BIP to fund both last and middle mile projects, and while applications were received by both agencies for last and middle mile projects, the awards data indicate that NTIA/BTOP has almost exclusively awarded grants to middle mile projects, while RUS/BIP has largely awarded funding to last mile projects. This can perhaps be viewed as a foreshadowing of the direction both agencies chose in the second round NOFAs (e.g., BTOP's focus on middle mile and BIP's focus on last mile broadband infrastructure projects).

- Of all broadband infrastructure funding, most (70%) was awarded to projects serving predominantly rural areas. However, a breakdown of the project categories awards data show that while all last mile projects have been rural, the majority of middle mile funding has been awarded to projects serving nonrural areas (as they are defined in the NOFA).
- Nonremote last mile rural projects were funded more heavily than remote area last mile rural projects. As set forth in the first round NOFA, only last mile remote area projects were eligible for full grants, and "remote area" was defined as an area at least 50 miles from a nonrural area. RUS encountered heavy criticism of this definition because many areas, particularly in the eastern half of the United States, were excluded. Total funding awarded for remote area last mile projects was significantly less than the amount set aside by the first round NOFA. This was perhaps due to the low number of eligible project applications received in the remote area category (due to the restrictive definition of "remote"). In the second round the remote and nonremote distinction has been eliminated as an eligibility criteria. Without a specific "carve-out" for last mile remote areas, Congress may wish to closely monitor RUS and NTIA to ensure that remote and completely unserved areas of the country are receiving a significant share of last mile broadband infrastructure funding.
- Another issue that has arisen in the first round and is likely to persist in the second round is the debate over funding broadband infrastructure projects with service areas already being served to some extent by existing providers. The awards data show that almost all middle mile project applications received public notice responses from existing providers. This is not surprising, given that middle mile projects cover very large areas where there is likely to be at least some existing providers. The awards data also show much more public notice responses for nonremote last mile projects than for remote area projects. Again, this is not surprising, given that remote areas tend to be more sparsely populated, less economically desirable to service providers, and thus less likely to have any existing broadband service.

Congress will likely continue to monitor how the stimulus broadband grants and loans are being distributed, particularly with respect to the types of projects funded, the types of areas and communities served, and how the awards break down on a state-by-state basis. In the longer term, the FCC's National Broadband Plan has recommended a significant expansion of federal funding for broadband deployment in unserved areas.[11] To the extent that Congress may consider whether broadband grant and loan programs should be expanded, the funding patterns and trends that emerge during rounds one and two could provide insights into whether such programs should be expanded, and if so, how these or similar programs might be fashioned within the context of a national broadband policy.

[11] The National Broadband Plan recommends expanding combination grant-loan programs at RUS, expanding the RUS Community Connect grant program, establishing a Tribal Broadband Fund, and significantly reorienting the FCC's Universal Service Fund program to support broadband. See Federal Communications Commission, *Connecting America: The National Broadband Plan*, March 2010, pp. 140-152.

Appendix.

Table A-1. State-by-State Distribution of Round One BTOP and BIP Broadband Grants and Loans

	Number of Awards	Grants (millions$)	Loans (millions$)	Grants + Loans (millions$)
TX	6	91.294	92.516	183.810
LA	6	115.336	28.403	143.739
WV	5	137.306	1.475	138.781
PA	2	128.444	0	128.444
AK	5	74.770	49.472	124.242
KS	5	60.466	60.621	121.087
WA	4	113.828	0	113.828
AS	1	81.034	10.000	91.034
IN	4	45.092	43.424	88.516
KY	2	38.816	39.843	78.659
NY	4	75.683	1.100	76.783
OK	6	63.161	10.037	73.198
MN	6	39.697	31.939	71.636
IL	4	50.011	14.230	64.241
TN	3	35.396	24.964	60.360
VA	6	52.121	8.062	60.183
GA	4	52.506	4.096	56.602
MI	4	46.949	4.165	51.114
CA	8	35.288	4.667	39.955
PR	2	38.731	0	38.731
NM	7	31.432	7.102	38.534
OH	6	30.707	6.374	37.081
FL	3	35.681	0	35.681
MA	4	35.451	0	35.451
AZ	2	33.490	0	33.490
ND	5	17.461	15.239	32.700
NC	3	29.476	0	29.476
MO	2	14.689	14.689	29.378
DC	1	28.500	0	28.500
WI	2	28.084	0	28.084
ME	1	25.400	0	25.400

	Number of Awards	Grants (millions$)	Loans (millions$)	Grants + Loans (millions$)
SD	1	20.600	0	20.600
ID	5	12.816	6.143	18.959
UT	1	13.401	0	13.401
IA	4	3.316	7.171	10.487
OR	4	9.509	0.936	10.445
MS	1	4.135	4.304	8.439
GU	1	8.039	0	8.039
SC	1	5.903	0	5.903
CO	2	3.660	2.168	5.828
NV	1	4.681	0	4.681
AL	1	3.892	0	3.892
VT	1	2.525	0	2.525
RI	1	1.245	0	1.245
NH	1	0.985	0	0.985
MD	1	0.932	0	0.932
HI	1	0	0.106	0.106
Total	150	1781.939	493.246	2275.185

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

Notes: Twelve BTOP and BIP projects involve a service area covering more than one state. In these cases, the award has been categorized with the principal recipient state, either as identified by RUS or NTIA, or based on the location of the applying organization. **Table A-4** shows awarded projects with service areas covering more than one state.

Table A-2. State-by-State Distribution of Round One BTOP Funding

	Number of Awards	Funding Awarded ($millions)
WV	4	135.889
PA	2	128.444
WA	4	113.828
LA	3	90.773
NY	3	71.383
GA	3	48.410
VA	5	44.059
IL	3	41.473
IN	2	39.397
PR	2	38.731

	Number of Awards	Funding Awarded ($millions)
OK	2	38.119
FL	3	35.681
MA	4	35.451
MI	2	34.184
AZ	2	33.490
CA	6	30.621
NC	3	29.476
DC	1	28.500
WI	2	28.084
ME	1	25.400
OH	2	24.838
SD	1	20.600
UT	1	13.401
NM	3	12.928
TN	2	10.681
OR	1	8.325
GU	1	8.039
MN	2	7.758
ID	4	6.673
SC	1	5.903
NV	1	4.681
TX	1	4.678
VT	1	2.525
RI	1	1.245
KS	1	0.998
MD	1	0.932
KY	1	0.535
Total	82	1206.133

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

Notes: Nine BTOP projects involve a service area covering more than one state. In these cases, the award has been categorized with the principal recipient state, either as identified by NTIA, or based on the location of the applying organization. **Table A-4** shows awarded projects with service areas covering more than one state.

Table A-3. State-by-State Distribution of Round One BIP Funding

	Number of Awards	Funding Awarded ($millions)
TX	5	179.132
AK	5	124.242
KS	4	120.089
AS	1	91.034
KY	1	78.124
MN	4	63.878
LA	3	52.966
TN	1	49.679
IN	2	49.119
OK	4	35.078
ND	5	32.700
MO	2	29.378
NM	4	25.606
IL	1	22.768
MI	2	16.930
VA	1	16.124
ID	1	12.286
OH	4	12.243
IA	4	10.487
CA	2	9.334
MS	1	8.439
GA	1	8.192
CO	2	5.828
NY	1	5.400
AL	1	3.892
WV	1	2.892
OR	3	2.120
NH	1	0.985
HI	1	0.106
Total	68	1069.051

Source: Compiled and calculated by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

Notes: Three BIP projects involve a service area covering more than one state. In these cases, the award has been categorized with the principal recipient state, either as identified by RUS, or based on the location of the applying organization. **Table A-4** shows awarded projects with service areas covering more than one state.

Table A-4. First Round Projects with Multistate Service Areas

Awardee	Program	Type of Project	Award ($millions)	States
ION Hold Co.	BTOP	middle mile	39.7	NY, PA, VT
ENMR Telephone Cooperative	BTOP	middle mile	11.25	NM, TX
Zito Media Communications	BTOP	middle mile	6.137	OH, PA
Navajo Tribal Utility Authority	BTOP	middle mile	32.19	AZ, NM, UT
Island Telephone & Engineering	BTOP	middle mile	8.039	GU, MP
Mission Economic Development Agency	BTOP	public computer centers	3.724	CA, AZ, CO, ID, MD, MN, MO, NM, PA, TX
OneCommunity	BTOP	sustainable broadband adoption	18.70	OH, FL, KY, MI, MS
One Economy	BTOP	sustainable broadband adoption	28.5	31 states and the District of Columbia
Allegiance Communications	BTOP	nonremote last mile	28.619	AR, KS, OK, TX
Peetz Cooperative Telephone Co.	BIP	remote last mile	1.5	CO, NE
Reservation Telephone Cooperative	BIP	nonremote last mile	21.9	ND, MT
Totah Communications	BIP	nonremote last mile	8.51	OK, KS

Source: Compiled by CRS from NTIA and RUS press releases, BTOP project information, and the Broadband USA Applications Database. Data current as of April 28, 2010.

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