



Andy Beshear
Governor

OFFICE OF BROADBAND DEVELOPMENT

100 Airport Road
Frankfort, Kentucky 40601
(502) 892-3002
broadband.ky.gov

Meghan E. Sandfoss
Executive Director

December 21, 2022

Mr. Jay Hartz, Director
Legislative Research Commission
Room 300, State Capitol
Frankfort, Kentucky 40601

Dear Mr. Hartz,

Pursuant to KRS 224A.1118 (4), the Office of Broadband Development is required to submit a report of its activities on a semiannual basis to the Legislative Research Commission. This report summarizes the activities of the Office of Broadband Development from its establishment through December 2022.

If you have any questions about this report, please do not hesitate to contact me.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Meghan E. Sandfoss".

Meghan E. Sandfoss
Executive Director



An Equal Opportunity Employer M/F/D

Office of Broadband Development Semi-Annual Report

December 2022

In accordance with KRS 224A.1118, the Office of Broadband Development is issuing a semi-annual report to the Legislative Research Commission regarding its activities.

Governor Beshear's Administration has remained focused on helping Kentucky residents and businesses close the Digital Divide. Efforts this past year have laid the groundwork for establishing the broadband connections necessary to ensure that Kentuckians can live, work, and play in the Commonwealth through equitable access to the best education, commerce, health care, and entertainment.

Through a combination of budget recommendations by Governor Beshear and subsequent appropriation actions by the 2021 and 2022 regular sessions of the General Assembly, \$300 million in federal funds from the American Rescue Plan Act (ARPA) were made available to the Broadband Deployment Fund. This includes \$117.2 million from the Coronavirus State Fiscal Recovery Fund and \$182.8 million from the Coronavirus Capital Projects Fund. An additional \$20 million from the Coronavirus State Fiscal Recovery Fund was designated to the Rural Infrastructure Improvement Program to provide grants for utility pole replacement activities supporting broadband expansion.

Office of Broadband Development

The 2022 session of the General Assembly passed House Bill 315, which established the Office of Broadband Development as the central broadband planning and coordination entity to encourage, foster, develop, and improve broadband within the Commonwealth as codified in KRS 224A.1118.

In September 2022, Governor Beshear appointed Meghan Sandfoss as the Office's Executive Director. This role is tasked with leading the newly established Office to do the following:

- Develop and implement a statewide broadband plan
- Administer grant funds, including the Broadband Deployment Fund and the Rural Infrastructure Improvement Program
- Perform statewide mapping to confirm service or lack thereof. This will include the collection of data from Kentucky's internet service providers (ISPs), as well as the management of a challenge process for that data.
- Maintain statewide data and statistics related to broadband
- Create a process for receiving and resolving complaints related to insufficient broadband services

Early efforts of the Office have been focused on Broadband Deployment Fund grants. The Office has been working with recipients from the first round of Broadband Deployment

grants to execute grant agreements and issued an application for the second round of Better Internet Program grants on November 21, 2022. The deadline for submitting applications is February 6, 2023. The application process includes consideration for scoring criteria and a review of the mechanisms necessary to administer the grants as outlined and specified in KRS 224A.1121.

Other tasks to establish and advance the Office undertaken since September include:

- Setting up the physical Office space and beginning the process to hire additional staff
- Establishing a web presence (www.broadband.ky.gov), which will serve as a clearinghouse of information related to broadband in the Commonwealth
- Beginning to engage the Commonwealth's many stakeholders by attending meetings and speaking engagements to promote broadband deployment, communicate about upcoming funding opportunities, and development of Kentucky's broadband plan, including speaking directly to County Judges-Executive and Mayors during the Governor's monthly calls with them
- Engaging in nationwide broadband leadership development activities, including the NTIA's State Broadband Leaders' Network (SBLN) and the Pew Charitable Trust's Broadband Education and Training Initiative (BETI), as well as quarterly meetings hosted by the Appalachian Regional Commission for Broadband Directors from ARC states.
- Hiring Connected Nation, a Kentucky-based nonprofit organization, that specializes in broadband and telecommunications public policy research and mapping, to assist the Office in fulfilling its duties.

In addition, the Office has been preparing for the federal Broadband Equity, Access, and Development (BEAD) program's required planning process. In November, the Office was notified by NTIA that its initial Planning Grant funds had been approved to develop its Five-Year Action Plan. To prepare for this process, the Office has:

- Begun coordination with the Education and Labor Cabinet to align outreach and planning of the federal Digital Equity Plan and BEAD.
- Planned for stakeholder listening tours to be held throughout the Commonwealth. These engagements will help inform the statewide broadband plan and the Five-Year Action Plan required to receive the federal BEAD funds authorized under the Infrastructure Investment and Jobs Act. The listening tours will be held across the state over several weeks and are anticipated to begin at the end of January 2023 and run through March.

Program Updates

Kentucky's Better Internet Program Grant Round 1

Grant awards were made for 47 projects for \$89.6 million, which, combined with matching funds, is \$204.4 million in broadband investment in the Commonwealth. These funds will bring 100Mbps/100 Mbps connections to more than 34,000 unserved Kentucky households and businesses. During this round, every qualifying grant application received funding for the proposed grant. Grant agreements were distributed to grantees in August 2022, and the Office is processing the required materials and executing grant agreements as grantees complete this documentation. Long-term monitoring of these projects is the responsibility of the Office of Broadband Development. Round 1 grantees are listed in **Appendix 1**.

Kentucky's Better Internet Program Grants

The second round of applications from the Broadband Deployment Fund (BDF) follow the federal Coronavirus Capital Projects Funds requirements set forth by the U.S. Treasury Department:

- Projects designed to meet or exceed the 100/100 Mbps symmetrical speed requirement
- Preference for fiber and last-mile projects
- Continuous participation in the Affordable Connectivity Program
- Show consideration of affordability
- Competitive grant program
- Funds may not duplicate other enforceable funding commitments
- Projects shall be operational by December 31, 2026

Priority is given to "no service" addresses, then unserved (25Mbps/3Mbps). As required by KRS 224A.1121, priority will also be given to projects deploying broadband to unserved locations that average 0 to 5 locations per route mile, followed by those projects averaging 5 to 10 locations per route mile, and then locations that average 11 locations or more per route mile and those areas where local, state, or federal funds are not already available.

Better Internet Program projects will be eligible for a maximum of 50% of the project cost unless the project serves areas with an average of 0 to 5 locations per mile, in which they may be eligible for up to 70% of the project cost. Those projects with 5 to 10 locations may be eligible for up to 60% of these total costs.

Matching funds could come from private sources, local governmental agencies, or a combination. The Office of Broadband Development opened the grant application window on November 21, 2022.

Rural Infrastructure Improvement Program

KRS 224A.1123 established the Rural Infrastructure Improvement Program and provides \$20 million in federal American Rescue Plan Act funds to reimburse a portion of the costs to replace utility poles for the deployment of broadband to unserved locations. These funds are intended to provide reimbursement for 50% of the cost of pole replacement up to \$5,000 in unserved areas of the state to facilitate the construction of broadband networks and minimize the potential for disputes between broadband providers and utility pole owners that could delay broadband deployment projects. Expenses incurred on or after July 1, 2022, are eligible for reimbursement. This grant opened on September 1, 2022. The Office has received two applications as of December 21, 2022.

Data Collection, Mapping, and Validation

With the enactment of HB 315, the Office of Broadband Development is required to maintain data and statistics on broadband throughout the Commonwealth and facilitate a process for receiving and resolving broadband service complaints as detailed below. This requirement complements the federal BEAD program directive for states to develop a comprehensive list of all the unserved (<25/3) and underserved (<100/20) locations in the state as part of the Five-Year Action Plan and the subsequent Initial Proposal.

The Office has developed a plan for internet service provider (ISP) outreach and data collection that includes direct outreach to ISPs and ISP associations. All known Kentucky ISPs will be contacted to gather data related to the location of their broadband services. As the initial mapping is completed, public feedback will be collected to help inform field validation in areas of concern.

The timing of the data collection, mapping, and validation will be coordinated to best accomplish the following: 1.) challenge any potential inaccuracies in the federal broadband data impacting Kentucky's BEAD allocations; 2.) inform both statewide and local broadband planning processes; and 3.) inform the administration of the broadband grant deployment fund.

The FCC recently released a new National Broadband Map that includes granular, location-specific broadband availability data. Prior to this release, the FCC's broadband availability data was available on the census block level, leading to an inaccurate representation of broadband service availability. With the recent release of the maps, the FCC has asked state and local governments, ISPs, and individuals to review the data and submit challenges to data that is inaccurate. Individuals can review the data and submit challenges at broadbandmap.fcc.gov, while government entities and ISPs may submit bulk challenges - involving more than one location - to contest the map. Recently, NTIA announced that challenges submitted prior to January 13, 2023 offer the best opportunity to correct the maps before the data will be used in the calculation of each state's BEAD funding allocation. The Office is working with its contractor to prepare a bulk challenge to submit to the FCC prior to January 13.

Federal Funding Update

Capital Projects Fund (CPF)

One critical program contained within the American Rescue Plan Act is the U.S. Treasury's Capital Projects Fund (CPF). This \$10 billion program is entirely focused on enabling broadband-related capital construction projects as prioritized by the states. Kentucky received \$182.8 million based on a formula that considered the total population, rural population, and poverty level in each state. According to program guidance issued September 2021, each state's Governor was required to designate an agency as a primary point of contact to manage the state's application and the submission of individual "program plans" for respective projects. In Kentucky, the Office of Broadband Development is the primary point of contact. Kentucky's plan to implement the Capital Projects Fund was submitted timely and awaiting final approval from the U.S. Department of the Treasury. Consistent with the appropriations made from these federal funds, Kentucky's plan devotes all of its allocation to broadband deployment projects. That decision complies with the federal grant requirements that each state's projects must positively and demonstrably impact work, education, and health monitoring within a given project area to be eligible.

Infrastructure Investment and Jobs Act (IIJA)

The IIJA passed historic funding to improve the nation's infrastructure, including funding to help close the national Digital Divide. Not unlike the New Deal programs of the 1930s that enabled rural electrification, rural telephone services, and public works projects in communities large and small, U.S. Congress has authorized and funded the single largest broadband investment in history in an effort to achieve universal, affordable, and reliable broadband service through the BEAD program.

The National Telecommunications and Information Administration (NTIA) was allocated \$48 billion to fund four distinct programs: Broadband Equity, Access, and Development (BEAD), Digital Equity Act (DEA), Tribal Connectivity Program (TCP), and Middle-Mile Broadband Infrastructure (MMBI).

Broadband Equity, Access, and Development (BEAD)

The \$42.45 billion Broadband Equity, Access, and Deployment (BEAD) Program focuses primarily on enabling last-mile connectivity to unserved and underserved areas of the country. Additionally, funds can be used for middle-mile projects to help connect last-mile projects. These funds will be granted directly to states to administer with guidance from the National Telecommunications and Information Administration (NTIA). Kentucky is projected to receive approximately \$700 million from this program.

The Commonwealth submitted its planning grant application before the August 25, 2022, BEAD deadline, and received notice of approval in November, which began a 270-day timeline for the preparation and submission of the Five-Year Action Plan. The NTIA released a press release on this funding on December 8, 2022:

<https://broadbandusa.ntia.doc.gov/news/latest-news/biden-harris-administration-awards-more-58-million-kentucky-internet-all-planning>

Digital Equity Act Program (DEA)

The \$2.75 billion Digital Equity Act (DEA) Program focuses on planning and implementing programs that promote digital equity, support digital inclusion activities, and build capacity related to broadband adoption. The Commonwealth submitted a Digital Equity Planning grant application in advance of the July 12, 2022, application deadline, and was notified of approval in late November. The Education and Labor Cabinet will lead this program, which will establish a framework for the future Digital Equity Capacity Building Grant Program.

Middle-Mile Broadband Infrastructure (MMBI)

The \$1 billion Middle-Mile Broadband Infrastructure (MMBI) Program funds construction, improvement, or acquisition of middle-mile infrastructure. This grant program is administered directly by NTIA, and the application period closed on September 30, 2022, with extensions allowed for Florida and South Carolina due to Hurricane Ian.

The MMBI received 235 applications from across the country totaling \$5.5 billion in requests. The Office provided coordination letters for three Kentucky applications, including projects to extend middle-mile networks and construct an internet exchange point (IXP). NTIA will evaluate the applications and make awards on a rolling basis no earlier than March 2023.

Other Federal Programs

FCC Affordable Connectivity Program

The Affordable Connectivity Program (ACP) is an FCC benefit program that helps ensure that households have access to affordable broadband services. The ACP provides a discount of up to \$30 per month toward internet service for eligible households and a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute \$10 to \$50 toward the purchase price.

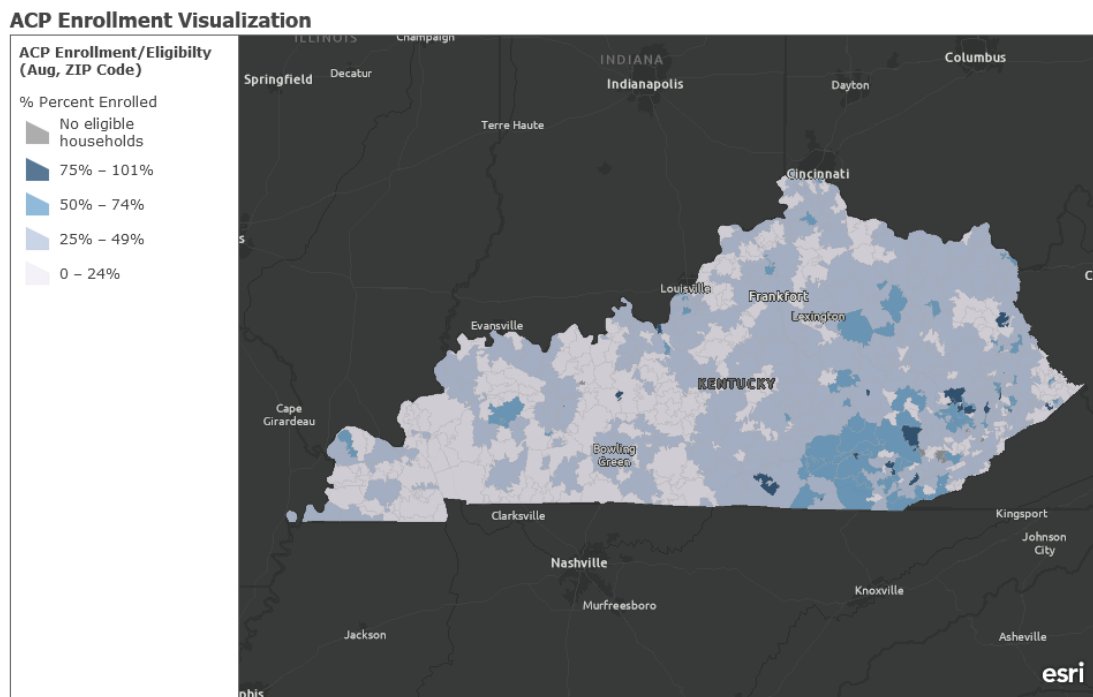
A household is eligible for the Affordable Connectivity Program if the household income is at or below 200% of the Federal Poverty Guidelines, or if a member of the household meets one of the following criteria:

- Received a Federal Pell Grant during the current award year
- Meets the eligibility criteria for a participating provider's existing low-income internet program
- Participates in one of these assistance programs:
 - Free and Reduced-Price School Lunch Program or School Breakfast Program, including at U.S. Department of Agriculture (USDA) Community Eligibility Provision schools

- SNAP
- Medicaid
- Housing Choice Voucher (HCV) Program (Section 8 Vouchers)
- Project-Based Rental Assistance (PBRA)/202/811
- Public Housing
- Supplemental Security Income (SSI)
- WIC
- Veterans Pension or Survivor Benefits
- Lifeline

As of December 9, 2022, 313,968 households in Kentucky are enrolled in the ACP ([Source: Universal Service Administrative Co.](#)). **Figure 1** below shows percentage enrollment by ZIP code of households estimated to be eligible for the program based on the number of households at 200% of the 2022 federal poverty level, calculated from the ACS B19001 table.

Figure 1 ACP Enrollment



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

Source: ACP Enrollment Visualization: Rural LISC <https://www.lisc.org/rural/our-work/broadband-infrastructure/ruralacp/>

Internet providers must participate in the ACP to be eligible for federal funding for broadband deployment from the Capital Projects Fund and the BEAD program. Affordability will be a key component to wide adoption of broadband services.

USDA ReConnect Loan and Grant Program

The ReConnect Loan and Grant Program furnishes loans and grants to provide funds for the costs of construction, improvement, or acquisition of facilities and equipment needed to provide broadband services in eligible rural areas. In facilitating the expansion of broadband services and infrastructure, the program will fuel long-term rural economic development and opportunities in rural America. The program is divided into five sections.

- The 100% grant program has \$150 million allocated nationally with the max grant of \$25 million for a location or project.
- \$350 million has been allocated for Tribal Governments, persistent poverty, and socially vulnerable communities.
- An additional \$150 million is available under a 50/50 loan or grant program, where the grantee provides a 50% match.
- The 100% loan program has \$150 million and allows a maximum request of \$50 million
- \$200 million is available for projects where 90% of the households lack sufficient access to broadband

ReConnect Round 4 accepted applications between September 6 and November 2, 2022.

On October 27, 2022, the Biden-Harris Administration announced the most recent awards under ReConnect 3, including two projects in Kentucky. Mountain Rural Telephone Cooperative was awarded \$9.3 million in grant funds to serve 871 people, including several farms and education facilities in Powell County. Thacker-Grigsby Telephone was also awarded a loan-grant combination for over \$24 million to serve more than 4,400 people, more than 60 businesses and farms, and for educational facilities in Breathitt and Leslie counties.

Appalachian Regional Commission

Kentucky continues to seek ways to work with the Appalachian Regional Commission (ARC) to bring broadband to Eastern Kentucky, and specifically the 54 federally designated ARC counties. The partnership of ARC and nonprofits, including the Center for Rural Development and Shaping Our Appalachian Region (SOAR), have created necessary leadership in the region to educate and normalize the conversation of broadband development in Eastern Kentucky and serve as a model for other rural communities in the Commonwealth.

ARC has funding programs that can contribute to broadband development programs offered through state and ARC-regional competitive applications. The Commonwealth receives an annual investment from ARC that is used to fund a competitive grant program administered by the Department for Local Government. Local governments and nonprofit entities can apply for grants to fund economic development projects to create jobs, develop the workforce, and provide health care and education services. Matching funds are required to

make up between 20% to 50% of project funds, depending on the distress status of the county in which the project is located. ARPA funds can be matched with ARC funds, so ARC funds are a viable source of matching funds for the Broadband Development Fund in the 54 ARC counties. Additionally, NTIA will permit ARC funds to be used as a match for BEAD project grants.

The Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative targets federal resources to help communities and regions that have been affected by job losses in coal mining, coal power plant operations, and coal-related supply chain industries due to the changing economics of America's energy production. POWER grants have supported economic development projects in the ARC region since 2015. Projects in the Commonwealth have received funding for broadband projects through this initiative, most recently with a \$1,937,475 award in September 2021 to Harlan County Fiscal Court for the Harlan County Connected project to design and build 40 miles of fiber network to offer gigabit broadband to the most underserved parts of the county. This last-mile fiber network is expected to leverage the ARC-funded Kentucky Wired middle-mile fiber network to provide broadband to 282 businesses and 7,380 households. The Harlan County Fiscal Court accepted proposals from ISPs to construct the infrastructure funded by this ARC grant until November 2, 2022. Additionally in 2021, two broadband planning and capacity-building projects each received \$50,000: SOAR's "Last-Mile Broadband: A Collaborative Approach" project and a broadband development feasibility study in Robertson County.

The Office has just begun the process of compiling past federal awards made for Kentucky locations and will continue to inventory those awards and monitor their progress.

Summary

During 2022, the Office of Broadband Development was established, and the first round of Broadband Deployment Funds were awarded. A second round of grant applications is underway. Additionally, efforts were undertaken to prepare for the Action Plan process that will take place during the next nine months to secure Kentucky's allocation of BEAD funding. In 2023, the Office of Broadband Development will develop a statewide broadband plan and interactive map consistent with federal guidelines from the BEAD program.

High-speed internet access plays a key role in Kentucky's education, health care, agriculture, manufacturing, industry, energy, public safety, and tourism sectors. Broadband bridges urban and rural communities, connecting people across geography. The pandemic heightened awareness of disparities in access to broadband services for education, telework, and health care. The Broadband Deployment Fund, BEAD and other federal funds designated for broadband development, will make significant improvements in access to broadband and reduce the number of unserved and underserved locations across the Commonwealth over the next five years.

Appendix 1
Kentucky Broadband Development Fund Grants
Round 1

Awardee	County/ Counties	Grant Amount	Matching Amount	Total Project Amount	Number of Unserviced Locations
Charter	Anderson A	\$ 3,696,373	\$ 3,710,800	\$ 7,407,173	776
Charter	Anderson B	\$ 2,929,099	\$ 2,942,200	\$ 5,871,299	634
Charter	Anderson C	\$ 2,873,850	\$ 3,000,600	\$ 5,874,450	682
Boone County Fiscal Court	Boone	\$ 808,832	\$ 4,071,600	\$ 4,880,432	2,130
Charter	Bourbon A	\$ 3,232,164	\$ 3,722,981	\$ 6,955,145	1,058
Charter	Bourbon B	\$ 3,406,835	\$ 3,480,000	\$ 6,886,835	884
Charter	Boyle	\$ 2,224,589	\$ 4,053,000	\$ 6,277,589	1,158
Pennyriple Rural Electrical Cooperative	Caldwell	\$ 1,362,738	\$ 1,362,738	\$ 2,725,475	339
West Kentucky Rural Telephone Coop Corp	Calloway	\$ 2,116,445	\$ 2,116,445	\$ 4,232,890	594
Charter	Carroll	\$ 1,659,687	\$ 1,920,000	\$ 3,579,687	600
Cumberland Cellular	Casey	\$ 1,012,879	\$ 1,012,879	\$ 2,025,758	290
Pennyriple Rural Electrical Cooperative	Christian- Northeast	\$ 1,827,239	\$ 1,827,239	\$ 3,654,477	574
Pennyriple Rural Electrical Cooperative	Christian- Northwest	\$ 1,310,179	\$ 1,310,179	\$ 2,620,358	381
Pennyriple Rural Electrical Cooperative	Christian- Southwest	\$ 1,433,494	\$ 1,433,494	\$ 2,866,988	421
South Central Telcom	Edmonson, Warren	\$ 1,885,000	\$ 1,825,000	\$ 3,710,000	215
Charter	Fayette	\$ 387,238	\$ 413,994	\$ 809,422	135
Frankfort Water & Plant Board	Franklin-Bald Knob	\$ 1,613,885	\$ 1,613,885	\$ 3,227,770	318
Frankfort Water & Plant Board	Franklin- Benson Valley	\$ 185,804	\$ 185,804	\$ 371,608	47
Frankfort Water & Plant Board	Franklin- Hickory Ridge	\$ 192,092	\$ 192,092	\$ 384,184	44
Frankfort Water & Plant Board	Franklin- Highway 1472	\$ 28,354	\$ 28,354	\$ 56,708	8
Frankfort Water & Plant Board	Franklin- Keaton Lane	\$ 54,249	\$ 54,248	\$ 108,497	8
Frankfort Water & Plant Board	Franklin- Ninevah Road	\$ 61,329	\$ 61,329	\$ 122,658	11

Frankfort Water & Plant Board	Franklin-Northern Peaks Mill	\$ 1,547,742	\$ 1,547,743	\$ 3,095,485	334
Frankfort Water & Plant Board	Franklin-Northwest	\$ 778,661	\$ 778,661	\$ 1,557,322	193
Frankfort Water & Plant Board	Franklin-Swallowfield	\$ 648,978	\$ 648,979	\$ 1,297,957	140
Frankfort Water & Plant Board	Franklin-Switzer	\$ 873,294	\$ 873,294	\$ 1,746,588	221
Frankfort Water & Plant Board	Franklin-Western	\$ 2,061,354	\$ 2,061,354	\$ 4,122,708	594
Gibson	Fulton, Graves, Hickman	\$ 4,650,880	\$ 6,422,672	\$ 11,073,552	1,763
Charter	Henry A	\$ 3,849,938	\$ 3,882,500	\$ 7,732,438	1,105
Charter	Henry B	\$ 3,463,513	\$ 4,406,000	\$ 7,869,513	1,256
Charter	Jefferson, Oldham	\$ 1,747,750	\$ 3,591,906	\$ 5,339,656	1,126
Charter	Jessamine	\$ 730,126	\$ 730,126	\$ 1,460,252	150
Charter	Lincoln	\$ 3,484,048	\$ 7,577,500	\$ 11,061,548	2,165
Pennyriple Rural Electrical Cooperative	Lyon	\$ 934,808	\$ 934,808	\$ 1,869,615	333
Charter	Madison	\$ 3,812,338	\$ 4,450,207	\$ 8,262,545	1,284
West Kentucky Rural Telephone Coop Corp	Marshall	\$ 1,249,260	\$ 1,249,260	\$ 2,498,519	249
Tri-County	Monroe	\$ 900,000	\$ 900,000	\$ 1,800,000	97
Bardstown Connect	Nelson, Spencer, Washington, Bullitt	\$ 1,090,982	\$ 2,214,082	\$ 3,305,064	1,061
Crystal	Powell	\$ 255,835	\$ 260,000	\$ 515,835	1,006
Duo County Telephone Cooperative	Russell, Wayne	\$ 3,368,826	\$ 3,368,826	\$ 6,737,652	550
Charter	Shelby A	\$ 2,400,900	\$ 3,696,900	\$ 6,097,800	848
Charter	Shelby B	\$ 840,530	\$ 4,085,785	\$ 4,926,315	966
Charter	Shelby C	\$ 2,456,556	\$ 4,562,556	\$ 7,019,112	1,053
Charter	Spencer	\$ 2,557,686	\$ 4,273,280	\$ 6,830,966	1,261
Pennyriple Rural Electrical Cooperative	Todd	\$ 5,000,000	\$ 5,251,700	\$ 10,251,700	2,750
Pennyriple Rural Electrical Cooperative	Trigg	\$ 1,958,864	\$ 1,958,863	\$ 3,917,727	800
Charter	Trimble	\$ 4,614,712	\$ 4,741,000	\$ 9,355,712	1,547
Total		\$ 89,579,933	\$ 114,806,861	\$ 204,394,984	34,159