

APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2018.** Please include this application form with electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact <u>Gage Harter</u>.

PROGRAM INFORMATION

county: Roanoke
Program Title: Broadband
Program Category: Community/Economic Development

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR
_{Name:} Thomas C. Gates
Title: County Administrator
Signature:

THE CHALLENGE

Since 2010, Roanoke Valley business leaders, community visionaries, and technology enthusiasts have been asking, "How can we support businesses who increasingly rely on internet connectivity to stay competitive in a global economy?"

For Roanoke County officials, the challenge was particularly difficult because while business leaders asked for more affordable enterprise internet transport options, elected officials raised concerns about limiting the role of government in solving a "private sector" problem.

A 2011 study had found the region had serious telecommunications infrastructure deficits and led to the formation of the Roanoke Valley Broadband Authority (RVBA), a regional effort to solve the telecommunications infrastructure deficit through the development of an enterprisegrade fiber optic ring around the region.

While Roanoke County was invited into the organization at that time and did take a seat on the Board of Directors they did not have the budgetary flexibility to fund the initial investment required to build fiber infrastructure into the County.

A REGIONAL MODEL

In 2016 when the RVBA lit their network, Roanoke County officials joined with their counterparts from around the region and celebrated together even though it would be several more years before they could fully take advantage of their own contribution of time, engagement, and planning support.

For the next two years, Roanoke County officials continued to advocate for continued investigation into a wide variety of options to improve broadband service in their community. They met with incumbent service providers, participated fully in the regional broadband

authority meetings and strategy sessions, collected data points from citizens and business prospects alike and advocated with the Board of Supervisors.

When the County held their 2016 strategic planning community feedback meetings to discuss future growth and economic investment with residents, the issue of broadband service continued to come up. The community had reached a tipping point and the Board of Supervisors took note.

In 2016, the County Administrator proposed a budget that included funds to build fiber infrastructure across the county. By leveraging the existing RVBA network they were able to significantly reduce capital expenditure costs and reap the benefits of the regional investments that had already been made.

Representatives from the County's Offices of Engineering, Planning, and Economic Development all met with representatives from the RVBA to plan out an affordable route that would extend and strengthen the core 50 mile fiber optic network that ran through the cities of Salem and Roanoke.

Great care was taken to build a strategic 25+ mile extension that would serve both new and existing businesses, strengthen the regional network, and offer strategic advantages to Roanoke County's neighbors should any of them want to emulate their actions and continue to build-off of the now 80-mile enterprise-grade regional network.

At every step in the process, Roanoke County officials advocated proactively for their citizens, represented a spirit of partnership and collaboration, and skillfully and successfully navigated the challenges and delays so common to community governing.

Through their patient but persistent efforts, Roanoke County staff have improved their economic position, strengthened bonds with their neighbors, and thought holistically about how to leverage limited resources for the common good.

COLLABORATION AND INNOVATION

In October of 2017, County officials gathered with representatives from the local business community, the RVBA, and supporters from all across the region at the South County Library Point of Presence/switching facility to light the RVBA phase 2 network extension across Roanoke County.

Community leaders celebrated the milestone but kept their focus on the future as they encouraged each other to think about how the investment could be leveraged not just to serve the community needs today but to build a stronger more competitive community for generations to come.

Over the last nine months, new customers from across the county have begun the process of connecting to the network, government officials have begun leveraging the investment to think creatively about how they can expand citizen services, and new internet service providers have begun planning for creative new business offerings that leverage the new shared infrastructure to drive opportunity and innovation for both businesses and residents alike.

Neighborhoods that were either underserved or unserved are now just months away from having competitive service options at affordable price points and that knowledge is improving community morale and creating renewed pride in areas of the County that had previously felt overlooked.

An open market for high-quality fiber optic internet transport service enables existing and prospective business owners, invested municipalities, community groups and individual citizens to all reap the benefits of a more robust ISP market. RVBA's open-access model promotes competition, greater consumer choice, lower prices, and greater transparency.

By collaborating with the RVBA at each stage of the organization's development, and at the level appropriate for Roanoke County's unique needs and appetite for growth, the community showed that collaboration does not come in a one size fits all model, and that giving back to regional efforts also pays dividends in local impact and value when viewed through a wide-angle lens.

Benefits and Outcomes

Roanoke County's investment is allowing for new and innovative ISPs to enter the market and is incenting existing providers to perform network maintenance and service upgrades to continue to protect and improve the regional assets that already exist.

Under the new competitive market pressure created by Roanoke County's involvement with the RVBA, existing service providers have increased regional offerings while decreasing area service prices by as much as 25 percent. Local businesses are reporting more service options at their locations, and lower price points for both bandwidth and connectivity speed.

With approximately 25 miles of new fiber optic conduit connecting Roanoke County to Roanoke City and the City of Salem, regional internet and data transport capacity is at an alltime high.

Local businesses have more service options than ever before, and costs are more comparable to other regions of similar size and population.

Nearby regions are also looking to the RVBA and Roanoke County's network expansion effort as an example of how municipal broadband can drive long-term regional value. Since Roanoke County lit their network, Botetourt County, another member of the RVBA which had not initially invested in building out fiber optic infrastructure, has begun planning to expand the RVBA network into their community using a similar model.

Communities outside of the initial RVBA footprint are also taking note of how easy it was for Roanoke County to join onto the core network at a later date. Alleghany Highlands, Bedford County, and Frederick County are all taking early steps to investigate similar opportunities for their communities.

The RVBA, Roanoke County and the Cities of Roanoke and Salem have together demonstrated a clear repeatable roadmap that other municipalities can leverage for their benefit and customization as well. The roadmap includes the following steps:

- **Benchmark:** Study where the community falls in the context of the broader comparative community set. Investigate what the community needs today and what they anticipate they'll need tomorrow. Determine if these needs are currently being addressed by existing services or if there are tangible and committed private sector plans in place to address these needs. Note: It's critically important to give all interested stakeholders a seat at the table and a voice in the strategy and planning process.
- **Research:** Before settling on a way forward, research existing private and public sector assets and look for ways to maximize the value of what exists to stretch limited investment dollars as far as possible.

- Plan: Develop a working group to build a concrete project roadmap. Encourage collaboration and the ability to pivot as new opportunities present themselves.
 Continuously validate viability and assumptions. Share working concepts with as many potential partners, subject matter experts and community advocates as possible to ensure thorough understanding of the possibilities and to proactively build stakeholder support.
- **Communicate**: Keep the community informed. Speak with local politicians, business leaders, residents, and the media about both the need and the various potential solution paths available. Ask for their support as you seek to determine which path makes sense for your community.
- **Partner**: Partner with incumbent service providers, co-ops, utilities, and municipal broadband authorities to discuss potential community-wide solutions. Look for vendor partners, businesses, and professional or private associations who want to innovate, pilot, or explore potential solutions in partnership.
- **Finance**: Consider financing possibilities from a variety of sources. Taxpayer contributions, economic development incentive programs, Federal, state local and non-profit grant programs, and private investments are all viable options. Remember that the more people who invest in your effort, the more people who will have a stake in seeing you succeed.
- Flex: Roanoke County's success proves that innovative programs don't follow a step-by-step guide or timeline. Build wiggle room into your project plans and expect to make adjustments as you go. Look to those with experience for help and stay patient and committed through the process and project lifecycles.

- **Prepare**: Change is hard. Large companies may not be able to reform their practices in response to a one-time local request, political philosophies and special interest groups may disagree with the program plan. Prepare to defend your strategy but stay open to finding win-win solutions as your plans mature.
- Manage the Message: Track the information being published about the project and address misinformation early and consistently. Take time to publicly celebrate your wins, track and share your community's improvements.

EXECUTIVE SUMMARY - BRIEF OVERVIEW

When Roanoke County had to turn down its first opportunity to partner with the Roanoke Valley Broadband Authority to build a cross-community fiber optic broadband network, supporters of the initiative could have lost hope. Instead they went to work, supporting their neighbors, tracking best practices, and planning for a time when they would have the budget flexibility to take advantage of the infrastructure advancements and best practices being deployed by their neighboring municipalities.

At a moment where they could have turned their focus inward, Roanoke County staff found ways to collaborate with their neighbors on a vision they believed in, even as the resources to fully recognize the planned regional benefits were restricted locally. In doing so, they deepened regional partnerships, benefitted from economies of scale, and prepared to revisit the opportunity when the timing was right.

County officials proactively demonstrated a spirit of collaboration and an innovative vision that enabled them to support the region and, when the time was right, benefit from the best practices and cost-effective deployment strategies offered by their neighbors.

The strategic market pressure created by Roanoke County's involvement with the RVBA has incented existing service providers to increase and improve regional offerings while decreasing prices by as much as 25 percent. Local businesses are reporting more competitive service options at their locations and lower price points for bandwidth, speed, and transport service. Roanoke County's investment is also allowing for new and innovative ISPs to enter the market and is incenting existing providers to perform network maintenance and service upgrades to continue to protect and improve the regional assets that already exist.

Roanoke County has developed a new first of its kind model for joining existing municipal broadband networks in the Commonwealth. In doing so they showcased a roadmap for other community leaders whoseek to educate and inspire their communities before they could responsibly begin any tactical activation of a municipal broadband effort.