



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b>		<b>Easygrants ID: 972</b>	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Mid-Atlantic Broadband Cooperative	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Tad Deriso	

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## A. General Application Information

1. Applicant Information	
1-A. Name, Address, and Federal ID for Applicant	
<b>i. Legal Name:</b>	Mid-Atlantic Broadband Cooperative
<b>ii. Employer/Taxpayer Identification Number (EIN/TIN):</b>	270076588
<b>Street 1:</b>	1100 Confroy Drive
<b>Street 2:</b>	
<b>City:</b>	South Boston
<b>County:</b>	Halifax
<b>State:</b>	VA
<b>Country</b>	United States
<b>Zip/Postal Code:</b>	24592

1-B. Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
<b>Prefix:</b>	
<b>First Name:</b>	Tad
<b>Middle Name:</b>	
<b>Last Name:</b>	Deriso
<b>Suffix:</b>	
<b>Telephone Number:</b>	18048554057
<b>Fax Number:</b>	14345722357
<b>Email:</b>	tad@mbc-va.com
<b>Title:</b>	President and CEO



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<b>1-C. Other Required Identification Numbers</b>	
<b>i. Organizational DUNS:</b>	143482482
<b>ii. CCR # (CAGE):</b>	55ZS7
<b>iii. Funding Opportunity Number:</b>	1
<b>iv. Catalog of Federal Domestic Assistance Number:</b>	<b>BTOP CFDA Number:</b> 11.557 <b>BIP CFDA Number:</b> 10.787 <b>BTOP CFDA Title:</b> Broadband Technology Opportunities Program <b>BIP CFDA Title:</b> Broadband Initiatives Program

**1-D Eligible Entities**  
 Please classify your organization. (Note: If there are multiple organizations involved in the project, designate the lead applicant that would enter into a Loan or Grant agreement with the Agency and assume operational and financial responsibility should an award be made). **Cooperative or Mutual**

**1-E. RUS Borrower Status**  
 No

**1-F. Applicant Federal Debt Delinquency Explanation**  
 Is the Applicant Delinquent On Any Federal Debt? **No**  
**Federal debt delinquency Explanation:**  
 N/A

**2. Project Description & Project Title**

**2-A. Project Title:** Middle Mile Expansion for Southern Virginia

**2-B. Project Description:** Mid-Atlantic Broadband Cooperative will extend our open access middle-mile fiber optic network to K-12 schools and vital community anchor institutions in unserved and underserved areas of Southern Virginia. Once completed, over 200 schools and 100,000 students will have access to an advanced network that will enrich K-12 education, trim costs and enhance economic growth.



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**3. Application ID for Multiple Submissions for Identified Service Areas:**  
N/A

**4. Rural Area Determination**

At least 75 percent of the proposed service area to be funded falls within rural areas that are unserved or underserved.

**Yes**

**5. Applications for Rural Areas:** Please choose the funding program(s) to which you are submitting this application.

a) BIP broadband infrastructure category to which you are applying:

**BIP - Middle Mile Project**

b) Would you like this Application for Rural Areas to also be considered for BTOP funding?

**Yes**

c) BTOP Infrastructure category for which you are applying.

**Middle Mile**

**6. Applications for All Other Areas: Per the NOFA, all applications to fund broadband infrastructure projects in areas that are less than 75% rural must be submitted to NTIA for consideration under BTOP.**

BTOP broadband infrastructure category to which you are applying:

## **B. Eligibility Factors**

**7. Application Submission**

**BIP and BTOP Factors Selected By Applicant:**

**Applicant has submitted a completed application and provided all supporting documentation required for the application.**

**The Project will be substantially complete within 2nd year from the award date, and the project will be fully**



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complete by the end of the 3rd year from the award date.
For projects seeking more than \$1 million funding, the Applicant agrees to submit a certification, from a Professional Engineer, that attests that a) the system will deliver the stated performance; and b) the projected project will be substantially completed within two years, and fully completed within three years.
The Applicant provides two-way data transmission with advertised speeds of at least 768 kbps downstream and 200 kbps upstream.
Applicant understands and agrees to comply with the nondiscrimination and interconnection obligations outlined in the NOFA.

<b>Additional Factors for BIP Selected By Applicant</b>
At least 75 percent of the proposed funded service area qualifies as unserved and underserved rural areas in accordance with the NOFA.
Applicant understands and agrees that the project will be fully funded in accordance with the requirements of the NOFA.
Applicant understands and agrees that only projects that RUS determines to be financially feasible and/or economically sustainable will be eligible under this NOFA.

<b>Additional BTOP Factors Selected By Applicant</b>
<ul style="list-style-type: none"> <li>• Conformity with Statutory Purposes</li> <li>• Cost Sharing/Matching</li> <li>• Reasonableness of Project Budget</li> </ul>



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The project advances at least one of the statutory purposes for BTOP
Applicant has provided documentation that the project would not have been implemented during the grant period without federal grant assistance.
Applicant has provided a budget that is appropriate to the proposed technical solution and only includes eligible costs.

- Demonstration the Project Could not be Implemented But For Federal Grant Assistance**  
 Applicant is providing matching funds of at least 20 percent towards the total eligible project costs?  
**Yes**

<b>7-k. Cost Sharing/Matching Fund Explanation</b>
N/A

## C. Executive Summary

### Executive Summary of Project for BIP and BTOP:

#### 8. Infrastructure Projects Executive Summary

The Mid-Atlantic Broadband Cooperative (MBC) is honored to submit this joint BTOP/BIP grant application for consideration. As you will see in this application, MBC was formed in early 2004 as a non-profit cooperative to build, operate and manage a 800+ mile advanced, wholesale, open-access fiber optic backbone network in rural Virginia to promote economic development, private investment and job creation.

MBC completed the network build in September of 2006, and became an operational entity. Since that time, MBC has grown our revenues from \$0 to \$3.2 million per year, and have kept our costs in line with growth. MBC has received over \$52 million in grant funding to complete this project, including \$6 million from the US Department of Commerce, Economic Development Administration and \$48 million from the Virginia Tobacco Indemnification and



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Community Revitalization Commission.

MBC is a unique success story in that we are cash flow positive, are growing the revenue base and adding employees in a very difficult economic environment. We have helped expand the availability of broadband services to residential and business customers in the region by operating this open-access middle-mile network.

The reason we are proposing this project is that there are many K-12 schools in our region that do not have fiber optic connectivity as of yet. In order to make those connections happen, over \$20 million in capital must be expended to complete those builds, and unfortunately there are no additional resources or grant funds available to do so, without the assistance of the critical BTOP/BIP broadband stimulus program.

Of the 207 schools in our region, only 86 schools (42,000 students) have a fiber connection today. This project will result in 121 schools (58,000 students) having access to a minimum fiber connection of 10Mbps, with the goal of 100Mbps (depending on each school's unique telecom/IT bandwidth needs and budgets). MBC has successfully extended the fiber network to other school systems in our region, but now that we have exhausted grant funds for these projects, if we rely on our internal revenue and budgets to build these fiber connections, it would take over 30 years to complete the funding of all schools. By leveraging what grant funds we have left with the Federal Broadband Stimulus funding available, we will be able to complete connectivity to these schools in a little less than 2 years, and ensure that over 100,000 students in our proposed service area have access to the critical telecom and broadband network connections to enable their success.

As a wholesale, open-access provider, MBC does not discriminate with any carrier, and encourages interconnection with any and all carriers who desire a connection to the MBC network. To date, over 55 telecom providers have joined our cooperative and are using the network in various forms. Some are buying 10Mbps Ethernet transport to their wireless broadband system on a water tower to serve residential customers, while others are buying 2.5Gbps and 10Gbps wavelengths to connect their data centers in our service area to key Internet peering points in Northern Virginia and the Southeastern United States.

MBC proposes to build over 465 route miles of new fiber optic cabling, which will finalize the



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connection of all K-12 schools in our region. This will expand MBC’s existing 800 route mile network by almost 50%.

The strategic reasoning that is behind our application for matching Federal grant dollars is that MBC is a proven entity, with a focus on underserved and unserved areas of Virginia, has a business model for how to do open-access networks that has been embraced by other communities from California to Massachusetts. Internationally, MBC is a model of open-access network in unserved markets by the International Telecommunications Union (ITU), where we spoke to their conferences in Africa last year regarding the business case for building open-access networks.

We have identified approximately \$20 million dollars in capital costs related to this expansion of fiber optic middle-mile resources. MBC has over \$4 million in available cash matching funds for this project (20%) and is ready and able to begin construction immediately (within 24 hours of grant agreement approval and signing) on several middle-mile routes we have previously engineered, designed and permitted.

We plan to expand the use of our carrier-class SONET/TDM backbone network to allow additional network capacity to be provided to the K-12 school systems. MBC provides Ethernet services over SONET network. From a technical basis, we do this because we offer dedicated bandwidth services ONLY. We do not offer shared connections or routed connections that could result in oversubscription of bandwidth. Our Layer 1 optical transport network is highly beneficial to telecom service providers that utilize our network in that the bandwidth is dedicated and not shared with others. This type of connectivity sets MBC apart from other middle-mile providers and allows us to deploy flexible Ethernet services (that do not exist from the existing incumbent telephone providers), while maintaining a carrier class system.

MBC has what few if any other middle-mile providers in rural areas have, which is direct connectivity to Tier 1 Internet peering points in Northern Virginia. MBC has on-net access to Equinix in Ashburn, Virginia where over 190 different carriers interconnect to exchange traffic and IP Transit services. This type of connection is beneficial to the region, in that we can provide direct connectivity from our ISP and last mile providers in the region to their peering partners, thus improving network performance, reducing costs, and providing a better experience for the residential and business customers that purchase broadband services from



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MBC telecom service provider members.

The other positive attribute of MBC’s proposal is that since we have an existing operational network in place which is up and running today, we can turn up services and start immediately providing middle-mile access to broadband communities once the various fiber segments are completed and tested. We do not need to wait 2 years or more to complete the build, install electronics, and hope to make revenue to make the system viable. MBC will leverage our existing network base, which is quite substantial (over 200Gbps of active network backbone capacity, and multiple OC-192 and OC-48 rings providing many middle mile transport circuits).

We conservatively estimate 75 jobs will be created as a result of this project, which will be made up of administrative, clerical, project management, engineering, construction and inspection jobs.

In summary, MBC’s grant application presents a substantial value proposition for the return on dollars invested in the form of new connections, jobs created and infrastructure built. MBC is a strong partner for the grant programs, and many of our political supporters and key stakeholders take comfort in the fact that Federal and State grant dollars have been invested in MBC which is a stable, viable, operationally successful open-access middle-mile provider

**Description of BTOP Project Purpose (BTOP Applicants Only Next Three Questions)**

**9. BTOP Statutory Purpose:**

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Provide access to broadband service to consumers residing in “unserved” areas of the United States.
Provide improved access to broadband service to consumers residing in “underserved” areas of the United States.
Provide broadband education, awareness, training, access, equipment, and support to schools, libraries, medical and healthcare providers, community colleges and other institutions of higher education, and other community support organizations by or through these organizations.
Improve access to, and use of, broadband service by public safety agencies.

**10. Description of BTOP Project Purpose:**

MBC’s middle-mile project proposal and grant application fits within the statutory purpose of BTOP by the following manner:

**Provide Access to Broadband Service to Consumers Residing in “Unserved” Areas**

MBC has a history of providing access to consumers, however we do not provide the retail part of the equation. MBC provides the middle-mile infrastructure that connects unserved areas to wireless ISP’s for instance, and these ISP’s use the MBC middle-mile transport network to connect to water towers or communication towers, whereby the ISP places wireless broadband radio transmitters on these facilities, and turns up broadband services for their customers in previously unserved areas.

**Provide Improved Access to Broadband Service to Consumers Residing in “Underserved” Areas**

MBC also has a history of accomplishing this very purpose, as indicated by our work with MBC members to connect school systems. While the schools were in areas that would be defined by NTIA under current definitions as “underserved” or even “served,” the schools' only option for connectivity were T1 or T3 lines with the incumbent phone company. Once MBC extended our open-access wholesale fiber optic network to those schools and allowed MBC members (private sector telecom providers) to buy transport services from MBC to reach those schools, the schools were able to realize their goal of 100Mbps of dedicated Ethernet capacity



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from every school back to a central aggregation point. This type of service on MBC’s wholesale open-access network is critical in ensuring their long-term success for educating students (their consumers).

**Improve Access to and Use of Broadband Service by Public Safety Agencies**

The Appomattox County, Virginia public safety network utilizes an existing MBC tower, which is connected to MBC’s open-access wholesale network, to improve emergency coordination and public safety components to the residents in the County. The overall network plan proposed by MBC will benefit public safety agencies by allowing access to the MBC open access network and the various members and services that are available on the network.

**Stimulate the Demand for Broadband, Economic Growth and Job Creation**

In a way, MBC does stimulate the demand for broadband and economic growth and most importantly job creation. While we do not purport to have formal educational programs and academic influence over this process, our reasoning behind saying MBC has this BTOP statutory purpose is that the stimulation of such is our primary goal. MBC was formed as an economic development engine to help bring technology related industries to the region by operation of a carrier-class open-access telecommunications network. There has been much success in this operation, as evidenced by the location of several data center facilities that have created hundreds of millions of dollars of private sector investment, and new companies such as start up web hosting and wireless internet providers who are coming to MBC to start new businesses, using the MBC network infrastructure to do so. Economic development and job creation is at the heart of MBC’s mission, and we strongly support the interdependence of broadband services as it related to job creation and economic development.

**11. BTOP Enhanced Services for Health Care Delivery, Education, and Children:**

MBC has had recent success in providing open-access middle mile solutions for healthcare and education resources.

MBC recently completed a buildout for the Mecklenburg County, Virginia public school system. There were 12 schools in the county, most of which were near an existing MBC fiber optic backbone route. Prior to this build, the County had T1 lines from each school back to the main administration office provided by Verizon, and a T3 line from the administration office to



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the Internet. The school system has 70% e-rate eligibility. The school system issued a Form 470 and request for proposals from service providers to establish 100Mbps connectivity between all schools, and a 50Mbps connection for Internet access. MBC built the fiber to the schools and an MBC Member, Kinex (a local Internet service provider) won the bid. Kinex buys a wholesale connection of 100Mbps from MBC to each school, then provides connectivity to their Internet backbone. Once the project was operational, the school system increased its bandwidth from 1.5Mbps to 100Mbps, and they are now paying LESS per month than they paid from Verizon solution.

MBC provides fiber connectivity to all hospitals in the service area today, and we have several examples of how these hospitals are using the network for improving patient care. Centra Health, a large regional healthcare provider in Central Virginia, is using an MBC Member (Ntelos) to connect their rural hospital in Farmville, Virginia. Ntelos is providing the healthcare system with 100Mbps of connectivity to deliver radiological and 3D MRI imaging. This is a huge benefit to residents of the underserved Farmville area, as they no longer need to drive 1 hour to the hospital in Lynchburg and can be served in their local community.

Many other examples include healthcare institutions using the MBC members to provide services to connect the hospital to regional and remote clinics in the region. This has allowed facilities to increase bandwidth 10x (go from T1 line to 10Mbps Ethernet connection) at the same or lower cost per month.

While the benefits of the network are helpful to educational and healthcare providers, the flexibility of an open-access middle-mile network is the key point. If the Mecklenburg County School system gets poor customer service or has Internet issues with the provider using the MBC system, they simply cancel their contract and use another provider who has the same access to MBC's middle-mile network at the same costs. No construction, no monopoly providers, no contracts that are iron-clad and benefit the provider only, not the customer. This is a proven technique that has been implemented by MBC which is improving the lives of residents in our service area, and will continue to improve others by expansion of this middle-mile project to the remaining schools and healthcare facilities that could not be affordably reached without this critical Federal Broadband Stimulus Grant funding.

## **D. Proposed Funded Service Area**



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**12. Proposed Funded Service Area Maps:**

**12-A.** Service Area Map (Reference Number): **2A7D-6813-48C9-9BDB**

**12-B.** Is the applicant is seeking a waiver for providing less than 100% coverage of a census block. **No**

**13. Proposed Funded Service Area (BIP - Last Mile Projects):**

Please refer to section M at the end of document.

**14. Proposed Funded Service Area (BTOP - Middle Mile Project):**

Please refer to section M at the end of document.

**15. Non-Funded Service Area( BIP Only):**

N/A

**16. Coverage Waiver:**

Applicant is seeking a waiver for providing less than 100% coverage of a census block.

**No**

For Response of “Yes” please refer to upload section for additional supporting documentation.

**17. Methodology for Area Status:**

MBC has utilized recently completed information from the Commonwealth of Virginia Statewide Broadband Mapping initiative. This initiative (which MBC was heavily involved in) resulted in carriers around the State indicating the areas they served for wireless and wireline services, and the resulting data was compiled in an ESRI Shape File map, which is loaded into our mapping system to identify census blocks and show existing and new middle-mile fiber optic routes.

The maps we have included in our application show unserved, underserved and served areas. Unserved is defined as having no access to broadband services, other than dial up internet services. Underserved is defined as having access to wireless or wireline broadband service provider or a maximum of 1 provider in a given census block. Served areas are defined as having access to more than 1 wireline service provider.

An important distinction to make in methodology for area status is the piece for middle mile services for strategic community facilities. For instance, we propose to deliver 100Mbps of



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direct Ethernet transport to every K-12 school in the service area. In many cases, if any area shows “served” by definition it is for households that have a high percentage of broadband availability at faster speeds. Bottom line, if the local telephone company cannot deliver 100Mbps Ethernet services to the schools regardless of if the area is served, underserved or unserved, then that should be noted somewhere.

Overall, MBC has utilized information gathered by the State of Virginia from their recent broadband mapping efforts, and that is the information used to determine our service area and middle-mile routes and termination points.

**18. Middle Mile Benefits**

The service areas are identified in various attachments and maps as part of this middle-mile grant application.

The highly beneficial reason MBC is involved in these projects is due to our proven operational network that already connects to over 50 different service providers that can offer retail broadband services in minimum speeds of 10Mbps up to 10Gbps to our critical community institutions.

This network expansion directly targets unserved K-12 schools in our service area that do not have fiber optic network connectivity today. There are some school systems that have fiber connections through a municipal network (which happen to be members of MBC) and other providers. This project will not overbuild these entities, rather interconnect with them as we do today, to ensure all schools in our service region (over 200 schools; 86 have fiber connection, 121 do not) have a fiber optic connection and can have access to 100Mbps of direct connectivity.

We have already extended fiber to all hospitals and community colleges in the region. Some are using the network and MBC members, but others are not due to long term contracts with other entities from State contracts. This expansion of the network to K-12 schools allows MBC to extend our fiber footprint to these locations and thus allows our members, such as wireless Internet service providers, to utilize the network to facilitate new broadband connections in areas that were previously cost prohibitive to serve from a backhaul/middle-mile perspective.

The benefits of middle-mile connectivity as a result of this project implementation are vast.



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This provides a platform that other regional educational institutions can use to provide distance learning and virtual classrooms as some are doing today using the MBC Network. Teachers and resources will be shared over the network and as more work is done on how schools can share revenues and teacher resources, the network will be in place to support those initiatives.

## E. Proposed Service Offering

### 19. Broadband Service Offerings for Last Mile Project:

Please refer to upload section at the end of the document.

### 20. Service Offerings for Middle Mile Project:

Please refer to upload section at the end of the document.

## Competing Service Providers

### 21. Existing Broadband Service Providers and Services Offered:

Please refer to upload section at the end of the document.

## Non-Discrimination, Interconnection

### 22. Description of Network Openness:

MBC has embraced the concept of open-access networks since our inception in January of 2004. It is absolutely critical that networks built with public funds that will benefit the public use be open to any and all providers, including incumbent telephone company and MSO cable companies.

MBC has a long and successful track record with open-access networks, as evidenced by our successful project in Southern Virginia. Over 50 telecommunications service providers use the MBC network today to reach unserved and underserved markets. These customers range from billion dollar companies like Verizon Business, Qwest and Level3 Communications, down to small wireless ISP's and local competitive exchange carriers.

The proposed middle-mile network build project shall be a wholesale, open access network



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built for use by retail telecommunications service providers.

From a policy perspective, MBC does not discriminate against any carrier, and is open to all interconnection requests. Most carriers like Embarq, AT&T, Cavalier Telephone, Qwest, Verizon Business, Level3, Comcast and others interconnect with MBC today for a variety of Layer 1 transport requirements, and MBC has completed Master Service Agreements with those carriers.

MBC connects to both the “public” Internet and peering exchanges in several locations, including carrier neutral interconnection facilities of TelX at 56 Marietta Street in Atlanta, Georgia, Level3 gateway in McLean, Virginia (1755 Old Meadow Road), Level3 Synergy Sites in Charlotte and Raleigh, North Carolina and Richmond, Virginia, Equinix facility in Ashburn, Virginia and the Terremark NAP of the Capital Region in Culpeper, Virginia. MBC brings a wide range of carrier neutral interconnection options to this project, which will greatly exceed the NTIA requirements for non-discrimination and network interconnection obligations.

As a primarily Layer 1 optical transport provider, MBC does not and will not block access or packet shaping, or restrictions on connectivity or bandwidth utilization. MBC provisions either wavelength or Ethernet circuits over our SONET network infrastructure at the STS-1 level, thus ensuring that when a telecom provider buys 100Mbps of transport services, they have a dedicated 100Mbps pipe for their services.

**Non-Discrimination and Interconnection (BTOP applicants only for next three questions)**

**23. Non-Discrimination Obligations (applicable to Last Mile and Middle Mile Applicants):**

Adhere to the minimum non-discrimination requirements as set forth in the NOFA.
Display the nondiscrimination practices in a prominent location on the service provider’s web page, and provide notice to customers of changes to these policies.



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**24. Interconnection Obligations (applicable to Last Mile Applicants):**

--

**25. Interconnection Obligations Middle Mile Applicants:**

Adhere to the minimum interconnection requirements as set forth in the NOFA.
Display the interconnection policies in a prominent location on the service provider's web page, and provide notice to customers of changes to these policies.
Commit to offering wholesale access to network components and services such as wavelength or fibers at reasonable rates and terms.
Commit to binding private arbitration of disputes concerning interconnection obligations.

**Cost Effectiveness and Affordability**

**26. Cost per Household (BTOP only):**

N/A - This project is middle mile, so does not include households.

**27. Affordability**

MBC has conducted market review of pricing for middle-mile broadband service offerings in the proposed service area. The main issue is that in many cases there is no comparable benchmark in which to compare.

For instance, in those areas where MBC proposes to provide metro Ethernet services at speeds from 10Mbps to 100Mbps, the only comparable wholesale transport offering would be from the Incumbent Local Exchange Carrier (Verizon and Embarq), who in most cases do not have the network ability to support Ethernet services, as they can only support TDM services at the T1 or T3 level with their copper plant. In some areas, the ILEC cannot deliver OC-level



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services (i.e. 155Mbps or above) due to technology issues.

Other middle mile providers including wireless microwave backhaul providers such as Conterra Ultra Broadband, LLC provide 100Mbps transport links at \$1,200 to \$1,800 per month depending on capital required and term of contract. In comparison, MBC offerings for 100Mbps dedicated transport link using optical fiber is \$1,200 to \$1,500 depending on term of contract (i.e. 2yr vs 5yr). This type of affordability factor is relevant for comparison.

If we were to take a more global view of affordability, one of the key reasons to implement an advanced, open-access wholesale network in underserved and unserved areas is to level the playing field when it comes to pricing. The goal is for outlying communities to have similar pricing structures to metropolitan areas so that economic development and opportunities for advancement are not hindered by having more expensive telecommunications services in rural, underserved markets.

At the end of the day, it is difficult to assess wholesale pricing comparisons on an apple to apple basis, simply because many of these unserved and underserved markets do not have providers today who can provide the level of advanced wholesale transport services availed by fiber optic networks, and instead have to rely on outdated, antiquated and expensive legacy TDM and copper infrastructures to deliver mediocre services to the area.

## **F. Technology Strategy**

### **28. Technology Type:**

Wireline - Fiber-optic Cable

**Other:**

### **29. System Design**

MBC has proposed utilizing our existing system design of carrier-class optical transport network delivery. This design has been highly successful at bringing advanced, middle-mile



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open-access telecommunications services to un-served and underserved communities in Virginia.

For this proposed Middle-mile project, we offer the following comments on our proposed infrastructure buildout, including fiber backbone, Node facilities, Electronics, and Internet backbone access requirements.

#### Fiber Backbone Infrastructure

MBC's proposed use of SMF-28E, single mode 96 strand fiber optic cable and 24 strand fiber cable to individual community anchor institutions in 12 fiber loose tube configuration using armored sheathing. Installation will be direct buried along roadway right of ways (through existing MBC agreements with the Virginia Department of Transportation). Where aerial facilities are needed due to terrain or congestion issues, fiber will be placed in the communications zone of existing pole facilities and will utilize existing pole attachment agreements with providers already in place by MBC. All fiber will be fusion splicing and will have a maximum of 0.25db of loss per KM (MBC existing installation of 800+ miles of fiber has loss readings of less than 0.21db per KM). Handholes will be placed at road crossings and other locations to facilitate access of last mile providers and lateral fiber builds to water towers, existing communication towers, etc. to the middle-mile backbone project.

#### Node Facilities

MBC proposed to build Four (4) new node facilities along the route, which will be 12'x20' pre-cast concrete structures. These node facilities will have two (2) entry doors (one side for MBC equipment, the other side for collocation of other telecom providers), and will provide carrier neutral cross connect and interconnection points in the communities. The Node facilities are designed with 200amp single-phase power, dual HVAC systems, emergency generator backup with low-emission EPA rated diesel fuel powered systems, and substantial grounding and environmental monitoring systems.

#### Electronics

MBC will utilize carrier class providers of optical transport equipment to facilitate the lighting



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of the network to provision services along the middle-mile route. This network will consist of an OC-192 (10Gigabits per second) Backbone System that will tie into MBC's existing network interconnection points in Blacksburg and Bedford, and will be robust enough to handle the interconnection facilities and requirements of last mile service providers in the service area. The network will be initially scalable to 200Gbps (20 OC-192 wavelengths), which is more than adequate to serve the proposed service area for the foreseeable future.

Connections to telecom service providers will be broken down in the node facilities to allow transport circuits as small as 10Mbps, utilizing Ethernet over SONET technology. This technology will ensure carrier-class reliability and will not have issues of Layer 2 type Ethernet offerings where VLAN support can prove problematic in the delivery of dedicated bandwidth to telecommunications service providers. All Electronics will be powered using redundant DC power A&B feeds, and will be monitored and managed 24 hours a day, 7 days a week, 365 days a year, from MBC's existing Network Operations Center (NOC) in South Boston, Virginia. This will provide efficiencies for the project in that new NOC capabilities will not need to be purchased or implemented, thus saving the NTIA program substantial sums of investment in that type of infrastructure.

#### Internet Backbone Access

MBC operates a 100% on-net facilities based network that connects unserved and underserved communities in Virginia to key Internet peering points and interconnection facilities. MBC has our own network equipment in the Equinix IBX facility located in Ashburn, Virginia. Many MBC telecom service provider customers are using MBC to transport their circuits to Ashburn, where MBC cross connects to various IP Transit providers. This has reduced the cost of Internet access in the region, and greatly expanded the competitive landscape of the number and types of carriers now able to reach formerly unserved and underserved areas of Virginia. For this particular project, the new communities along the proposed fiber route will have access to the middle-mile network and will improve the reach of Internet access to those providers, who will ultimately be able to improve the Internet access experience for their residential and business customers. Middle-mile access provided as part of this project is a critical part of ensuring the largely unserved and underserved communities in this proposed service area have direct access to key Internet peering points and will provide an advantage in economic development as communities look to attract technology based industries to their region.



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### Reasoning of Infrastructure Choices

Fortunately for the NTIA, MBC has already invested a substantial amount of money (\$52 million to date) to provide access into the key peering points in Northern Virginia and the Southeastern United States, manages over 800 route miles of fiber optic sheath that is owned and controlled by MBC, and implements creative and cost effective policies that showcase middle-mile access projects as the key to revitalizing regional economies.

MBC has proven that networks built to carrier-class standards and operated as a wholesale network with open-access policies for any and all telecom service providers are beneficial to the communities served, and result in more last-mile, telecom service providers to access the network to enable deeper reach into unserved markets as well as increase their bandwidth to the commodity Internet while reducing their ongoing costs at the same time.

We have found that this type of infrastructure also provides an opportunity to offer “postage stamp” pricing on the regional network. That is, MBC has a flat rate per circuit that is not mileage sensitive. This is a huge benefit to telecom service providers who utilize the middle-mile network as it does not promote more costly services the further away a community is from an Internet access point, and creates a very level playing field for all telecom providers to utilize.

### Upgrade and Scalability of Network

MBC has designed this network with upgrade and scalability in mind. As with all of our network builds, ease of upgrade is critically important, as many of our customers require fast upgrades to support their growing telecommunications businesses. For instance, when we provision a 100Mbps transport circuit, we provision that on a 1Gbps Ethernet port, and allocate 100Mbps of bandwidth. If the customer needs to increase to 150Mbps or 200Mbps, MBC can do that remotely and requires about 10 minutes to re-provision the circuit. We have done this multiple times for our carrier customers, and they appreciate the flexibility of that process.

Upgrading the system is relatively simple, as additional cards can be added to increase backbone speeds, and with the implementation of a DWDM or CWDM capabilities, the



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possibilities of speeds are endless. MBC utilizes Nortel and Infinera as our primary equipment providers, and will utilize this type of equipment for ease of use and cost effective utilization.

**30. Network Diagram:**

Please refer to upload section at the end of document.

**31. Certification by Professional Engineer:**

Please refer to upload section at the end of document.

**32. Buy American Waiver Request:**

Is the applicant seeking an individual waiver of the Buy American provision? **No**

**Buy American Waiver Request – Legal Justification**

We do not require a waiver.

**33. Choice of Service Provider:**

Does the project’s Infrastructure and the Company’s business plan allow more than one provider to serve end users in the proposed funded service area?

**Yes**

## **G. Project Milestones and Completion Factors**

### **Timeline & Milestones**

**34. Infrastructure Build-out Timeline:**

Please refer to upload section at the end of the document.

**35. Licenses, Regulatory Approvals and Agreements:**

Due to MBC’s considerable experience in operating and managing a large middle-mile telecommunications network, few licenses and agreements will be needed for successful implementation and operation of the project.



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Land leases, rights of way and railroad crossing permits are all mandatory in this project. Land leases are necessary because MBC plans to obtain long-term easements from the County owned land where the new node facilities will be placed. MBC has successfully completed that process with 24 other counties/cities and will use that same process for the new land leases. Rights of way are needed in this project, and MBC has an extended, ongoing Memorandum of Understanding with the Virginia Department of Transportation for use of their right of way for the entire state. We will not be required to renegotiate another agreement, as our existing agreement will cover this project. Railroad crossing permits will be necessary in this project because there are 14 railroad crossings for this project. MBC has successfully completed crossing permits with the railroad owner for 24 other crossings in the state. MBC will follow our standard permit procedure for this activity and do not anticipate any lengthy delays.

Tower leases, equipment leases, building leases, FCC authorizations, state authorizations, video franchise agreements, and leasing of local loops are not necessary in this project. No towers are proposed as part of this project, so tower leases will not be needed. Equipment leases are not necessary because all equipment proposed for installation as part of this project are planned to be purchased as capital assets. Building leases are not needed because all node facilities proposed for this project will be pre-cast concrete structures and building will not be required. MBC, as an open-access wholesale provider, is not required to register with the FCC as a service provider, so FCC authorizations are not needed. State authorizations are not needed because similar to the FCC, MBC has met with the State Corporation Commission and does not need a certification as a telecom service provider. All necessary approvals for corporate operations have been reviewed and approved by the SCC as evidenced by our 3 years of successful operations. Since MBC is not planning on offering video services on a retail basis, video franchise agreements are not required. Finally, leasing of local loops is not needed because the project will provide 100% on-net connectivity to many different carriers from the MBC network, and we do not expect any local loop expenses to be purchased to allow successful operation and implementation of this project.

### **36. Construction and Vendor Contracts**

The contractors we intend to rely on for the building and implementation of the new network include Better Cable Systems Inc., RACO, Inc., Telephone Engineering Consultants (TEC) and GCR Communications. Both Better Cable Systems Inc. and RACO Inc. will be



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contracted to lay the fiber optics for the building and implementation of the proposed network. MBC has an ongoing relationship with RACO, Better Cable Systems and TEC, and are ready to start immediately. We have used these companies for several years and are confident in their abilities to provide the best costs, as indicated with their ongoing relationship with MBC.

Better Cable Systems Inc. (Certified Woman Owned Business)  
1230 N. Main St.  
P.O. Box 1117  
Roxboro, NC 27573  
Phone – (336) 599-2226  
Fax – (336) 599-0989  
Email – jpuryear2004@earthlink.net (JoAnn Puryear – President of BCS)

RACO, Inc. (Certified Small Business in Virginia)  
P.O. Box 265  
Gretna, VA 24557  
Phone – (434) 656-6676  
Toll Free – (800) 709-6690  
Fax – (434) 656-6678  
Email – Service@raco-construction.com

Telephone Engineering Consultants (TEC)  
14116 Ward’s Rd # B  
Lynchburg, VA 24502  
Phone – (434) 239-3700  
Email – dscearce@embarqmail.com (Don Searce – Engineer for this project)

GCR Communications  
Address  
South Boston, Virginia 24592



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Phone (434) 570-1301

Email – gcr@gcrcommunications.com (Glenn Ratliff – Network Implementation)

**Qualification of Management Team and Organizational Readiness**

**37. Management Team Resumes:**

Please refer to upload section at the end of the document.

**38. Organizational Readiness:**

Mid-Atlantic Broadband Cooperative is prepared to implement, manage and operate the advanced, open-access middle mile network that is proposed. MBC is a wholesale broadband provider, and our company currently manages a broadband network comprised of more than 800 miles of fiber in Southern Virginia in our regional/metro network. Our senior management team, along with our project team members, have over 75 combined years of experience in the telecommunications field. MBC also has an eleven member Board of Directors dedicated to MBC's regional economic development mission that provides governance and policy decisions corresponding to MBC activities.

The senior management team at MBC is comprised of two people, Tad Deriso and Hunter Ford. Mr. Deriso is the President and CEO of the company. He is in charge of coordinating operations, member needs, community relations, governmental affairs, sales and marketing and carrying out strategic direction.

Hunter Ford, our Networks Operations Manager, already manages and maintains the existing 800 mile MBC fiber optic outside plant network, and is also the manager of the MBC Networks Operations Center facility in South Boston, VA. He will be managing these new fiber routes as well.

Billing and Grants Administration will be carried out by our Accounting and Finance Manager Dana Jones. She is responsible for billing all of our current accounts and will be responsible for the new accounts from this project and following grant reporting and transparency requirements. Dana successfully manages existing MBC grants from the Virginia Tobacco Commission, NASA, and the US Department of Commerce Economic Development



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Administration.

MBC, as a successful, existing wholesale carrier, is well qualified to carry out the full implementation and ongoing operational support requirements. MBC has a fully operational network that has been up and running for 34 months and has a comprehensive understanding of billing, customer care, network operations, network maintenance, financial reporting, and overall management. MBC's ability to integrate this projects operation into the daily operations of MBC is not an issue. MBC will establish a separate department to track grant activities, revenues, expenses for assurances of auditing and government transparency requirements. As MBC has been the recipient of over \$55 million in grants from State and Federal agencies for broadband network deployment, we understand the requirements of separate accounting and accountability for the project expenditures and take this responsibility very seriously.

MBC's existing carrier members are anxious for this project to be completed, as it will enable their services to be expanded to other unserved and underserved markets in Virginia, thus improving the access for middle-mile services to those affected regions.

## Other

### 39. Organizational Chart:

Please refer to upload section at the end of document.

### 40. Legal Opinion:

Please refer to upload section at the end of document

### 41. Government and other Key Partnerships:

MBC has a successful history of partnering with private sector retail telecommunication service providers who utilize MBC's open-access wholesale network to reach new customers. As a non-profit organization, MBC does not compete directly with retail service providers, rather works with Governmental institutions to identify services best suited for their needs, and then allow the retail telecom providers to provide proposals to those institutions. This process works very well and is a model that other regions are looking to copy.



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We do not anticipate any involvement from public safety entities, community anchor institutions, or other governmental agency in the project planning and ongoing operations. It is our stance that MBC, as an independent non-profit cooperative, is best suited to manage a telecommunications network not educate students, and K-12 schools are best suited to educate students, not run a telecommunications network. That philosophy works very well in our service area, and has been embraced by many who see MBC as a unbiased, community minded telecommunications partner whose goal is to help bring more broadband services at lower costs, rather than be a competitive entity that competes with private sector telecom providers.

Due to the short timelines of this application, MBC was unable to gather letters of support specifically for this project, as we have many supporters but as everything we do, institutions cannot commit to use the network, since their services must be publically bid.

**42. Recovery Act and Other Governmental Collaboration.**

MBC plans to conduct extensive outreach to communities who are involved in various stages of leveraging Federal Programs.

Due to the very short time frame for this proposal application submission on August 14th, and the relative newness of various stimulus programs and applications, there is not a specific program or collaboration opportunity we can point to at this time. However, MBC believes it is in our interests as well as our region’s interest, to jointly pursue programs where a collaboration effort makes sense.

We have been engaged in discussions with Virginia Tech, the State of Virginia, our Congressional leaders, Private sector entities and even data center operators about the various programs available under the American Recovery and Reinvestment Act and will continue to do so as opportunities develop with the various entities.

**Community Involvement (BTOP Applicants Only)**

**43. Partnering with Disadvantaged Businesses**

MBC has agreements in place with several local companies who are certified under the Commonwealth of Virginia’s Small, Women and Minority (SWAM) Certification. These



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vendors include:

Telecom Engineering Consultants, LLC

Role in Project: Engineering, permitting and design work for the infrastructure build  
SWAM Certification #: 656907

GCR Communications, Inc.

Role in Project: Electronics and transport equipment design, installation and testing  
SWAM Certification #: 9107

Better Cable Systems, Inc.

Role in Project: Contractor for fiber installations (underground and buried), splicing and testing  
SWAM Certification #: 9745

KimbaNet, Inc.

Role in Project: Contractor for grounding, testing and site preparation including tower work  
SWAM Certification #: 654693

## **H. Project Budget**

### **44. General Overall Budget**



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Budget	Loan Request	Grant Request	Equity	Debt	Bond	Other
Network & Access Equipment (switching, routing, transport, access)		1,254,400				313,600
Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.)		11,782,924				2,945,731
Buildings and Land – (new construction, improvements, renovations, lease)		320,000				80,000
Customer Premise Equipment (modems, set-top boxes, inside wiring, etc.)						
Billing and Operational Support Systems (IT systems, software, etc.)						
Operating Equipment		54,000				13,500



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(vehicles, office equipment, other)						
Engineering/ Professional Services (engineering design, project management, consulting, etc.)		2,552,966				638,242
Testing (network elements, IT system elements, user devices, test generators, lab furnishings, servers/computers, etc.)						
Site Preparation		80,000				20,000
Other						
<b>TOTAL BROADBAND SYSTEM</b>		<b>16,044,290</b>				<b>4,011,073</b>



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**Total Budget:** \$ 20,055,363

**45. Detailed Budget:**

Please refer to upload section at the end of the document.

**Sustainability**

**46. Reasonableness**

MBC has accurate and reliable unit cost data which is based on our ongoing costs received for products and services related to network design, construction, operations, maintenance and management. MBC has relationships with suppliers that have been competitively bid (most under US Dept. of Commerce, Economic Development Administration rules and guidelines). All of MBC's capital funding has come from Grant funds, both from Federal and the State of Virginia Tobacco Indemnification and Community Revitalization Commission. We are well aware and embrace the requirements of fiduciary responsibility and transparency in financial transactions. We feel there are three (3) major components of financial reasonableness, which are Capital Costs, Operational Costs, and Revenues.

**Capital Cost Reasonableness:** Due to our existing fiber construction work, our extensive knowledge of fiber backbone and middle-mile infrastructure projects in rural markets, we are confident that the unit prices proposed in this project are reasonable, necessary and appropriate for the project to be completed on time and on budget.

**Operational Cost Reasonableness:** MBC has operated a substantial middle-mile project in rural Virginia for 34 months and understand the various costs that are attributable to managing and maintaining a substantial middle-mile network. We estimate that it will cost \$442.50 per route mile per year to maintain the network maintenance and monitoring functions. This includes costs for underground utility locates, pole attachment fees, fiber repair and restoration, fiber testing and preventive maintenance. Power costs in node facilities will be approximately \$267 per month (based on actual MBC costs in other similar node facilities in the region). Sales and Marketing costs are necessary to market the system to local and regional Internet service providers, and provide sales support to drive revenue to the middle mile network. Customer care and billing are operational expenses that will require approximately \$1,000 per month to complete as the open-access network capacity will be sold on a wholesale basis to other telecom



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services providers. Corporate G&A includes those management and administrative costs related to network operations, grant reporting and collection work.

Revenue Reasonableness: MBC, as an operator of a wholesale, open-access, middle mile network in rural Virginia, has a structured pricing program in place that provides flat rate transport pricing for telecom service providers. This pricing model has been in place for almost 3 years and has been embraced by the telecom provider community as the right way to sell transport services. Those revenue estimates are based on our knowledge of the wholesale transport industry and assumptions about the viable transport services to be gained in the service area.

**47. Historical Financial Statements:**

Please refer to upload section at the end of the document.

**48. Broadband Subscriber Estimates:**

Please refer to upload section at the end of the document.

**49. Other Services:**

Please refer to upload section at the end of the document.

**50. Pro Forma 5-Year Financial Forecast and Assumptions:**

Please refer to upload section at the end of the document.

**51. Commitment of Capital Funding Support**

MBC has \$4,080,000 in non-Federal grant matching sources and Cash ready for this project. The money is allocated as follows:

1. Virginia Tobacco Commission: \$1,980,000 awarded to MBC for purposes of providing 20% match to leverage Federal Grant Resources for Broadband Stimulus Application
2. Virginia Tobacco Commission: \$1,000,000 in Grant #1774 for purposes of providing 20% match to leverage Federal Grant Resources for Broadband Stimulus Application
3. Mid-Atlantic Broadband Cooperative: \$1,100,000 in available cash (unused portion of Tobacco Commission Grants) for purposes of providing 20% match to leverage Federal Grant Resources for Broadband Stimulus Application.



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TOTAL NON-FEDERAL MATCHING CASH AVAILABLE: \$4,080,000.00

### **BTOP Requirements**

#### **52. Matching Funds:**

- a. **Cash:** \$ 4,080,000.00
- b. **In-Kind:** \$ .00
- c. **Percent of Total Project Cost:** 20

#### **53. Demonstration of Financial Need:**

MBC has a long history of evaluating project justifications for grant funding versus private sector or loan funding. Simply put, this project would not be viable under any type of Loan or capital repayment program.

When MBC evaluated the financial viability of building the original 700+ mile fiber optic middle mile network in Southern Virginia, one of the factors evaluated was debt repayments. The original plan was to borrow approximately \$50 million to build the network, then pay back the loan over 10 years at 3% interest. The capital and interest repayment was over \$450,000 per month, and the projected revenues would only reach about \$300,000 per month for the first 3 years. That did not include the normal operational expenses of \$250,000 per month and depreciation of \$300,000 per month, bringing total expenses to \$1,000,000 per month with only \$300,000 in revenue to support the initiative. Without 100% grant funding for the capital infrastructure expenses, the project would not proceed.

Similarly, this project calls for almost \$20 million in capital expenses. From a private sector perspective, the returns are non-existent. The revenues for the first full year (year 3) of operation are projected to be a little over \$970,000. That is enough to cover the operational cost of the network, but not fund depreciation.

The only reason this project is being considered is because of the NTIA/BTOP program



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availability of grants to cover the critical infrastructure costs of extending this middle mile network to unserved and underserved areas of Virginia. If MBC were to utilize our own revenues to cover the costs for this project, we would be able to support \$500,000 per year in capital expenses based on our existing revenue run rate and network reach. At that rate, we would need to accumulate 40 years worth of revenue to implement this project.

From access to capital perspective, no private sector banking institution would consider this project, as it does not pay for itself over the long term. By focusing on this project as a long-term asset whose purpose is providing critical middle-mile infrastructure and long-term benefits to underserved regions of Virginia, it is an appropriate public purpose Grant investment.

It is our contention that this project is not feasible to implement with any type of capital repayment program. A loan of 50% (\$10,000,000) paid over a 20-year term at 4% interest would result in annual payments over \$700,000. From our financial projections, that would result in annual expenses of \$1.9 million dollars (\$1.2million depreciation, \$700,000 loan repayment). The revenue numbers would not exceed \$1.7 million dollars annually, therefore this project is not feasible to implement without the Federal Grant dollars available.

**54. Unjust Enrichment**

MBC has not received, nor has requested, Federal support for non-recurring or recurring costs in the service area under this project. MBC does not anticipate applying for funds from any other Federal Program to support the goals of this project within our service area.

**55. Disclosure of Federal and/or State Funding Sources**

MBC has not received any Federal funds such as Universal service funds and its related programs for this project. MBC has received commitment letters and has cash available from the Virginia Tobacco Commission (an agency of the State of Virginia) that would be used for the matching portion of the 20% of the overall capital cost of middle-mile grant infrastructure.

**I. Self Scoring – BIP Only Self Scoring**

**56. Self Scoring Sheet**



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Criteria	Method	Points	Self Scores
<b><u>PROJECT PURPOSE</u></b>			
Proportion of Rural Residents Served in Unserved Areas	1 point for every 10,000 unserved households	Up to 5	0
Rural Area Targeting	1 point for every 5% increase in the rural service area up the minimum 75% rural area requirement	Up to 5	5
Remote Area targeting	1 point for every 50 miles a service area is located from a non-rural area	Up to 5	0
Title II Borrower	If you are or were a Title II borrower	5	0
Recovery Act and other governmental collaboration	1 point will be awarded for each governmental or Recovery program the applicant is partnering with	Up to 5	1
<b><u>PROJECT BENEFITS</u></b>			
Performance of the offered services	If a last mile wireline project delivers 20M to household – if a last mile wireless projects delivers 2M to end-user – if a middle mile projects delivers 100M to end points	<b>10</b>	10
Affordable of services offered	Points awarded based on the proposed rate structure and the logistics of the proposed service area	Up to 5	5



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Choice of service provider	If the proposed infrastructure is available to be used by multiple service providers	<b>5</b>	5
Critical Community Facilities	If discounted rate packages at least 25% lower than advertise rates are available to critical facilities	<b>5</b>	5
<b><u>PROJECT VIABILITY</u></b>			
Applicant's organizational capability	Points will be awarded on the strengths and accomplishments of key management	Up to 12	12
Community Support	If a letter of support has been received from a designated representative of the community for every community in the proposed service territory	2	0
Ability to promptly start project	If the applicant can demonstrate that all licenses and regulatory approvals have been received, contractors and vendors are ready to enter into contracts, and equity has been deposited into applicant accounts	10	10
Socially and economically disadvantaged small businesses (SDB), as defined by section 8(a) of the Small Business Act, 15 U.S.C. §637.	If the applicant is a Section 8(a) entity	1	0
<b><u>PROJECT BUDGET AND SUSTAINABILITY</u></b>			
Reasonableness of the budget	Points will be awarded based the	Up to 5	5



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	adequacy of the proposed budget		
Leverage of outside resources (outside funding/financing requested)	(i) 10 points if this ratio is greater than 100% (ii) 7 points if this ratio is between 100% and 75% (iii) 5 points if this ratio is between 75% and 50% (iv) 3 points if this ratio is between 50% and 25% (v) 1 points if this ratio is lower than 25%	10	1
Extent of grant funding (Grant funds/loan funds)	(i) 0 points if this ratio equals 100% (ii) 1 points if this ratio is between 100% and 75% (iii) 3 points if this ratio is between 75% and 50% (iv) 5 points if this ratio is lower than 50% (v) 10 points if no grant funds are requested	10	5
<b>Total Points</b>		100	64



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## J. BTOP Certification Requirements

### Certification (Requested for BTOP)

Please refer to upload section at the end of the document regarding following uploads.

1. U.S. Department of Commerce, Broadband Technology Opportunities Program
2. SF-424D Assurances—Construction Programs (Schedule N)
3. CD-511, Certification Regarding Lobbying (Attachment O)
4. SF-LLL, Disclosure of Lobbying Activities (Attachment P)
5. CD-512, Certification Regarding Lobbying—Lower-Tier Covered Transactions (Attachment Q) This certification will not be required until the time of the grant award, because it applies to subcontractors, etc.

## K. BIP Certification Requirements

### Certification (Requested for BIP)

Please refer to upload section at the end of the document regarding following uploads.

1. Equal Opportunity and Nondiscrimination Certification
2. Certification Regarding Architectural Barriers
3. Uniform Relocation Assistance and Real Property Acquisition - Policies Act of 1970 Certification
4. Certification Regarding Debarment, Suspension, and Other Responsibility Matters – Primary Covered Transactions
5. Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements



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- 6. Network Design and Implementation Plan Certification (to be complete for projects requesting more than \$1 million in federal assistance)

## L. Schedules

### Schedule: A-1 Congressional Districts

**1. State the Congressional District of the Applicant’s headquarters**

Virginia - 5

**2. State the Congressional District for each area covered by the Project.**

Virginia - 4

Virginia - 5

Virginia - 9

Virginia - 6

## M. Proposed Funded Service Area Details (BIP & BTOP)

### 13. Proposed Funded Service Area (BIP - Last Mile Projects):

**Proposed Funded Service Area Name:**

**Census Blocks in Proposed Funded Service Area:**

**Community Name:**

**Rural Classification of the Community:**

**BIP - Service Status:**

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
--



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**BTOP – Service Status:**

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
---

**Total Square Miles of Community:**  
**Total Population :**  
**Total Number of Households:**  
**Total Number of Businesses:**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:**

**14. Proposed Service Area (BTOP - Middle Mile Project):**

**Middle Mile Span Name:** Southern Virginia  
**Census Blocks in Middle Mile Span:** See attached maps. (Supplement 2)  
**Last Mile Service Area Name:** N/A  
**Community Name:** Southern Virginia  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Unserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
--

**BTOP - Service Status:** Unserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
---

**Total Square Miles of Service Area:** 293  
**Total Population :**  
**Total Number of Households:**  
**Total Number of Businesses:**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 121



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## N. Uploads

In order to improve system performance and help ensure that all applicants are able to complete their applications by the deadline, we have changed the way your application PDF is created. This PDF contains all of the information you entered throughout the Easygrants data entry screens. PDF copies of all documents that have been uploaded can be viewed and printed separately from the **Main page of the application after you submit**. These will continue to be available to you in read-only format after your application has been submitted.