

# *Commonwealth of Virginia Appalachian Regional Commission*

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## **Telecommunications Initiative Funding Strategy and Request for Proposals**



**VIRGINIA DEPARTMENT OF HOUSING  
AND COMMUNITY DEVELOPMENT**  
*Partners for Better Communities*  
[www.dhcd.virginia.gov](http://www.dhcd.virginia.gov)



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# **VIRGINIA APPALACHIAN REGIONAL COMMISSION PROGRAM AND CONTACT INFORMATION**

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The Appalachian Regional Commission, or ARC, is an independent Federal agency created through the Appalachian Regional Development Act of 1965. ARC's mission is to be an advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life.

Virginia is one of thirteen states in the ARC region. The Appalachian Regional Commission programs, other than the Highway program, are administered in the Commonwealth of Virginia by the Virginia Department of Housing and Community Development. The Virginia ARC Program is managed by:

**William C. Shelton**

Director  
ARC State Alternate

**Denise H. Ambrose**

Associate Director  
ARC Program Manager  
(804) 371-7029  
denise.ambrose@dhcd.virginia.gov

*Contacts for the 2011 Competition:*

**Chris Thompson**

Program Manager  
(804) 371-7056  
Chris.Thompson@dhcd.virginia.gov

**Keith Sherrill**

Policy Analyst  
(804) 371-7055  
Keith.sherrill@dhcd.virginia.gov

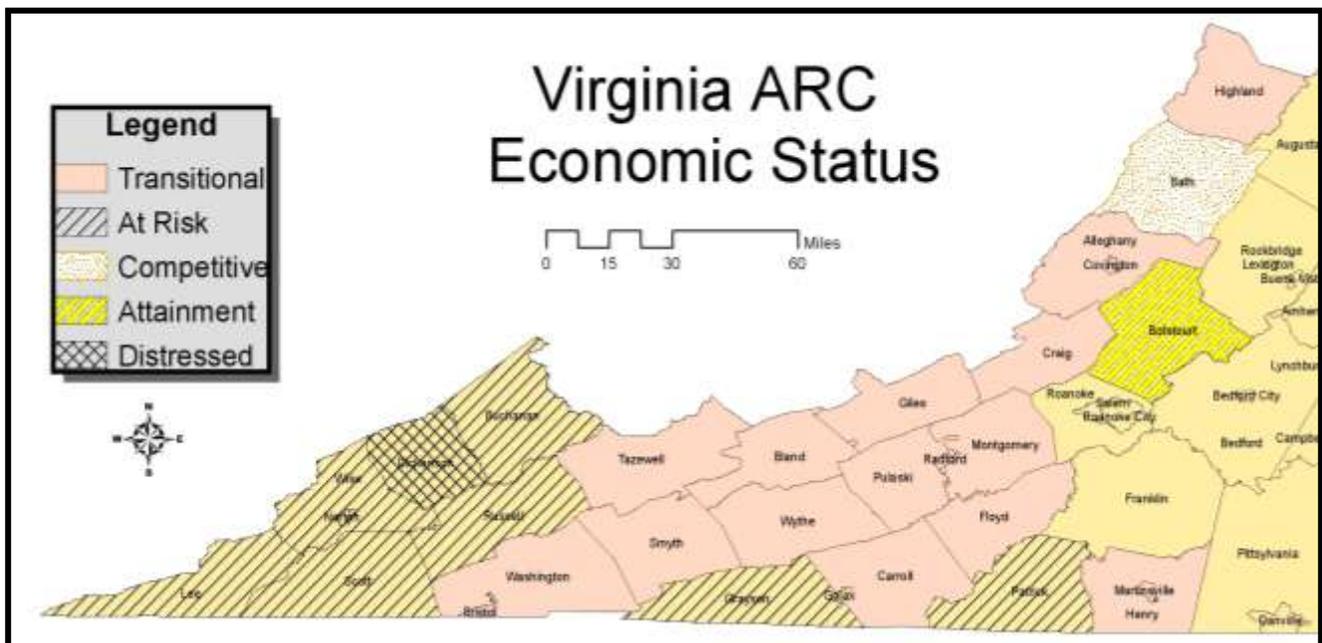
In Virginia, twenty-five counties and eight independent cities are eligible for in the ARC program. These localities and their economic stress designation are as follows:

| <b>Counties</b>  |                     |                   |                     |
|------------------|---------------------|-------------------|---------------------|
| Alleghany County | <i>Transitional</i> | Lee County        | <i>At Risk</i>      |
| Bath County      | <i>Competitive</i>  | Montgomery County | <i>Transitional</i> |
| Bland County     | <i>Transitional</i> | Patrick County    | <i>At Risk</i>      |
| Botetourt County | <i>Attainment</i>   | Pulaski County    | <i>Transitional</i> |
| Buchanan County  | <i>At Risk</i>      | Rockbridge County | <i>Transitional</i> |
| Carroll County   | <i>Transitional</i> | Russell County    | <i>At Risk</i>      |
| Craig County     | <i>Transitional</i> | Scott County      | <i>At Risk</i>      |
| Dickenson County | <i>Distressed</i>   | Smyth County      | <i>Transitional</i> |
| Floyd County     | <i>Transitional</i> | Tazewell County   | <i>Transitional</i> |
| Giles County     | <i>Transitional</i> | Washington County | <i>Transitional</i> |
| Grayson County   | <i>At Risk</i>      | Wise County       | <i>At Risk</i>      |
| Henry County     | <i>Transitional</i> | Wythe County      | <i>Transitional</i> |
| Highland County  | <i>Transitional</i> |                   |                     |

| <b>Cities</b>       |                     |                      |                     |
|---------------------|---------------------|----------------------|---------------------|
| City of Bristol     | <i>Transitional</i> | City of Lexington    | <i>Transitional</i> |
| City of Buena Vista | <i>Transitional</i> | City of Martinsville | <i>Transitional</i> |
| City of Covington   | <i>Transitional</i> | City of Norton       | <i>At Risk</i>      |
| City of Galax       | <i>Transitional</i> | City of Radford      | <i>Transitional</i> |

Virginia receives funding from the Appalachian Regional Commission on an annual basis and through special initiatives for distribution in these localities. Virginia prepares a State Strategy on an annual basis which guides its use of ARC funding.



# VIRGINIA ARC PROGRAM OBJECTIVES

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Virginia's Four Year Development Plan and Annual Strategy Statement identify the objectives of Virginia's program which are consistent with ARC's strategic goals. The state objectives are closely correlated to the Appalachian Regional Commission Goals, and several specific strategies are developed for each objective. Virginia's objectives, the corresponding ARC goal, and the specific strategies are as follows:

## VIRGINIA ARC OBJECTIVE I

Promote regional partnerships that support regional economic development, encourage activities that diversify the economic base, enhance entrepreneurial activities, develop a highly skilled, competitive workforce, and provide training and technical assistance to agents engaged in economic development.

### ARC Goal:

Increase job opportunities and per capita income in Appalachia to reach parity with the nation.

### Strategies:

- 1.1 Encourage public-private sector partnerships and regional approaches to economic development, marketing, regional competitiveness, and business assistance.
- 1.2 Develop and market strategic assets for local economies (heritage and cultural tourism and creative economies).
- 1.3 Support tourism activities that are directly linked to overall regional economic development strategies.
- 1.4 Encourage projects which diversify the economic base, including asset-based development and energy-related projects.
- 1.5 Encourage communities and community leaders to develop the skills and tools necessary to use existing and innovative telecommunications technology to assist in their community and economic development efforts.
- 1.6 Participate in business development efforts which will assist existing businesses with expansion activities.
- 1.7 Assist with installation of public infrastructure (water, sewer, fiber) for new business location / expansion, creating jobs for the Region.
- 1.8 Assist in the expansion of the availability of capital for small and medium-sized businesses, including microenterprises and new small technology-based companies through the use of revolving loan funds or other financing mechanisms.
- 1.9 Assist small and medium-sized businesses to access markets for their products, with emphasis on export training and assistance that will enable them to participate in the international marketplace.
- 1.10 Encourage the development of telecommunications and other technologies to assist in improving the participation of Appalachian businesses in the international marketplace.
- 1.11 Support the expansion of value-added businesses and sustainable development strategies to build sustainable local economies.
- 1.12 Capitalize on the economic potential of the Appalachian Development Highway System.

- 1.13 Support programs that will ensure the availability of a workforce with skills and abilities required to promote economic retention and growth.
- 1.14 Implement workforce readiness programs such as technologically literate workforce training and technological training in math, science, and engineering that will ensure students are given the necessary skills to enable them to find and hold jobs.
- 1.15 Strengthen the delivery of workforce training programs among the various provider agencies in order to improve the business retention, expansion, and formation efforts.
- 1.16 Support programs that will provide access to entrepreneurship training for high school students and adults.
- 1.17 Foster civic entrepreneurship.
- 1.18 Assist communities and regions in establishing ongoing strategic planning and management processes.
- 1.19 Encourage efforts to establish ongoing local and regional civic and leadership development programs.
- 1.20 Encourage Local Development Districts (LDDs) to become more involved in local and regional capacity building.
- 1.21 Support energy-related projects, including research of carbon sequestration, energy-efficiency technologies, alternative energies and biofuels, and coal mine reclamation.
- 1.22 Support projects that encourage broad-based, regional cooperation and provide increased regional economic growth opportunities.

## **VIRGINIA ARC OBJECTIVE II**

Develop a world class work force that is well educated and appropriately trained for the job market, as well as provide adequate health care services throughout the Region.

### **ARC Goal:**

Strengthen the capacity of the people of Appalachia to compete in the global economy.

### **Strategies:**

- 2.1 Provide skill development training for high demand jobs which currently lack adequate training programs (ex. Construction, telecommunications, energy).
- 2.2 Continue to support initiatives that will reduce the school dropout rates.
- 2.3 Support programs that will improve the enrollment of Virginia Appalachians in post-secondary education.
- 2.4 Continue to expand educational opportunities through telecommunications.
- 2.5 Strengthen the delivery of workforce training programs among the various provider agencies in order to improve the business retention, expansion and formation efforts.
- 2.6 Implement work force readiness programs such as technologically literate work force training and technological training in math, science that will ensure students are given the necessary skills to enable them to find and hold jobs.
- 2.7 Encourage educational programs which train students in cultural and heritage arts, such as traditional music and craft production.
- 2.8 Encourage communities and community leaders to develop

knowledge, skills and abilities necessary to use existing and innovative telecommunications technology to assist in their community and economic development efforts.

- 2.9 Encourage the establishment of partnerships and innovative arrangements among health care providers in Appalachian Virginia in order to assure quality care and the efficient use of available health care resources.
- 2.10 Encourage the use of telemedicine technology to assist in the delivery of rural health care services, to include wellness and prevention efforts
- 2.11 Support projects which include wellness and healthcare prevention efforts.
- 2.12 Continue efforts to place doctors and other medical professionals in medically underserved areas through physician and other recruitment programs.
- 2.13 Support efforts to initiate and expand early childhood education programs.
- 2.14 Support programs to increase access to quality child care.
- 2.14 Encourage local leaders to develop innovative, cost-effective arrangements for delivery of healthcare services, including regional approaches, privatization and service consolidation.
- 2.15 Foster civic entrepreneurship.

### **VIRGINIA ARC OBJECTIVE III**

Assist communities to provide and develop an adequate physical infrastructure to support economic development opportunities and improve the quality of life.

#### **ARC Goal:**

Develop and improve Appalachia's infrastructure to make the Region economically competitive.

#### **Strategies:**

- 3.1 Assist community water supply and wastewater treatment projects that will support private investment leading to job creation or retention.
- 3.2 Assist community water supply and wastewater treatment projects that will support private investment leading to job creation or retention in distressed counties and that will address serious health/environmental compliance problems. Such projects could be proposed to be carried out through a Self-Help method of implementation.
- 3.3 Support continued efforts to expand the Region's stock of safe, affordable housing.
- 3.4 Build and enhance environmental infrastructure, such as brownfields redevelopment and eco-industrial activities.
- 3.5 Support infrastructure projects where installation of telecommunication conduit (dark fiber) is included in construction with the larger infrastructure project, to increase local and regional connectivity.
- 3.6 Provide financial and technical assistance to communities for development of industrial sites and parks, shell buildings, business incubators and micro-enterprises.
- 3.7 Increase accessibility and utilization of telecommunications technology, especially to identify markets and consumer groups.
- 3.8 Support public-private sector partnerships, which provide clear and measurable service outcomes

directly associated with quality sustainable job creation activities, to deploy advanced traditional and nontraditional cost-effective solutions and increase advanced telecommunications infrastructure capacity.

- 3.9 Provide access to child and adult care services in specific work-related environments.
- 3.10 Assist in the local revitalization efforts that will increase the physical and economic revitalization of communities, neighborhoods and downtowns.
- 3.11 Support local access road projects which would result in job creation or retention opportunities or community revitalization.
- 3.12 Help establish multi-county projects for establishing solid waste collection, disposal and recycling.
- 3.13 Foster development of an intermodal transportation network.
- 3.14 Capitalize on the ADHS and its development potential.
- 3.15 Support projects that promote energy conservation, green building, use of eco-friendly resources, and sustainable land-use practices.
- 3.16 Encouraging sustainable economic use of natural resources.
- 3.17 Conserving the natural places in the region for ecotourism.
- 3.18 Supporting land use and development strategies that promote sustainable communities and which seek to align transportation, housing, economic development, and environmental issues.

## **VIRGINIA ARC OBJECTIVE IV**

Expand and upgrade existing roadways in rural communities to allow greater access to resources and opportunities for increased economic growth.

### **ARC Goal:**

Build the Appalachian Development Highway System to reduce Appalachia's isolation.

### **Strategies:**

- 4.1 Capitalize on the ADHS and its development potential.
- 4.2 Promote a development approach for the ADHS that preserves the cultural and natural resources of the Region while enhancing economic opportunity.
- 4.3 Encourage strategic, appropriate development along ADHS corridors (industrial parks, commercial development, and intermodal transportation).
- 4.4 Continue to support the development of the Coalfields Expressway.
- 4.5 Support infrastructure projects where installation of telecommunication conduit (dark fiber) is included in construction with the larger infrastructure project to increase local and regional connectivity.
- 4.6 Foster civic entrepreneurship.

# VIRGINIA ARC TELECOMMUNICATIONS INITIATIVE

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The Virginia Appalachian Telecommunications Initiative seeks to stimulate economic growth and improve the standard of living in the Region through technology-related avenues. This initiative is funded through the Virginia Regional Initiative program, which also provides funding for the Virginia ARC Asset-Based Development Initiative.

## **INFORMATION AGE - APPALACHIA**

ARC's Information Age Appalachia telecommunications and information technology program was created to promote the development of telecommunications in Appalachia, with a special focus on helping the Region's distressed counties.

The report *Information Age Appalachia: A Rural Digital Divide Program* describes the framework within which ARC and its partners will work to bring the benefits of the information revolution to those it threatens to bypass.

The focus of Information Age Appalachia is not only on access to infrastructure, but also, and more importantly, on applications that use that access. Instead of simply promoting technology by itself, the program seeks to stimulate economic growth and improve the standard of living in the Region through technology-related avenues.

In November 2001, the Commission approved a policy statement for the Information Age Appalachia program:

*The Information Age Appalachia program envisions Appalachia as a prosperous and vibrant region with full access to the tools of the Information Age, and possessing the knowledge and capacity to use those tools to compete successfully in the twenty-first-century economy.*

The overall program will support the Commission's four strategic goals by focusing on the following four distinct subject areas:

### **Focus Area One: Access and Infrastructure**

Broaden the availability of advanced telecommunications services by promoting increased infrastructure investments from both private sector and government sources.

### **Focus Area Two: Education and Training**

Ensure that the region is supporting today's workforce as well as developing the workforce of tomorrow by integrating technology into K-12 and continuing education programs plus expanding community awareness and training programs.

### **Focus Area Three: E-Commerce**

Improve the competitiveness of businesses in the region by increasing the adoption of e-commerce practices.

### **Focus Area Four: Technology Sector Job Creation**

Increase employment in the technology sector for producer and user industries through investment and entrepreneurship support.

Through the program activities supporting these focus areas the Commission hopes to achieve the following outcomes based on the ARC's requested program budget:

Projected Outcomes for the entire ARC region:

- 100,000 households with increased IT capacity
- 5,000 jobs created or retained
- 1,000 businesses with increased IT capacity
- 1,000 government, education, and facilities with increased IT

## **OUTCOME-BASED IMPLEMENTATION**

Virginia's ARC Telecommunications Initiative (TI) program will focus on aspects of the overall "Information Age Appalachia" program and will be implemented on an outcome basis. Virginia, along with ARC, views its role as that of an investor. In the outcome context, proposals must demonstrate a direct relationship between intended project efforts and measurable, tangible improvements to the health of the community being served. Proposals must clearly present performance targets, outputs, and outcomes.

Performance targets are the key events and milestones in the implementation of a project. Outputs are the near-term results of a project, such as the number of participants in training events or number of businesses receiving assistance. Outcomes are the long-term results of a project, such as the number of new businesses created and the number of new jobs created or retained. ARC TI budgets and contracts must be based on performance targets and products.

## **IMPLEMENTATION STRATEGY**

Approximately \$250,000 is expected to be available in this round of funding for ARC Regional Initiative projects. DHCD reserves the option to add additional ARC funds, if available. Final funding figures will be based on Virginia's ARC allocation pending federal budget approval for fiscal year 2011.

Virginia will direct funding into three programs under the 2011 Regional Initiative Program:

- Virginia ARC **Telecommunications Initiative**,
- Virginia ARC **Asset-Based Development Initiative**, and
- Virginia ARC **Energy Initiative**

Eligible funding requests must meet the following criteria:

- Are clearly described with achievable performance outcomes,
- Applicant has the capacity to implement the project,
- Non-ARC resources are in place to leverage the requested funds,
- Project will be implemented using a collaborative approach, and
- The project is sustainable.

It is anticipated that all funds available under the Regional Initiative program will be committed during this competitive round. However, in the event funds remain available, DHCD may evaluate additional proposals on an open submission basis and award funding for additional eligible projects. DHCD will accept additional proposals on an open basis as long as funds remain or until July 1, 2011. Applicants anticipating the submittal of projects beyond the September deadline should contact DHCD directly for guidance.

Nonprofit organizations must demonstrate adequate capacity to be an eligible applicant for ARC funds. To show adequate capacity, an applicant must have fulltime staff, a track record with managing comparable projects, and a current 501(c)3 status.

## **SUBMISSION REQUIREMENTS**

It is strongly suggested that applicants contact DHCD to discuss the submission of their proposal. This discussion will ensure that the applicant's proposed idea is eligible and will provide insight regarding DHCD's investment philosophy on the proposed project.

All proposals must contain direct responses to all required items, must be printed in a font size no smaller than 12 point, and must provide well organized information in the form of complete sentences, proper paragraphs, and bulleted lists, charts and tables, where appropriate. Only relevant attachments should be included and these should be organized as requested.

Assembled proposals should be submitted to:

|  |
|--|
| <p><b>Denise H. Ambrose</b><br/><b>Associate Director</b><br/><b>Project Management Office</b><br/><b>Department of Housing and Community Development</b><br/><b>600 East Main Street, Suite 300</b><br/><b>Richmond, Virginia 23219</b></p> |
|--|

**An original and four (4) copies of the proposal should be submitted by October 13, 2010.** In making your submission, applicants are encouraged to provide clear but **brief** responses to the requested items. Documentation such as PERs, studies, etc. should be identified in the proposal and 1 copy must be submitted with the proposal.

Additional copies will be required at a later time if a proposal is recommended for funding. Specific items an applicant should be prepared to submit are underlined in this RFP. Additional items, not specifically identified here, may also be required.

**All proposals should be assembled using a binder clip.** Please do not assemble proposals using staples, 3-ring notebooks, or other forms of binding. Applications must be assembled in the order that is shown in the RFP guidelines, according to sections. Please do not use tabs when assembling applications.

**Pages must be numbered for the entire application (to include attachments, budget forms, etc.).** Pages should be numbered continuously throughout the application; do not restart numbering at the beginning of new sections.

## **TIMETABLE**

**Proposals should assume the receipt of contracts and initiation of activities by August 2011.** The start date should be projected to be no earlier than August 1, 2011. Be aware, if project activities begin prior to ARC approval and contract execution the entire project is at risk of being deemed ineligible. This includes activities funded by match that is used as leverage for the ARC request.

## **ELIGIBLE PROJECTS**

Proposals will be accepted for the following project types:

1. Planning
2. System Development and Technical Support
3. Implementation

Applicants may submit proposals that target a single project type or a combination of project types that marries either: a) Planning and System Development and Technical Support, or b) Planning and Implementation. Projects may not target all three of the project types. Applicants submitting for an implementation and/or a system development project must have completed a Regional Telecommunications Plan last year, and the proposed project must fit within this Plan.

Funding is available for System Development/Technical Support or Implementation projects. However, prior to funding either of these project types, however, there must be a Community Telecommunications Plan in place for the locality / region that will be served by the proposed project. This Community Telecommunications Plan must indicate that the locality has seriously considered its need and demand for the proposed project and should follow closely the form as found at **APPENDIX E**.

Funding is also available for Planning projects. The product of the Planning project will be a Community Telecommunications Plan (see **APPENDIX E**). The Community Telecommunications Plan will identify needs and demand in the community for services related to telecommunications, will reflect consensus with regard to the design of such services, and result in an action plan for implementation along with the identification of appropriate funding sources.

Examples of eligible project activities are:

### ***Planning***

- Regional Coordination: PDC wide or multi-county

- Public/Private Partnership strategy
- Community Telecommunications Plan

### ***System Development and Technical Support***

- Community Business Training and Education Program
- Establishment of Community Cooperative
- Establishment of E-Village
- Development of community tech support

### ***Physical Implementation***

- Installation of a wireless network
  - Installation of “last mile” dark fiber loop
  - Installation of a co-location facility/equipment
- Note:** Installation of “Backbone” is generally NOT an eligible activity.

### ***Ineligible Projects***

The following types of proposals will be considered ineligible for 2011 ARC TI funding:

- Those that do not support the ARC goals for the Appalachian Telecommunications Initiative, including those targeting assistance for non-local businesses such as the location of branch plants;
- Those that do not present clear outcomes for the ARC TI investment;
- Those that do not add significantly to currently available resources;
- Those that have no relevance to the use of telecommunications infrastructure; or,
- Those that include funding for efforts which exclude potential participants based on factors beyond business interest or skill level, including assistance based on religious affiliation or membership.

## AVAILABLE FUNDING AND MATCH

ARC TI investment is limited as follows:

|   | Distressed       | Transitional /<br>At-Risk | Competitive      |
|---|------------------|---------------------------|------------------|
| Planning                                | \$ 30,000        | \$ 25,000                 | \$ 20,000        |
| System Development and Tech.<br>Support | \$ 40,000        | \$ 30,000                 | \$ 30,000        |
| Implementation                          | \$100,000        | \$ 80,000                 | \$ 80,000        |
|   |                  |                           |                  |
| <b>Total may not exceed:</b>            | <b>\$130,000</b> | <b>\$105,000</b>          | <b>\$100,000</b> |

### ***Required Match***

Virginia ARC TI assistance must be matched **dollar for dollar or 50% match** with local (non-Federal) funding, unless the project is in a:

- Distressed locality which must provide a 20% match for 80% ARC funds,
- At-Risk locality which must provide a 30% match for 70% ARC funds, or

- Competitive locality, which must provide a 70% match for 30% ARC funds.

### **ARC RESOURCES**

Applicants are encouraged to visit the ARC website at: [www.arc.gov](http://www.arc.gov). This site contains numerous data sets, research reports, and links to other sources of information.

## **PLANNING DISTRICT COMMISSION REVIEW**

Copies proposals must be provided to the local Planning District Commission (Local Development District). **This should be submitted to the PDC no later than September 30, 2010.** The purpose of this requirement is to keep the PDC informed of potential projects. The PDCs are also available to assist applicants in developing projects. The PDC role is not to accept, reject, or otherwise screen these proposals.

### **LENOWISCO PDC**

Mr. Glen Skinner  
P.O. Box 366  
Duffield, Virginia 24244  
Phone: (276) 431-2206

### **Cumberland Plateau PDC**

Mr. Jim Baldwin  
P.O. Box 548  
Lebanon, Virginia 24266  
Phone: (276) 889-1778

### **Mount Rogers PDC**

Mr. David Barrett  
1021 Terrace Drive  
Marion, Virginia 24354  
Phone: (276) 783-5103

### **New River Valley PDC**

Mr. Kevin Byrd  
6580 Valley Center Drive  
P. O. Box 21  
Radford, Virginia 24141  
Phone: (540) 639-9313

### **Roanoke Valley-Alleghany PDC**

Mr. Wayne Strickland  
P. O. Box 2569  
Roanoke, Virginia 24010  
Phone: (540) 343-4417

### **Central Shenandoah PDC**

Ms. Bonnie Riedesel  
112 MacTanly Place  
Staunton, Virginia 24401  
Phone: (540) 885-5174

### **West Piedmont PDC**

Mr. Robert Dowd  
P.O. Box 5268  
Martinsville, Virginia 24115  
Phone: (276) 638-3987

# PROPOSAL FORMAT – TELECOMMUNICATIONS INITIATIVE PROJECT

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## SECTION 1 – COVER SHEET

(See APPENDIX A)

Project Name

Applicant Contact Information

Person Who Prepared this Application

Project Location

Census Tracts Served

Project Funding Summary

DUNS NUMBER

## SECTION 2 – PROJECT PROPOSAL SUMMARY

Using the template provided in APPENDIX C please complete the Project Proposal Summary. This summary must be limited to two-pages in length. Outputs/Outcome measures must include ones as appropriate from the listing in APPENDIX B for the relevant ARC Goal Area.

**NOTE: The ARC Summary should be completed exactly as requested since it will be submitted to ARC. If it is completed incorrectly, you will be requested to revise it and this step could hold up the submittal of your project to ARC.**

## SECTION 3 – PROJECT NARRATIVE

### *Goals & Strategies*

Indicate which of the following four ARC Goals the proposed project will address:

1. Economic Development and Job Creation,
2. Health, Education, and Training,
3. Infrastructure,
4. Appalachian Development Highway System.

*While projects may address more than one ARC Goal, choose the one that most closely fits your project.*

Further indicate the State Objective (there is one for each goal) to be addressed by the project. The State Objectives are identified on page 3.

List the Strategies by number and write out the full Strategy (do not just provide the number). For example, in a project including creation of a workforce training program for a needed degree program, the ARC Goal would be Goal 2: Health, Education, and Training, and the State Objective would be “2.6 Implement work force readiness programs that will ensure students are given the necessary skills to enable them to find and hold jobs.” Consult the draft 2011 Virginia ARC Annual Strategy for additional information on the Goals and Virginia’s Objectives and Strategies.

**Purpose, Description, & Rationale –**

Indicate the NEED for the project, specifying both the need for ARC resources as well as the problem(s) the project will address. Describe the challenge, issue, or asset you are seeking to address and show how ARC funds in the implementation of this project will help do so. Is this consistent with the with ARC goals? Does it focus on the expansion or enhancement in the use of telecommunications to improve the economic health of the community? Describe how.

State in one sentence the main purpose of the project in terms of the goal and strategy being addressed (e.g., *To fully assess the need, demand, and gaps in available broadband services to support and encourage community and economic development*)

**Project Description and Outputs:**

Briefly describe the activities to take place during the life of the proposed project for which you are seeking ARC Telecomm funding. Who stands to benefit and how can these beneficiaries be quantified? For

example with Planning, will a determination of the most appropriate telecommunications infrastructure will be completed, leading to the subsequent deployment of recommended technologies (i.e. planning assessments determined that wireless telecommunications is the most viable method of deployment and will be installed to stimulate economic growth.). These specific, quantifiable products of your project are the OUTPUTS. Consult **APPENDIX B** for examples of project outputs. With few exceptions, Outputs should occur within a one year contract period.

**Performance Targets:**

Create a three column table. In column one, provide the sequence of key events and milestones in accomplishing the project (performance targets), including the identification of project and quantification of project benefits. In column two, indicate the date you anticipate meeting this product (assume a start date of August 2011). In the third column, indicate the cost that corresponds with that particular milestone.

For example:

| <u>Performance Target</u>                  | <u>Completion Date</u> | <u>Cost</u> |
|--|------------------------|-------------|
| 1) Stakeholder meetings                    | 9/11                   | \$ 1,000    |
| 2) Demand / user assessments               | 11/11                  | \$ 2,000    |
| 3) Physical system design                  | 12/11                  | \$ 2,000    |
| 4) Management issues and Business Planning | 3/12                   | \$ 3,000    |
| 5) Marketing and Funding Development       | 6/12                   | \$ 2,000    |

**Approach:**

Explain why the proposed approach is the most beneficial. In addressing project needs, discuss any relevant data derived from plans, studies, statistics, or engineering reports. The sources of such data should be

cited (title, date, page numbers). Explain how the proposed project would fill a void in current services or programs. Illustrate local demand for the project, and be prepared to provide letters from key

stakeholders, customer data, etc. at a later time.

***Readiness:***

Explain how this project is ready to proceed. Why is now the appropriate time to undertake this effort? (Note: Projects should be approved by ARC by August of 2011.) The start date should be projected to be no earlier than August 1, 2011. What steps have been taken to get the applicant and its proposed beneficiaries ready for this project? What is the level of energy and degree of will among the organization and its partners to see this effort through?

Describe accomplishments and progress to date if continuing an ongoing program (whether or not ARC funded).

***Relation to Other Local / Regional Activities:***

Discuss how this project is related to other local / regional activities. Describe how the project meets priorities of local or regional economic development plans. Detail efforts to coordinate with other ongoing activities.

***Project Location:***

Indicate which locality (or localities) covered by project benefits and, where possible, the specific location to be impacted by the project as defined by place name, boundaries, building, or other features. Provide a description of either: (a) the geographic area for services and benefits where clients are in relatively close proximity, or (b) the client service area when residency may be scattered over a wide area. Indicate if the county in which the project is located is an ARC Distressed County. The only Virginia County with this status is Dickenson.

***Census Tract Information:***

Provide map of project service area with census information overlaid or provide list of all census tracts in service area. If your project only serves part of a Transitional, At Risk, or Competitive County be very clear about which census tracts are included. ARC tracks activities and benefits in “areas of distress” within Transitional, At Risk, and Competitive Counties. These are determined by census tracts. Comment on the project’s impact on ARC’s designated distressed areas.

***Maps:*** Attach maps if needed to illustrate the project’s service area and proximity to distressed areas and for projects providing site improvements, a site map showing proposed improvements, including affected or proposed buildings or facilities, water and sewer lines, water storage tanks, treatment plants, drainage improvements, access roads, location of assisted industry(ies) on site plan, etc. For all projects, be prepared to provide a map within at least a 10-mile radius, clearly showing roads or appropriate service area at a later time.

ALL maps should be LEGIBLE and contain a scale which is clearly marked on the map.

***Benefits and Performance Measures***

State outputs and outcomes in absolute numerical terms (not percents) per ARC’s Performance Measurement Guidelines.

***Outputs:***

Output measures must include outputs selected from the list in Appendix B. Additional outputs may be listed as well. Quantifiable figures MUST be used for outputs. Outputs should be listed using specific and absolute numbers. Percentages may also be used to supplement the application.

**Outcomes:**

Detail the specific long-term benefits, or outcomes, of this project. Diversification of the local economy and reduction of out-commuting are examples of possible outcomes of a project that includes utility extensions to help an industry locate in a particular market.

Consult Appendix B for examples of project Outcomes. **Each project must select outcomes noted in Appendix B.** Additional outcomes may be listed as well. **Quantifiable figures MUST be used for outcomes.** Outcomes should be listed using specific and absolute numbers with percentages used to supplement the application.

**Project Beneficiaries:**

Provide the number of persons to be served within three years of project completion and provide a discussion of the methodology used to derive this number. **Be prepared to provide attachments in support of these beneficiary claims.** As this number is used in scoring ARC proposals, DHCD reserves the right to make adjustments to claimed numbers or ask for supplemental information. Describe other project benefits as appropriate, such as the likely impact on future economic development activity in the area, or anticipated spin-off results.

**Leveraged Private Investment:**

Identify private sector commitments that follow **as a result** of the completion of this project. Leveraged private investment is different from the funds that leverage the ARC request and are a part of the project budget, and not all proposals will include leveraged private investment. Estimates for the leveraged private investment and associated job impacts for a three-year period following the completion of this project should be included. Letters of

commitments by private companies should be available.

For example: Amount of private funds invested in relocating to the project area by Business X as a result of the installation of and access to telecommunications / fiber optics.

**Agency Capacity & Qualifications**

**Nonprofit Eligibility**

Nonprofit organizations applying for ARC funding must provide the following:

1. A copy of their current designation as a 501(c)3 nonprofit organization.
2. A listing of the number and positions of fulltime and part-time staff of the organization. For smaller organizations this should include all staff, while for larger organizations (>15 employees) this can include only the staff associated with this project.
3. A detailed synopsis of similar projects managed and implemented by the organization within the last three years.

**NOTE: DHCD encourages nonprofit organizations who are not clear on if they are eligible to contact us in advance of submitting a proposal to determine eligibility.**

**Capacity / Staffing Plan:**

Provide the names and profiles of the individuals who will be responsible for delivering the project's services or carrying out implementation. Provide the name and profile of the individual with the most project responsibility first, followed by information on the person with the next highest level of responsibility, and continue in this order until all relevant individuals have been identified. Identify the skills, knowledge, and attributes each individual possesses and the value these provide to the

overall project effort. Provide information, where applicable, on how the different attributes of the different individuals may be complementary. Identify any roles which have not yet been filled.

Discuss the implementing organization's ability to carry out the project effectively. Provide the name, description, performance targets, and outcome of two of the most similar and recent projects implemented by this organization. Provide a statement of the other business conducted by this organization and the relationship of this project to this other business.

Identify those individuals and organizations, including names and telephone numbers, which have committed to support this project. Provide information on the type and level of support provided and the value of this support to the overall project. Identify any individuals expressing an interest in participating as a project beneficiary, providing, also, their names and telephone numbers. Be prepared to provide letters from these individuals and entities

documenting their role in the project upon request.

***Funding Need–***

- 1) Indicate the NEED for the project, specifying both the need for ARC resources as well as the problem(s) the project will address. Describe the challenge, issue, or asset you are seeking funds for and how implementation of this project will address this.
- 2) Detail why ARC funding is needed at this time. In addressing the need for ARC resources, discuss why ARC funding is being sought in lieu of other funding.

***Sustainability:***

Discuss the plans for continuation of the project following initial ARC funding. If the project is part of a phased effort, indicate future sources of funding, including the current levels of commitment, and strategies for achieving completion of all phases. For all projects, describe the process to be used to ensure long-term sustainability, especially financial sustainability.

## **IMPLEMENTATION OR SYSTEM DEVELOPMENT/ TECHNICAL SUPPORT PROPOSALS**

***For Physical Implementation Project: Status of Relationship with Local Telecommunications Provider:***

Discuss the current relationship between the proposed project and the local telecommunications provider. Does the provider know about this project? Does the provider currently provide this service to other communities? If so, why isn't the applicant community served? Provide documentation.

***Community Telecommunications Plan:***

Include a copy of a plan that has been completed that reflects the need for the proposed telecommunications project. This plan should substantially address the issues as presented in Appendix E. Should this Plan not exist or one similar, the project will not be eligible for Physical Implementation assistance or System Development and Technical Support assistance.

### **SECTION 4 - BUDGET INFORMATION AND SUPPORTING MATERIALS**

***Project Budget:***

Using the Non-Construction budget form from Appendix D as a guide, construct a project budget. The budget should show the costs, relative to each funding source, of each activity and activity component (i.e., salaries, fringes, and so on). Budgets for equipment projects must include a list of the equipment and cost by item. Include the budget as a page in the proposal.

A sample table is as follows:

---

| <u>Source</u>   | <u>Amount</u>    | <u>Percentage</u> |
|-----------------|------------------|-------------------|
| ARC             | \$ 40,000        | 40%               |
| Local/Applicant | \$ 15,000        | 15%               |
| Other Federal   | \$ 35,000        | 35%               |
| <u>Private</u>  | <u>\$ 10,000</u> | <u>10%</u>        |
| TOTAL           | \$ 100,000       | 100%              |

---

***Status of Other Funds:***

Indicate the current status of all non-ARC funds to be used on the project. List the general categories from the **Cost Summary** (above) and the specific funding sources under these categories. **SPECIFY THE AMOUNT ANTICIPATED FROM EACH SPECIFIC SOURCE.** Provide information,

where applicable, on the project's position within the funding cycles of each source, the anticipated timing for release of each source of funding, the level of funding commitment received to date (firm; not contingent on future approval), and adequate, specific supporting documentation (recent letters, contracts, or resolutions). Letters of

commitment and other documentation of other funding should be included.

***Alternatives for ARC Funding***

Discuss the rationale for seeking ARC funding for the proposed project in lieu of other resources. What other funding alternatives exist? How would these alternatives impact the financial feasibility of this project and accessibility to the intended beneficiaries?

***Calculations of match***

For multi-county projects with more than one ARC designation (i.e., distressed, transitional, at-risk, competitive, attainment), show calculations to confirm the project meets ARC match requirements.

***Derivation of Costs / Budget Narrative:***

Provide a budget narrative that explains expenditures by line items shown. Detail the methodology used to determine each amount listed in the project budget. List each activity and activity component, their related cost estimates, and those unit costs or otherwise which provide the basis for these estimates. Identify the information sources and/or methodologies used to generate these cost estimates and give the dates that the estimates were developed. Documentation from these information sources in support of the cost estimates should be provided. Costs will be reviewed for reasonableness. Please explain any conditions that exert upward pressure on your costs.

***Sample Derivation of Costs:***

| <u>Activity</u>                     | <u>Total Costs</u> | <u>ARC Amount</u> | <u>Leverage</u> | <u>Source</u>          | <u>Date</u>   |
|-------------------------------------|--------------------|-------------------|-----------------|------------------------|---------------|
| <i>Solicitation of Participants</i> | \$ 10,000          | \$ 5,000          | \$ 5,000        | <i>Comm Coll Staff</i> | <i>8/6/11</i> |
| <i>Provision of Training</i>        | \$ 20,000          | \$ 10,000         | \$ 10,000       | <i>XYZ Consultants</i> | <i>9/6/11</i> |
| <i>Technical Assistance</i>         | \$ 5,000           | \$ 2,500          | \$ 2,500        | <i>BBA</i>             | <i>9/6/11</i> |
| <i>Evaluation of Performance</i>    | \$10,000           | \$ 5,000          | \$ 5,000        | <i>BBA</i>             | <i>9/6/11</i> |
|                                     |                    |                   |                 |                        |               |
| <i>Total</i>                        | \$45,000           | \$22,500          | \$22,500        | <i>ARC %</i>           | <i>50%</i>    |

***Letters of Benefit and Support***

***Commitment:***

Applicants must provide letters and other documentation which provide confirmation that the project will benefit the number of individuals it is targeting. Applicants are strongly encouraged to solicit letters from proposed beneficiaries. Letters from potential project partners should be available as evidence of additional project support.

***Submission to Planning District***

***Commission:***

Copies of Virginia ARC Regional Initiatives Proposals must be provided to the local Planning District Commission (Local Development District). **This should be submitted to the PDC no later than September 30, 2010.** The purpose of this requirement is to keep the PDC informed of potential projects. The PDCs are also available to assist applicants in developing

projects. The PDC role is not to accept, reject, or otherwise screen these proposals.

***Application Review Process***

DHCD will review proposals and as necessary, may ask for additional information or clarification. Once projects are selected for funding a recommendation is prepared for the Governor's office. Following announcement by the Governor's office, DHCD will coordinate with successful applicants to revise or in some cases, substantially re-write proposals if needed, complete necessary federal forms, and resolve any outstanding issues that were

noted in the review. Applicants must respond by the deadline provide or they may jeopardize funding. Please note the recommendation from the Governor's office **does not** guarantee funding. Once all additional proposal information is returned to DHCD, proposals will reviewed and then sent to ARC for final approval. ARC will review proposals and may ask for additional information as well. Funding is only secured after ARC has approved the proposal.





# APPENDIX B – OUTPUTS AND OUTCOMES

## GOAL 1 – ECONOMY

### Measures:

| <b>ENTREPRENEURSHIP/BUSINESS INCUBATOR</b>  |  |
|---|--|
| Output Measurement – number of<br><input type="checkbox"/> <i>participants</i><br><input type="checkbox"/> <i>businesses served / assisted (existing and new)</i> | Outcome Measurement – number of<br><input type="checkbox"/> <i>new businesses created or graduated</i><br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>jobs retained</i><br><input type="checkbox"/> <i>Leveraged Private Investment</i><br><input type="checkbox"/> <i>participants with improved skills or completed program (such as course with certified skills)</i> |
| <b>EXPORT</b>   |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>participants</i>  | Outcome Measurement – increase in<br><input type="checkbox"/> <i>Export dollars</i>  |
| <b>HIGH VALUE, HIGH WAGE EMPLOYMENT OPPORTUNITIES</b>   |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>new/revised strategic plans</i>   | Outcome Measurement – number of<br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>jobs retained</i>   |
| <b>TELECOMMUNICATIONS</b>   |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>participants</i><br><input type="checkbox"/> <i>businesses hooking on</i>                           | Outcome Measurement – number of<br><input type="checkbox"/> <i>new telecommunications sites serving 50 clients per week offering telemedicine, distance learning, governmental or business applications</i><br><input type="checkbox"/> <i>number of trainees with improved skills</i><br><input type="checkbox"/> <i>miles of infrastructure or new technology deployed</i>                             |
| <b>TOURISM DEVELOPMENT</b>  |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>businesses assisted</i>   | Outcome Measurement – number of<br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>Leveraged Private Investment</i><br><input type="checkbox"/> <i>“new” tourists</i>  |

*revenue generated*

## **GOAL 2 – HEALTH AND EDUCATIONS**

### ***Measures:***

|   |  |
|---|--|
| <b>WORKERS RECEIVING BASIC EDUCATION, SKILLS TRAINING, SKILLS UPGRADING OR CUSTOMIZED TRAINING.</b>   |  |
| Output Measurement – number of workers<br><input type="checkbox"/> <i>participating in skills training activity</i>   | Outcome Measurement – number of workers<br><input type="checkbox"/> <i>obtained employment</i><br><input type="checkbox"/> <i>retained employment</i>  |
| <b>STUDENTS PARTICIPATING IN SCHOOL READINESS, DROPOUT PREVENTION, SCHOOL-TO-WORK TRANSITION AND GED PROGRAMS.</b>  |  |
| Output Measurement – number of students<br><input type="checkbox"/> <i>participating in educational activity</i>  | Outcome Measurement – number of students<br><input type="checkbox"/> <i>obtained a GED (within 1 year)</i><br><input type="checkbox"/> <i>graduated from high school (at-risk dropouts)</i><br><input type="checkbox"/> <i>completed a school readiness activity and tested on grade level entering kindergarten</i><br><input type="checkbox"/> <i>entered college after high school (within 1 year)</i><br><input type="checkbox"/> <i>entered workforce after participating in school-to-work program (within 1 year) (school/college students)</i> |
| <b>TELECOMMUNICATIONS</b>   |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>students</i><br><input type="checkbox"/> <i>workers</i>   | Outcome Measurement – number of<br><input type="checkbox"/> <i>new telecommunications sites serving workers/students per week</i>  |
| <b>HEALTH CARE PROFESSIONALS RECRUITMENT</b>  |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>health care professionals recruited</i><br><input type="checkbox"/> <i>annual patient office visits</i> | Outcome Measurement – number of<br><input type="checkbox"/> <i>patients with improved health care</i>  |
| <b>INTEGRATED HEALTH CARE DELIVERY</b>  |  |
| Output Measurement – number of<br><input type="checkbox"/> <i>participants</i>  | Outcome Measurement – number of<br><input type="checkbox"/> <i>participants with improved health</i>   |

### GOAL 3 - INFRASTRUCTURE

*Measures:*

| <b>WASTE/SEWER/WASTE DISPOSAL SYSTEM</b>  |   |
|---|---|
| Output Measurement – number of<br><input type="checkbox"/> <i>linear feet</i><br><input type="checkbox"/> <i>businesses served</i><br><input type="checkbox"/> <i>increase in capacity or storage</i> | Outcome Measurement – number of<br><input type="checkbox"/> <i>households served (new)</i><br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>jobs retained</i><br><input type="checkbox"/> <i>Leveraged Private Investment</i> |
| <b>INDUSTRIAL PARK/COMMUNITY REVITALIZATION</b>   |   |
| Output Measurement – number of<br><input type="checkbox"/> <i>Linear feet installed</i><br><input type="checkbox"/> <i>businesses served</i><br><input type="checkbox"/> <i>housing units</i>         | Outcome Measurement – number of<br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>jobs retained</i><br><input type="checkbox"/> <i>housing units</i><br><input type="checkbox"/> <i>Leveraged Private Investment</i>           |
| <b>TELECOMMUNICATIONS</b>   |   |
| Output Measurement – number of<br><input type="checkbox"/> <i>participants</i><br><input type="checkbox"/> <i>businesses served</i><br><input type="checkbox"/> <i>jobs created / retained</i>        | Outcome Measurement – number of<br><input type="checkbox"/> <i>new telecommunications sites offering tele-health, distance learning, governmental or business applications</i><br><input type="checkbox"/> <i>Leveraged Private Investment</i>              |

### GOAL 4 – ADHS SYSTEM

*Measures:*

| <b>ADHS CORRIDOR DEVELOPMENT</b>  |  |
|---|--|
| Output Measurement – number of<br><input type="checkbox"/> <i>new revised strategic plans</i> | Outcome Measurement – number of<br><input type="checkbox"/> <i>jobs created</i><br><input type="checkbox"/> <i>jobs retained</i> |



# APPENDIX C – PROJECT SUMMARY FORMAT

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(2 page maximum)

Project Title: Title of the Project

Project Grantee: Provide name, address, and contact information, including email.

County(ies) to be Served: List each county and its designation (e.g. transitional, distressed, etc.)

List the Distressed Area Census Tracts – Use the *County Economic Status and Distressed Area* report in your packet

**Basic Agency:** Not required for non-construction projects

Goal/Strategy: Identify the primary ARC Goal and State Objective which the project will address. Specify the State Strategies by number

Purpose: 1-2 sentence statement describing overall purpose of proposed project

Funding:

| <u>Amount</u> | <u>% age</u>    | <u>Source</u> |                  |
|---------------|-----------------|---------------|------------------|
| ARC           | \$40,000        | 66 %          | ARC TI           |
| State         | 10,000          | 16.6 %        | VEI              |
| Local         | 10,000          | 16.6 %        | Local Government |
| <b>Total</b>  | <b>\$60,000</b> | <b>100 %</b>  |                  |

**Description:** Description of major activities to be conducted under grant proposal. The description should address who, what, where, when and how for each major activity.

Rationale:

- Critical circumstances that compel project to be funded
- Local, regional and/or state need for project
- Problems and/or issues that project will alleviate

- Why this project is a good investment of ARC funds and why the ARC funds are necessary

Benefit:

- Results and accomplishments to be derived from project
- Other non-quantifiable benefits (e.g. new partnerships, improved standard of living, etc.)

Output/Outcome:

- Identify output and outcome measurements (as defined by ARC, see Appendix B)
- Identify Outcomes of this proposal (as defined by ARC, see Appendix B)

Leveraged Private  
Investment:

Identify anticipated private sector commitments (with associated dollar amounts) and associated job impacts that follow as a result of this project for a three-year period following completion of the project. *Does not apply to Planning Projects.*

# **APPENDIX D – NON-CONSTRUCTION BUDGET FORM**

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**BUDGET INFORMATION - Non-Construction Programs**

OMB Approval No. 0348-0044

| <b>SECTION A - BUDGET SUMMARY</b>      |   |                             |                 |                       |                 |           |
|--|---|-----------------------------|-----------------|-----------------------|-----------------|-----------|
| Grant Program Function or Activity (a) | Catalog of Federal Domestic Assistance Number (b) | Estimated Unobligated Funds |                 | New or Revised Budget |                 |           |
|  |   | Federal (c)                 | Non-Federal (d) | Federal (e)           | Non-Federal (f) | Total (g) |
| 1.                                     |   | \$                          | \$              | \$                    | \$              | \$ 0.00   |
| 2.                                     |   |                             |                 |                       |                 | 0.00      |
| 3.                                     |   |                             |                 |                       |                 | 0.00      |
| 4.                                     |   |                             |                 |                       |                 | 0.00      |
| 5. Totals                              |   | \$ 0.00                     | \$ 0.00         | \$ 0.00               | \$ 0.00         | \$ 0.00   |
| <b>SECTION B - BUDGET CATEGORIES</b>   |   |                             |                 |                       |                 |           |
| 6. Object Class Categories             | GRANT PROGRAM, FUNCTION OR ACTIVITY               |                             |                 |                       | Total (5)       |           |
|  | (1)   | (2)                         | (3)             | (4)                   |                 |           |
| a. Personnel                           | \$  | \$                          | \$              | \$                    | \$ 0.00         |           |
| b. Fringe Benefits                     |   |                             |                 |                       | 0.00            |           |
| c. Travel                              |   |                             |                 |                       | 0.00            |           |
| d. Equipment                           |   |                             |                 |                       | 0.00            |           |
| e. Supplies                            |   |                             |                 |                       | 0.00            |           |
| f. Contractual                         |   |                             |                 |                       | 0.00            |           |
| g. Construction                        |   |                             |                 |                       | 0.00            |           |
| h. Other                               |   |                             |                 |                       | 0.00            |           |
| i. Total Direct Charges (sum of 6a-6h) |   | 0.00                        | 0.00            | 0.00                  | 0.00            |           |
| j. Indirect Charges                    |   |                             |                 |                       | 0.00            |           |
| k. TOTALS (sum of 6i and 6j)           | \$  | \$ 0.00                     | \$ 0.00         | \$ 0.00               | \$ 0.00         |           |
| 7. Program Income                      | \$  | \$                          | \$              | \$                    | \$ 0.00         |           |

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Prescribed by OMB Circular A-102

| <b>SECTION C - NON-FEDERAL RESOURCES</b>   |                                |                       |                   |             |             |
|--|--------------------------------|-----------------------|-------------------|-------------|-------------|
| (a) Grant Program  | (b) Applicant                  | (c) State             | (d) Other Sources | (e) TOTALS  |             |
| 8.   | \$                             | \$                    | \$                | \$ 0.00     |             |
| 9.   |                                |                       |                   | 0.00        |             |
| 10.  |                                |                       |                   | 0.00        |             |
| 11.  |                                |                       |                   | 0.00        |             |
| 12. TOTAL (sum of lines 8-11)  | \$ 0.00                        | \$ 0.00               | \$ 0.00           | \$ 0.00     |             |
| <b>SECTION D - FORECASTED CASH NEEDS</b>   |                                |                       |                   |             |             |
|  | Total for 1st Year             | 1st Quarter           | 2nd Quarter       | 3rd Quarter | 4th Quarter |
| 13. Federal  | \$ 0.00                        | \$                    | \$                | \$          | \$          |
| 14. Non-Federal  | 0.00                           |                       |                   |             |             |
| 15. TOTAL (sum of lines 13 and 14)   | \$ 0.00                        | \$ 0.00               | \$ 0.00           | \$ 0.00     | \$ 0.00     |
| <b>SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT</b> |                                |                       |                   |             |             |
| (a) Grant Program  | FUTURE FUNDING PERIODS (Years) |                       |                   |             |             |
|  | (b) First                      | (c) Second            | (d) Third         | (e) Fourth  |             |
| 16.  | \$                             | \$                    | \$                | \$          |             |
| 17.  |                                |                       |                   |             |             |
| 18.  |                                |                       |                   |             |             |
| 19.  |                                |                       |                   |             |             |
| 20. TOTAL (sum of lines 16-19)   | \$ 0.00                        | \$ 0.00               | \$ 0.00           | \$ 0.00     |             |
| <b>SECTION F - OTHER BUDGET INFORMATION</b>  |                                |                       |                   |             |             |
| 21. Direct Charges:  |                                | 22. Indirect Charges: |                   |             |             |
| 23. Remarks:   |                                |                       |                   |             |             |

# **APPENDIX E – COMMUNITY TELECOMMUNICATIONS PLANNING GUIDE**

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(The full document is available upon request from DHCD.)

## Overview

Broadband telecommunications infrastructure consists of the equipment and technology that carries information at high speeds between two or more locations. The Virginia Department of Housing and Community Development (DHCD) views broadband telecommunications infrastructure as an essential public utility in the same regard as public water and sewer service. As such, our aim is to prepare and empower communities by providing technical assistance and financing to enable them to “level the playing field” in order to compete with larger urban communities for economic development and expanded social opportunities through the availability of affordable high-speed internet service in their community.

To assist communities plan for broadband telecommunications DHCD has developed this guide. It is a framework for communities who want to investigate their readiness, capacity, and demand for advanced telecommunication infrastructure. This guide is by no means a final solution and should not be viewed as a substitute for qualified telecommunications expertise to assist communities in planning for broadband. Communities must take a comprehensive approach to telecommunications planning that includes identification of need within the community and the potential impacts that broadband telecommunications infrastructure would produce.

The final product of the planning process will be the development of a **Community Telecommunications Plan**. The plan should include analyses of existing telecommunications conditions, defining broadband goals and developing action steps to achieve the goals. The desired outcome of this planning effort is to provide a tool for communities to assist in future implementation of the construction of broadband projects that will lead to enhanced educational opportunities, improved medical services, enhanced economic development opportunities, and improved quality of life.

A Community Telecommunications Plan is required by DHCD in order to apply for implementation financing through the ARC TI program. Investments in implementation will only be made in “Last Mile” broadband connectivity solutions for business, medical and educational facilities, i.e. the final leg of connectivity from a communications provider to a customer.

The information in this guide lists some of the critical components to explore when developing the plan but certainly does not include everything to be covered. A glossary of terms commonly used when discussing telecommunications is also available from DHCD.

## Management Team

The first item to address when starting the planning process is to set up an effective Management Team. This team will provide oversight and direction throughout the planning process including the procurement of and collaborating with consultants and contractors necessary for successful implementation of the broadband telecommunications network. It should be comprised

of decision makers and stakeholders representing a cross section of all potential broadband users or beneficiaries. The following is a list of potential fields from which to seek prospective members.

- Local government
- Economic development professional
- Public schools
- Higher education institutions
- Workforce development
- Health care
  - Hospital
  - Medical clinics
  - Private medical practice
- Industry/Manufacturing
- Retail and commercial business
- Small business/entrepreneurs
- Service sector
  - Banking
  - Insurance
- Professional
  - Legal
  - Engineering
  - Accounting
- Local telephone provider
- Internet service providers
- Police dept. and emergency services

Another member of the Management Team should be the telecommunications expert (usually a private consultant) that is hired to assist in carrying out the project. This person should have experience not only in planning and analysis but also telecommunications and technology. The most qualified person or firm that can do a comprehensive job should be procured. A sample Request for Proposals (RFP) for a telecommunications consultant is available from DHCD.

It is critical that there is continued involvement from the members of the management team even after the planning process is complete. The members should be committed to continue pursuing achievement of the goals that are identified in the Community Telecommunications Plan.

## **Needs Assessment**

The current status of broadband telecommunications availability as well as the current and future telecommunication needs of the community must be evaluated. Using various methods of assessment tools including surveys, questionnaires, and in-person interviews, the grantee will determine the telecommunications needs and usage in the community. This includes identifying all current telecommunications providers such as the incumbent telephone service carrier and existing internet service providers (ISP), their broadband capabilities, the location of their infrastructure and

the current rates they are charging for services. In addition, future plans for broadband deployment by current providers as well as proposed rates, types of services to be offered, technical support and how it all relates to the particular community and the surrounding region should be determined.

Demand must be assessed. Demand consists of those telecommunication services used and projected to be used by current and future customers. Grantees must develop survey methods that will provide the best means to determine areas of existing service (including at a minimum what level of service is available, user rates, and the service provider) and of unmet need. These methods must also allow for potential customers to express their level of satisfaction with current broadband services, develop projections for potential broadband service, and examine potential price points for improved service. The assessment should concentrate on the businesses, schools, and health care facilities, identifying the types of applications used and number of employees and users. However, residential areas should not be excluded because there could be several home-based businesses identified. Identifying and quantifying these will reveal the potential for a revenue source for any future publicly owned networks. If a potential user does need broadband, the types of applications they would use, the amount of bandwidth they will need including how many would need a hard-wired, secure connection and what they would be willing to pay for broadband needs to be determined. Additionally, projections of jobs added from the availability of high-speed telecommunications should be sought from businesses responding.

Once the data is collected an analysis of the gaps between existing telecommunications services in relation to demand and broadband availability should be performed. Trends in the use of broadband by existing and potential customers as well as any other pertinent trends need to be identified. User rates need to be evaluated to determine affordability. Projections of potential broadband service need to be developed and the community's efforts related to on-going and future regional telecommunication efforts of other entities or communities should be examined.

## **GIS Base Mapping**

The data obtained from the assessment should be plotted on a GIS map showing concentrated areas of need in both the business district and surrounding areas, the service providers and their infrastructure, and blighted areas. The data should be so that a determination can be made as to whether there is sufficient critical mass to justify public investment in physical infrastructure that will be self-sustaining.

## **Asset Inventory**

An inventory of a locality's existing assets must be taken. This includes not only the existing telecommunications infrastructure, but other physical assets such as publicly-owned communications towers, trails and rights-of-way, government centers, proximity to major transportation avenues, and the types of businesses located in the community. Identifying what is already owned or readily available access places the community in a better position to plan and build future infrastructure.

## Community Education & Training

To expand demand for a broadband network requires effective community education and training. Broadband education development strategies and end user application identification is key to ensuring the success of a community network. This component should investigate current programs available in the community, denote training gaps, and research and identify potential training partners to provide additional broadband education programs. These partners could include higher education institutions, the Virginia Electronic Commerce Technology Center (VECTEC), Virginia's Center for Innovative Technology (CIT) and other entities that may serve as resources to help communities assess and develop strategies for expanding broadband education program availability. Increasing community awareness and education through local workshops and seminars is one method of building demand.

Examples of two excellent courses for general broadband education include *Broadband 101-Untangling the Wires* offered by CIT and the *Knowledge Economy Readiness Roadshow* by Design Nine, Inc. The *Broadband 101* workshop is designed to help broadband novices to understand terminology, attain understanding of technologies, gain awareness of broadband applications, and learn safeguards of network security. The *Knowledge Economy Roadshow* is designed to help jumpstart community broadband projects by assisting local leaders in understanding the linkages between broadband and economic development.

## *Business Use and Applications*

In addition to education, training programs should also be developed that will increase the potential for people to obtain jobs in fields that utilize broadband. This can be accomplished by first identifying the specific applications that require broadband to work. Some of these are listed below:

- Data transfer;
- Voice over Internet Protocol (VoIP);
- Video on Demand;
- Online gaming;
- Video conferencing;
- Webcasting;
- Distance Education;
- Online Auctions;
- Video Tele-medicine;
- Agriculture Management; and
- Geographic Information Systems (GIS).

Practical applications that require high-speed connectivity must be cultivated in order to build demand for community-based broadband infrastructure. Part of the planning process must include outlining specialized training on specific courses and skills. The Virginia Community College system and Higher Education Centers offer workforce training to assist individuals in gaining the necessary skills to find jobs in technology and broadband related fields. VECTEC

regularly offers mini-courses and seminars on application specific training including website design, internet security, database development, electronic marketing, and search engine optimization.

In conjunction with training and education there should also be emphasis placed on entrepreneurship development. Statistics indicate that 75% to 90% of all jobs created are in small businesses. Broadband availability will provide an opportunity to encourage potential businesses to startup and grow.

## **Broadband Infrastructure**

ARC TI only invests in implementation projects that address “Last Mile” connectivity solutions. This component should provide a variety of options for achieving this objective. The planning for this should be “technology neutral”, i.e. not skewed to favor one technology over another. In addition, the planning should be based on community needs that relate to economic development, education and health care. Before financing for construction of broadband wiring can be attainable the community must know what its broadband telecommunications needs are and the type of infrastructure needed to best address those needs.

It is likely that a telecommunications professional, typically an engineer, will be needed to prepare the preliminary engineering design for the recommended community network. The engineer should utilize information from the needs assessment and potential users in order to identify elements that could impact the design including specific bandwidth requirements and redundancy needs. The design should outline the type of installation (fiber-optic cable [aerial or buried], wireless or other state-of-the-art technology), identify utility pole attachments, develop network electronics specifications and sites to house them (co-location facility), and include preliminary cost estimates for construction of the proposed solutions. The design should be plotted using GIS mapping showing existing telecommunications infrastructure, public and private rights-of-way, and proposed routes of “Last Mile” solutions. Recommendations to reach outlying areas and remote sites should also be included. Depending on the size of a project area, a phased approach to infrastructure projects may be necessary.

## **Network Organization and Operation**

This component should provide a comprehensive study of the possible structures in terms of organization and ownership for a proposed broadband infrastructure network. All possible scenarios should be investigated including, but not limited to, locality owned and operated networks, public-private partnerships, lease-hold agreements, and cooperatives. Part of this analysis must include research of federal, state, and local regulatory and legal issues. The establishment of standards and rules for usage by entities wanting to use the network, e.g. re-selling bandwidth, decency issues, etc. should be evaluated.

A Business Plan should be developed as part of this component. Identified in the plan should be anticipated legal requirements, operational and maintenance (O&M) requirements and

associated staffing necessary to meet O&M requirements and projected operational costs and revenues. A rate structure should be developed that will generate revenue sufficient to cover the expenses associated with maintenance and bandwidth while allowing the entity to sustain itself. Information from potential users should be analyzed to determine the need for training, consultation and technical support and how this will impact the business plan.

In addition, all service providers in the community should be identified and their willingness to be a provider on the network needs to be determined. To facilitate this process and garner interest, user agreements should be obtained by the locality to illustrate the extent of the projected customer base.

## **Funding Strategies**

If it is determined that the need and demand for broadband telecommunications is sufficient to justify installation of a system, it is necessary to examine ways to finance that effort. This evaluation should take into account the availability and relevance of particular financing sources including governmental and private resources. The evaluation needs to assess what various sources of funds can and should pay for, i.e., physical infrastructure, education programs and/or operational support. One recommended strategy for implementation may be to prioritize and phase projects and address how that will impact various funding sources. Communities should be comprehensive in their search for financing to implement potential projects.

## **Marketing the Network**

Another element that is essential to achieving a successful network is marketing. Marketing here refers to showcasing a community's assets, i.e. broadband, in a way that attracts industry and new residents. One way this can be accomplished is to have a good Community Portal or Website. The site content should be updated frequently and relate to every demographic. Information about community events, schools, church schedules, and public meetings are just a few of the things that can be highlighted. The portal can also be utilized as a vehicle for education and training programs such as e-commerce and distance learning.

A community broadband network is also an economic development tool that can assist in recruiting new businesses from outside the community. A majority of companies wanting to locate or expand make their first cuts from how much current information there is on the community portal. In addition to standard information such as physical infrastructure and population, websites that showcase a sense of community and high quality of life will attract and keep good employers.

A good publicity campaign should be a part of your overall marketing effort. In addition to a good community portal the media can be a big help. Invite the newspaper and television to meetings and allow them to draft a story that publicizes the hard work of a community broadband initiative. A concentrated push to get the word out to local citizens will act as a catalyst to boost attendance at education and training events as well as increase use of the community portal.

## **Conclusion**

While the material contained in this guide is not all inclusive, it is intended to provide basic information to help communities begin the process of developing a broadband telecommunications strategy. The most difficult challenge is overcoming fears of the unknown, getting out of the current comfort zone and embracing something new. Once citizens realize the benefits that can be gained from such an effort, it will move the community forward to remain on par with other localities in the 21<sup>st</sup> century.