



**RAPPAHANNOCK COUNTY  
BROADBAND AUTHORITY**

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www.rappahannockcountyva.gov

Debbie P. Donehey, Chair  
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**REQUEST FOR INFORMATION (RFI)**

**RFIRCBA #2021-01**

**PARTNERSHIP FOR INTERNET CONNECTIVITY IN RAPPAHANNOCK COUNTY, VIRGINIA**

**ISSUED: June 23, 2021**

The Rappahannock County Broadband Authority (RCBA) will accept responses until 4:00PM EDT on July 8, 2021, in the Rappahannock County Administration Office, which is located at 3 Library Road Washington, Virginia 22747.

**INQUIRIES:** Address questions related to this RFI to County Administrator, Garrey W. Curry, Jr. (gwcurry@rappahannockcountyva.gov). Contact initiated by a respondent concerning this RFI with any other County or RCBA representative, not expressly authorized elsewhere in this document, is prohibited. Any such unauthorized contact may result in disqualification of the respondent from consideration.

**PLEASE PROVIDE THE FOLLOWING INFORMATION:**

**Complete Legal Name of Firm (Respondent):** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Federal Tax ID Number:** \_\_\_\_\_

**Signature of Authorized Representative:** \_\_\_\_\_

**Printed Name & Title:** \_\_\_\_\_

**Please provide the primary contact person for questions relative to this project:**

**Contact Name & Title:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

The respondent has the sole responsibility to identify and describe the services it proposes. Respondents should take into account not only the content but also the form and clarity of their response. In addition, please ensure all requests enumerated in Section VI of this RFI are fully addressed in your response. If the RCBA cannot determine what is being proposed, it is likely to reject the response. All information should be submitted in an organized, easy-to-understand manner. The RCBA reserves the right to revise this document prior to the due date and postpone the due date. Such revisions will be announced by written addenda. The RCBA will reject responses received after the date and time of closing and will return them to the respondent. Timely submission of a response is the sole responsibility of the respondent. If the County Administration office is closed on the date proposals are due, the deadline will be extended to the same time on the next business day.

The RCBA requests that respondents provide seven (7) paper copies and one PDF electronic copy of all responses it authorizes for release and discussion in a public forum, with any proprietary or sensitive information redacted. The RCBA also requests that respondents provide one PDF electronic file for any response to this RFI containing proprietary or sensitive information that the respondent wishes the RCBA to consider but that the respondent does not authorize the RCBA to release to the public. Please refer to pages 6 and 7 for further details.

**RETURN THIS PAGE WITH RESPONSE**

**DEFINITIONS for terms used in this RFI:**

**RCBA** – Rappahannock County Broadband Authority, also known as the Authority

**Mbps** – Megabits per second

**Served (broadband)** – Properties that currently have access to internet speeds greater than 25 Mbps download speed and 3 Mbps upload speed (VATI 2021 Guidelines)

**Unserved (broadband)** – Properties that currently have access to internet speeds at or below 25 Mbps download speed and 3 Mbps upload speed (VATI 2021 Guidelines)

**Universal (broadband)** – 97% of households/businesses within Rappahannock County served

**ISP** – Internet service provider

**Respondent** – ISP responding to this RFI and submitting information called for in Section VI below

**I. PURPOSE**

The RCBA is seeking one or more Internet Service Providers (ISPs) with which to partner to expand the availability of broadband internet connectivity in Rappahannock County, Virginia. The need for such a partnership overtly recognizes that the density of housing units in Rappahannock County is generally considered too sparse to support broadband deployment using only typically available commercial infrastructure.

It is anticipated that the partnerships resulting from this RFP process will lead to one or more joint efforts to seek all forms of available government and non-government funding to bridge the gap between commercially available infrastructure (from a provider/respondent) and what is actually needed to deploy broadband service to 97% of households in Rappahannock County.

One such form of government funding is the Virginia Department of Housing and Community Development (DHCD) Virginia Telecommunication Initiative (VATI) Grant opportunity for FY2022. This funding opportunity requires a public-private partnership. VATI Guidelines are available on the DHCD VATI webpage, which can be accessed via: <https://www.dhcd.virginia.gov/vati>. Critical VATI deadlines include: Notice of Application due on July 27, 2021; Applications due on September 14, 2021.

**II. COUNTY BACKGROUND**

Rappahannock County is located in the northern Piedmont area of Virginia in the foothills of the Blue Ridge Mountains. The County comprises an area of 267 square miles with a population of approximately 7,300. Shenandoah National Park (SNP) occupies nearly 50 square miles of the western most portion of the county within which broadband services are not required, leaving the populated area at 217 square miles with a net density of 33.7 persons per square mile. The U.S. Census Bureau reported that there were approximately 3,131 households in the county in 2017 with an associated density of 14.4 households per square mile. The Town of Washington is the only incorporated town in Rappahannock County and has a population of under 150. There are five other “village areas” of varying household and business density including Amissville, Chester Gap, Flint Hill, Sperryville, and Woodville. The County does not have a publicly facing GIS system from which the public and businesses are able to analyze the population density. Given the rural character of the Rappahannock County landscape, many households are served by very long private driveways.

Rappahannock County is bordered to the northwest by Warren County, the northeast by Fauquier County, the southeast by Culpeper County, the south by Madison County, and the west by Page County. Warren County and Page County lie on the western side (opposite side) of the Blue Ridge Mountains. The topography in Rappahannock County is varied, ranging from 360 to 3,720 feet above mean sea level. The lowest point in the county is where the Rappahannock River crosses into Culpeper County. The highest point is along the top of the Blue Ridge Mountains along the border with Page County in the SNP.

Portions of Rappahannock County are currently served by varying degrees of terrestrial based internet connectivity by incumbent broadband providers either with DSL, wireless, coaxial cable, or fiber; however, large portions of the County are not covered by reliable, affordable broadband. In 2021, the Rappahannock County Board of Supervisors created the RCBA, an independent political subdivision of the Commonwealth of Virginia under the Virginia Wireless Service Authorities Act, in order to address the issue of providing high-speed and affordable broadband service to citizens using partnerships not inherently available to the local county government.

### III. PARTNERSHIP

As noted, the RCBA intends to partner with one or more private sector broadband service providers to expand the availability of broadband internet connections in Rappahannock County. The desired outcome of the partnership(s) is a joint effort to seek all forms of available government and non-government funding to bridge the gap between commercially available investment and what is needed to deploy broadband service to 97% of households (universal broadband service) in Rappahannock County. The RCBA has a preference to enter into a partnership with a single partner for the entire county, but reserves the right to enter into geographically distinct partnerships dividing the County into sub-parts, which would be ultimately served by different partners.

The potential availability of state, federal, and non-governmental funding to supplement the deployment of broadband internet connectivity in the wake of the global pandemic is unprecedented with trillions of dollars in pandemic relief appropriated by the federal government, of which billions are expected to be available for various pandemic related needs in the Commonwealth of Virginia, including the expansion of Broadband. The Governor of Virginia recently issued a directive signaling his plan to invest heavily in the expansion of broadband internet connectivity using these funds and to shorten his 10-year goal for statewide universal broadband deployment to an 18-month period.

Recognizing the current investment opportunity, the RCBA seeks to provide broadband internet connectivity to citizens and businesses in Rappahannock County while meeting the speed requirements stated in the recently released interim final rule for the American Rescue Plan Act (ARPA), **which are 100 Mbps download and 20 Mbps, scalable to 100 Mbps upload** (upload could possibly be reduced if there is an upgrade path). We presume that these speeds would require the installation of optical fiber at least in the middle mile of installed systems, but other innovative technical solutions to the premises, including high speed wireless solutions, capable of meeting the technical requirements found in the interim final rule, will be considered. At present, desired minimum speeds for VATI grant purposes are 25/3 Mbps.

If 100/20 Mbps speeds are not immediately attainable in your proposed plan, please provide information in the materials you submit (under section VI below) regarding how the VATI 25/3 minimums will be attained and how these minimums can transition to 100/20 Mbps in a later phase of broadband installation. Meeting this standard will ensure deployment of internet service that meets foreseeable future requirements in the County and will allow the RCBA to invest both ARPA funds and other funds it receives that have the same technical service requirement.

Respondents should **identify existing structures already served by an ISP, what type of internet connection currently exists, who the ISP is, and determine those end users that are adequately served or are unserved. The final result will be a detailed map of the entire county displaying this information.** Generalized maps of broadband coverage in Rappahannock County appear at the end of the Interim Report of the Broadband Committee to the Rappahannock County Board of Supervisors, October 2018. This can be accessed via:

[https://go.boarddocs.com/va/corva/Board.nsf/files/BY3MYN5COB6F/\\$file/2018%20Broadband%20Committee%20Interim%20Rpt%20to%20BoS.pdf](https://go.boarddocs.com/va/corva/Board.nsf/files/BY3MYN5COB6F/$file/2018%20Broadband%20Committee%20Interim%20Rpt%20to%20BoS.pdf)

A key portion of a response should outline the methods a respondent would use to **identify existing structures already served by an ISP, what types of Internet connections currently exist and who the ISP is, and determine those end users that are unserved:**

- Research, understand, and explore the technical requirements involved in various available funding support opportunities (available now or in the future) including, but not limited to, the definition of “unserved” and “served” as they apply to households and areas eligible to receive grant funding (from various grant sources).
- Conduct a broadband needs assessment including an “on-the-ground” defensible survey of the County to identify structures (households, businesses, other) and the method through which they are currently able to access broadband internet connectivity.
- Compare the results of the technical requirements and standards with the on-the-ground survey to identify “unserved” and “served” structures definitively as groupings may vary from funding opportunity to funding opportunity based upon different technical standards.

#### **IV. DESIRED OUTCOME**

Following the research needed to understand the areas of the County that are eligible to receive outside funding, explore and **fully identify funding needs:**

- **Identify** existing services and infrastructure that can be leveraged to most efficiently provide universal broadband service.
- **Develop** a broadband internet connectivity deployment plan that provides universal broadband service at the referenced speeds to the citizens and businesses of Rappahannock County. The deployment plan shall include plan of action and milestones covering all aspects of a project and ending with universal broadband service.
- **Determine** the capital investment needed to complete the deployment plan; the capital recovery that is expected from customer revenue; and the supplemental capital that must be provided from federal, state, local, and non-governmental agencies to close the capital funding gap.
- **Lead** the process to assemble broader partnerships (as necessary).
- **Lead** the process to apply for outside funding including VATI funds before their respective application deadlines.
- Following the identification of funding needs and the application and receipt of necessary funds, **own and deploy the broadband system.**

#### **V. GOALS AND OBJECTIVES**

By releasing this RFI, RCBA seeks to:

1. Understand the key technical considerations involved in integrating with a fiber middle mile and last mile connection and deploying an optimized solution to residences, businesses and Community Anchor Institutions (CAI), which includes schools, library, and fire and rescue stations.
2. Uncover potential issues that need to be addressed prior to construction of the planned network.
3. Develop an appropriate business model for Rappahannock County and any contracted vendor during construction and service phases, keeping in mind all requirements under Virginia law.
4. Learn the capabilities and requirements of the respondents with regard to construction, operation, maintenance, and sustainability (including technology upgrades) of the network.
5. Identify strategies for structuring and/or implementing the proposal and to stimulate interest in providing broadband/high-speed internet service access to all unserved areas of the County.

6. Identify potential challenges and/or roadblocks related to the implementation of broadband/high-speed internet service access for underserved and unserved areas of Rappahannock County.
7. Identify ideas and/or recommendations on ways to speed deployment of broadband/high-speed internet service infrastructure to meet Rappahannock County broadband/high-speed internet service goals and the proposed timeline.
8. Identify suggestions on how the County can leverage partnerships, utilize existing assets, coordinate broadband/high-speed internet service deployment with other infrastructure improvements and/or take other steps to reduce broadband/high-speed internet service deployment costs.
9. Identify regional considerations that might be relevant to the Rappahannock County Broadband Authority's ability to meet its goals.
10. Identify potential challenges, and/or roadblocks, barriers, etc., that might prevent residents, businesses and/or CAIs from taking advantage of the benefits of broadband/high-speed internet service, including approaches to ensure all citizens and business owners have uncapped access to the internet that is affordable, adequate, reliable and low latency.

## **VI. REQUESTED INFORMATION**

Responses to this RFI must include, in order of importance, complete responses to the below requests. Those ISPs that are most responsive to this RFI will enhance their prospects for being selected as a member of a public/private partnership to implement service funded by a VATI grant.

1. Technologies proposed to deliver universal broadband as defined herein, including projected range of maximum and minimum download speeds, upload speeds, "ping" (latency in milliseconds). Also, please attach photographs or other digital imagery of major types of broadband equipment your proposed plan will use, including technical specifications and physical dimensions of each item.

NOTE: All such proposals of technology for universal broadband and its proposed deployment in the County must conform to the 2020 Comprehensive Plan Principles and Policies and the Wireless Telecommunications Plan outlined in ATTACHMENT ONE below. Please consult the Rappahannock County Comprehensive Plan 2020 for more information:

<http://www.rappahannockcountyva.gov/compplan.html>

2. List of company principals who will be assigned to the project and be responsible for overall development and implementation.
3. Timeline of proposed actions including those expressed as desired herein and expressly including actions necessary to jointly submit the necessary documents for the FY2022 VATI program. In what ways would you report to the County and be accountable for the work you will be doing on the VATI grant application? What are your processes for accountability, scheduling, and delivery?
4. Proposed partnership agreement including guarantees that will be offered in exchange for the investment of federal, state, local, and non-governmental funds through the RCBA.
5. Summary of current broadband services provided and locations your organization currently serves including the number of years in the telecom industry.
6. Evidence of financial capacity to deliver the Desired Outcome with levels of commercial capital necessary for deployment in the form of guaranteed funding put up as "grant match" together with RCBA funds totaling an amount necessary to have a competitive and realistic opportunity to receive federal, state, and non-governmental funds.
7. Listing and copies of existing partnership agreements with other local governments in Virginia and evidence showing progress toward meeting the intent of those agreements.

8. Please describe potential partnerships you feel will/might be necessary to enable the RCBA to achieve its goals.
  - a. Are there strategic partners whose cooperation would enhance your ability to deliver services under the Initiative and/or reduce your time and cost to deploy? If so, please list the strategic partners with whom you are currently working and/or plan to partner with in the future.
  - b. Would you be willing to partner with other broadband providers and/or municipalities to provide broadband access to underserved and unserved areas of Rappahannock County? If so, please explain under what circumstances you would be willing to enter into such partnerships.
  - c. Are you willing to connect to open-access fiber networks? Or to open your fiber networks or lease fiber or communications services to partners?
  - d. Are there types of interconnection arrangements that would foster innovative models to reach underserved and unserved areas?
  - e. In addition to 8.a. through 8.d, are you open to other types of collaboration with ISPs, Cooperatives, non-profit organizations and governmental bodies that lead to universal provision of adequate, affordable, and low latency broadband service throughout Rappahannock County? If so, describe how you would work with such entities for full implementation.
9. A listing of support needed from the RCBA to meet the above DESIRED OUTCOMES. Respondent must be prepared to carry nearly all of the burden to prepare complete and approvable grant documents with limited support from the RCBA.
10. What other steps can the County take to encourage or facilitate such collaboration?

## **VII. SUBMISSIONS and TIMELINE**

Submit requested information and all other information the respondent deems pertinent (creative ideas, recommended approaches, strategies, advice, etc.). RCBA seeks input in any form deemed appropriate by the respondent, including, but not limited, to white papers, lessons learned, etc. All submissions should be made in printed form with a soft copy in portable document format (PDF), in accordance with the last paragraph of Page 1 of this RFI.

Responsive submissions **must be received** by the date and time listed on the cover page of this RFI. If not hand delivered to the location listed on the cover page of this RFI, submissions may be mailed with the following clearly labeled on an outer envelope or box: "RFI RCBA #2021-01" to the attention of:

Rappahannock County Broadband Authority  
c/o Garrey W. Curry, Jr., County Administrator  
Rappahannock County, Virginia  
3 Library Road  
PO Box 519  
Washington, VA 22747

### **Business Proprietary Information**

If you include in your response proprietary information, please:

1. State clearly on the cover page of your response that "This response contains business proprietary information."
2. Identify in your cover letter the page numbers on which this business proprietary information appears;
3. Enclose in brackets (" [ ]") **all** business proprietary information contained in your response; and
4. Provide with your response a public version from which the business proprietary information has been redacted.

## **VI. DISCLAIMER**

Be advised: this RFI is not a purchase of goods or services. This RFI is an expression of interest for potential partners who are seeking a partnership with a local broadband authority in such a way as to provide non-commercial investment necessary to implement a privately held broadband internet connectivity system as expressed herein within Rappahannock County that would otherwise not be commercially viable if not for the non-commercial investment. Responding to this RFI does not obligate RCBA or Rappahannock County to select any respondent for further work, or to enter into a contract for anything at any time.

Any materials submitted in response to this RFI shall be the sole property of the RCBA.

# **ATTACHMENT ONE**

[Following are extracts from 2020 Rappahannock County Comprehensive Plan, pp 86, 87 and 99 – 103. The Rappahannock County Comprehensive Plan 2020 sets forth the characteristics of Rappahannock County, including a statement of Principles and Policies reflecting the County’s goals for future growth. Below are key Principles and Policies relating to broadband development plans in the County and the Wireless/Telecommunications Plan. A complete copy of this Comprehensive Plan is posted on the County website: [www.rappahannockva.gov](http://www.rappahannockva.gov).]

## **Principles and Policies – pp. 86 & 87**

### Principle 3

“Protect natural resources, including soil, water, air, viewsheds, scenery, night skies, national park access, and fragile ecosystems<sup>1</sup>.” . . .

### Policies Supporting Principle 3

12. To the extent permitted by applicable federal and state laws and regulations, restrict the potential adverse effects of telecommunications infrastructure, including (i) broadband and wireless facilities; and (ii) wind, solar, and other renewable energy or public utilities facilities on prime agricultural land, sensitive or scenic landscapes, ridges and crests as defined in Code of Virginia § 15.2-2295.1, and viewsheds from designated scenic highways, designated historic sites, and other areas important to maintaining a rural county atmosphere.

13. Ensure the ridges, crests, and ridgetops in Rappahannock County remain scenic and are preserved as a valuable resource.

## **Wireless/Telecommunications Plan – pp. 99-103**

Telecommunications play an important role in the quality of life for residents of the county. In rural areas of the county, in particular, there has been a shift in recent years toward greater demand from residents for access to wireless communication and also to ensure reliable law enforcement and fire and rescue department communications throughout the county. However, wireless transmission structures have potential negative impacts – primarily visual.

The value of expanding wireless facilities in the county should be balanced with protection of Rappahannock county’s landscape, vistas, scenic viewsheds, and its historic heritage that contribute in a significant way to the quality of life and are cited by residents and visitors alike in noting their attraction to Rappahannock County. As valuable as telecommunications might be, so too is the protection of our county’s natural scenic and historic resources (including but not limited to sites designated in the Virginia Landmarks Register and the National Register of Historic Places). Our proximity to the Shenandoah National Park is an additional unique and valuable characteristic of Rappahannock County, and as a gateway community to this national resource, we recognize the importance of preserving viewsheds that attract tourists and related businesses to both the Shenandoah National Park and to Rappahannock County.



The purpose of this Comprehensive Plan is to establish a policy approach that accommodates access to competitive telecommunications services for law enforcement, fire and rescue services, businesses, residents, and visitors while protecting Rappahannock County's unique resources. This policy approach must be consistent with the permissible regulatory framework established by federal laws and regulations that have increasingly eroded the county's ability to regulate telecommunications facilities.

The Federal Telecommunications Act of 1996 ("FTA") preserves the zoning authority of Rappahannock County to regulate the placement, construction, and modification of personal wireless service facilities. Under the FTA, authority to regulate siting and construction of telecommunications towers is subject to certain limitations, see 47 U.S.C. § 332(c)(7)(B). These limitations include prohibitions against discriminating among wireless service providers and against banning personal wireless services altogether; and requirements that local governments act on permit applications within a reasonable period of time and to deny applications only in writing and only when supported by substantial evidence contained in a written record. Federal law also prohibits local governments from taking into consideration the environmental effects of radio frequency emissions. Moratoriums on approval of wireless service facilities are also prohibited.

In addition to federal law and regulations, the Code of Virginia also limits the extent to which localities are able to regulate wireless facilities through their zoning ordinances. Current state law limits those circumstances under which a locality may disapprove a proposed location or installation for "small cell facilities" and restricts the regulatory options for certain other wireless facilities and wireless support structures. Federal and state regulations that restrict the locality's ability to regulate commercial wireless telecommunications structures and facilities are ever-changing. It is critical that the county stay abreast of federal regulations and update our local regulations to maintain compliance, as needed, and to update this Comprehensive Plan in a timely fashion to reflect changes in the applicable regulatory scheme.

The following principles are intended to guide the county, the public, and wireless service providers in addressing reasonable and feasible siting and design options as an alternative to otherwise highly visible personal wireless facilities. No wireless communication facilities (other than "administrative review eligible projects" facilities as prescribed by Code of Virginia § 15.2-2316-4:1 or those that are 80-feet or shorter above ground level and serve broadband internet based services or Rappahannock County public safety service) should be permitted in Rappahannock County except by way of a Special Exception permit issued by the Board of Supervisors after consideration and recommendation from the Planning Commission. When reviewing such applications, the Commission and Board of Supervisors should apply the following goals and policies to each application consistent with applicable federal and state law and regulations:

- All applications should include a section detailing what consideration the applicant gave to other alternatives, including alternative sites and why and how the specific site proposed in the application was selected. If appropriate, the county should employ outside consulting and review services with expertise in telecommunications to assist in evaluating whether more desirable alternatives are viable in specific situations and to ensure all facilities are properly designed and constructed for safety.

- Co-locate wireless communications facilities whenever feasible, provided that such co-location has no or only a negligible adverse visual impact by placing new antennas on existing telecommunications towers. Utilizing existing towers reduces the need for additional new towers, minimizing new visual, aesthetic, and public safety effects upon the natural environment created by the construction of new towers. Local regulations should assure new co-locations do not diminish the low impact nature of concealed towers, or make non-concealed towers more obtrusive than they already are.

- The county has seen few, if any, proposals to locate antennas on buildings. The low height of most buildings in the county diminish opportunities for this approach. However, in cases where an opportunity might exist — in a church steeple, as part of an existing barn or silo, or even on taller buildings — due consideration should be given to placement of antennas in such locations.

- Concealed facilities are those intended to blend unobtrusively with the surrounding landscape and are mandated in locations adjacent to or visible from Scenic Byways designated as such by the Virginia Department of Transportation (See Map No. 15), on or near ridges or crests, and on or visible from historic resources currently designated (or which may hereafter be designated) as such by the Virginia Department of Historic Resources (See Map No. 16). The key to a concealed facility strategy is to ensure that the specific design of each facility is appropriate for its immediate surroundings consistent with the following principles:

- a. Obscure or blend the views of proposed wireless communications facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible so that the facility is more or less invisible or disguised as something other than a wireless tower.

- b. Design, site, and/or landscape to eliminate impacts on the character of the area to the maximum extent possible. Proposed wireless communications facilities should be located near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting and backdrop for the proposed structure so that when viewed in context, perspective views, relative topography, and other factors eliminate or mitigate the visual presence and prominence of the facilities.

- c. Disguise and camouflage so as to be of a bulk, mass, and height typical of and similar to the feature selected. Taking into consideration the mass, scale, location, and detailed design treatment of proposed facilities to assure the design blends harmoniously with its surroundings.

d. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements camouflaged facilities and supports their design, location, and appearance. In the county's significant wooded areas, an appropriate design might be a tree pole. Silo towers would be appropriate for many rural landscapes provided they are designed with a scale, mass, and detail consistent with working silos found in the county.

- Non-concealed wireless facilities should be allowed only as a last-resort in those areas that are not adjacent to or visible from Scenic Byways or within proximity to Virginia Department of Historic Resources designated historic resources, and only after a showing by the applicant that more desirable "concealed facility" approaches are not technically feasible or impossible. Unless such a showing is made, proposed wireless telecommunications facilities should be designed so as to disguise or camouflage their appearance by simulating man-made structures and natural features (such as flagpoles, silos, and trees) that are typically found in the surrounding areas and blend with the setting.

- Applicants should be required to demonstrate that any proposed site for new wireless communications facilities will ensure the protection of, and provides the least visual impact on, adjacent residential areas, the Shenandoah National Park, roads designated by the Virginia Department of Transportation as Scenic Byways, historically or sensitive scenic viewsheds, and other cultural resources. The views of and vistas from these locations should not be impaired or diminished by the placement of wireless communications facilities, and the feasibility of alternate less intrusive sites should be considered. In determining whether or not to approve or deny an application, the Commission and Board of Supervisors should analyze the potential impacts from other vantage points in the area to determine if the proposed site provides the best opportunity to minimize its visual impact on the area near the proposed site.

- Applicants should be required to demonstrate that the overall height of new wireless communications facilities is no greater than necessary to allow for future co-location on the facility based on its service area requirements, while ensuring that visibility principles in this section are followed. When new wireless support structures, co-locations and/or technologies are necessary to meet the service area requirements, ensure that the height and mass of any appropriate co-location on the wireless communications facility is compatible with the surrounding area and mitigates the visual impact of the facility on the surrounding area to the greatest extent practicable.

- Design, site, and/or landscape of ground facilities around proposed wireless communications facilities should minimize impacts on the character of the neighborhood and surrounding properties. Applicants should be required to demonstrate the appropriateness of the design

through facility schematics and plans that detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas. To ensure protection of vegetative screening, applications should include tree conservation plans by a certified arborist, and/or obtain tree preservation easements from surrounding properties.

- Proposed wireless communications facilities should avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, and resource protection overlay areas.
- All applications should include a decommissioning plan to remove the facilities if and when they reach the end of their useful life, are discontinued in use for a period of one year or more, or otherwise become obsolete. The decommissioning of the facilities should be guaranteed by certified funds, cash escrow, bond, letter of credit, or parent guarantee, in an amount based on an estimate of a professional engineer licensed in the Commonwealth. Since the useful life of these facilities could be 25 to 35 years, the county should condition approval on agreement of the applicant that the amount of such guarantee shall be recomputed every five years to ensure that it is sufficient. The required guarantee should contain an inflation clause.