AT A REGULAR MEETING OF THE JOINT MEETING OF THE RAPPAHANNOCK COUNTY BROADBAND COMMITTEE AND THE RAPPAHANNOCK COUNTY BROADBAND AUTHORITY HELD ON MONDAY, FEBRUARY 15, AT 5:30 P.M. AT THE RAPPAHANNOCK COUNTY COURTHOUSE, 250 GAY STREET, WASHINGTON, VIRGINIA.

CALL TO ORDER

Ms. Donehey called the meeting to order at 5:30 P.M.

Authority Board Members present: Debbie P. Donehey; Christine Smith; Ronald L. Frazier; I. Christopher Parrish; and Keir A. Whitson.

Broadband Committee Members present: Debbie Donehey, Board of Supervisors Representative to the Committee; Margaret Bond; Bill Dan; Edward Goshorn; Todd Summers; and Alan Zuschlag.

Others present: Garrey W. Curry, Jr., County Administrator.

PLEDGE OF ALLEGIANCE

Ms. Donehey led attendees in the Pledge of Allegiance.

MOMENT OF SILENCE

Ms. Donehey requested that attendees observe a moment of silence

ADOPTION OF AGENDA

Ms. Donehey moved to modify the Agenda to allow for a period of public comment. Mr. Parrish seconded the motion. In the ensuing discussion, Mr. Frazier queried the propriety of having the Broadband Authority conduct business set out in the Agenda, as he was unsure whether the Authority was an organization yet, preferring to denominate it a "fledgling" organization and not ready to conduct official business. Following discussion by Mr. Frazier and Ms. Smith concerned whether the Agenda was properly prepared as it was not posted on the County's website BoardDocs until Saturday, February 13^{th.} Ms. Smith said members had insufficient time to study the by-laws, which were posted at the same time, to be ready to vote on them.

Ms. Donehey explained the intent of the meeting was to review the by-laws for the Authority and elect officers, as well as hear the Broadband Committee's final report. Mr. Whitson suggested the Authority members could amend the Agenda to (1) appoint an acting chair; (2) consider the Authority Board by-laws; and (3) add a section for public comment and then hear from the Broadband committee that would move us forward from a logical place. After further discussion of this suggestion, the original motion was withdrawn. Ms. Smith moved to (1) leave Adoption of the Agenda; (2) Add Naming of an acting chair; (3) dd: Public comment period. Mr. Parrish seconded the motion. After further discussion about disposition of the proposed By-Laws and public comment, Ms. Smith added to her motion (4) Add Agenda item E.3. By-Laws to be considered for discussion and information purposes only, and (5) Add E.4. to allow for another public comment period before adjournment. Mr. Parrish seconded this augmented motion. The motion to amend the Agenda carried.

Aye: Donehey, Smith, Frazier, Parrish, Whitson

Nay: Abstain:

ELECTION OF ACTING CHAIR

Mr. Parrish nominated Ms. Donehey as Acting Chair. Mr. Whitson seconded the motion. Ms. Smith cautioned the Board to be careful not to make the Authority Board and go off track and make this Board of Supervisors meeting. Mr. Curry read a statement the following statement that was included on the public posting of the Joint Broadband Authority and Broadband Committee Meeting:

"While members of the Board of Supervisors will be present serving their roles as members of the Broadband Authority, the meeting is not a Board of Supervisors meeting, and as such, information, discussion, and action will be limited to matters pertinent to the scope of the Broadband Authority."

The motion to elect Ms. Donehey Acting Chair carried.

Aye: Donehey, Smith, Frazier, Parrish, Whitson

Nay: Abstain:

1ST PUBLIC COMMENT PERIOD

Bill Dant, Stonewall-Hawthorne District first clarified that he was offering his comments not as a Broadband Committee member, but as a County resident. Mr. Dant said he was pleased to see the Board of Supervisors had responded to the Committee's recommendation to stand up a Rappahannock County Broadband Authority. He was concerned, however, that the current Broadband Authority looked just like the Board of Supervisors, with no other citizen representatives that could add particularized expertise to the Authority Board's deliberations. He urged the Authority Board to incorporate County citizens with technology or engineering backgrounds to advise it, knowledgeably in its business.

Demaris Miller, Hampton District, said she was a long-time resident of Rappahannock county, having lived in three homes with 5 different broadband systems in the County. She informed the Board she found all of these ISPs – Virginia Broadband, Comcast, and Piedmont Broadband – adequate for her needs. She said the County didn't need to spend money installing broadband. According to Ms. Miller, service would expand on its own if the government removed impediments to broadband. She also expressed her firm opinion that the County should not hundreds of thousands of dollars to hire experts to study broadband needs and alternative technologies in the County.

Kirby Thornton, Stonewall-Hawthorne District, thought that the goal of 25/3 Mbps internet speed was already too slow and should be raised higher. 5 to 10 Mbps speed is adequate for most purposes of county residents. If Virtual Private Network (VPN) serviceⁱ is needed.¹ Satellite internet does not work well, other systems do far better. Mr. Thorton was also against hiring a consultant because consultants tell you what you want to hear not what you need to know.

Terry Dixon, Stonewall-Hawthorne District was also opposed to spending money to hire a consultant. He said he heard there was a potential the County was considering hiring a broadband consultant for 150,000. This would mean one cent on our property taxes. He told the Authority to be careful because consultants "tell you what we already know." Also, if you divided the cost of hiring a consultant (\$150,000) by the cost of an average internet install (\$400) gives you could get 375 installs, which is almost half the number of students using internet in the County. Mr. Dixon said long-term fiber would be the best to get broadband to every household. REC runs a wire to every house. The Authority to do was put pressure on our state representative to put on the General Assembly to pressure on REC to string fiber to the homes in the County or to make broadband a utility. Short term solution: put out an RFP to any provider to bring internet to the County and see what's out there. He thought the Authority could find grant money to help pay for broadband development.

Robert Blair, Stonewall-Hawthorne District, said the County should take advantage of local IT and telecom resources and get local government out of their way as a solution to bringing broadband service to the County. He recommended pulling in more local resources to pay for it. He also believed the government should remove impediments to broadband development in the County. He indicated he wanted to be a part of finding the broadband solution as he was currently relying on a tenuous service by T-mobile.

Mark Anderson, Piedmont District, noted two good news stories which came out last week involving two counties similar to Rappahannock which are making progress toward affordable, universal broadband. (1) Wise County, in Southwest Virginia coal country, signed on as an early "beta tester" for Starlink satellite broadband and obtained 45 installation kits for low-income

¹ VPN is a private network that encrypts and transmits data travelling from one place to another on the internet.

families with school aged children. Jack Kennedy, Clerk of the Court, was the "spark plug" for this project and other economic development activities in that county. (2) Richmond County, in the Northern Neck, joined with three other counties and the Electric Cooperative there to greatly increase broadband delivery there, particularly focusing on reaching school-age children.

Daniel Coffey, Piedmont District, expressed his opinion also opposing the County spend any money on providing a public utility to residents. He said he thought bringing broadband service to the County was up to the ISPs to do.

RAPPAHANNOCK COUNTY BROADBAND COMMITTEE REPORT

Margaret Bond, Broadband Committee Member, introduced herself the other Committee members, all of whom were present: Bill Dant, Todd Summers, Ted Goshorn, and Alan Zuschlag.

Ms. Bond reminded the Authority that the Broadband Committee was originally stood up by the Board of Supervisors in 2016 to advise the BOS on broadband issues in the County. In conjunction with the Virginia Center for Innovative Technology, the Committee conducted a County-wide survey of broadband needs, with results published in a report to the BOS². Based on this Report and its subsequent work over the past four years, the Committee offered five recommendations for its consideration: (1) upgrade the current broadband Mission Statement³ for adequate broadband to 100 Mbps mirrored speeds, and ensure broadband service to all County residents was affordable, (2) manage County residents' expectations with realistic near- and long-term broadband development goals. (3) continue self-education on rapidly-developing new technologies, including inviting ISP and other experts to speak at Authority meetings, (4) publish a request for proposals for a comprehensive engineered design plan, as a precursor to developing comprehensive, phased County broadband plan, (5) consider Authority staffing to include a full or part-time grant writer and broadband project manager.

Ms. Bond advised the Authority Board and members of the public that key Broadband Committee documents were posted on the Rappahannock County Government's website under BoardDocs. She suggested the Authority Board establish a Broadband Library on BoardDocs so ongoing broadband information could be posted and help the Board and community stay abreast of ongoing developments in broadband technology and deployment.

Bill Dant, Broadband Committee Member, spoke to the Authority Board about the Committees' findings on broadband costs. Mr. Dant reminded the Board members that internet service providers have many stripes. A comprehensive broadband network is typically a combination of both wired and wireless broadband technologies. Wired broadband relies on relaying wireless signals converted to radio signals from a remote broadband connection (e.g. a fiber optic line) to the end user. A network relying on fiber signals would be routed via fiber optic line, usually hung on utility poles which could be rented for around \$12 per year. The most important feature of either broadband system is that it is affordable to the end user.

According to Mr. Dant, the Starlink system which utilizes signals transmitted by low earth orbit satellites may not realistically be affordable for everyone in Rapp County. At present Starlink is advertising subscription rates of \$99 per month with a \$499 set up fee. Mr. Dant also told the Authority Board that the Broadband Committee had interviewed the most active ISPs in the county and in the region and found they were not interested in expanding their coverage into Rappahannock County or partnering with the County to apply for government grants because they could not figure a business model that would offer enough return on the capital investment in infrastructure without some percentage of County funds or County "Skin in the game." Dant said the Committee concluded the County needs to make a financial commitment to support broadband development which would be reflected favorably in future grant applications. He also pointed out the County is not currently geo-mapped, but that it would need this information to assist in completing information required by most government grant applications.

Alan Zuschlag, Broadband Committee Member responded to a question by Mr. Whitson regarding Starlink broadband. Mr. Zuschlag said there are currently three beta testers for Starlink

² Interim Report from the Rappahannock County Broadband Committee to the Rappahannock County Board of Supervisors, October 2018. This document is posted on the Rappahannock County Government website BoardDocs.

³ To achieve 95% affordable digital subscriber line (DSL), fiber optic (fiber) or equivalent broadband transmission service of no less than 25 Mbps consistent download speed and 3 Mbps consistent upload speed with low latency for Rappahannock County residents, businesses, schools, government, and volunteer organizations.

in the County. The roll out for the satellite hookup is projected to be sometime in June or July 2021. Starlink is currently advertising download and upload speeds of 100-150 Mbps. Because of the much lower altitude for the Starlink satellites, latency was not a factor. Costs for this service are high now (See report by Bill Dant above) but Starlink claims these const will go down as more subscribers sign up. Starlink could be a "game changer" for the County. The question for the County to consider if it supports this broadband system is whether it can subsidize those households that cannot afford Starlink subscriber and hook up costs. Mr. Zuschlag, (who is also a Realtor with Washington Fine Properties), told Authority Board that real estate and land values in general in the County are directly affected by availability of high speed broadband. With the pandemic lockdown, more people want to work untethered from their office location and are demanding any property they consider for purchase support telework requirements.

Q&A PERIOD

Ms. Smith asked if anyone had any details about Shentel's \$700,000 award from the Rural Opportunity Development Fund (RDOF) auction. Mr. Goshorn spoke about his experience with getting hooked up with Starlink which, for him involved putting the antenna on an 80-foot pole. He was skeptical that Starlink would be an economic solution. He said Shentel's proposal for broadband business in Rappahannock County was complicated. Mr. Goshorn believed the two most likely broadband technologies for the County would be either satellite (Starlink) or fiber optic wire. Mr. Goshorn said 100 Mbps would be the only minimum speed that would make it. Starlink does need download sites which need to be fiber. REC could provide the download sites with its fiber network.

Mr. Frazier asked about requirements for Starlink dishes to have a northern orientation. Mr. Goshorn explained that the Starlink satellite required a 15-degree clear shot to the horizon to keep its orientation to orbiting satellite cells.

Mr. Curry showed a map of the County with all of the RDOF winners and the areas they are projected to cover. This map was provided with meeting materials. All colors are based on FCC census block measurements for broadband coverage. However, the map colors only showed where these ISPs received RDOF grant money for broadband. ISPs are free to extend outside these areas. The coverage areas, based on census block mapping, are very sporadic, so we don't know how Starlink is active in the area shown on the map

Todd Summers said he and Ms. Donehey had talked with Shentel. Shentel principals did not provide very many specifics of the coverage they anticipated for Rappahannock County because of the RDOF quiet period. They did say, generally, that they had air space over Rappahannock County. Additionally, Shentel said two things: They would like the word "wooden" to be removed from ordinances allowing for 80-foot poles and they would like to put microwave relays on poles for backhaul. Mr. Curry explained that the Broadband Authority would have conversation to how to expand and facilitate ISP plans, with the help of, perhaps, a new committee.

Ms Bond said the Broadband Committee found that no one in the County had a precise understanding where all the different ISPs are is operating and the extent of the area they planned to cover for broadband service. Hence, the Broadband Authority would benefit from a good comprehensive engineered study to learn where everyone is and is operating and where they are projected to do so in the future.

Todd Summers said part of the broadband solution is to address all telecommunication issues as well, including telephone service. For example, Verison is telling people they will no longer put in copper wires or reactivate phone service that has become dormant. We are struggling to provide reliable phone service to people. We need to address these concerns along with broadband plans

Mr. Frazier asked if it is no longer possible to get hooked up via phone (copper lines). Mr. Summers told them he knew people who tried to get old copper wire service reactivated but Verizon would not do so.

Mr. Frazier recommended someone find out business plans of adjoining counties. He suggested the Broadband Authority members or a committee they could appoint, take on this task, with each member researching one county. Mr. Frazier cautioned that business plans may be

skewed by infusion of millions of dollars of CARES Act money. Curry – Broadband Authority can set up committee however it thinks it could help BA

Ms. Smith asked if there will be a second round of RDOF funding. Mr. Curry suggested that there is still a lot of RDOF money not spent on this first round of grant awards. There may be another RDOF II program with this unused money. Todd Summers said that, additionally, the FCC may change the rules for determining which areas of the country are un- or underserved and use a system not based on census block counts.⁴ He pointed out that, if you looked at the RDOF map, it looks as if Rappahannock is beaming with broadband. This image is misleading because, under FCC broadband mapping rules, if one person in census has broadband, the whole census block is counted.

Mr. Curry reiterated that this picture is inaccurate and that we still not know where, comprehensively, broadband exists in county. If someone came here and asked us where we do and do not have coverage, we would not know for sure. We have T-mobile in Sperryville with 4G service and Verizon is here. As we go forward, the big problem will not be installation costs, but carrying costs. The big multinational players will probably squeeze out the little providers.

Mr. Whitson asked what is going to happen to the Broadband Committee. Mr. Curry said that will be a matter for the Board of Supervisors. The Broadband Authority cam create new committees to help it do its business.

Ms. Smith thanked the Broadband Committee for its work. She asked about if the Broadband Committee had engaged with Rappahannock County Schools in its work. Bill Dant said that early in the Committee's work, different Committee members took on investigating broadband issues in specific sectors of County, such as health, business, and education and the schools. He said the Committee met with Dr. Robin Bolt, among others, about the needs and other broadband issues the County schools were experiencing and brought back their findings to Broadband Committee⁵. Ms. Smith and Ms. Donehey said they wanted to continue working with Rappahannock Schools, and that Dr. Bolt had said she wanted to continue to work on improving broadband services to Rappahannock kids.

Ms. Smith asked if the Broadband Committee had contacted or spoken to Kevin Feinman. Mr. Curry said the Committee had both spoken to and met in person with Mr. Feinman. He had good input and helpful to the Broadband Committee in explaining the Virginia Technology Initiative (VATI) grant process.

Mr. Curry explained that the big problem for the Broadband Authority is how to subsidize broadband service for residences that cannot afford current subscriber prices. All of these factors are critical for developing a viable and sustainable broadband case for the County. Mr. Curry reminded the Authority Board of what All Points CEO Jimmie Carr had told the Broadband Committee about the two laws governing broadband deployment: The Laws of Physics and the Laws of Finance. The Laws of Physics constrain what kinds of technology is deployed in the County, and the Laws of Finance determine if internet service can be supplied to everyone at affordable prices. Mr. Curry concluded, if it were easy and profitable for ISPs to reach every potential subscriber in the County, we would have it today. It is not. The Broadband Authority will have to work through figure out how to bridge gaps between Laws of Physics and Finance. The BA may also have to ask BOS for money to bridge these gaps if it came to an agreement with an ISP.

BY-LAWS

⁴ Subsequent to this comment, FCC Chair Jessica Rosenworcel announced formation of an FCC Data Task Force that will undertake a new and much more accurate survey of rural areas in the country to determine which areas still lack adequate broadband coverage.

⁵ This information is posted in BoardDocs under Early History - RAPPAHANNOCK COUNTY BROADBAND ADVISORY COMMITTEE, Interview with Rappahannock County Public Schools ,April 2017.

Mr. Curry introduced <u>Articles 1 and 2 Offices and Authority Board of Directors</u> of the By-Laws (4th Draft), based on the provisions of the Articles of Incorporation which the Board of Supervisors approved on December 7, 2020.

- Article 3, General Powers and Meetings Acting Chair Donehey designated the third Monday at 5:30 p.m. as the regular meeting day/time for the Rappahannock County Authority Board. Members agreed and discussed allowing for electronic participation by Authority Board members as well as allowing citizen participation via Zoom meeting set up. Ms. Donehey pointed out the proffered by-laws included a provision for electronic participation as currently allowed by Board of Supervisors policy. Ms. Smith commented on the By-Law provision for removing Authority Board members if a member missed three consecutive Board meetings or five meetings in a calendar year. Ms. Smith recommended these absences be changed to two and three respectively.
- <u>Article 4, Officers</u> A consensus of Authority Board members was that the By-Laws specifically enumerate addition of a FOIA officer, but that this officer need not be a member of the Authority Board.
- <u>Article 5, Committees</u> The Authority Board consensus was that the Board, not exclusively the Chair, define committee assignments upon their formation and appoint committee members.
- Article 7, Consensus of the Authority Board was that the Board of Supervisors would not audit its books and records, but such functions would be conducted by an independent auditor.

County Administrator Curry said he would edit the Version 5 of the By-Laws which the Authority Board members were reviewing with the changes noted and circulate them for review and comment before their consideration for approval at the next Authority Board meeting.

2ND PUBLIC COMMENT PERIOD

Kirby Thornton, Stonewall-Hawthorne District – Mr. Thornton referred to himself as an IT "Geek". He encouraged attention to distinction between "megabytes" and "megabits." Megabits is used when referring to data transfer rates of computer networks. Eight megabits is equal to one megabyte, e.g. to achieve transfer rate of one megabyte per second one needs a network connection with a transfer rate of eight megabits per second. Throughput is in "bits" vs. "bytes". He also said the Authority needs to develop a working definition of "Affordable" as used in the previous discussions of broadband subscriptions and hookups, even if can't satisfies everybody's needs. Mr. Thornton expressed an interest in supporting the development of broadband in the County and strongly suggested the Authority Board advertise its committees and openings on them for the entire County to participate. He also said the County's BoardDocs postings were painful to access.

Mark Anderson, Piedmont District – Mr. Anderson recommended the Authority Board look at the following counties for innovative and creative implementation of broadband coverage:

- <u>Botetourt County</u> –A rural county with good broadband coverage thanks to getting in early on grants and have an innovative ISP nearby.
- <u>Nelson County</u> A rural county that created its own internet service provider with Obama era grants, which it eventually sold to Central Virginia Electric Cooperative's subsidiary ISP, Firefly. Firefly is doing what we thought REC was going to do.
- <u>Page County</u> A county bordering on Rappahannock where Shentel is already pulling cable. Mr. Anderson speculated that it would make a likely candidate to expand into Rapp County.
- <u>Louisa County</u> Partially served by Central Virginia Electric Cooperative and Rappahannock Electric Cooperative. The areas served by Firefly are doing well with broadband coverage. CVEC is expanding services of its subsidiary, Firefly, to Orange County as well as <u>Fluvanna County</u>.
- Orange County -- With a large unserved area, Orange is installing its own fiber optic cable using county equipment and funds and going through a lot of struggles.

Mike Mosco, Jr. – Chairman of Madison County Planning Commission – Thanked Rappahannock County for inviting him to attend this meeting. Mr. Mosco said Madison County was working on establishing a broadband authority and found the information and commentary of this meeting was very helpful and would pass it along to their Broadband Taskforce.

Robert Blair – Stonewall-Hawthorne District, has worked a bit with SpaceX. He cautioned the Broadband Authority to be wary of claims SpaceX has made about broadband. Would be a mistake for County to hang its hopes on Starlink. Cautioned about talking exclusively to only one ISP. EM based business model on complete coverage of whole United States – not Rappahannock county specifically. This model doesn't include subsidizing County coverage, but it is, rather, subsidizing his Starlink program. Based on geography, Rapphannock County has had a ratio of about 3-1 new local broadband subscriber rate to fixed line subscriber rate over the past five years. Starlink will make this proportion more dynamic. Mr. Blair suggested the Broadband Authority get information to work with more frequently than every third Monday.

Ms. Smith - Some of BoardDocs links were not working correctly, but were fixed on Saturday. Mr. Curry said the agenda was made available to the public at the same time it was made available to the Broadband Authority. The date/time/place of the meeting Was properly noticed to the public.

Mr. Parrish – said he didn't want the Broadband Authority to invest time and money and have another technology, like Starlink, and undermine the previous work. Mr. Parrish believed GEO-mapping is an invasion of privacy. A lot of people in county value their privacy. GIS mapping is expensive to set up and maintain. The Rappahannock County Commissioner of Revenue can use GIS mapping, but she is able to get around requiring it. A lot of his neighbors who have been here a long time, and don't use broadband. Mr. Parrish said they would resent having their tax rate go up to pay for someone else's broadband service. However, he acknowledged, it is clear school children need it.

ADJOURN

Margaret Bond

Mr. Parrish moved to adjourn and the motion carried. The meeting was adjourned at 6:48 p.m.

Aye: Nay: Abstair	·
Respec	tfully submitted,
/S/	