



Broadband Implementation Committee

Berryville/Clarke County Government Center, 2nd Floor

101 Chalmers Court, Berryville, Virginia 22611

Main Meeting Room

Wednesday, October 21, 2020 2:00 pm

1. Call to Order
2. Minutes:
 - August 19, 2020
3. Update from the State on the CARES Act funds
4. Rappahannock Electric Cooperative Update
5. Shentel Update
6. Clarke County Broadband Accomplishments through October 2020
7. New Business
8. Next Meeting staff recommends:
 - January 13, 2021, 2 pm, main meeting room
9. Adjournment

Broadband Implementation Committee
August 19, 2020 Regular Meeting 2:00 pm

At a regular meeting of the Broadband Implementation Committee held on Wednesday, August 19, 2020, at 2:00 pm in the Meeting Room AB, Berryville Clarke County Government Center, 101 Chalmers Court, 2nd Floor, Berryville, Virginia.

Members Present: Doug Kruhm, Bev McKay, Dr. William Houck, Doug Lawrence, Doug Kruhm

Members Absent: Buster Dunning

Staff Present: Chris Boies, Felicia Hart, Cathy Kuehner, Brandon Stidham, Brianna Taylor

Others Present: Mary Ivie

A. Call to Order

At 2:03 pm, Chair Lawrence called the meeting to order.

B. Approval of Minutes

Bev McKay, seconded by Doug Kruhm, moved to approve the December 2, 2019, minutes as presented. The motion carried by the following vote:

Buster Dunning	-	Absent
William Houck	-	Aye
Doug Kruhm	-	Aye
Doug Lawrence	-	Aye
Beverly McKay	-	Aye

July 22, 2020, minutes: Chair Lawrence corrected the spelling of “kajeet” on page 3.

Dr. William Houck, seconded by Bev McKay, moved to approve the July 22, 2020, minutes as amended. The motion carried by the following vote:

Buster Dunning	-	Absent
William Houck	-	Aye
Doug Kruhm	-	Abstain
Doug Lawrence	-	Aye
Beverly McKay	-	Aye

Doug Kruhm abstained since he was not present at the July 22, 2020, meeting.

C. Open House Discussion

Chair Lawrence highlights:

- Broadband Forum to take the information we have and present to the Clarke County citizens and give them the option to explain the information they have. Have companies and cooperatives present to explain options and what plans are for the future.
- Would be used as a way to spread the word to the entire community.

Bev McKay stated that this is a good idea, but at this time, during the pandemic, it may be hard to find a good location for a more massive anticipated crowd.

Dr. William Houck agreed with Bev McKay that it will be challenging at this time because of the amount of space needed to accommodate people.

Chair Lawrence expressed that there was an idea to record the presentation so it could be played back, knowing that the issue with playing it back is that you need internet access. Bev McKay stated that recording the presentation is a good idea, but the whole issue is that the target audience, people who need internet, will not be able to access the recording because they need internet to do so. Chair Lawrence added that if it was recorded, staff could make it available to the public at specific locations throughout the County.

Brandon Stidham explained that potentially news releases could be done, to highlight key items for the public. Bev McKay stated that it could also be put on the government website as an article because it is easier to download documents.

D. Study Update

Chris Boies highlights:

- One idea was to use CARES Act funding to update the existing Broadband Study that was done in 2014.
- After discussion with the consultant, it was recommended not to spend any funds to update the study because has not been enough technology changes within the County.
- The consultant suggested to reach out to Shentel to see what infrastructure that they have in place that could quickly be mobilized to provide hotspots to serve students that need to have internet for their classes and citizens who are teleworking.

- Had a conference call with Shentel, and it does not seem like they are geared to complete that quickly.
- Shentel does have long-term plans, but those will not help us within the next two months.
- Conference call with Segra, previously Lumos, they do not have any quick options because they do not have fiber throughout the County where we would like to set up hotspots, but they would be interested in long-term plans.
- Long-term for these companies seems to be the next 12-18 months for infrastructure improvements.
- Emphasized that the long-term improvements would first be done to the efficient areas which would leave the outlying areas, which are the most needed, last. This will be because it is based on economics.
- Indicated that companies seem to want to move fast, adding that if one company starts the others will want to come into the County and begin working also.
- There are potential State funds that could help the installation of the infrastructure.
- Shentel expressed that they were not ready for a VATI grant this summer, but next year would like to discuss the option of applying for the grant.

E. Virginia Telecommunications Initiative (VATI) Update

Chris Boies highlights:

- Hoped that Comcast would serve the area of Wildcat Hollow area (Carefree Acres), but their survey showed that there was not enough houses in the area to make it a valuable project.
- That project will not get submitted as a VATI grant application this year. Adding that a letter of intent was submitted in case Comcast did say they could complete the project but that was before the survey.
- To get the VATI grant you have to have a private provider.
- Staff will continue to have conversations with providers, no solutions thus far for the immediate need to provide broadband for school students.
- Planning and Zoning Department has plotted out the map of houses in need of internet based on the school survey.
- The map has been sent to providers to see if they can help in any way, adding without the infrastructure in place it is harder to put something up quickly.

Bev McKay asked if the Calmes Neck area could be looked at as a potential project. Brandon Stidham explained that the density in that area is probably similar, and there would be a longer distance to get Comcast there. Brandon Stidham added

that Comcast is partially in Clarke County in the Shenandoah Farms, so Comcast would have a shorter distance to the Wildcat Hollow area - Carefree Acres.

Chair Lawrence asked if the map followed that same known pattern throughout the County. Brandon Stidham responded that the school map is only based on the school survey. Adding that it was scattered throughout the County with clusters in the same areas that responded to the Center for Innovative Technology's RUOnline Survey from four or five years ago. Emphasizing that there was a significant amount of responses for the Russel district and areas on the mountain around the Frogtown area.

Brandon Stidham stated that there was a surprising amount of response from the school survey who did not have internet that were in Town where Comcast is available; the reasoning for this could be that those people do not know what the technology is or cost issues.

Chair Lawrence question and Brandon Stidham responded that if WISPs were installed; it would depend on the customers and being able to get the line of sight to the tower. Brandon Stidham expressed that there are towers on Mount Weather and Blue Mountain, but the problem is that the houses on the ridge cannot get the line of sight so they cannot get service.

F. NOVEC Update

Chair Lawrence highlights:

- Northern Virginia Electric Cooperative put out a press release where they are doing fiber to the home.
- Promising that they may be interested in doing fiber to the home.
- Long-term goal to have all of the electric cooperatives run fiber to the home.
- The whole Country and the world are having the same issues with broadband, so it is good to look at what everyone else is doing.

Brandon Stidham stated that many years ago he saw a map for the area of coverage from NOVEC, it is small in Clarke and mostly along the ridgeline on the VA 7 area.

Chair Lawrence expressed that for future meetings he would like to come up with a format so each member can look at different types of broadband, do research, and report back to the committee. Adding that he plans to reach out to the different cooperatives to see what long-term options would be available.

Chair Lawrence stated that Fauquier County has done major subsidies that he would like to get more information on. Brandon Stidham expressed that Fauquier County was tempting to create a partnership with internet service providers. Adding that a few years ago, they partnered with a company that was going to run fiber to the home, had a contract and proposed map, but before the work was started, the company went out of business. They have entered a new contract with Datastream, which does fixed wireless internet - explained that it seem that instead of the point-to-point wireless where you have to have line of sight to the tower, it operates more like a cellular service with a radius of service around the tower. Looks like Fauquier County has spent money on towers and providing access to place equipment on the towers; to some extent, they seem to be subsidizing the cost because there is a special rate for Fauquier residents. Believe that Datastream is a National company that is based in Florida. Contacted Datastream and they seem to be disorganized and their primary page is a FaceBook page which stated there have been equipment issues, and they have been offline. Personally feel like Datastream is struggling and emphasize that if Clarke County partners with a private sector company, we need to make sure that it will be able to provide.

Chair Lawrence stated that they have 2.2 million that they are funding from their budget. Chris Boies explained that their real estate tax rate is 99¢ compared to our real estate tax rate of 61.5¢

Bev McKay asked Brandon Stidham a question in regards to the outfit that was supposed to provide fiber from the east coast to Ohio. Brandon Stidham expressed that he has not heard any information for that since it was presented. Chair Lawrence stated with curiosity if this was the same outfit that released a map of broadband connected to the houses of the United States houses, adding that in West Virginia there were eight (8) Counties that were connected. Bev McKay explained that the connected eight (8) Counties in West Virginia is because of Hardy Telephone, that area has been connected to DSL in the mid-1980s, when DSL became less serviceable they replaced it with fiber.

Chair Lawrence asked for the science behind a cell tower if the capacity can become limited due to not enough equipment and limited bandwidth. Brandon Stidham expressed that there is a finite capacity to provide internet service from the cell tower. Added that Mark Bayliss, Visual Link, explained this in the past that there is a number of different providers using a single cell tower, they are limited by a number of things; what point on the tower they can be at, how many strands of fiber they can purchase to provide their service, and the cell tower owners install the equipment to regulate and make sure that every provider for that single tower gets what they paid for at peak periods. For example, during peak periods, you may see a drastic difference in the speed compared to normal times with a cellular based service. Further explaining that when the pandemic began there was a

drastic change in the Visual Link service provided, personally believe that providers will ramp back certain types of internet connections to benefit the entire stream. Described that some of the WISPs are more in tune than others, know that there are a maximum amount of numbers that can be served from the tower while still be 100% certain that the data speeds will be available. On the other hand others will just put as many numbers as they can with no guarantee of the coverage.

Chair Lawrence asked if it is known what will happen when all of the schools begin with all of the students using data for their studies. Chris Boies stated that there is a meeting scheduled with the School for tomorrow to figure out all of the details.

Bev McKay stated that even with decent internet, if a family has multiple children whom all have to be on the internet simultaneously, there may still be issues. Chair Lawrence and Brandon Stidham expressed that if fiber is being used there will be no issues with have multiple members on at the same time. Brandon Stidham further explained that a WISP service might also be able to provide enough for those families.

Dr. William Houck asked if all of the information on broadband could be summarized to the committee by what has been done over the years. The best scenario would be to get one company in the County and provide for the County as a whole. Chair Lawrence hopes that our local electric cooperative that serves most of the County, Rappahannock Electric Cooperative; who has started running fiber from each of their switching stations will apply for a grant through FCC to get funding to provide fiber to the homes by using the fiber from the switching stations and companies to get fiber to the homes - adding that in the long run believe that fiber to the home is that best solution.

Chair Lawrence stated that in the future we would need to examine the rates to provide the fiber and the service to the homes.

Dr. William Houck asked if VACo (Virginia Association of Counties) is addressing these issues Statewide. Bev McKay confirmed that it is being addressed adding that it is an issue throughout the Commonwealth, believe that with the electric cooperatives should provide the electric poles to run the fiber to the homes. Chair Lawrence expressed that his discussions with the electric cooperatives he believes that the electric poles may be available in the future. Chair Lawrence added that after more research and discussion with this committee would like to contemplate if the County should write a letter to Rappahannock Electric Cooperative asking them to pursue using the electric poles.

Dr. William Houck asked, and Chair Lawrence confirmed that other Counties are looking at running fiber to the home, should examine what is working in other localities to move Clarke forward.

G. Clarke Connect Update

Felicia Hart highlights:

- Provided a handout of all of the website pages with marked up changes.
- Made information current.
- New information will be included.
- Will work with additional providers to see if they are interested in being included in the site.

Brandon Stidham highlights of Clarke Connect site:

- For a new resident in the County, this site explains the general standards, explains the two components of broadband; speed and data.
- With the “What speed and capacity is needed for the household” page, it explains the idea speed needed for resident usage.
- Page explains the difference between wired and wireless internet. Further explains the multiple types of wireless internet; WISPs, satellite, and cellular.
- There is a page that links to the different providers of the County, this page is the most popular page.

Chair Lawrence asked and Brandon Stidham confirmed that you can analyze which page is used most often and the usage of the site at different times.

Chair Lawrence stated that if residents studied this site it would be useful for a Broadband Forum. The site is a great resource, we need to get this throughout the community.

Bev McKay expressed that a Broadband Forum is a great idea but not at this time, adding that if a postcard or email was sent home through the School to reach those families. Brandon Stidham confirmed that the School has sent out documents for Clarke Connect in the past.

Doug Kruhm opined that the County should advertise in as many different ways as possible to keep people advised on where we are, where we are going, and how long it will take. Suggest that the County look at prioritizing the resources that are available, who will get those resources, and when they will get those resources. Personally feel like we are entering a time of appeal and conflict because we have

having to prioritize how we get the resources to the people who need them when they need them. During the day the school system needs the resources during the virtual learning times, need to figure out how to get that resource to those students when they need it. May need to ask the rest of community to step back when the public service first responders and school system needs the resources. Opined that we need to do a better job at educating the children, without knowing how long the pandemic will last, we cannot just sit back and say we have done the best we can for the students. We need to do everything we can for the students; for the past few years the technology has been coming, but it is still not here and will not be here for a while. we need to see what we can do now to help in the meantime.

Chair Lawrence explained that if the Broadband Forum is not acceptable at this time the next best option would be to use the Clarke Connect site. Brandon Stidham said staff could send out more social media messages to get more attraction to the site.

Bev McKay expressed that we should try to help the students who live in Berryville who do have the capability to get internet through Comcast. Chair Lawrence explained that the Department of Social Services has a program for this and is working on helping. Brandon Stidham stated that from the scholl survey map a significant number of households are in a known Comcast area that could possibly get service because they are close to where service is provided.

Doug Kruhm stated that people are taking their children out of the public school system because they cannot get internet. Need to look at if people start taking their children out of the public school system then what will happen the school system. We need to realistically explain to residents without internet that they will not get the service for a while, giving residents the option to make, the decision, it may not be the decision that we want them to make but we need to help in all ways possible to help the children.

Felicia Hart stated that the flyer for Comcast Xfinity discount was sent home with students.

Chris Boies confirmed that broadband, childcare, and what the County can do to help with the reopening of the schools would be discussed with the schools tomorrow.

By consensus, the committee determined an open house/Broadband Forum is not doable at this time.

Chair Lawrence expressed that he will do more research and present that information at the next meeting in October. Opined that he would like to bring in more aspects of broadband and see what the options are from the electric cooperatives.

Felicia Hart stated that the General Assembly is making Broadband a priority for discussion. Chair Lawrence asked if the State does have a press release if we could put that on our FaceBook pages and broadcast the information. Dr. William Houck explained that he was impressed with how much research the Government has done and Delegates knowing that it is an issue that needs to be addressed.

Felicia Hart stated that the Schools will reevaluate the learning processes in November. Chair Lawrence explained that the County and the Schools are having discussions on what can be done with WiFi and other options.

H. Next Meeting- October 21, 2020, 2 pm, main meeting room

I. Adjournment

Bev McKay, seconded by Dr. William Houck, moved to adjourn the meeting. The motion carried by the following vote:

Buster Dunning	-	Absent
William Houck	-	Aye
Doug Kruhm	-	Aye
Doug Lawrence	-	Aye
Beverly McKay	-	Aye

At 3:06 pm, Chair Lawrence adjourned the meeting.

Minutes Recorded and Transcribed by Brianna R. Taylor

CLARKE COUNTY BROADBAND ACCOMPLISHMENTS

- December 2016 -- Board of Supervisors accepted the “Telecommunications Infrastructure and Broadband Study 2020” prepared by the Atlantic Group to be used as a guidance document to improve broadband and telecommunications coverage for residents and businesses.
- February 2017 – The Board of Supervisors formed the Broadband Implementation Committee consisting of two Board members and two Planning Commissioners. The purpose of the committee is to develop projects and recommendations to help expand broadband internet availability. The committee began meeting in May 2017.
- June 2017 -- Zoning regulations for communication towers (“wireless communication facilities”) were updated and modernized to help encourage expansion of telecommunications infrastructure.
- June 2017 – The County issued a Request for Information (RFI) to telecommunications providers and infrastructure developers to gauge the industry’s level of interest in expanding broadband and telecommunications as well as ways that the county can assist with this effort.
- September 2017 – The County launched www.clarkeconnect.org – a website dedicated to provide information on broadband initiatives and provider options.
- June 2018 – The Broadband Implementation Committee convened a roundtable meeting with broadband industry representatives to explore ways that the County could assist the private sector to expand broadband availability and potentially remove regulatory barriers.
- February 2019 – New zoning regulations were adopted to allow antenna support structures up to 100-feet tall to facilitate residents' access to wireless broadband services.
- March 2019 – The County, in partnership with Comcast, was awarded a Virginia Telecommunication Initiative (VATI) grant to extend wired broadband internet to the village of White Post.
- May 2019 – The Broadband Implementation Committee met with representatives from Rappahannock Electric Cooperative (REC) to discuss their future plans to provide broadband internet service in Clarke as the Central Virginia Electric Cooperative (CVEC) is doing in central Virginia through their spinoff company, Firefly Broadband.
- July 2020 – The Board of Supervisors added a citizen member to the Broadband Implementation Committee.
- August 2020 – County Staff developed a map using survey data from Clarke County Public Schools to identify areas of the County that lack broadband access.