

Broadband Implementation Committee  
July 22, 2020                                  Regular Meeting                                  2:00 pm

At a regular meeting of the Broadband Implementation Committee held on Wednesday, July 22, 2020, at 2:00 pm in the Meeting Room AB, Berryville Clarke County Government Center, 101 Chalmers Court, 2nd Floor, Berryville, Virginia.

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

**Members Absent:** Buster Dunning, Doug Kruhm

**Staff Present:** Dr. Chuck Bishop, Clarke County Public Schools Superintendent; Chris Boies, Clarke County Administrator; Felicia Hart, Director of Economic Development and Tourism; Brandon Stidham, Director of Planning and Zoning; and Brianna Taylor, Deputy Clerk to the Board of Supervisors

**Others Present:** Robina Rich Bouffault, Keith Tubandt

**A. Introductions**

At 2:02 pm, the meeting was called to order. Committee members introduced themselves. Chris Boies explained that Felicia Hart is in attendance because broadband was shifted to fall under Economic Development, and she will be the point person for the project.

**B. Selection of Chair**

Chris Boies opened the floor for nominations of Chair for 2020.

**Bev McKay, seconded by Dr. William Houck, moved to appoint Doug Lawrence for Broadband Implementation Committee Chair for 2020. The motion carried by the following voice vote:**

- |                |   |        |
|----------------|---|--------|
| Buster Dunning | - | Absent |
| William Houck  | - | Aye    |
| Doug Kruhm     | - | Absent |
| Doug Lawrence  | - | Aye    |
| Bev McKay      | - | Aye    |

### C. School Update

Superintendent Chuck Bishop gave the following update:

- When the Broadband Implementation Committee was initially formed, Dr. Bishop had many discussions with a previous member, Robina Rich Bouffault, to help the committee by pinpointing locations of students in the school district without access to internet service.
- The first year this was discussed, there were well over 200 students without broadband internet access.
- The most recent data collected last fall, there were 199 students and 119 households that did not have access to broadband internet. We are serving different families now than when discussions of internet access first came up.
- March closure forced the schools to shift to an online model within a few weeks of the Governor's mandate; this was not very robust. There were some online, face-to-face instructional opportunities for students, mainly to complete programing responsibilities and requirements. There were also virtual conferences with guidance counselors and other school employees, but in terms of face to face instruction, that was not the case.
- Primarily students were learning and doing work that supported what the teachers had already taught, with some new material mixed in.
- Dr. Bishop, on July 22, 2020, received an estimated 200 emails that were meant for the School Board regarding the lack of reliable broadband internet in the area. Dr. Bishop passed those messages along to the School Board as he is not a voting member but wanted them to have all the information he received.
- Included in the 199 students and 119 households, those numbers include some folks with dial-up access, specifically looking at those without access to broadband.
- Brandon Stidham inquired if, in the survey, families were asked if they had access to Comcast but chose not to have it? Dr. Bishop responded that information was not explicitly requested.
- Felicia Hart inquired as to how the survey was done? Dr. Bishop responded it was an online survey with part of the online enrollment process, not a stand-alone survey, so he feels very confident of the data collected.
- Bev McKay voiced most would have to do a WISP. That service is not the most reliable because when it works, it works, but when it doesn't, it doesn't. If people know which options are closest to their homes, they would know who to call to get the best possible service.
- Johnson-Williams Middle School was made into a public hotspot location this past spring. Through the foundation and monies set aside in Dr. Lewis' name, the school was able to purchase hotspots. Still, it is essential to remember those are

- not always reliable in many locations. If there is poor cell service, then there will be poor hot spot service too.
- KAJEET are specific educational hotspots through a company that works primarily with schools and filters through Verizon.
- Buses could be configured and used as a hotspot location around the County.
- Cell Providers do not work in all areas.
- There are fewer people in the White Post area that indicated they do not have access to reliable internet; that could be because some have graduated out of the system.
- Brandon Stidham stated if Comcast is available in certain areas, it may be less monthly cost than the WISP due to installation costs and higher costs for the bandwidth needed for distance learning.
- Chris Boies though no decision has been finalized, we know there will be some learning at home, but what speeds will they need? Dr. Bishop replied that students would need to be able to live-stream, download, and upload assignments. Two models are being presented; one is a hybrid two days of in-person learning per week, and three days learning virtually (independent practice), the second is all virtual learning. In either case, there will be some downloading and then in classes virtually with teachers.
- Chris Boies requested clarification that poor or slow service would not be helpful. Dr. Bishop, yes – with the Chrome books, you can download the assignments from a hotspot location, such as Johnson-Williams Middle School, then come back and upload once complete.
- Bev McKay asked if Boyce could become an access point. Dr. Bishop - yes, also looking at that and possibly Blue Ridge Fire Company for those living on the mountain. There are some options.
- Felicia Hart inquired how the teachers know what the status of assignments for their students is. Dr. Bishop stated that children in grades six (6) – twelve (12) have a school-issued Chrome book. The school has issued more devices. Once students upload their assignments, that is how we know the work is being done.
- Some of the students did not have devices, whether it be parents didn't have multiples to dedicate to their child while also working from home or none in the home period. The next step will be addressing this issue.
- Brandon Stidham asked if the school has purchased any Chrome books that came with a cellular card. Dr. Bishop looked into those but are back-ordered through half a dozen different vendors.
- Robina Rich Bouffault asked to speak – She noted that Brandon Stidham had worked hard to create a map with the existing towers. Could the school make a comparison by pinpointing what areas of families without access and mapping that against the map of the current towers? We would have a visual of the worst service areas compared to students' needs. Dr. Bishop indicated the information

had to have been sent to County Administration. Chris Boies said we have not yet added that data to the GIS mapping but will, and noted, the data was sent to Comcast to see if they would have an interest in working with the County.

- Bev McKay maintained citizens need to be in contact with all WISP providers to see if they could be of assistance. Just because one or two say they can't help doesn't mean someone else couldn't. The number and locations of towers are always changing.
- Chair Lawrence asked if any of the teachers had any problems this past spring. Dr. Bishop detailed there were a few teachers that had issues and had to be allowed into the building to be able to assist the students.
- Chair Lawrence was hopeful we could be of some help once we figure out the next course of action. Dr. Bishop thanked the Committee and recognized this is a problem not just for the schools but for the entire community.
- Chair Lawrence suggested having an open house to show the community the work that has already been completed on this project. There could be a round table discussion on the users and how it works. Would the school be available to use one evening for something like this? Dr. Bishop agreed and stated they would help in any way possible on this issue.
- Chair Lawrence felt it was essential to explain technology in laymen's terms. Helping the community understand their obstacles and making people aware of different ideas and what else can be done for them.

Dr. Chuck Bishop left the meeting at 2:27 pm.

#### **D. Approval of Minutes**

The Approval of Minutes was tabled until the next meeting.

#### **E. Committee History & Orientation for new members**

Brandon Stidham gave the following report:

- The Planning Commission had always had a committee working on telecommunication issues.
- There was a small committee of three (3) when Brandon Stidham first started that came up with the original amendment to our zoning ordinance to let owners put up a structure to facilitate wireless internet. That committee went by the wayside a few years later.
- The need for reforming the committee was brought to our attention from an attorney inquiring if we were complying with the federal mandate for co-locating

- antennas on existing structures. Also, there were other concerns from the industry, specifically, Verizon, about the then-current tower ordinance and matters relating to that ordinance
- The Planning Commission reformed a telecommunications subcommittee to address these concerns. The first thing they did was to address the federal law changes related to co-location. Then, a few years ago, there was an overhaul done to the tower ordinance to go to a more conventional approach to allow towers up to a max of 199 feet with a special use permit. They no longer have to be located within a stand of trees.
  - When moving from the more restricted approach to a more conventional approach, there was a need for a study to identify key locations where these towers could be situated and under what circumstances those would be approved versus what circumstances those towers would not be accepted.
  - The Board of Supervisors authorized a telecommunications/broadband study. The Atlantic Group conducted that survey, and George Cadilliasias served as the telecommunication engineer.
  - The most important part of the study was the development of a map of existing towers put together by The Atlantic group, who also provided recommendations for new towers. The Study, Permitted Communication Tower Development Areas, provided a map of areas where, if a permit were put in for a new tower in or around an area recommended by The Atlantic Group, that would check off a box in the application process.
  - This study also provided many other recommendations in addition to changing the zoning ordinance. The Board of Supervisors formed this committee, Broadband Implementation Committee, which includes two members of the Board of Supervisors, and two (2) members of the Planning Commission.
  - One of the first projects this committee had was to issue the request for information from different industry providers to meet and discuss the challenges in expanding broadband in the County.
  - In 2017 a round table with wireless providers, Shentel, Verizon, and New Moss who came to talk about what the County can do to help to remove barriers to help providers better serve the County.
  - Besides networking and getting to know the appointed contact for each group, the only substantive action was the WISP wanted the flexibility to allow small-scale support structures by right; structures that leave a small footprint as opposed to a large scale tower. These structures can also be used for more connection with neighbors.
  - Since the ordinance went into effect, Brandon Stidham is aware of two (2) structures that have been built, looking for others to take advantage of that.
  - The Broadband Committee met last year with representatives from Rappahannock Electric Company (REC), which was prompted by the Central Virginia Electric Cooperative (CVEC). CVEC created a spinoff company, Firefly, to

- provide its "Fiber to the Home" program of its customers. Clarke County inquired with REC to see if there were similar plans. Last year REC had plans to update its Microwave Point-to-Point Network with a full fiber network for its internal use. REC had an interest in being Middle Mile Providers but, as of last year, were not interested in being Last Mile Providers, the one who hooks fiber up to the homes.
- In December, the Broadband Implementation Committee met with the president of VisualLink, who came to demonstrate a new project called Tower Beam. Tower Beam is a stand-alone device that can better connect to their wireless access points through just about everything except topography. During the demonstration, a device was set on the table, which was able to get a signal in the direction of the ridge without the use of external antennas. We've not heard from any current customers that use this method so far, so we can see how they work in real life.
  - Chair Lawrence inquired as to whether Firefly is a co-op? Brandon Stidham indicated the charters for the Electric Cooperative do not allow them to be direct providers of internet service because they are charged with running an electric service. They created a subsidiary to do the broadband for the home. REC staff if, in the future, they will look at that to use.
  - Bev McKay voices his opinion that the elect co-ops that own the poles make it difficult for other providers to use the pole because of the high fees associated with them.
  - Robina Rich Bouffault detailed they charge a fee to have a cable put on their poles. Shentel and Comcast have wires on the poles from Route 522 to VA Route 7. It's a question of making a profit for the WISP companies. We have a low population, so it's not worth their while to spend money on expensive fiber for so few customers.
  - Chair Lawrence read in legislation and code regarding the cost associated with the installation of wires and the transparency needed. Robina Rich Bouffault agreed they are not very transparent.

Chris Boies provided a brief update on provider communications:

- Chris Boies reached out to Shentel, Comcast, Rappahannock, and a few others.
- Rappahannock has been very responsive. From the discussion with them, they have preliminary plans to provide backbone infrastructure into the County. The County then has to decide to extend that further.
- Shentel was also very responsive. They indicated an interest in providing broadband to Clarke County as we are an "untapped resource." It is important to note that Shentel is known for working in rural areas and areas with low population density and has made a name for themselves.
- We have continued conversations with Comcast regarding a VATI grant. We submitted the letter of intent for Wildcat Hollow. Comcast has not yet gotten

back to Chris Boies as to whether they are interested in that project or not. We will follow up with them to see if they made a decision.

#### **F. Discussion of Study Update**

- Chair Lawrence asked whether Mr. Condillias is still available; Chris Boies confirmed that the study allows for him to be on call without a further procurement process. Thought that if we looked at updating to put a new end date to get a better chance at grants, Chair Lawrence feels it would be great to see what he says.
- Bev McKay pointed out the topo has not changed, but technology has. Mr. Condillias may be able to help us some without it costing more money.
- Brandon Stidham also believes this was done before the VATI program came out.
- Chris Boies getting prepared for VATI should be happening well in advance of the actual due date.
- Chair Lawrence asked if Mr. Condillias would be available to address any questions should an open house be conducted. Brandon Stidham and Chris Boies expressed confidently he would be open to that.
- Brandon Stidham stated WISP providers were not interested in doing the leg work themselves to build those neighborhood networks. If the homeowner is involved and is willing to go door to door, then the WISP providers would be agreeable to set something up.
- Brandon Stidham stated the towers were not the problem. The WISP providers spoken to in the past have said if four to six neighbors came together and all would sign up, you as a homeowner could then go to the providers who can then do cost a cost analysis.
- Chair Lawrence inquired into the current tower height limits for residents of Clarke County; Brandon Stidham responded it depends on if it is free-standing or attached to a structure for support, and what zoning ordinances are in place for the requested tower location.
- The cost of building a tower depends on the height and width of the structure. The maximum footprint for a tower is eight (8) feet across and would have to be connected to power. There is permitting associated with it as well. Guestimates discussed during the meeting into the cost of building a tower is a few thousand dollars.
- Chris Boies clarified part of our issue is how to fix the problem of the private sector not being responsive? How much should the local government be involved?

- Brandon Stidham made a point that the advice given in 2015 by the Center for Innovative Technology, Clarke County needs to find a dependable, reliable industry partner to go through this. Are any of these partners ones Clarke County would consider partnering with?
- Bev McKay opined the problem is that all have a lot of customers and a lot of work.
- Chair Lawrence stated that 58 of 62 localities that are eligible for the VATI Grant are applied for, so that means we are not the only ones in this predicament; the entire country is.

**Bev McKay moved for Chris Boies to look into the study update options and the costs associated and report back to the Broadband Implementation Committee.**

- Chair Lawrence likes the idea of hosting an open house to provide options for the community to hear what the County is working on concerning broadband. Host this type of event in a large location, such as a school auditorium. Invite providers to hand out information to citizens.
- Bev McKay reminded this would have to follow Social Distancing guidelines though he is a bit leary of doing this during Covid-19. It is a great idea, though.
- Chris Boies stated we need to set the expectations with the agenda, so homeowners know what information is going to be provided; we can find a way to hold something.
- Dr. William Houck suggested holding the event outdoors.
- Chris Boies stated there would be a craft fair at the park so we can have an idea of how an outdoor event would possibly work. There isn't a presentation happening, but the setup and distancing would be able to be tested.
- Robina Rich Bouffault said the new high school seats roughly 400.
- Bev McKay suggested the Fair Grounds as a location option.

**By consensus, all members agreed for staff to get more details and look into options doing an open house event.**

**G. Virginia Telecommunications Initiative (VATI) Update**

- Rural Digital Opportunity Fund is similar to the VATI grant- have to fall within a certain census block, but Chris Boies does not believe Clarke is eligible for that funding.
- Chair Lawrence voiced that maybe other regions would help Rappahannock qualify.



- Chris Boies clarified that the State sees this as a way to get this done. General Assembly may reconvene on August 18, which could provide more options for Broadband.
- Chair Lawrence mentioned the fact that the Board of Supervisors has set aside CARES Act funding of 100K to see what we can do. Chris Boies said we might be eligible to use those funds, but the way the rules are worded is that it needs to be a specific problem from COVID-19. Chair Lawrence inquired whether adding a WISP to create a hot spot would qualify. Chris Boies stated a permanent infrastructure would serve the long term, not just the needs during the pandemic; we are not sure how they will look at something like this. If we proceed and then find out we shouldn't have used the funds for that, we would have to pay the money back.
- Chair Lawrence questioned in previous years how much discussion was done about the "lemon" spots and putting towers there to improve the service; how was the grant opportunity for White Post found? Brandon Stidham indicated that Comcast approached us. We have one potential scenario on creating a County wide tower network; it is driven heavily by rooftop installation. There has been only one application from Mt. Carmel Road to replace a new tower from short to taller, which was ultimately denied. We do not see an interest in coming into Clarke County because of our population density.

#### H. Next Meeting

To Be Determined

- Brianna Taylor will reach out to all members and determine a date for the next meeting.

#### I. Adjournment

At 3:11 pm, Chair Lawrence adjourned the meeting.

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Minutes Recorded and Transcribed by Brianna R. Taylor and Tiffany R. Kemp