

Attendees: Sally Greene (OC Commissioner)
Earl McKee (OC Commissioner)
Jim Northrup (OC CIO)
Vasu Kilaru (resident)
Paul Cardillo (resident)
Terri Buckner (resident)
Todd Broucksou (resident)
Pat Hull (resident)
Doug Noell (Chief IT Operations Officer Chapel Hill Carrboro City Schools)
Victoria Deaton (Compliance Specialist Office of Institutional Equity and Inclusion Durham Tech)
Jeff Sural (Director, NC Broadband Infrastructure Office)
Dr. Monique Felder (Superintendent, OC Schools)
Dr. Kathleen Dawson (Deputy Superintendent, OC Schools)
Laura Jensen (Clerk to the BOCC)
Travis Myren (Deputy County Manager)
Mark Johnson (maybe)

Broadband Task Force April 21, 2021 @ 5:30 PM Meeting Agenda / Minutes

AGENDA

- 5:30 PM Welcomes and introductions - Greene/McKee
- 5:40 PM Catharine Rice – Broadband Matters
- <https://ncheartsgigabit.com/board-of-directors/>
 - 1-min featuring Catherine illustrating the important difference between 10/1 Mbps and Gigabit symmetrical service.
 - <https://www.loom.com/share/607560768b3142ac86a3ea49184dc2a6>
- 6:00 PM Piedmont Electric (PEMC) Update Susan Cashion / Larry Hopkins General Update - questions and answers
- 6:20 PM RiverStreet Communications Bill Shillito / Greg Coltrain - Introduction and What's going on around us? - questions and answers.
- 6:40 PM Old Business/New Business/Housekeeping
- Action Register Grants Update
 - Minutes/Notes approval
- 7:00 PM Adjourn

End Draft Agenda

Meeting Prep Links:

- <https://www.dailytarheel.com/article/2021/04/city-digital-redlining-letter>
- A Farm Bureau presentation—Jeff Sural is one of the presenters, and another one is a county commissioner from Person County, Ray Jeffers, who talks about their positive experience with River Street. If you just want to watch that part, start at about minute 45: <https://www.facebook.com/northcarolinafarmbureau/videos/152360513402810/>

This video is more detail on Person County. Person County leveraged the MCNC network running through the county and were able to get two EMS towers through the VIPER program, and that serves double duty for wireless Internet: <https://vimeo.com/527982590>

Meeting Notes:

Action Items:

- Discuss short/long term solutions + RFP at next meeting (All)
- Provide Task Force Charter to RiverStreet
- Viper expansion research (Travis)
- Determine what “next steps” should be before next meeting (Travis/Jim/Earl)
- Approve minutes from last meeting (4/21) at next meeting (All)

Discussion:

Catharine Rice – BACKGROUND (pulled info below from nheartsgigabit.org because I couldn’t hear well):

For more than a decade Catharine has been a broadband consultant serving North Carolina communities in planning and deploying local broadband systems and closing the digital divide, focusing particularly on those communities in the Research Triangle area and surrounding rural counties.

Highlights of Catharine’s work include assisting Pinetops, N.C. in its 2017 legislative effort to keep gigabit service (NC House Bill 396); contributing to the development, implementation and promotion of North Carolina’s first community-owned, fiber-to-the-home gigabit network in Wilson, N.C.; working with the Town of Chapel Hill on piloting a free Wifi network to serve underprivileged public housing students with no internet access at home, assisting Carrboro N.C. in its role as a participant in the Triangle’s NCNGN project and assisting in various broadband feasibility studies.

Catharine is known for organizing the NC fiber lunches, and co-founding NC Hearts Gigabits (previously named CLIC-NC). She spearheaded a North Carolina grassroots effort that lobbied against NC House Bill 129 to defend local community authority to offer broadband services between 2007 and 2011. She is currently the project director for the Coalition for Local Internet Choice (CLIC), president of the Virginia Chapter of NATOA and at-large member and chair of the City of Alexandria, Virginia’s IT Commission. Catharine holds a master’s degree from the Annenberg School of Communications and a B.A. from the University of Michigan.

- Questions/comments:
 - o Commissioner McKee – how to proceed?; Catharine - Wireless is interim technology; fiber is ultimate goal
 - o Terri – what are other counties doing about acquiring vertical assets; Catharine - using anything they can get their hands on; Person Co is using ES towers; viper built 2 of 4 public safety towers; took fiber to towers as well for backhaul; grain silos, any kind of towers

OpenBB - only able to serve 225; switched to CBRS which will be faster and penetrate trees 100mb down/20mb up. On 2 county towers, and crown castle, want to get on ToH water tower, funding expansion on their own now; OC situation is a lot like Person Co in that so much rural

PEMC: Susan/Larry – Background:

- in 2014 PEMC started looking at fiber so could connect their business/offices and substations; 2016 or so started putting in 144 fiber between facilities that went from H’boro to Roxboro and many substation in between; 2017-2018 extended up through Person Co and into Granville Co; sub-leased fiber from MCNC; phase 3 started in 2019 and finished in 2020 that formed big/couple of loops for PEMC for connectivity and failover
- started looking at what could do to help membership; how to leverage all the bandwidth they have in the air; Susan – 160 miles of fiber (nearly all aerial but some underground – costs 2-2.5x to go underground); 30 miles is leased; put in 144 strand; all about doing what can to help community/members

- PEMC looked for partner that knowledgeable about broadband – owned by members so required to be fair/equitable; for-profit subsidiary – RiverStreet
 - o => share philosophy regarding members; RiverStreet started as “fiber to the home” but had to change focus to wireless (without forgetting fiber for long run); NC GREAT grant had 2 year timeframe to meet requirements; members and non-members will be served
 - o RiverStreet has had some great successes – buildout of the towers in Person Co, RiverStreet is building one tower; in June in Person Co, PEMC will be announcing service; Caswell Co another success \$1.5 million GREAT grant; 2918 accounts planned; CBRS – RiverStreet has secured a lot of CBRS;
 - Q:Terri Buckner – how will service cost work; A:will be separate from PEMC and will come from RiverStreet; have programs for homes that can’t afford service; State is making funding available
 - o RDOF is a disappointment – winners that didn’t submit bids that included their costs but still received funding and therefore locked out other vendors from federal funding; PEMC is trying to address this with legislature
 - o Bill Schillito (scatter map) – RiverStreet => PEMC fiber wouldn’t go down to any members’ homes; PEMC fiber is used as backaul then RiverStreet takes over from there to provide service
 - PEMC/RiverStreet has a great partnership; Bill is fixed wireless expert; fixed wireless for last mile; needs to be sustainable – be here for at least 5 years; when need for greater speed comes about, technology needs to advance to meet need
 - Bill wants background of Task Force/Charter – how do we know when we’re done?
 - Jim -Task Force is time limited group working toward making recommendation(s) to BOCC for how best to move forward. BOCC goal is to extend service to as many county residents as possible.
 - Greene - started with spirit of inquiry and exploration; COVID money available to searching for all options and cost of each. Charge is to recommend a viable and responsible option and provide the best service possible to the ~5000 homes in unserved/underserved areas.
 - McKee – best opportunity for funding for this is right now – strike while the iron is hot! Possible movement on state level that will help this.
 - Bill – is this an empowered committee? At what point will you know when you’re ready to propose a solution?
 - o Answer: NO; Jim – OC RFP is a possibility, money coming to states from Federal govt may be for shovel ready projects; would likely draw from Task Force group to participate in RFP process/responses;
 - o McKee/Greene could introduce an agenda item if needed; 4 meetings for background, 2-3 meetings for providers to present, then a couple of meetings to decide on a solution to propose
 - o Bill – no one solution is the right solution; probably need hybrid solution – is there a fiber plan cost in place?
 - \$30-50 million; mixed solution along with mixed costs – would need to put together a cost plan that includes all technologies;
 - Catharine concerned that fixed wireless folks will be forgotten which would continue the digital divide ; think big and try to get funding to achieve the best long term solution;
 - Jim – not a business model that will sustain the unserved/underserved and make it a money making model, prefers plan to shoot for fiber to every home as goal then fixed wireless becomes backup rather than first ;
 - Bill – America Recovery program (\$28million for OC); who owns it and maintains it will need to be wrestled with;

- Cardillo – if we only focus on unserved/underserved 5000, is it scalable to look at how to connect whole county with fiber?
 - Jim – fiber is the only solution that will scale into the future, at very least we'd need fiber close to the 5000 homes to provide highspeed the last mile; start with fiber then work with companies for partnership to go from there;
 - Cardillo – is it possible to get a wired or fiber solution to everyone
 - Todd - is RiverStreet working with PEMC to determine what solution will work in OC?; if Task Force decides that best solution is something in northern OC, would PEMC/RiverStreet share plans so we can understand their plan so don't step on each others' infrastructure; unserved are that way for a reason, expectation was that infra would be built out but that never happened; capital costs of building infrastructure will be required if goal is to reach unserved/underserved; no reason to develop a plan if no money for capital costs are part of the conversation;
- Greg – what is the county's desire to fulfill the goal of getting communities connected; resources for broadband is being gobbled up quickly; tying up resources, labor, etc; large fiber producers (Corning) are saying 6 months or longer for fiber; help county build a county-wide plan - even areas already being served just to see what county-wide build would cost; gives you a plan so can know what costs are; build a fiber backbone, then connect to towers and other vertical assets, or look at infrastructure methods for funding; 4 licenses for CBRS spectrum that can be utilized (can travel further and penetrate denser foliage);
 - Doug - \$7.1 billion from eRate American Rescue Plan Act (only covers devices not fiber) ; hybrid LTE solution (managed model) that could be entertained; state office (BB Infra office) trying to formulate a plan for how best to use funding coming down;
 - Terri – short term and long term needs; identify audience – unserved/underserved first but could create inequities; some areas where service is available but unaffordable
 - Jim – hotspots - are hotspots solving problems?
 - Doug economic problem because 1 year of service is \$350,000, since own hotspots, only useable if continue service;
 - Catharine – 1mb up is frustrating; short term solution;
 - Sally – Travis/Todd, viper option for vertical assets? CIP has money for public safety – can we use money for getting on existing viper tower? Have 1st responder upgrade - would be viper expansion (4-6 new towers) – Travis, looking into this;
 - Todd – can OC use MCNC infrastructure, yes, but because it's in southern OC and goes into Chapel Hill, won't help H'boro any;
 - Bill - existing viper tower will be problematic getting state permission to put equipment on existing towers – need to plan for viper use before towers erected;
 - Greene – going to need to patch together a plan; layers of things that can be done, comprehensive plan needs to be drawn up

Closing:

Thank you to guests – hope to be able to work with all of you. Next Steps: Travis/Jim/Earl need to say what next steps should be; have discussion between now and 2 weeks from now to even come up with a direction then have committee to discuss amongst ourselves. Immediate next step is RFP (Jim) Jim – RFP, request plans from providers; RFI instead of RFP – will force OC to ask questions; what problem are you trying to solve – fiber to every home?

- RFP says we already know what we want and we want you to tell us how much it will cost?
- Catharine, RiverStreet and PEMC left the meeting (7:31).
- Terri – sat in on RFP last summer, OpenBB clear that couldn't meet the needs without vertical assets; sole source for PEMC because only 1 of 2 respondents and only one that comes to the table with their own vertical assets; fiber is long term solution, do we need to move quickly for long term or just the short term? Need to move quickly for funding from Feds. Have until 2024 for \$28million (many hands in the pot for this); funding expected to be coming from the State to OC and announcement coming soon.
- Decision we need to make is RFP or RFI. Jim – can provide RFP and RFI for review by next meeting. RFP - coverage for 5000 homes in next 6 months. Jim/Travis to review RFP to see if it's workable and if not, will put something else together by early next week.

Adjourn – 7:51pm