



MEETING MINUTES I January 16, 2020

						January 1	<u> </u>	
Me	eeting Title	WV Broadband Enhance	cement Council			Time	10:00 a.m.	
Ch	airman	Robert Hinton				Location	Capitol Complex, Bldg. 3, First Floor	
						Attendance	P = Present; TC = Teleconference; VC = Videoconference; _ = Absent	
	Council Member	Representing			Counc	il Member	Representing	
TC	Robert Hinton, Chairman	Rural Business User Congressional Dist. 2		_	C. Edwar	rd Gaunch	WV Dept. of Commerce, Cabinet Secretary	
Р	Robert Morris, Vice Chairman	Urban Residential User		Р	Jeff Proc	tor	Representing Secretary Gaunch	
TC	Michael J. Holstine Secretary-Treasurer	Rural Business User Congressional Dist. 3		TC	William	D. "Bill" Bissett	Urban Business User	
_	Robert Cole	Rural Residential User Congressional Dist. 1		TC	Dennis L	ee	Business User, Large Scale Broadband	
Р	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		Р	Honorab	le Ronald G. Pearson	Rural Residential User Cong. Dist. 2	
_	Dr. Steven L. Paine	Dept. of Education, State Superintendent		_	The Hon Robert P		WV Senate (D) (Ex-Officio/Advisory Member)	
Р	Brenda Morris	Representing Dr. Paine		-	The Hon Mark Ma		WV Senate (R) (Ex-Officio/Advisory Member)	
Р	Joshua D. Spence	WV Office of Technology, Chief Technology Officer		Р	The Hon Daniel Li		WV House (R) (Ex-Officio/Advisory Member)	
Р	James Dixon	Representing Joshua Spence		-	The Hon Kenneth	Hicks	WV House (D) (Ex-Officio/Advisory Member)	
_	Matt Turner	Higher Education Policy Commission Vice Chancellor		-	Vacancy	: Rural Business User Co	ngressional Dist. 1	
TC	Dr. Carl R. Powell	Representing Matt Turner		_				
	Representative	Agency			Represe	ntative	Agency	
Р	Kelly Workman	WV Development Office Administrative Director		Р	Alexand	ra Shulz	Bowles Rice Legal Counsel	
Р	CarolAnn Williams	WV Development Office GIS Manager, Broadband		_	Jim Kelsl	1	Bowles Rice Legal Counsel	
_	Wes White	WV Commerce, Deputy Secretar	-у	тс	Chris Ca		Tilson Technology Management	
_	Peter Markham	Bowles Rice Legal Counsel			Elin Katz		Tilson Technology Management	
Ag	enda Item		Det	ails/Mir	nutes			
1.	Call to Order, Ope	ning Remarks; Roll Call	Vice	Chairma	an R. Moi	ris called the meet	ing to order and took a voice roll call.	
2.	Minutes and Financial Statement Me				Meeting Minutes were approved; Motion by Member Hobbs and second by Member Spence. Financials were approved; motion by Member Holstine and second by Member Hobbs.			
3. Update on USDA ReConnect			Seco Wor Vice	Tyler County and Wetzel County Announcement Second Round Applications: January 31 – March 16, 2020 Workshop: USDA Morgantown Office, January 29, 2020 Vice Chairman Morris reviewed recent announcements from USDA for broadband infrastructure development in West Virginia.				

Kelly Workman briefly detailed recent success with the Council's push with USDA in 2019. Five applications were submitted from West Virginia. With 2 out of 5 funded, West Virginia achieved a 40 percent success rate, and more project. The Council is partnering with USDA on a Workshop on January 29 to help local teams develop additional projects. Any projects not funded in the first round should reapply for the second round. A complete list of USDA awards is provided here: USDA ReConnect: \$29,188,920 Investment Second Round applications due by March 16, 2020. 2020-Harrison Rural Electrification Association, Digital Connections: \$24,999,920, Harrison, Doddridge, Lewis, Upshur, Barbour counties. 2019-Tyler County Development Authority, CityNet, \$3,516,000 50/50 Loan-2019-Regional Economic Development Partnership (RED), CityNet, \$4,189,000 50/50 Loan-Grant USDA Community Connect: \$7,960,000 Investment; Rolling application cycle. 2020-Hampshire County Broadband Expansion, Hardy Net, \$3 million 2019-Preston County Economic Development Authority, Digital Connections, \$3,000,000: Preston 2019-ClearFiber, \$1,960,000: Marion, Monongalia 2017-Central West Virginia Development Association, MicroLogic, \$3,000,000: Barbour, Randolph, Upshur Vice Chairman Morris congratulated the project teams and pledged that the Council would continue to provide assistance. Council unanimously approved resolution in support of study on December 12, 2019. Logan and Mingo Counties have passed resolutions in support of the project; Discussion of next steps. Chairman Hinton deferred to Chris Campbell for an overview. Chris Campbell with Tilson Technology reviewed ongoing work with the AEP/APCo team, including: Woking with WVDO and Bowles Rice, and Logan and Mingo counties on the coordination of the advisory committee, 4. AEP Broadband Feasibility Study Input and refinement on the AEP RFP, evaluation criteria, dark fiber lease terms, and Working on the last-mile feasibility study which would illustrate how an ISP partner could utilize AEP fiber to build out a potential FTTP project. Tilson will continue working on last-mile study to inform the RFP process, including design, cost, and feasibility. The Vice Chairman thanked everyone for their work on this project. Chairman Hinton added that the team continues to push this project ahead in cooperation with AEP and that the project is on schedule. Final submitted to WV Legislature by Dec. 31, 2019. Submitted to Commerce Communications, posted on website. https://broadband.wv.gov/resources/west-virginia-broadband-plan/ Development Guide draft; companion to Five-Year Plan, 5. 2020-2025 State Broadband Plan part of ARC Project. This project was completed on deadline to meet the legislative reporting requirement and to meet the requirements of USDA and other funding programs which require a state broadband plan. The plan is posted on the Council website and will be updated annually.

FCC to consider rules for \$20 billion RDOF program in January 2020, expected to be awarded through a two-phase reverse auction procedure. Proposal from Tilson for training approved 12/12/2019, to be scheduled. Chris Campbell also detailed Tilson's work on development of training specific to the FCC RDOF process. The FCC is expected to vote on the RDOF order in February 2020 and the first WV RDOF workshop will be scheduled in the Spring. 6. FCC Rural Digital Opportunity Fund A detailed agenda and logistics for the April workshop are in development. Workshop Three workshops were approved on 12/16/2019. Chairman Hinton noted that the RDOF will make available at least \$16 billion in Phase I for infrastructure development through reverse auction similar to the CAF II process. The FCC is expected to adhere to 25:3 speed thresholds, although scoring is weighted toward higher speeds. The FCC is not going to require a subscriber measurement. Noting that this will be one of the largest CAF programs seen in past 20 years, the Chairman noted that West Virginia should aggressively compete for this funding. WVPSC issued the final rules on December 6, 2019, which will take effect on February 3, 2020. http://www.psc.state.wv.us/scripts/WebDocket/CaseServiceListID=102591 Ally Shulz, legal counsel with Bowles Rice, provided a brief review of the PSC Pole Attachment rules, which are now in effect, noting the following: The PSC adopted the FCC statutes and regulations almost entirely. There were a few changes, which were largely consistent with the Council's recommendations, including: Definitions apply only to pole attachment proceedings Removed provision for awarding damages in Proposed Rule 17 because the PSC does not have this authority, Added a joiner's provision in the former Rule 17 and new Rule 17. Member Pearson commented on pole ownership patterns and how this may 7. WV PSC Pole Attachment affect future broadband development. Asking if the poles are owned by the power companies or phone companies. Ms. Shulz stated that she does not know the exact breakdown of ownership. Mr. Pearson noted that there is discussion that Frontier is seeking relief from its COLR (Carrier of Last Resort Obligations) and is seeking legislation and/or relief from the WV PSC for this responsibility for telephone communications. Mr. Pearson stated that this could have a detrimental impact on pole network maintenance in West Virginia. Mr. Pearson stated that he had not seen specific legislation but that discussions are occurring. Chairman Hinton stated that he had heard this concern from a legislator. He then requested that Ms. Shultz review pole ownership in West Virginia as it could potentially relate to pending legislation and the COLR issue, as well as the Legislature's position on this matter. The Chairman requested a rough idea of pole ownership by utility, such as 25 percent owned by Frontier, etc.

	Sign-In for Public Comment
8. Public Comment	John Tuggle, executive director of the Region 4 PDC, requested guidance on potential partnerships with the MMI fiber project as it relates to Region 1 and Region 4. Chairman Hinton advised that Mr. Tuggle should contact the project team directly, following their meeting at the groundbreaking.
9. Next Meeting Date	February 20, 2020, 10:00 a.m.; Building 3, First Floor Conf. Room 124
10. Adjournment	

	Action Items								
No. Description		Assigned To Month Identified		Target Completion Date					
1.	1. Legal and Cooperative Toolkit and Training 2. Broadband Hub ARC Broadband K. Workman, C. Williams WVGES		June 2017	Underway by WVU Law Clinic					
2.			November 2018	Mapping in 10 counties complete and added to website. Development Guide drafted.					
3.	3. Website Updates-Speed test survey updates, map updates Commerce, C. Williams		December 2018	Complete					
4.	NTIA/National Broadband Availability Map	K. Workman, C. Williams	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.					
5.	5. Guide to Broadband Development K. Workman		February 2019	Draft for Review, Version 1					
6.	2020-2025 State Broadband Plan	Steering Committee, Staff	March 2019	Complete.					





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Р	Chairman	Congressional Dist. 2		-			Cabinet Secretary	
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TC	Wes White	WV Commerce, Deputy Secretary	/	TC	Chris Ca	mpbell	Tilson Technology Management	
ı	Peter Markham	Bowles Rice Legal Counsel		TC	Elin Katz		Tilson Technology Management	
Age	nda Item		Deta	ails/Min	nutes			
1.	Call to Order, Opening	Remarks; Roll Call	Chair Hinton called the meeting to order at 10:01am					
2.	Approval of 1/16/2019 and Financial Stateme	9 Council Meeting Minutes	Moved to accept the January 2020 meeting minutes as presented; Jeff Proctor motion; second by Dr. Powell; motion approved.					
3.				Kris Warner, the USDA Rural Development State Director, thanked the council for its work to support West Virginia applicants. The USDA has announced \$32 million in broadband grant funding, through ReConnect Round One and Community Connect and other USDA programs, in West Virginia since October 2019. Mr. Warner announced that a regional conference will be held in Virginia for any project teams that would like to attend. Reconnect Round Two will offer \$550 million in grants and loans. USDA will continue to assist applicants in this process.				

Chair Hinton thanked Mr. Warner for his work and reiterated that \$32 million has been awarded thus far and the council will support continuation of this progress. Mr. Warner stated that USDA was impressed with the level of attendance at Morgantown conference, held in conjunction with the council in January.

Chair Hinton asked if there will be a Reconnect Round Three. Mr. Warner said yes, after Round Two awards are made, then Round Three would begin before the end of 2020. Therefore, applicants should begin to prepare now. Chair Hinton noted that West Virginia should attempt to beat its current allocation of \$32 million in rounds two and three. The council will continue working with USDA and Director Warner on this important initiative.

Jim Kelsh, Partner and Attorney with Bowles Rice, provided an overview of the FirstEnergy Broadband Feasibility Study. The study proposes a project in portions of Wood and Ritchie Counties. This is the second study received by the council in which the council has a 60-day time period to take action. This 60-day period will end on March 24 and Mr. Kelsh hopes to have this study to Council for final action by March 12th meeting.

Mr. Kelsh noted that proper notice has been provided, with legal ads in

Parkersburg and Richie County papers. Those who support or oppose the study are advised of the opportunity to speak at the council meeting. If Council members have concerns, Mr. Kelsh asks that the members send those to Kelly Workman get those answered by March 12⁻ At March 12th meeting Bowles Rice will submit for the study to be approved by the Council.

Should the council approve the feasibility study, it will then proceed to the WV Public Service Commission for further evaluation.

Ms. Holly Kaufmann, President for FirstEnergy, presented information about the study, introducing the FirstEnergy team and thanking the council for the opportunity. Present from FirstEnergy were: Kristin Dransfield, Eric Young, and Ray Valdez. Ms. Kaufman detailed that FirstEnergy serves one half million customers and has over 2,000 employees to assist the state. They are proud to be part of West Virginia.

Ms. Drasnfield presented presentation from Mon Power outlining the West Virginia Legislature's enactment of SB 3 establishing a voluntary program whereby each electric utility may investigate the feasibility of constructing middle mile networks in the state. Legacy circuit replacements could provide benefits, such as lower cost of service to customers. Mon power needs to further review legal and regulatory issues as part of this process.

Mr. Young thanked the council for having Mon Power present at meeting. He explained that the project includes 12 fiber location handoffs to ISPs. No handoff locations are planned in a 7-mile stretch in Wirt County. The Company estimates 3-5 years to complete new/rebuilt fiber route. Last mile connectivity will be provided by ISPs picking up at the handoff location to take to customers.

Mr. Valdez explained the numbers of the project and detailed certain Regulatory and Legal Barriers that this project may encounter. Other concerns are related to: Cost Recovery, Telecommunications Services Agreement, Asset Classification, Easements and Right of Ways, Interconnections, Electric Utility Exemptions from FCC Regulation

4. FirstEnergy Broadband Feasibility Study
Proposed project in portions of Wood and Ritchie
Counties

https://broadband.wv.gov/news/firstenergy-broadband-feasibility-study/

Ms. Dransfield noted that the study was filed on January 23rd and pending HR4619 will determine if study can continue.

Chair Hinton thanked the FirstEnergy-Mon Power team and asked if Mon Power had any assumptions that if they release their fiber per mile, if that fiber is sold, what changes would occur? In terms of this model Mon Power did not, they intentionally left that off this presentation, they did not want to give false information but would expect them to occur and didn't want to give a false impression on the revenue.

Chair Hinton indicated that from a council standpoint, this is a learning curve, did understand the cost recovery for this project would be expected and posed a couple of questions. What are the magnitude of changes even if they are never achieved? What is the impact to the customer and is it a large or small amount? How significant would that be to reducing the cost to the load bearer? The Council needs a sense of scale. Ray Valdes indicated that it would be a linear movement, depending upon the magnitude

There were numerous questions from council members concerning the study, cost savings, number of fibers. Mr. Young indicated that the company was flexible and that the study was done from a desktop view which incorporated numerous assumptions. Chair Hinton asked if carriers wanted to use the fiber in the future that they would be permitted to do so, and Mr. Young said this was understood.

Chair Hinton indicated that the council asked AEP to refine its cost analysis and show where the fiber cost is. He also noted that Armstrong communications had undertaken a 700+ mile fiber buildout in Ritchie County and there may be some Synergies and wanted make Mon Power aware.

Chris Campbell gave an update of the AEP Broadband Feasibility Project. Regarding the RFP to solicit ISPs, AEP is having a Q&A session.

Mr. Campbell noted that the Council had requested an investigation into the potential last mile, and Tilson has completed some of that work. Tilson is reviewing how ISPs would use middle mile fiber would on a fixed wireless network through Logan and Mingo Counties, looking at a 48-fiber network to use as a transfer network to gain access into the region. Tilson spoke with AEP regarding the project they had performed in Grayson County, Virginia, and Tilson did find differences based on distribution in certain counties, some went to a field split model, which would allow an ISP to get to a smaller portion of the county that may not originally be accessible.

Mr. Campbell spoke on the First Energy Feasibility study, felt it to be a good contrast to the AEP feasibility study. Mr. Campbell pointed out that First Energy was at a higher level review in terms of detail. Mr. Campbell feels there is more information needed from First Energy to project cost and AEP provided a road map that Tilson has been able to follow.

Member Ron Pearson asked if Tilson looked at the cost per mile in respect to the first energy proposal? Mr. Campbell indicated that Tilson did review costs based upon total miles and it is a large number. In the initial conversation with First Energy the request was made for additional details

5. Projects and Updates from Tilson

to better understand the cost, Tilson needs to take note of that initial impression, and proceed through a cost review similar to the prior study with a better understand of the development of the cost estimate. Chair Hinton requested that Mr. Campbell review the cost estimates for continuing work with First Energy.Mr. Campbell stated that the initial budget was an estimated \$50k and felt that was a good initial amount last Fall. Have gone through that amount including work done on the interconnected last mile. To move forward an increase in the budget would be needed and proposal was sent to the Council for \$32,200. Mr. Campbell thinks the amount is a reasonably conservative and would get the Council through to the next phase of study. Vote and approve on initial const to move forward: Jeff Proctor first motion; Pearson second motion; Motion Approved Member Jeff Proctor asked did in the review of AEP project does it make since that there is a hybrid option that would include some last mile fiber that may be omitted or duplicate some of the fiber that AEP is wanting to. Is there any alternative option so there isn't a lot of duplication. Mr. Campbell stated yes, we started with a comprehensive approach and actual respondents to the RFP may not take that approach. They may want to pick which part in the county the work, some may be a wireless approach and some may use a hybrid approach. Tilson felt it important to report out conclusions without consuming to much of the budget. There are opportunities to look at certain areas and the approach at a more graduator level. Mr. Campbell and Ms. Elin Katz reviewed preparations for three planned workshops specific to the FCC RDOF process. Mr. Campbell states they now have high level framework on how auction will be handled. The FCC be accepting public comment on public notice in March and April. Mr. Campbell wants to do workshops when Tilson knows what the basic framework will be. Tentative next workshop will be in April. Mr. Campbell 6. FCC Rural Digital Opportunity Fund Workshop stated the goal is to educate potential bidders and go through a fake auction as a training to show what bidders should expect. Chair Hinton thanked Chris and Elin for the presentation and hope to announce this soon. Goal is \$200 – 300 million to capture funds for the state. Steven Hill presented on the Satellite Broadcast & Communications from Dish Network, started the presentation with background history of Dish Network. Dish is currently building a 5G network that will be stood up nationwide in the future. The network will be in rural communities to build out nationwide, not only in larger cities. The presenters noted that HughesNet and ViaSet are the only other two 7. Satellite Broadcast & Communications satellite broadband providers. Airlines are currently using Dish Network Association wireless on their flights. Broadband is being used as a backup in (http://www.sbca.org/pages/Home.cfm). emergency situations. George spoke to how Dish is assisting with disaster relief, when WV had the floods in 2016 Dish was able to set up communications for relief

workers. They have also deployed an estimated 40 systems which remain in Puerto Rico for government use. Regarding the constellation of satellites that will sent to space via SpaceX, the estimate is by the end of 2021, service at will be 100Mbps + in the United States. Once the first satellite is

launched the next generation will be in production this will take an estimated 3-5 years. Jeff Proctor asked how the new technology work without blackouts. George stated that this technology tends not to have that issue, if you have 2 feet of snow on the dish then you may have issues but typically no. Dish appreciates the Councils time HB4015: Ally Shulz presented on these bills. Lead sponsor is Delegate Linville. This bill amends the broadband loan insurance program to expand the debt obligations, makes other changes to Chapter 31G, and provides that the Governor will appoint the Chair for a period of 3 years. State permitting agencies must provide council will any information for AREA maps that will presurvey paths for middle mile fiber and the Council must present to the Legislature. HB4619 makes changes to Article 2 Chapter 24, pertaining the broadband feasibility studies. Member Jeff Proctor noted that this is the cost recovery Chair Hinton opened the discussion with question concerning length of time needed for permits and noting that the Legislature has requested additional work on the council's part. Member Robert Morris noted the cost and questioned whether the council had the expertise to continue to HB4015. The legislation would appear to change the market value from the current existing \$0. 8. Pending Legislation There was discussion of HB4619 and whether the council's role would continue. Member Ron Pearson noted the vertical access activity (in HB 4015) the state does own some of these powers, will this make available to users who need access, Would suggest that the Council manage these assets and which compensations will be split between WVOT and the Council Suggests a sub committee be established to keep check on this Chair Hinton agrees with the creation of a sub committee to deal with vertical real estate. Member Robert Morris asked if the Chair or Kelly Workman of the WVDO had been consulted in the creation of the bills. Discussion was that there were concerns with some of the most recent proposals, however several positive policies had been enacted and that the Council would continue to consult with the Legislature and seek input from ISP partners on any issues of concern. Chair Hinton stated the Council was going to have a representative from Frontier to speak to this but instead yielded to Mr. Pearson. Mr. Pearson wanted to enter into record a summary of financial record that was filed through Sept 30, 2019. He noted that Frontier is spending a large amount of its revenue - about 1/3 of everything they collect from their consumers – for interest payments on debt. 9. Frontier Mr. Pearson stated that bankruptcy cases are usually handled in one jurisdiction with one case and parties that come forward have a lot to say regarding what the plan may contain. The WV PSC is watching this closely and working on a focused audit/management review and financial review to anticipate how the services will be interrupted.

Chair Hinton stated there is willingness from Frontier to come and brief the Council and we will make the invitation for them to come and present to the Council in March. Mr. Holstein states that a concern for rural areas in the is there any plan for them as they are the last resort for phone service? Chair Hinton believes this was brought forward in Legislature but tabled/dismissed Appalachian Regional Commission (ARC) Power Grant applications are due: 10. Broadband Funding Opportunities and Training Feb 28th Letter of Intent, and Mar 27th final submission. There were two public comments. Jim Martin with CityNet stated that he had the pleasure of being on the Council formerly and appreciates what the members do. His comments pertained the middle mile infrastructure feasibility studies being undertaken by AEP and FirstEnergy. Questions posed included: What is the next step for the Utility to request rates? Is there a requirement that a last mile provider before going forward? Mr. Jim Kelsh noted that AEP has a request for proposal out and they would not build the facilities unless this is provided. Martin stated this could be another BTOP issue if not handled properly. CityNet is a last mile provider and they have asked what the cost will be. The project teams need to look at the household count and the revenue. He stated that CityNet can install fiber for \$30,000 per mile rather than a projected cost of nearly \$250,000 per mile. Mr. Martin asks the Council to consider the opinions of the last mile providers. Mr. Martin requests that last mile providers are invited for their option on the issue. Member Ron. Pearson stated that the Council is one of two entities that 11. Public Comment have to approve the projects. Council gets them first then they are presented to the PSC. We should listen carefully to Mr. Martin and if the costs are unrealistically high just to install broadband may their projects be amended to include relationships with last mile providers and whatever rate increase be understood and separate what they are allowed to extend the broadband. Mr. Kelsh noted that he has been involved in the AEP feasibility project and the company has requested input from internet service providers on the middle mile piece through its RFP and other consultation and outreach. RFP submissions are due back from internet providers on March 11. He encouraged input from CityNet on the process. The proposals will be received, and an advisory committee, will advise AEP. Mr. Martin asked the Council to consider what is the requirement of the company to deploy? Just because they say they will be a last mile provider they may not. It has been proposed that the cost would be \$35 million. CityNet could do it for \$5 million. With respect to the lease rate AEP has not

set a lease rate and will be negotiated.

Chair Hinton stated he respects Mr. Martin and agrees with what he is saying. The one bottle neck that they Council has is the 60 days to make a determination as to whether the process should go forward. On a Cost

Recovery Basis, the utilities may ask for an amount and the WVPSC can adjust that amount. The Chair hopes it is well known that a vote from the Council concerning whether a proposed project is or isn't feasible does not mean that a project will continue if the utility cannot find a last mile provider. Member Jeff Proctor agreed.

Chair Hinton stated that any project done in the state it may be beneficial to see if there are any items that can place accountability and milestones for those last mile providers, such as a possible legislative amendment. These would be similar to those required for recipients of federal funding.

John Tuggle, Executive Director of the Region 4 Planning and Development Council, agreed with Jim Martin on his statements. He would like to have input on what happens. Would like to get with First Energy and AEP to determine what is next. He and his colleagues have been working throughout the regions and have many worthy potential projects.

12. Next Meeting Date

March 12, 2020, 10:00 a.m.; Building 3, 8th Floor

13. Adjournment

Chair Hinton adjourned the meeting at 12:37pm

	Action Items									
No. Description		Assigned To Month Identified		Target Completion Date						
1.	Legal and Cooperative Toolkit and Training	WVU Law	June 2017	Underway by WVU Law Clinic						
2.	Broadband Hub ARC Broadband K. Workman, C Hub/Mapping Project Williams, WVG		November 2018	Mapping in 10 counties complete and added to website.						
3.	FCC 477 January 8, 2020 Mapping Update (Notice Attached)	Commerce, C. Williams	February 2020	Latest FCC Data Release Mapping Underway						
4.	NTIA/National Broadband Availability Map	K. Workman, C. Williams	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.						
5.	FCC RDOF Workshop		January 2020	April 2020						





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TC	Robert Cole	Rural Residential User Congressional Dist. 1		TC	Dennis L	ee	Business User, Large Scale Broadband	
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Age	nda Item		Deta	ails/Miı	nutes			
1.	Call to Order, Opening	Remarks; Roll Call						
	Approval of 2/20/2020 and Financial Statemer	Council Meeting Minutes	February 2020 minutes were updated to show that Member Pete Hobbs					
	and Financial Statemer	ıı.	was present by teleconference. State Director Kris Warner update on USDA ReConnect. USDA has					
						•	Round 1. The second round of	
3.	Update on USDA ReCo	nnect	\$550 million is currently open for application. USDA today announced an					
				extension of the second-round application deadline to March 31, 2020.				
4.	4. FirstEnergy Broadband Feasibility Study			Energy T	eam Pres	senting/In Attendar	nce: Sammy Gray	
	Proposed project in Wood and Ritchie Counties			FirstEnergy Team Presenting/In Attendance: Sammy Gray Mr. Gray stated that First Energy had submitted a middle mile broadband				
-	s://broadband.wv.gov/			-			ong with Council staff, the	
	dband-feasibility-study		company has reached out to several ISPs for consultation. Mr. Gray indicated that there was little interest in the in the initial pilot project area					
			maic	ateu ind	it there w	vas iittie iiiterest iii	the in the initial phot project area	

of Wood and Ritchie counties. He noted that in consideration of this finding, that It may be beneficial to consider other areas. Mr. Gray indicated that First Energy respectfully requested to withdraw the current study and evaluate other options. The intent is to provide more benefits to the State and for FirstEnergy customers. He noted that the project team has already started the process to engage more interest up front and to more fully assess needs. Mr. Gray thanked Council, staff and Tilson for all efforts to date and reiterated that First Energy looks forward to resubmitting an updated plan. Vice Chair R. Morris asked about the timeline and Mr. Gray indicated that no definite timeline has been established but efforts are underway, and he expects that a revised study will be submitted in 2020. Chair Hinton noted the Legislative intent to make sure that the Broadband Council has a role in the development of the study. Council should be involved in formation of study. Legal Counsel Jim Kelsh indicated that process is unfolding, and we are learning. He noted that First Energy has provided a great initial work product and is very engaged in the process. Mr. Kelsh noted that formal action of the Council is required within 60 days, if that cannot be satisfied, then he agreed that the Council should accept the withdrawal of the application. **Formal motion**: R. Morris moved to accept withdraw of application from Mon Power (First Energy). Secretary Holstine provided a second, and motion passed. Update on AEP Project and Assistance for FirstEnergy Projects Update on AEP Project: Mr. Campbell noted that AEP/APCo had issued a Request for Proposals for ISP partners. The proposal response deadline was 4:00 pm on March 11, and that AEP would still be in review process for evaluating responses. Following review, he would soon have a clear picture of responses and direction of project. Concerning the First Energy project, Tilson is continuing to work with the 5. Projects and Updates from Tilson project team, and has funds remaining in the budget for future work. This Chris Campbell, Principal Consultant work will include evaluation of more favorable areas for potential projects. Meetings have already been initiated. Tilson is prepared to support project to identify potential partners, ideal routes, and to assist with outreach. The goal is to create a richer set of information upon which First Energy can base its decisions. Tilson is seeking higher level of information from potential partners. Chair Hinton asked if the current project budget was sufficient, and Mr. Campbell said that the budget would be fine in the near term, at a minimum until next council meeting. However, this may need to be revisited to incorporate review of revised proposal. **Bidding Procedure Public Comment:** The FCC proposed procedures for \$16 billion rural broadband auction targeted for October 2020. Comments are due on or before March 27, 2020. Reply Comments are due on or before April 10, 2020. https://docs.fcc.gov/public/attachments/FCC-20-21A1.pdf. 6. FCC Rural Digital Opportunity Fund **Proposed RDOF Workshops:** April 1: Charleston, WV Commerce Building 3, First Floor April 28: Summersville, Summersville Arena & CVB May 5: Bridgeport, Bridgeport Conference Center

Elin Katz stated that Tilson is prepared for workshops to begin on April 1.Ms. Katz added that Tilson is anticipating travel restrictions. This may provide benefit of the online format for follow up and technical assistance. She expects there would be room in the budget for follow-up or coaching. There was discussion of moving the webinars to an online format. Vice Chair R. Morris asked if this would diminish the quality of the workshops and Ms. Katz thought the online format would be effective.

CTO Josh Spence asked that they be recorded and added to website. Ms. Katz noted this request. Dr. Powell stated this would be a good solution and the recording would enable those to view later. The decision was to conduct the April 1 workshop as an online webinar and evaluate future events as the situation warranted. Chair Hinton reiterated the State goal of \$300 million in RDOF investment.

Presentation by:

Jason Roberts

Executive Director, Region 1 Planning and Development Council John Tuggle

Executive Director, Region 4 Planning and Development Council Jason Roberts and John Tuggle provided an overview of the ROC initiative. 6 counties in the southern part of the State. Mr. Roberts introduced John Tuggle and Amanda Smarr with Region 4. He thanked the WV Development Office and the US EDA for providing initial funding. With the first round of HUD CDBG funding, the regions matched those funds to US EDA to begin the initiative and conduct a review of the need for service in this area of State. The ROC Board is comprised of Region 1, Region 4 and representatives of Clay, Calhoun and Roane counties. ROC is an established nonprofit.

Mr. Roberts noted the following:

- The Regional Optical Communications (ROC) is an established entity.
- ROC is the result of two years of work.
- This is a draft study.
- ROC is working to secure funding within the 14 counties with larger projects and smaller projects,
- Also includes Clay, Calhoun and Roane.
- The project is based upon a regional perspective. Local governments did not understand how to bring projects together.
- ROC is a champion for the region.
- ROC works in partnership with Thompson & Litton and Blue Ridge Advisory Group. Thompson handles technical areas and Blue Ridge handles market items.
- The total population of these 14 counties in the regions is 20-22 percent of the State's population, and 25 percent of the State's counties.
- Broadband is at the forefront of development efforts and aligns with the WV Development Office's site readiness initiative.
- Market analysis revealed that cable television is being cut and moving toward mobile devices. The report includes consideration of 5G. 5G will help but not a complete solution.
- The Takeaway great opportunity, broken out from years 1 through 10.

Development of middle mile: Mr. Roberts noted that Blue Ridge did initial outreach to anchor institutions and revealed good service in metro areas.

7. Regional Optical Communications (ROC)

However, the area is viewed as underserved because there is only one wholesale fiber backhaul line. This is limiting. Speeds are changing over time. In 5 years, 25/3 will be antiquated. Viewing as long-term investment. Looking for success next 20 to 30 years. Touched on FCC data and maps of areas.

Mr. Roberts noted the impact of broadband in, workforce, real estate, tourism, and all economic sectors. He discussed lack of speed for schools and education and described students at McDonald's doing homework, noting that this is more common than most realize.

ROC Findings and Recommendations: Need a conduit to extend middle mile. The project team has identified barriers:

- It is difficult to define areas that serve areas that serve the greater need without this being viewed as overbuilding.
- Companies are asked to look beyond cost per mile and look at larger issue and long term goals.
- Main issue is gaining access to outside internet source.
- Best options are Bluefield or Pearisburg and expand interconnectivity.
- Will also need to rely on wireless providers and use existing infrastructure wherever possible to reach areas with less density.

Funding resources: USDA, EDA, HUD CDBG, ARC, FCC. One size does not fit all. Region 1 has 6 CDBG applications and one ARC application pending. Region 4 has 6 CDBG applications pending and two ARC applications pending.

Work with Utilities and Partners: ROC is seeking to work with AEP and First Energy so that ROC can be partner across areas. As entities are building out ROC can serve as a manager of the fiber assets. ROC is reviewing operational models and backhaul rates.

With recent announcements of ZAYO and MMI. The Council suggested that ROC work directly with MMI and this is underway. Mr. Roberts is also working with Point Broadband and other lit networks. ROC has developed a list of projects that show cost of going from point A to Point B with estimates and installation techniques. The total cost for buried fiber is \$52 million, for aerial installation cost is \$22 million. Based upon \$95,000 per mile and \$40,000 per mile for aerial. Includes Regions 1 & 4 does not include CCR.

ROC developed a scoring matrix to rank projects in 14 counties. These are also mapped. Also show HUD eligibility and a breakdown of projects by Region and by county. The entire project has been two years in the making. The ability of picking up CCR added value.

Strategy is to focus on middle mile as major emphasis, then focus on last mile. Facilitate communication among all members. View of southern West Virginia as a cooperative effort. There is constant communication and the ROC model is enabling greater efficiency in pursuit of federal funds due to regional perspective. Do not want to operate in limited boundaries without serving project as a whole.

The ROC initiative is part of the Regional Council's overall mission to improve infrastructure in the area. John Tuggle mentioned the USDA ReConnect application in Pocahontas County and Roane EDA \$8 million

ReConnect application. This would eventually become part of the ROC network. Mr. Tuggle thanked Amanda Smarr for her work and reiterated interest in working with First Energy to develop potential project areas. He stated that the ROC approach can be replicated. In consultation with review of grid and substation needs.

Chair Hinton asked if ROC was reviewing population data, number of homes, customer counts, to include residential and business customers. Hinton asked if ROC had reviewed NMTCs and Mr. Tuggle responded that they were aware of the opportunity. Mr. Tuggle stated that the term "customer per mile" is problematic and a review of number of customers and the end goal with a perspective on complete project is needed. Hinton asked if ROC had gained soft commitments from providers and Mr.Roberts indicated that these discussions were ongoing.

Chair Hinton indicated that this great work was a result of three-year effort to develop the model of infrastructure to include a master plan and priority list and that this is needed to capitalize on federal funding opportunities. Chair Hinton thanked ROC for work. ROC thanked the Council, the WVDO and US EDA and thanked Kris Warner at USDA for his personal attention to broadband issues in West Virginia.

Vice Chair R. Morris described way the ROC initiative has executed a vision and applauded all efforts.

Mr. Tuggle and Mr. Roberts asked that the Council facilitate relationships with the utility companies, and indicated that this level of oversight ROC could provide was needed and that other areas of the state would benefit.

Mike Graney, Executive Director of the WVDO, asked if ROC would be able to share their presentation with other areas of the State. Mr. Tuggle and Mr. Roberts indicated that leaders of the regions would need to be on board. The next regional council conference is in September.

Concerning ARC funding specifically, Mr. Tuggle indicated that the State needed to establish a basic agency and Mr. Graney indicated that this was in development.

Del. Linville asked if the Council would receive the data that ROC has collected. Mr. Tuggle indicated that this would be shared. GIS information is being submitted to CarolAnn Williams. Discussion was that this may be useful in challenging FCC data as it includes data points for businesses.

Del. Linville also asked about partnership with utility companies. How would this be structured? ROC would like to discuss this in terms of lease rates as a nonprofit and execute agreements with ISPs. This is still in development. ROC would act as a broker to sublease with the goal and function of providing service to local governments and ensuring performance standards. Legislative concern would be protection of rate payer and the WV Public Service Commission would review. Mr. Tuggle stated that ROC understands that the WVPSC would be the final authority on those issues as they do with water and wastewater projects. He noted that the Regional Councils are keenly aware of these requirements. He further explained that thus far, funding applicants are the local governments. The long-term vision is for ROC to apply and possibly take on debt. Del. Linville asked if there is a movement toward control rather than

facilitation. Mr. Tuggle indicated that control was not the goal but there should be a performance measure and that agreements would need to be developed. Service provision is the main goal. Because the ROC board is made of local elected leaders and as public servants, they represent local governments and communities. Del. Linville will introduce ROC to Max Wilkinson, chief counsel for subject matter committees, to make sure all parties are informed and to work together on any legislative process.

This concluded the ROC presentation

HB 4015: http://www.wvlegislature.gov/4015: Relating to Broadband Enhancement and Expansion

HB 4619: http://www.wvlegislature.gov/Bill_Status/4619: Approving plans proposed by electric utilities to install middle-mile broadband fiber.

Ally Shultz, legal counsel with Bowles Rice, presented information on both bills. At the time of this meeting, official versions were not available. Ms. Shulz detailed that **HB 4619** passed with an amendment clarified that a public utility running middle mile fiber would not be considered a public utility under Section 24-2-1.

This section was added as a revision to the minutes to clarify statements concerning HB4619: This legislation states, "§24-2-1o(i) The council or the commission may not act to limit the number of last-mile broadband Internet providers eligible to be contracted to utilize the middle-mile fiber infrastructure constructed as part of a project proposed pursuant to this section. No board, commission, agency, or other governmental body may regulate the costs extended to a broadband customer from any last-mile broadband Internet service provider. Nothing in this subsection shall prevent the commission from reviewing, modifying, and approving or denying the cost or means of providing a middle-mile fiber proposed project pursuant to this section"

Concerning HB 4015, there were floor amendments by Sen. Plymale creating term limits for council members and the chair and vice chair. The term limits are three consecutive three-year terms and for the chair and vice-chair two consecutive two-year terms. Del. Linville clarified that the term limits applied to these roles specifically. He stated that this was partially accurate and noted that the entire bill was struck except for the vertical asset management act. The advanced regulatory environmental analysis piece, the shot clock, and changes to the WVEDA broadband loan insurance program, as requested by the Council, were removed. For the benefit of the Council, the bill was received late in the evening on the last day of session, so conference committees were not feasible.

Member R. Pearson asked to clarify that restrictions on service by the officers and members of the Council did pass. Del. Linville responded that this was an amendment offered by Sen. Plymale. The House concurred and the bill was submitted to the Governor.

Chair Hinton asked if this was prospective or retroactive and Del. Linville stated that this should be asked of Sen. Plymale. Chair Hinton also asked if this was legislative intent. Member Pearson stated concern that this was shortsighted as mattes as complex as those presented by ROC and those that come before the Council, require experience. He further stated that he did not understand the rationale for such limitations. These are

8. 2020 Legislation

complex issues and experience; performance and results would be more important than a last-minute amendment.

Del. Linville noted that nothing precludes members from serving for nine years, and the officers would serve four years. Member Pearson asked if the Council elects the chairman and vice chairman and is concerned by the substitution of judgement by last minute legislation action in matters that could otherwise by exercised by the Council. Chair Hinton asked if Del. Linville supported the amendment. Del. Linville affirmed that he voted in favor, noting the measure was unanimously approved by the Senate and supported the measure in general. Chair Hinton asked what is the benefit, and Del. Linville responded that this was the will and pleasure of the Senate and that having new and good ideas, as in the Legislature and Congress, and other bodies is favored.

Del. Linville noted that there were concerns by the Council that there was no consultation on the legislative agenda and Del. Linville wished to correct this by saying that he presented information to the Council at the November 2019 meeting. Further, he had consulted with Kelly Workman on proposed loan insurance program revisions. Went to great lengths to include the Council and seek input.

Chair Hinton indicated that there could be more engagement and did not recall specific recommendations on the loan insurance program.

Kelly Workman indicated that over the course of 2019, she recommended changed to the broadband loan insurance program related to the speed thresholds and number of providers that posed a limitation for eligibility, upon request of the legislative offices. She noted that the Infrastructure Committee met, along with Max Wilkinson and Jeff Proctor. The committee discussed numerous concerns related to utilization of the right of way, and Ms. Workman also provided feedback concerning the Dig Once policy. She indicated that she was not involved in discussion of term limits and that her conversations were related to the loan insurance program and Dig Once policy. There was no consultation on the vertical assets inventory. Although this item is included in the Council's five-year plan to develop this area more thoroughly and ascertain where these assets are located, she was not part of any consultation on this specific legislation.

Chair Hinton indicated that the Council should establish a plan to develop expectations to meet goals of the Legislature. Del. Linville stated that he would continue to seek input from the Council on broadband expansion in West Virginia. There was a discussion regarding voting rights, and this was not included in the final bill, therefore the legislative members remain exofficio

CTO Josh Spence indicated that HB4015 assigned the responsibility to the WV Department of Administration and that he would work with the Real Estate Division for procurement of the study. He indicated that the Office of Technology would consult with the Council as the process moves forward.

Referring to an item in the February 2020 minutes, Del. Linville asked if the Council wanted to serve in a management role of towers. Chari Hinton said the Council did not have capacity to act as administrator. Chair Hinton

			indicated that the Council would engage with the WV Office of Technology but did not seek an administrative role.				
9. Bro	9. Broadband Funding Opportunities and Training 10. Public Comment		ARC POWER: March 27, 2020, 5:00pm (ET): POWER Portal) Kelly Workman stated that ARC Power closed March 27, with letters of intent being submitted by the end of February. There are 5-7 potential applications. Previously, it was understood that USDA or US EDA would have administered these projects. However, these agencies have not agreed to act as project administrators. Therefore, the State would need to develop a responsible agency to administer these projects. Mike Graney, Executive Director of the WV Development Office, is considering options for supporting ARC POWER, and any other ARC funding. Ms. Workman announced that Todd Goddard has joined the broadband team. Mr. Goddard is experienced in CDBG water infrastructure and familiar with state and federal development programs and brings this experience to management of broadband projects administered by cdbg and ARC programs. Member Cole asked if there was an issue with the Speed Test. Ms. Workman indicated that this was related to a procurement issue. Previously, the speed test was purchased by a subscription and must be procured through competitive meeting. The process has taken longer than expected but should be resolved soon. CTO Josh Spence asked that the Council review options for the next Council meeting and legal counsel indicated that the Council could meet by teleconference. As a final point, Chair Hinton referred to the earlier question in the February minutes concerning the Council's intention regarding management of vertical infrastructure. He clarified that this was a result of general discussion after Member Pearson raised the suggestion that if the Council would be involved in consultation on vertical assets with WVOT that a committee would be formed to work with WVOT, but there was not intent for management by the Council. Chair Hinton asked for a motion to adjourn, offered by Vice Chair R. Morris.				
		Sign-In for Public					
	xt Meeting Date	April 9, 2020, 10:0	00 a.m.; Building 3, First l	Floor			
12. Ad	journment	Action Items					
No.	Description	Assigned To	Month Identified	Target Completion Date			
1.	Legal and Cooperative Toolkit and Training	WVU Law	June 2017	Underway by WVU Law Clinic			
2.	Broadband Hub ARC Broadband Hub/Mapping Project	K. Workman, C. Williams, WVGES	November 2018	Mapping in 10 counties complete and added to website. Final reports to be submitted to ARC March 2020			
		1		1			

Latest FCC Data Release Mapping

Underway

Commerce, C.

Williams

February 2020

FCC 477 January 8, 2020 Mapping Update

3.

4.	NTIA/National Broadband Availability Map	K. Workman, C. Williams	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.
5.	FCC RDOF Workshop		January 2020	April 2020

The WV Broadband Enhancement Council did not meet in April 2020





MEETING MINUTES I May 14, 2020

Me	eting Title	WV Broadband Enhancem				Time	10:00 a.m.
Chairman Robert Hinton				Locatio		Location	Conference Call
WV Broadband Enhancement Council meetings will be held by co COVID-19. This communication will be updated if changes occur. Conference call information and instructions for public use: +1 (681) 245-6817 Conference ID: 1564-17425 Please mute your phone if not speaking. Please identify yourself if you need to speak. Please hold any public comments until the public comment						Attendance	P = Present; TC = Teleconference; VC = Videoconference; _ = Absent
	Council Member	Representing			Council	Member	Representing
TC	Robert Hinton,	Rural Business User			C. Edward (WV Dept. of Commerce,
TC	Chairman	Congressional Dist. 2		-			Cabinet Secretary
TC	Robert Morris, Vice Chairman	Urban Residential User		TC	Jeff Proctor		Representing Secretary Gaunch
TC	Michael J. Holstine Secretary-Treasurer	Rural Business User Congressional Dist. 3		TC	William D. '	'Bill" Bissett	Urban Business User
TC	Robert Cole	Rural Residential User Congressional Dist. 1		TC	Dennis Lee		Business User, Large Scale Broadband
TC	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		TC	Honorable	Ronald G. Pearson	Rural Residential User Cong. Dist. 2
_	W. Clayton Burch	Dept. of Education, State Superintendent		TC	The Honora Robert Plyn		WV Senate (D) (Ex-Officio/Advisory Member)
	Brenda Morris	Representing Clayton Burch		-	The Honora Mark Mayn		WV Senate (R) (Ex-Officio/Advisory Member)
TC	Joshua D. Spence	WV Office of Technology, Chief Technology Officer		TC	The Honora		WV House (R) (Ex-Officio/Advisory Member)
_	James Dixon	Representing Joshua Spence		_	The Honora Kenneth Hi		WV House (D) (Ex-Officio/Advisory Member)
_	Matt Turner	Higher Education Policy Commission Vice Chancellor		_	Vacancy: Rural Business User Congress		gressional Dist. 1
TC	Dr. Carl R. Powell	Representing Matt Turner		TC	Jeff Whitma	an, WV Office of Techr	nology
	Representative	Agency			Representa	tive	Agency
TC	Kelly Workman	WV Development Office Administrative Director		_	Alexandra S	Shulz	Bowles Rice Legal Counsel
TC	Todd Goddard	WV Development Office Development Manager		TC	Jim Kelsh		Bowles Rice Legal Counsel
_	Wes White	WV Commerce, Deputy Secretary		_	Chris Camp	bell	Tilson Technology Management
_	Peter Markham	Bowles Rice Legal Counsel		TC	Fred Feit		Tilson Technology Management
	nda Item		D	etails/N	/linutes		
1. Call to Order, Opening Remarks; Roll Call							
 Approval of 3/12/2020 Meeting Minutes, Revised 2/20/2020 Meeting Minutes, Financial Statement 			Li m	nville pro inutes a	ovided com nd provide	nments concerning d a written review	ete Hobbs present. Delegate g corrections on the April 9 v of minutes.
			Applications for Round Two funding were due on April 15, 2020. Additional information is available at www.rd.usda.gov/coronavirus				

		At this time, Josh Spence advised that the meeting was being recorded.
3. PP	PE For WV ISPs: WV National Guard	PPE training for internet service providers is available through the WV National Guard. Those interested may contact the WVDO for a point of contact at county offices. Josh Spence noted that the State is providing all options that may be available for identification of resources that may assist companies during the pandemic. Kelly Workman offered the county listing for EMS offices through the WVDO.
4. Up	odate on AEP/APCo Project	Jon Webster, External Affairs Manager, Appalachian Power Mr. Webster thanked the Broadband Council for its support, as well as the advisory committee, which includes Logan and Mingo Counties, Region 2 PDC, WVDO, and the WVPSC. Mr. Webster reiterated the goal of the project is to expand broadband in Logan and Mingo counties. Project cost would be funded by AEP/Appalachian Power and Wheeling Power electric power. Fiber lease rates would be credited back to cost of service. Advisory committee has weekly update calls. Seeking ISP partner to provide last mile internet service. After no proposals were received in first round, the project team returned to the companies to seek input. The companies detailed concerns with business models, project areas, and operational models. Infrastructure ownership was an issue that needed clarification. For some, the area was outside of business area, and other challenges included topography, and customer counts. Lack of time was also a factor. For the second round of RFP, the timeline is extended to a 60-day window, and the amount of detail requested has been reduced. Ongoing communication in established intervals to encourage participation. Presentations by the equipment vendor and the WVDO were also provided. Regarding the timeline, Mr. Webster explained that the RFP was issued May 1, a mandatory meeting was held on May 14, and the expected timeline will include, ISP responses at the end of June, selection of partner(s) at the end of July, and lease agreement end of September, to be submitted to Council in October. Mr. Webster explained that through the process, the company is going back to the beginning, seeking greater level of participation from ISP and trying to communication more information. Mr. Webster concluded and offered to answer questions. Also pledged to provide regular updates to Kelly Workman and Council. Chairman Hinton thanked Jon for his presentation and for AEP's commitment to the project. He thanked the team for continuing to work on the project. Chairma
5. CA	ARES Act Funding	Education: (in thousands) ESSER: Elem. and Secondary Schools Emergency Relief \$86,640 HEER: Higher Education Emergency Relief Fund \$66,808 GEER: Governor's Emergency Education Relief \$16,398 Telemedicine:
		USDA Distance Learning and Telemedicine: \$25 Million Open through July 13, 2020

USDA conducted first webinar on May 12
 FCC-COVID-19 Funding: \$200 million

- Available to healthcare facilities
- Webinar Proposal from Tilson

CTO Josh Spence provided details on the Governor's Office's team working on this initiative. A portion of the CARES Act has been issued to the State and multiple agencies are working to administer funds. There will be a grants application portal for local governments, with additional details to be provided by the Governor's Office.

Agencies are reviewing how to best leverage the funding. Providing feedback to the Congressional delegation regarding restrictions and opportunities. The concern would be for expansion of infrastructure, not limited to devices only. To enhance long-term capacity for broadband in WV. Also looking for short-term opportunities. Education is a main concern, especially looking toward start of school in the Fall. The WV Department of Education is reviewing options. Seeking ideas from private sector and ideas to help influence broadband expansion.

Member Pearson noted that he was presented on the call. Chairman Hinton encouraged everyone on the call to share ideas with Josh Spence.

- Review of eligible locations and census blocks, reserve pricing, and auction process
- Overview of activities; webinars on April 1, April 28
- Challenged census blocks and challenge process

Fred Feit with Tilson Technology provided an overview. The Council and Tilson have conducted two webinars (April 1 and April 28, 2020), and received good feedback from providers concerning the webinars. The goal is to encourage ISPs to participate in the auction. There is an initial maximum in \$800 million in eligible areas, subject to change with the FCC's final determinations, following the FCC's review of challenged census blocks.

Mr. Feit noted that the FCC will subsidize census blocks. This funding opportunity predated the pandemic. Bidding is expected to begin October 22, but participants must meet certain requirements leading up to the auction. The application process gets underway in the Summer, and ISPs must apply to be eligible.

On March 17 the FCC released the initial eligible areas. Challenges are permitted until April 10. The FCC received a substantial number of challenges. 180 entities have submitted challenges for 280,000 census blocks, While several companies in WV submitted challenges, Frontier made the largest number of challenges within the WV. Mr. Feit noted that Frontier is claiming to have provided 25/3 in a relatively short amount of time, while simultaneously not meeting other timelines. Multiple entities have submitted comments to the FCC concerning the validity of the challenges. The FCC has slower release of final eligibility list. This poses a challenge as it reduces the time available for network design.

In WV, \$800 million in maximum subsidy is available for preliminary census blocks. The RDOF is a multi-round reverse auction, so the \$800

6. FCC Rural Digital Opportunity Fund (RDOF)

million represents the high side. The cost of deployment will exceed funds available. The reverse auction reduces the cost through competition and the final amount will be less than the \$800 million opening price.

The 2018 CAFII auction followed the same format, the opening cost of the auction exceeded the budget by a ratio of 3:1, and the current RDOF ratio is 2:1. Meaning that larger dollar amounts are potentially available for deployment of future-proof infrastructure and better networks. With some rule changes from 2018 to 2020, the FCC is attempting to incentivize more robust networks. Fiber to the premise networks would be favored over wireless and satellite.

The Auction start date is still October 22. Tilson has seen no indication that this would be delayed, even with the substantial challenge response. Final decisions on challenges is forthcoming and would potentially influence network designs and cost estimates.

Ron Pearson: asked if what State agencies should have input on questionable challenges that may stand in the way of neighborhoods receiving assistance, asking whether the Attorney General is involved. Mr. Feit responded that the response could come from various agencies, including the governor's office, broadband council, senate offices, attorneys general. There has been an aggressive response nationwide concerning the Frontier challenge. The RDOF docket allows for electronic filing of comments.

Chairman Hinton noted that the meeting packet included letters (from WISPA and NRECA) that were recently submitted to the FCC concerning the Frontier challenge specifically. The Rural Broadband Association also submitted a letter (that was not included in the packet). Conversations in West Virginia are ongoing, and priority is given to pandemic response. The Council may draft a letter in support of the abovementioned letters, although the RDOF process does not offer a clear mechanism for questioning challenges.

Frontier's challenge includes 17,000 census blocks nationwide; and 790 census blocks in WV are included in the Frontier challenge, which are estimated to represent approximately \$80 million in potential subsidies. Several other providers submitted challenges as well, such as Spruce Knob and others. Tilson did not have the breakdown for this meeting but will develop this information.

Frontier's challenge represents about 5 percent of the eligible census blocks in WV. Determining the cost impact is difficult because the FCC defines subsidy amounts at the block group level. The minimum bidding unit is a census block group, not the block level. If individual blocks are removed from the block group, the FCC would recalculate the subsidy. Relying on an average, if the challenge involves about percent of the total, the amount could be estimated.

Mr. Pearson asked if the Council could explain this data to the Attorney General so that agencies understand the impact of the challenge due to its unique understanding of the issue so that any action could be considered. Chairman Hinton indicated that this would be an opportunity for discussion but would defer to the Attorney General's

office on any action, options and/or how to pursue. Fred Feit offered that the RDOF is a two-phase auction. The budget for phase one is \$16 billion for subsidies over 10 years. Phase two budget is \$4.4 billion, plus any remaining funds from phase one or any funds added by the FCC and has not been scheduled. The process for determining eligible areas will change between phase one and phase two.

Mr. Feit also described the issues concerning with current mapping according to Form 477 data. There is no challenge process or penalty for erroneous filings. Before RDOF phase two, the FCC will implement the DDOC program in addition to the Form 477 filings and will also require broadband coverage polygons to draw lines around coverage areas. A polygon will be submitted for each speed tier and each technology. This data will then be made public and the FCC will create a crowd-source challenge portal, so this data, after decades, will be subject to a challenge process. RDOF round two will then present other options for input on eligible areas.

Mr. Pearson noted that he will continue to monitor the bankruptcy case. Chairman Hinton said that the RDOF is the largest amount of funding available for broadband funding in West Virginia within the next 10 years and is hopeful that providers take advantage of this opportunity to make a significant impact.

Mr. Pearson said this is precisely why the challenge areas need to be resolved. Chair Hinton noted that some of the counties included in the challenge have the greatest need for improvement.

Jeff Proctor asked if U.S. Senators have been involved. Chair Hinton stated that these conversations are ongoing.

Sen. Plymale noted that both U.S. Senators have expressed concerns, as published in recent articles or releases, with the challenge and that he would circulate to Council members. Sen. Plymale said this was a critical area that needs to be addressed. Tilson has done a good job of articulating the issue, and that the Council could and should write a letter to the FCC on this issue. Sen. Plymale noted that CTO Josh Spence may speak to the Governor's Office.

Concerning the data available, Tilson is continuing to work on the analysis of financial impact, number of census blocks challenges, by county, or other metrics.

Mike Holstine requested the map and specific breakdown of challenge areas in Pocahontas and Greenbrier counties.

Del. Linville added that there are efforts to focus on accuracy of maps to push RDOF to the time at which maps could be considered more accurate, so the Council should request that RDOF proceed as quickly as possible but with more accurate date that would not eliminate eligibility for funding by certain census blocks.

In summary, Fred Feit noted that Sen. Manchin has recently requested that the FCC delay the RDOF until the maps are correct. Chair Hinton noted that the Council would work to coordinate any action with the State's agencies and leaders.

July 2019, the FCC voted to eliminate the educational requirements for Educational Broadband Service (EBS) and issued the "<u>Transforming the 2.5GHz Band</u>" Report and Order. The Order includes a priority filing window for Tribal Nations through August 2020, prior to the auction.

Chairman Hinton began discussion of the EBS Spectrum 2.5 Educational Broadcast Service. The FCC has initiated a process to auction the spectrum. Recent discussion has focused on the whether the State may have an opportunity to secure spectrum. The FCC has not announced an official date. There would likely be a short form application, then a long form. The tribal priority filing window for Tribal nations closes in August 2020. The Chair noted that Sprint is the largest lease holder of this spectrum for mobile and fixed wireless in the nation. The State should take advantage of the opportunity to secure spectrum.

CTO Josh Spence and Jeff Whitman have been working on this issue. Mr. Whitman has prepared a white paper on the EBS spectrum. Mr. Spence said his agency is reviewing short and long-term goals and opportunities. He noted that this spectrum has value in that it can be transmitted through obstacles that other cannot. With the pandemic, technology has enabled everyone to stay connected. The spectrum would provide capability for education and telemedicine initiatives.

Mr. Whitman noted that this frequency has greater capability to provide a wireless signal in a 10-mile radius, which is greater than 600 MHZ and Mi-Fi. 600 MHZ can only produce one-watt of power, while 2.5 MHZ can produce ten-watts. A typical Mi-Fi may only cover 2 -3 miles. Lower spectrums also limit channels. Mr. Whitman noted that the FCC has only opened a couple of windows for educational institutions to apply for EBS licenses, and the last may have been in 1995. In WV, the only county that owns a license if the Jefferson County Board of Education. This may have been issued in 2013, as shown on the FCC website, through a waiver.

In 2005, the FCC issued new data-centric rules. As the FCC moves toward an auction, the commercial carriers may win the auction and then limit its capabilities. While coverage is better now than 5 to 10 years ago, the rural areas are still being left out. Mr. Whitman stated that wireless facilities could be added to schools and this would potentially cover a larger area. The technology could also be deployed quickly. Utilizing available fiber networks and key splice points, the EBS could improve broadband in rural areas. Mr. Whitman noted that this spectrum could provide adequate speeds and could dramatically improve broadband in WV.

Council members requested that Mr. Whitman's contact information and white paper. Chairman Hinton noted that a 10-mile radius is equal to 319 square miles from one vertical access point. He also noted that the previous CBRS auction was conducted at the county level. The Broadband Loan Insurance would contemplate license spectrum as infrastructure because it is a medium and companies in WV would need capital to purchase spectrum. Providers – fiber and wireless carriers – need to be informed of the auction and the State needs to be prepared for the auction.

 EBS Spectrum https://docs.fcc.gov/public/attachments/DOC-358065A1.pdf

8. Additional Project Updates from Tilson Fred Feit, Broadband Consultant	 Update on AEP Project and Assistance for FirstEnergy Project Tilson GIS Work and Direct Support Contract Renewal First Energy: Fred Feit gave a brief overview, noting that after First Energy withdrew the study for Wood and Ritchie counties, the plan involved a more refined focus on areas that may also have opportunities for other funding. This would include USDA ReConnect, Round 1 or Round 2, and any areas that may be eligible for FCC RDOF. This overall view was then combined with First Energy's infrastructure and investment goals overlay middle mile deployment with pending applications for ReConnect and/or FCC RDOF auction. Sammy Gray with First Energy expects that they would resubmit the feasibility study within a couple of months, with a possible update in June and final submission in July.
9. State WIFI Map	The State Wi-Fi location map has been set up upon request of Governor Justice with about 400 Wi-Fi locations statewide. The WV Office of Technology is handling updates to this map. There are some areas of the states that are not well represented. If any partners know of additional other locations, those can be sent to the WVDO. Initial submissions were submitted by county boards of education and libraries. These locations are said to offer exterior access so that users can remain in their cars. Many thanks to WVOT for ongoing assistance with the project.
10. 2020 Broadband Deployment Report	https://docs.fcc.gov/public/attachments/FCC-20-50A1.pdf FCC Broadband Deployment Report Fred Feit with Tilson reviewed key takeaways from the broadband deployment report. The national ranking has slipped from 45 to 48 but the underlying statistics did not change much. The changes may be attributed to the statistical performance of other states. The US is shown by the FCC at 94.4 percent covered; 77 percent rural and 98.5 percent urban covered. In WV, the total number is 84.2 percent covered; 70 percent rural and 95 percent urban. The trend is not drastically different from 2019. If preferred, Tilson can conduct some analysis of trends and percent changes from year to year. Major changes may only be evident with major funding but overall, there would be modest changes from year to year. Tilson does not believe the slip from 45 to 48 was significant in terms of comparison to surrounding states.
11. FY 2021 Budget	Fiscal Year 2021 Budget A projected budget for FY 2021 was discussed. The Council's budget was initially set up on a calendar year basis due to the requirement for annual reporting. The WVDO intends to work with the Commerce CFO to establish tracking tools. The WV Legislature has provided \$500,000 for the Broadband Council and the Commerce CFO added this amount in April 2020.

Expensed in May included Ookla, Speed Test Custom, Bowles Rice for legal services, and Tilson that included general consulting and RDOF workshops which were previously authorized.

The 2019 budget was on a calendar year, and beginning July 1, 2020, the budget will be moved to fiscal year basis. The Council was provided with 2019 budget, 2019 expenses, 2020 expenses to date, and a projected budget for FY2021. A few modifications would include:

- Commerce Communications \$20,000;
- Technology and Subscriptions \$60,000. This may need to increase if the Council renews its license for Fiber Locator. This is less than \$20,000 per year.
 - \$41,650 was previously budgeted for WVGES for GIS mapping. About \$13,000 was paid in 2019. \$5,000 would be retained as a placeholder for ad hoc GIS services.
- Attorney General: maintaining \$25,000 per year, although this is far under budget.
- Bowles Rice: Budget is \$83,000. Expenses in 2019 exceeded \$120,000. This includes complex topics, such as Dig Once, FCC, utilization of right of way. This \$83,000 placeholder can stand but will most likely need to be increases. Current expenses are at \$78,000.
- Tilson: Previous Budget was \$83,000. This was increased by \$50,000 for Additional funding for the RDOF workshops, and then additional funding for First Energy. The existing budget for Tilson would be about \$165,000 per year, however, there is a new need for GIS and technical assistance such as back-end work with speed test data, mapping, GIS services for local project teams, CarolAnn began an initiative to map all publicly funding such as CDBG, ARC, USDA, FCC CAF II, and we want to continue this process. This ongoing initiative will create a clearer picture of where assets and infrastructure..

WVDO Executive Director, Mike Graney, has agreed that the WVDO will fill the GIS position. Tilson can assist on interim basis within a budget of \$30,000 through the end of the year, but this total does not include the RDOF workshops, which will be added.

At a previous meeting, the Council did approve the use of personal services up to \$150,000. This could be used for the GIS position. This position was previously funded by the WVGES and the WVDO. With the personal services authorization, the WVDO and the Council can jointly fund the GIS position or other positions. With all of these items, the projected FY2021 budget is slightly more than \$500,000 (if the personal services funds are allocated).

The chairman noted that the Council has been under budget for two consecutive years and has shown the ability to operate efficiently. Jeff Proctor noted that the current pandemic has highlighted the importance of broadband. The Council needs to continue to develop capacity. The entire task is huge. Mr. Proctor offered a motion for approval of the proposals from Tilson for the interim GIS assistance/technical assistance, until the position is filled, and for the Tilson Telehealth proposal. Mr. Holstine provided a second and the motion was approved.

WVDO Executive Director Graney said he would push to find a GIS professional. Mr. Graney stated his agreement with the need to file comments with the FCC concerning the RDOF challenge. He also agreed with Jeff Whitman's comments concerning the EBS spectrum and how this could be an enormous opportunity for West Virginia with wireless services as a companion to fiber infrastructure. He urged the Council to seek inroads with the FCC for emergency access to the EBS and would like to see the effort continue.

Chairman Hinton stated appreciation for the support and leadership of Mr. Graney and the WVDO team.

Motion to approve the FY21 budget was offered by Jeff Proctor, and second was offered by Robbie Morris and approved.

12. Public Comment

13. Next Meeting Date June 11, 2020, 10:00 a.m.; Building 3, First Floor

14. Adjournment

Meeting adjourned.

	Action Items								
No.	Description	Assigned To	Month Identified	Target Completion Date					
1.	Legal and Cooperative Toolkit and Training	WVU Law	June 2017	Underway by WVU Law Clinic					
2.	2. Broadband Hub ARC Broadband K. Workman, C Hub/Mapping Project Williams, WVG		November 2018	COMPLETE					
3.	FCC 477 January 8, 2020 Mapping Update	Commerce, C. Williams	February 2020	COMPLETE					
4.	NTIA/National Broadband Availability Map	K. Workman, C. Williams	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.					
5.	FCC RDOF Workshop		January 2020	COMPLETE					





MEETING MINUTES I June 11, 2020

Meeting Title		WV Broadband Enhancement Council				Time	10:00 a.m.	
Chairman		Robert Hinton				Location	Conference Call	
• •	eting Registration: <a bill"="" bissett<="" href="https://h</td><td>erence call due to COVID-19. Upda os://forms.office.com/Pages rence/call information upon regne if not speaking and identify bolic comment and hold any public comment and hold any public comment.</td><td>/Me
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VC = Videoconference; _ = Absent</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></tr><tr><td></td><td>Council Member</td><td>Representing</td><td></td><td></td><td>Council</td><td></td><td>Representing</td></tr><tr><td>TC</td><td>Robert Hinton,
Chairman</td><td>Rural Business User
Congressional Dist. 2</td><td></td><td>_</td><td>C. Edward G</td><td>Gaunch</td><td>WV Dept. of Commerce, Cabinet Secretary</td></tr><tr><td>TC</td><td>Robert Morris,
Vice Chairman</td><td>Urban Residential User</td><td></td><td>TC</td><td colspan=2>Jeff Proctor</td><td>Representing Secretary Gaunch</td></tr><tr><td>TC</td><td>Michael J. Holstine
Secretary-Treasurer</td><td>Rural Business User
Congressional Dist. 3</td><td></td><td>TC</td><td colspan=2>William D. " td=""><td>Urban Business User</td>	Urban Business User						
TC	Robert Cole	Rural Residential User Congressional Dist. 1		TC	Dennis Lee		Business User, Large Scale Broadband	
TC	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		TC	Honorable Ronald G. Pearson		Rural Residential User Cong. Dist. 2	
_	W. Clayton Burch	Dept. of Education, State Superintendent		TC	The Honorable Robert Plymale		WV Senate (D) (Ex-Officio/Advisory Member)	
TC	Brenda Morris	Representing Clayton Burch		_	The Honorable Mark Maynard		WV Senate (R) (Ex-Officio/Advisory Member)	
TC	Joshua D. Spence	WV Office of Technology, Chief Technology Officer		TC	The Honora Daniel Linvi	lle	WV House (R) (Ex-Officio/Advisory Member)	
_	James Dixon	Representing Joshua Spence		_	The Honora Kenneth Hid	cks	WV House (D) (Ex-Officio/Advisory Member)	
_	Matt Turner	Higher Education Policy Commission Vice Chancellor		-	Vacancy: Rural Business User Congressional Dist. 1			
TC	Dr. Carl R. Powell	Representing Matt Turner		_	Jeff Whitma	an, WV Office of Tech	hnology	
	Representative	Agency			Representa	tive	Agency	
TC	Kelly Workman	WV Development Office Administrative Director		_	Alexandra S	ihulz	Bowles Rice Legal Counsel	
TC	Todd Goddard	WV Development Office Development Manager		TC	Jim Kelsh		Bowles Rice Legal Counsel	
_	Wes White	WV Commerce, Deputy Secretary		-	Chris Camp	bell	Tilson Technology Management	
_	Peter Markham	Bowles Rice Legal Counsel		TC	Fred Feit		Tilson Technology Management	
Age	Agenda Item			Details/Minutes				
1. Call to Order, Opening Remarks; Roll Call			Chair called meeting to order at 10:02 a.m.					
 Approval of Revised 3/12/2020 and 5/14 Meeting Minutes, Financial Statement 			to se	A motion for approval of minutes from May 2020 meeting and revision to March 2020 meeting minutes was offered by Dennis Lee, with a second by Bill Bissett. Motion carried. Financial report filed for audit.				
3. Generation West Virginia, Benedum Foundation				Natalie Roper, Generation West Virginia Mary Hunt, Benedum Foundation				

Generation WV and Benedum Foundation presented information concerning their partnership and broadband initiative. Mary Hunt, program director for community and economic development with the Benedum Foundation, explained that Benedum has a long history of working on broadband through a number of initiatives, mostly related to demand development and federal grant funding. As Benedum began its 75th year, the Foundation adopted its Local Solutions to Broadband, a threeyear imitative starting in January 2020. Benedum is partnering with Generation WV due to its involvement and advocacy on broadband and reach to key constituencies. The project will focus on two nine-county regions, located where Benedum has a presence. Eighteen counties include one-third of the state, and approximately one-third of the state population. Broadband development will support transitioning economies and rural characteristics, in the Hatfield-McCoy area, and Monongalia Forest Area. Goal is to provide broadband access through work with local capacity groups and capacity building. Mary thanked partners, Natalie Roper and Kelly Workman.

The measure of success will be amount of funding secured. Rather than focusing on the process, the program will focus on outcomes and how projects can match up with available funding streams.

Natalie Roper, Executive Director of Generation WV, reviewed work over the first six months of the project. Work to date has included consultation with local communities. Focusing on outreach to key stakeholders and identifying gaps, needs, and barriers. Generation WV has previously been an active advocate of broadband development. The group will work with CTC Net and Joanne Hovis as a technical consultant, and John Golden with 360 Strategies, as project manager. A core measure will be provision of funding. The project team will support local efforts to obtain funding and help bring projects to completion. Also working with Jason Roberts and John Tuggle, executive directors of the Regions 1 and 4 Planning and Development Councils.

Chair Hinton thanked the Ms. Hunt and Ms. Roper and detailed that the amount of funding available for broadband has increased substantially over the past few years, and West Virginia has a growing capacity to develop applications and projects, through the development of relationships with private companies. Moving from concept to execution is often a challenge with access to capital and capacity. Council would like to see expansion of cooperatives, in addition to HardyNet and Seneca Rocks.

Questions from Council Members: Jeff Proctor asked about the biggest opportunities. Ms. Roper stated that the development of local champions, bringing together leaders to help push the

initiative with the goal to improve education, healthcare, and economic opportunities. While the issue cannot be solved overnight, local leaders need to engage for the long haul, and as younger workers see the integration of broadband with career development. The development of cooperatives and solutions for areas in West Virginia, to add to the work of the Council and the WV Development Office. Ultimately, the goal is to increase broadband across the state with involvement of counties, communities.

Ms. Hunt observed that schools and other organizations have become more engaged by necessity, along with healthcare as the need to adapt has rapidly evolved. These stakeholders have become more directly involved.

Chair Hinton asked about the alignment of entrepreneurship and broadband, specifically related to local internet service providers that may be willing to serve local communities. Ms. Hunt outlined that Benedum has been involved in developing local tourism and food industries, that are small, but collectively offer a greater scale. They are currently working with the Mon Forest Initiative to develop outdoor recreation, along with Tucker County, to grow the industries. These companies may benefit from being in a collective group, akin to industry building, that can collectively pursue capital through economies of scale. This has been seen in the food industry and tourism. This approach may work but the practicality should be explored. Ms. Roper explained that Generation WV's work has focused on new economy job creation, such as technical fellowships. The project will seek to align technical and broadband, increasing customers and opportunities.

Sen. Plymale noted that the amount of funding needed is significant. Related to education, and specifically Wayne County, about 50 percent of the county may lack access. His question related to how the project may benefit connectivity for students. Ms. Hunt explained that the project will help identify pinch points in rural areas, by identifying how all grant opportunities can work together. Ms. Roper reiterated that the project team will consult as many people as possible. Council members and anyone interested can contact Ms. Hunt or Ms. Roper directly.

Sammy Gray, FirstEnergy

4. First Energy-Mon Power Broadband Feasibility Study

Sammy Gray provided a review of the FirstEnergy-Mon (FE) Power Middle Mile Feasibility Study. Also participating on the call were Gary Jack, legal counsel; Kirsten Dransfield, FE Emerging Technologies; Eric Young and Doug Milbrand; FE Fiber Networking; and Eric Mills FE IT Networking. Mr. Gray detailed that FE submitted a study in January but withdrew this study and since that time has worked to further refine its approach. Mr.

Gray thanked the Council, Tilson and Kelly Workman for assistance. Mr. Gray reviewed key highlights of the study:

- Study contains three projects in a 10-county area in central WV.
- Counties mostly lacking 25/3 Mbps Service
- Will support broadband services to these areas within the Companies' service footprint
- Proximity to the utility's existing fiber infrastructure
- Able to achieve diverse middle mile paths to maintain continuity in the event of a fiber break
- Unserved or underserved Internet service
- Opportunities will exist to serve homes, businesses, and schools

The Study includes Roane, Calhoun, Gilmer, Braxton, Clay, Nicholas, Webster, Randolph, Barbour and Pocahontas counties in central West Virginia.

Mr. Gray explained that there are three project areas:

- Roane EDA Project

 Roane, Calhoun, Gilmer, Braxton, Clay, Nicholas
- Pocahontas County-Greenbrier Valley Economic Development Council
- Randolph, Barbour Counties -Southern Route

The estimated route lengths of each were provided, with all project combined totaling 431 miles at a cost of \$72.08 million. Estimated operation and maintenance would be \$2.1 million for all three. The company requests flexibility from the Council to pivot among these projects in consideration of pending applications with USDA ReConnect, and those that may be submitted to the FCC RDOF auction. The goal is to use all resources wisely for maximum benefit.

A map of the Roane EDA project was provided with a blue line indicating new fiber build. Red diamonds indicated substations along the route. A red outline shows an existing line from Parkersburg to Spencer which would be utilized to increase reliability.

The Pocahontas County project featured the Marlinton service center, and other substations.

The Randolph-Barbour Southern Route does not include a loop design but is significant to the other two projects due to its Elkins service center and other facilities.

With all three projects combined, a continuous loop is achieved throughout the 10-county area within the FE service territory and this loop is contiguous with all three projects from end to end.

A list of company locations within each of the three project sections was provided. These will be tied together for efficiency within communication systems and service to electric customers.

The estimated residential impact for each project was shown. Estimated three-year construction timeframe. In-service capital was detailed along with operation and maintenance costs, and revenue requirements. Since leases have not yet been negotiated, the company picked a range of possible lease revenue from low, medium to large. The estimated residential monthly impact to customer billing was shown in relation to each lease revenue level.

In summary,

- Study identifies areas that highlight the foundation necessary for economic growth and a sustainable quality of life through broadband
- Identifies opportunities to provide high-bandwidth, reliable communications to underserved locations, leveraging technologies to reduce outage times
- Operate within a regulated cost recovery construct that is full and timely
- Coordination with Broadband Council, ROC and ISP Outreach

The timeline was reviewed. Assuming Council approval in August 2020, the FE would intend to file with the WVPSC in late 2020, with possible approval in first half of 2021, with project beginning in second half of 2021.

A general legal disclaimer was included. Mr. Gray thanked the Council for the opportunity to present the study and invited questions.

Chair Hinton thanked Mr. Gray and asked with three projects, in three areas, are all three dependent upon one another or can they be independent? Mr. Gray stated that these projects can be independent, but the goal would be to connect all three eventually. With pending grant applications, the company has submitted all three as potential areas to provide flexibility.

Questions from Council members – Robbie Morris asked about the number of households and other demographic data. Mr. Gray indicated that this analysis was not part of the feasibility study. However, the electric customer count was included in the study. Eric Mills noted that they incorporated local ISP interest in the

analysis. Gary Jack noted that on page 8, the number of electric customers is detailed, showing about 80,000 customers in the project area. Mr. Morris also asked if part of the route was chosen based upon local ISP interest, and Mr. Gray said that those consultations were made up front to gauge interest. Mr. Morris asked about the number of ISPs, and Mr. Gray indicated that consultations were conducted with the ROC, Regional Optical Communications group, which had conducted its own outreach and indicated that the interest is there. Gary Jack noted that circumstances may change, but if the USDA provides grant funding for the Cltynet projects, that the project will come together, and that additional outreach will be conducted.

Mr. Morris asked about the cost per mile. Gary Jack noted that the cost per mile is \$167,000. This is significantly lower than the cost detailed in the first study. The project team reviewed contingencies and ways to drive down costs. This cost is higher than placing normal fiber optic cable because it includes upgrades at substations, fiber huts for ISPs, the placement of fiber in the power supply space. All of these elements add cost, but still lower than the initial study.

Mr. Holstine noted that the project is very sensible and appreciates the need to bring the service from Parkersburg through the service territories and throughout the state. In reference to separate the projects, what is the intent for backhaul if the Pocahontas County section stands alone, and what is the capacity for this. Eric Mills noted that the project would provide dark fiber but not electronics.

Chair Hinton asked if the cost analysis could be factored to show the fiber cost per mile without the other costs included. Looking at this cost alone can provide a more accurate cost comparison. Eric Mills stated that this budget detail would be provided.

Mr. Proctor asked the team to address how the Barbour-Randolph project was more of a line than a loop. Mr. Gray stated that there are existing fiber assets in the area that would support the project, however, it would be most beneficial to tie all three projects together. Mr. Proctor noted that Region 4 PDC and others have completed studies and asked how the projects could be coordinated.

Gary Jack indicated that consultations with John Tuggle and the ROC group were conducted to develop the route to provide maximum value and benefit. Mr. Proctor asked about the relationship of the projects. Gary Jack stated that the project would augment the existing project design.

Mr. Spence asked about the fiber count for FE use and ISP availability. Eric Mills stated that the plan is to place 144-count fiber with up to 96 fibers available for ISPs (found on page 11).

Chair Hinton thanked the FE team for its work on the project. Chair Hinton proposed a timeline for processing the study prior to August to be within the 60-day requirement. Tilson is prepared to complete its analysis. A working session will be held on June 17, at 9:00 a.m. to review the project. On June 25, final questions and information will be submitted; July 9 would be the deadline for analysis; and vote would be conducted on July 16 Council meeting, moving the meeting back one week.

Mr. Morris stated that the timeframe would work provided that Tilson and Bowles Rice agreed, and they concurred. With all parties in agreement, the chair asked for a motion to move the July meeting date and complete the items according to the timeline. Motion by Bill Bissett, and second by Mike Holstine. Motion carried.

Fred Feit, Broadband Consultant, Tilson Technology Fred Feit provide a review of the subsidy of the auction, to be paid monthly over a 10-year term. Some census blocks are subsidized and some are not. On June 9, the FCC voted on the final auction rules.

The FCC is being aggressive but did delay the auction date to October 29. The main items provided in Mr. Feit's presentation are as follows:

- FCC Voted June 9, 2020 on final auction rules
- Bidding to start on October 29
- Potential auction participants must submit the short form by July 15. This includes questions regarding the planned technology and thorough project description.
 Some must submit financial statements.
- Auction Short Form application window open between July 1-15
- FCC reviewing eligibility 200 entities challenging almost 300,000 census blocks nationwide
- Final eligible areas list to be released prior to July 15, leaving 100 days until bidding
- Successful ReConnect Round 2 application areas may be removed before auction
- Lowest weighted bid wins once auction budget clears.
 While most procedures are similar to CAFII auction, this
 is a significant change, meaning that a gigabit project
 would likely prevail over wireless or satellite.
- (Geo-synchronist satellite providers-Hughes Net, ViaSat) cannot bid in upper two speed tiers
 - Satellite providers will have a minimum weight of 75

5. FCC Rural Digital Opportunity Fund (RDOF)

- Satellite loses to all terrestrial bids (lowest weighted bid wins)
- In CAFII, ViaSat won several bids because they had existing satellite networks and could accept lower subsidies.
- LEO satellite providers such as StarLink do not have this blanket 75-point penalty and will be reviewed on a case-by-case basis.
- Letter of Credit requirement relaxed compared to CAF II auction.
 - All auction winners must maintain the LOC; first year 10 percent; second year 15 percent; third year 20 percent.

Mr. Feit provided a map of eligible areas in West Virginia, determined by the FCC through Form 477 data, known for lack of accuracy and quality. The FCC will undertake a change after this auction. The map showed challengers, color coded by provider. Tilson also provided a review of the financial impact of challenges, showing \$800 million total available, and the value of the challenged blocks, with Frontier's challenge equaling \$80 million or approximately 10 percent. In total, all challenges equaled about \$150 million. Nationwide, numerous organizations have questioned challenges, including the Frontier challenge. Along with all other providers, Frontier must apply to the FCC for participation in the auction.

Mr. Proctor asked if the State would challenge the Frontier challenge due to the bankruptcy. Chair Hinton stated that statutorily, the bankruptcy does not necessarily prevent entry into the auction. From the legal counsel standpoint, Bowles Rice is unable to assist on this matter. Mr. Kelsh stated his regret for this situation. The Council may utilize the WV Attorney General's Office, or the WVAGO can authorize the retention of substitute counsel. At this time, Mr. Kelsh had not received any confirmation on this point. The Council must have authorization from the WAGO to proceed with alternative counsel.

Mr. Holstine asked if the Council was using the results of broadband surveys to provide detail to the FCC. Chair Hinton stated that information had been compiled, but the Council should not move forward without legal counsel. Mr. Holstine noted that Sen. Manchin is sending broadband surveys to the FCC, and should the Council send its survey results to Sen. Manchin. Chair Hinton stated that he had not objections to this action.

Mr. Kelsh stated that Frontier has asked the FCC to include its challenged census block in the FCC auction. There was discussion of this issue and potential action on the part of the FCC.

Chair Hinton asked if the Council had any objection to sharing the survey results. Mr. Bissett suggested sending these results to both Senators Manchin and Capito. Mr. Bissett also offered to contact the WVAGO. Del. Linville stated that he had contacted the WVAGO directly and would assist in resolving the issue. Mr. Pearson advised that the WVPSC has received a petition from Frontier asking for approval their plans to reorganization before the filing of the case. This provides an opportunity for the Council to advise the WVPSC of any information. Frontier has requested an expedited ruling that will enable its entry into the auction. Mr. Pearson noted that 29 states and each state that has a regulatory agency has a chance to speak to how the plan might impact customers. Chair Hinton reiterated the need for legal counsel on this matter. Del. Linville asked Mr. Pearson to provide a written overview and offered to coordinate directly with the WVAGO. Mr. Pearson noted key questions related to the bankruptcy filing and indicated that he would compile a list of issues related to the case and other matters that he would share. Fred Feit noted that when a company applies to the FCC for entry into the auction, the approval can be granted on a state by state basis. Mr. Feit stated that although Frontier has offered to return census blocks to the auction. In this scenario, Frontier then can bid on the census blocks and forego any investment because they have stated that they already provide 25:3 in these areas. Mr. Pearson noted that this would enable Frontier to veto any improvements in these areas, and that this should be called to the FCC's attention. July 2019, the FCC voted to eliminate the educational requirements for Educational Broadband Service (EBS) and issued the "Transforming the 2.5GHz Band" Report and Order. There is ongoing consultation between the WV Office of Technology and the WV Dept. of Education. WV CTO Josh 6. EBS Spectrum Spence participated in a National Governor's Association in which https://docs.fcc.gov/public/attachments/DOCseveral states discussed how EBS could possibly be utilized, but 358065A1.pdf concrete details were not available. The question remains as to whether the WV Dept. of Education wants to pursue as a pilot or at a statewide level. Chair Hinton noted that the EBS Auction is expected to occur later this year but could be pushed to 2021 due to the RDOF and the CBRS auction this summer. This matter was previously discussed related to the need for legal

counsel.

7. Other Business

8. Public Comment		Public comment: Carol Heiberger said she was reviewing information and will offer comment at a later date. John Tuggle noted his appreciation to the FirstEnergy team, and their work. Roane EDA, Greenbrier Valley EDC, are involved. The First Energy project offers distinction to the USDA ReConnect applications. The ROC group is also in discussion with AEP-APCO for discussion of potential projects in southern areas.				
9. Next	Meeting Date		July 16, 2020, 10:00 a.m.; Building 3, First Floor/Conference			
10. Adjournment			The meeting was adjourned at approximately 12 noon. Holstine made a motion to adjourn, second by Bissett. Action Items			
No. Description Assig			ned To	Month Identified	Target Completion Date	
1.	Legal and Cooperative Toolkit and Training	WVU	Law	June 2017	Underway by WVU Law Clinic	
2.	NTIA/National Broadband Availability Map	K. Workman, Tilson		February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.	





MEETING MINUTES I July 16, 2020

Me	eting Title	WV Broadband Enhancen	ancement Council		il	Time	10:00 a.m.
Cha	irman	Robert Hinton Location				Location	Conference Call
	eting Registration: <a <="" href="https://h</td><td></td><td colspan=3>/Meeting Registration gistration</td><td>speak</td><td>P = Present; TC = Teleconference;
VC = Videoconference; _ = Absent</td></tr><tr><td></td><td>portion of the agenda</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><th></th><th>Council Member</th><th>Representing</th><th></th><th></th><th>Council I</th><th>Memher</th><th>Representing</th></tr><tr><td>TC</td><td>Robert Hinton,
Chairman</td><td>Rural Business User
Congressional Dist. 2</td><td></td><td>тс</td><td>C. Edward G</td><td></td><td>WV Dept. of Commerce,
Cabinet Secretary</td></tr><tr><td>TC</td><td>Robert Morris,
Vice Chairman</td><td>Urban Residential User</td><td></td><td>тс</td><td>Jeff Proctor</td><td></td><td>Representing Secretary Gaunch</td></tr><tr><td>TC</td><td>Michael J. Holstine
Secretary-Treasurer</td><td>Rural Business User
Congressional Dist. 3</td><td></td><td>_</td><td>William D. " td=""><td>Bill" Bissett</td><td>Urban Business User</td>	Bill" Bissett	Urban Business User				
TC	Robert Cole	Rural Residential User Congressional Dist. 1		TC	Dennis Lee		Business User, Large Scale Broadband
TC	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		тс	Honorable F	Ronald G. Pearson	Rural Residential User Cong. Dist. 2
TC	W. Clayton Burch	Dept. of Education, State Superintendent		TC	The Honora Robert Plym		WV Senate (D) (Ex-Officio/Advisory Member)
TC	Brenda Morris	Representing Clayton Burch		-	The Honora Mark Mayna		WV Senate (R) (Ex-Officio/Advisory Member)
TC	Joshua D. Spence	WV Office of Technology, Chief Technology Officer		TC	The Honora Daniel Linvi		WV House (R) (Ex-Officio/Advisory Member)
_	James Dixon	Representing Joshua Spence		-	The Honora Kenneth Hid	cks	WV House (D) (Ex-Officio/Advisory Member)
TC	Matt Turner	Higher Education Policy Commission Vice Chancellor		-	Vacancy: Ru	ıral Business User Cor	ngressional Dist. 1
TC	Dr. Carl R. Powell	Representing Matt Turner		TC	Jeff Whitma	an, WV Office of Tech	nology
	Representative	Agency			Representa	tive	Agency
тс	Kelly Workman	WV Development Office Administrative Director		_	Alexandra S	hulz	Bowles Rice Legal Counsel
TC	Todd Goddard	WV Development Office Development Manager		тс	Jim Kelsh		Bowles Rice Legal Counsel
_	Wes White	WV Commerce, Deputy Secretary		_	Chris Campl	bell	Tilson Technology Management
_	Peter Markham	Bowles Rice Legal Counsel		TC	Fred Feit		Tilson Technology Management
	nda Item		Details/Minutes				
Call to Order, Opening Remarks; Roll Call		Chair called meeting to order at 10:00 a.m.					
Approval of 6/11/2020 Meeting Minutes, Financial Statement		A motion for approval of minutes from June 2020 meeting was offered by Dennis Lee, with a second by Bill Bissett. Motion carried. Financial report filed for audit.					
3. Update on USDA Programs			Kris Warner, State Director, West Virginia Rural Development, USDA, provided an update on all USDA programs. The most recent Reconnect and DLT applications from West Virginia were deemed eligible and are under review. Announcements are				

forthcoming. New funding recommendations include \$960 Million nationwide for ReConnect and \$1.1 Billion nationwide for the Community Connect program. Applications for Community Connect will be due late Summer/Early Fall. Mr. Warner encouraged applicants to be ready for new rounds of Reconnect, Community Connect, and DLT programs. Chair Hinton thanked Mr. Warner for his updates and invited questions. Jon Webster, External Affairs Manager, Appalachian Power, provided an update on the Middle Mile fiber project. Mr. Webster detailed the following information from previous update in May 2020: Mr. Webster detailed that the project area is specific to Logan & Mingo County and includes up to 414 miles of Middle Mile Fiber Optic Cable. The project represents an investment of approximately \$55 Million. AEP-APCO has 34,000 existing customers in two counties. While the project would be funded through electric rates applied statewide, any fiber lease fees will be returned to customers. The following highlights were presented: The project Advisory Committee meets regularly, including Region 2 PDC, WVDO, WVPSC, Broadband Council and its consultants, and Logan and Mingo Counties. Mr. Webster thanked this group for its continued support, involvement and 4. AEP/APCO Middle Mile Feasibility Study Key to success is ISP Partner(s) The first RFP did not generate responses. The team revised and reissued the RFP on May 2020 and received three responses upon closing in June 2020: Agile Networks, Gigabeam, and Point Broadband. All respondents are deemed eligible in phase one review and were invited to present project details. The timeline going forward is as follows: o RFP selection planned by end of August Lease Agreement drafted by end of September Project Returned to Broadband Council for approval in October 2020 Mr. Webster thanked the communities, WVPSC and Broadband Council for the continued support and ongoing communication. Robbie Morris thanked the AEP/APCO team for its tenacity in developing the project. WV Commerce Secretary Ed Gaunch expressed his gratitude for the work of the Broadband Council and its partners and staff over the last four years. The accomplishments were noted as remarkable, with thanks to Chairman Hinton and WVDO staff. The Secretary is planning to work with WVDO Director Mike Graney to create a director level position within the WVDO for broadband issues, to work along with 5. Comments by WV Commerce Secretary existing and future staff, within an organizational structure. Ed Gaunch The Secretary noted the need to inject a sense of urgency for infrastructure needs and broadband. This issue is critical to the WV Commerce efforts to build the State economy. The staff working with Kelly Workman to support this effort will work with Legislative staff to clear this hurdle.

This will require budget allocations and the Governor's approval. This would facilitate the creation of an organization that would enable the Council could serve more of an advisory role instead of being on the front lines to see that work is being done. Noting that this is conceptual, If Council approves of the idea, the initiative deserves more attention and resources.

Chair Hinton noted this is the needed next step in developing capacity, and the need for full time staff and capacity.

Robert Pearson noted it is difficult for volunteers, including the Chairman and Vice Chairman, to take resources from their other activities. He applauded the efforts of the existing staff and noted that more resources are needed.

Senator Bob Plymale agreed to assist with any Legislative changes needing to be made. He noted that the this is needed.

Speaker Roger Hanshaw agrees with the action and wants to look for suggestions concerning legislation and other action that may be needed to advance this initiative. The Speaker stated that he would personally support action to empower the amount and quality of work. All parties should work in consultation to achieve this goal.

Delegate Daniel Linville, House of Representatives, agreed and will support efforts to provide state level resources to efforts to bridge the digital divide.

Matt Turner, speaking on behalf of the HEPC, noted that the pandemic has exacerbated the need for state level resources to support broadband development.

On behalf of the WV Dept. of Education, Brenda Morris concurred.

Chair Hinton asked that they let the Council know what added action or help they may provide. Secretary Gaunch also thanked Jeff Proctor for serving as the WV Department of Commerce designee to the Council, and noted that the will make this a priority going forward.

Kelly Workman noted discussion at the June meeting regarding the need to share speed test data and survey results to the US Senate offices. Following consultation with Ookla Account Manager Scott Sorenson and Brian Darr, Vice President-Smart Cities, the State is considering a partnership which would involve Ookla and Tilson.

As background, Ookla is working with the State of Georgia on a Pilot Project to push speed testing in four rural counties and would be willing

to partner with West Virginia in the same manner. Previously, the West Virginia Development Office staff extracted data and sent it to Tilson for analysis and reporting. Tilson provided a compilation of speed test data for the Council's 2019 report to the WV Legislature. Under the proposed partnership, Ookla is willing to provide data directly to Tilson. This would facilitate Tilson's ability to access, analyze and report speed

test data to the State of WV in new and innovative ways, and would enable to the State to use this data to its highest and best ability. An addendum to the Tilson Contract is needed. If the Council agrees and WV Purchasing approves, signatures will be executed.

6. Ookla Speed Testing and Data Management

Brian Darr, Ookla presented information with accompanying PowerPoint slides. Mr. Darr noted that Ookla data consists of speed tests collected by Mobile applications and through Speedtest.net are consumer-initiated data, as an individual hits go and runs a full test, measuring download/upload, latency and jitter as data quality and connectivity measurements.

Consumer Initiated Data

Overall, counts are up, even though people are generally averse to filling out forms. Mr. Darr noted that the mobile application captures a latitude and longitude measurement that is accurate within a few meters. Ookla considers this the best data in terms of locations. If users are connecting via wifi, there may be other factors such as the connection that influence the connection, as opposed to a fixed connection.

Verizon, TMobile and other networks are included. Many Measurements are also obtained through fixed locations, from a mobile device or direct connection via desktop. Ookla is the number one speedtest application in the world.

Slide 1: Speed Test Results from January to June 2020 a Mobile app allows the track latitude and longitude of the user. There were 654,000 tests performed on fixed networks in the first 6 months of 2020. Ookla's analysis averages multiple tests from devices to ensure that these do not over sample. Test shown are fixed from mobile device or desktop. The map shows areas of poor (in blue) and good connectivity.

Ookla will assist Tilson in the process of deriving and analyzing this data. Data is aggregated to scale. To see the test view in a rural county, Mr. Darr provided a slide for **Logan County, Slide 2:** The map shows areas of good connectivity and very poor connectivity.

In Logan County, during the same period, with all providers, 11,293 tests were conducted. Mr. Darr noted that the number of connections needed at one location has significantly increased. Therefore, future funding may incorporate higher speed thresholds. Therefore, 25:3 may be sufficient until numerous people begin using the same connection.

Concerning the pilot project in Georgia, Ookla is working with the State to reach out to local government leaders, first responders, education, health care, and other stakeholders in four rural counties to generate more data. Ookla would like the opportunity to work with West Virginia to provide customized applications. The goal is to drive more data collection through distribution of the free application for the public. Ookla has more data than any other company, but realized there is a need for more and better data.

Ms. Workman noted that Logan (and Mingo) were chosen due to existing AEP-APCO project as case studies. The proposed data sharing and the contract will increase data and allow ease of access. This will also enable the State to identify unserved areas.

Fred Feit, Tilson asked how the GPS location from the speed test is acquired on the desktop or laptop. Brian said if the device does not have a GPS-enabled chip, then Ookla data will default to the GEO-IP (centroid) location provided by the Internet Service Provider for the user. It does not provide the address level location. They can use the GEO-IP in aggregate and average the experience.

He noted that about half of all speed tests are from a mobile device. Even the centroid can show the average or aggregate experience within a community. The GEO-IP or centroid can be used to show averages.

Fred then asked if Ookla can ask for an address in the speed test drop-down menu then use that exact data in funding applications. The GEO-IP is difficult to extract for certain applications, such as USDA ReConnect in which street addresses will be required. Due to issues with global addressing systems, Brian said the speed test customer can provide an exact address and speed test result through the Broadband Council's Speed Test Custom (STC) similar to Senator Manchin's website. The Broadband Council's site also captures the address manually.

Chair Hinton asked for a motion to allow Tilson to access Ookla data. The motion was made to move forward with a third-party agreement to be created between the Broadband Council, Tilson and Ookla. Robbie Morris made the motion

Jeff Proctor seconded the motion

Concerning the pilot program with Ookla, specific to Logan and Mingo. Brian indicated that there is no additional cost. Ookla is committed to assisting with the expansion of broadband and will provide images and support for outreach, advice and other tools to promote speed testing. Robbie Morris made the motion

Jeff Proctor seconded the motion

No discussion, the motion carried unanimously. Ms. Workman will work to execute the agreement. She thanked Brian and Ooklo.

Tilson Study and Recommendation:

Fred Feit, Broadband Consultant, Tilson Technology

Review and Consider Adoption of Proposed Resolution

James V. Kelsh, Partner, Bowles Rice

Fred Feit provided Tilson's Recommendations on the First Energy Project. The proposed project includes 431 miles of fiber spanning 10 counties and the total estimated cost is approximately \$72 Million.

- Tilson completed the review of the feasibility study submitted June 3.
- The project includes 28 Electrical Substitutions, and 2 Customer Service Stations. It will serve as middle mile for three USDA Reconnect projects.
- USDA to announce the awards in September/October.

Slide: Ten County Fiber design

- Counties in the study include Roane, Calhoun, Gilmer, Braxton, Clay, Nicholas, Webster, Randolph, Barbour, and Pocahontas
- The approach is technically feasible: ADSS will be installed in power supply space on poles.
- The Council issued an RFI which included discussion of the electric utilities middle mile feasibility studies. At that time, 19 last mile and middle mile broadband providers responded. Of

7. First Energy-Mon Power Study

those, at least 2 appear to be qualified and interested in serving this area. Other ISPs may demonstrate interest and qualifications in a future RFP.

Slide: Proposed projects would be in the interest of electric utility providers.

The project is deemed to be in the interest of the utility. The question was posed in chat, regarding the USDA's knowledge of the First Energy project. Will it connect to proposed or existing systems to increase robust service areas? USDA State Director Kris Warner advised the information has been provided and they are aware. Mr. Feit noted that this connection would result in more robust network development.

Slide: Recommended key terms and conditions.

- Construction terms define roles
- Service delivery and acceptance
- Acceptable use and limits
- Lessee costs
- Monitoring, maintenance, and repair
- Dispute resolution and plans

Delegate Linville asked if the Council sets the costs. Fred confirmed that the lease cost is established by private market in the RFP/lease process between First Energy and the lessee. This process is underway in the beginning stages with the AEP-APCO project.

Slide: Anticipated RFP process for setting cost to lessee dark fiber and other final terms and conditions.

The RFP will be issued by First Energy. The terms are negotiated with the respondents and the terms will be submitted to the Council for final approval.

Slide: Last Mile Feasibility Study.

High level design for last mile fiber interconnected to First Energy middle mile network

Advantages:

Reduce uncertainty and risk for ISPs and revenue to First Energy. Choices on how to structure dark fiber lease payments

Create validation for reasonableness of bids submitted.

Understand last mile business case does or does not also need additional grant or other support.

Slide: Public Interest served by proposed project.

Public interest would be served through both improved broadband and better electric service.

Slide: Regulatory and Public Policy Considerations.

Project costs and electric systems benefits will be reviewed by West Virginia Public Service Commission.

Further define "underserved areas" in legislation. The Council and First Energy should explore this with the Commission.

Note for the Council, Robert Cole contacted the Council staff following the meeting to state that he was supported this resolution but unable to unmute his phone and planned to vote to approve the resolution.

Jim Kelsh provided a review of a proposed Resolution, which was provided to Council in the packets.

Mr. Kelsh detailed that the Council provided proper notifications and executed a public comment period. Three written comments were received to Notice Published.

June 23 Jason Roberts, ROC supports the First Energy Study with R1 and R3

- July 14 Sheena Fray Barbour County Commission said the County Commission supports the First Energy Study
- July 16 Lisa Messimeo, Roane County resident, supports the First Energy Study.
- A fourth comment was received from Terry Martin, Region III.
 Kelly Workman will send all four comments to Council after the meeting.

Chair Hinton asked for discussion. Robbie Morris moved to Adopt the Resolution and Mike Holstine seconded the Motion. Chairman Hinton voiced his support of the resolution. A roll call vote was taken with the following members voting to approve the resolution:

- Robbie Morris
- Michael Holstine
- Pete Hobbs
- Brenda Morris
- Josh Spence
- Matt Turner
- Jeff Proctor
- Dennis Lee
- Ron Pearson
- Note to meeting minutes: Robert Cole contacted the Council following the meeting and requested to note that he was unable to unmute his phone but would vote to approve the resolution.

Fred Feit provided an update on the FCC RDOF.

The RDOF auction will begin on October 29, 2020. The deadline to apply for participate ended July 15, 2020. Prohibited Communications rules now apply to the competitive process. This forbids any communication of bidding strategy or project locations as an auction for subsidy.

The RDOF Phase I was funded with Phase I at \$16B Billion out of total funding of \$20.4 Billion. The FCC may fund a Round Two and they are allowing challenges to the process with new data.

The FCC is implementing a more granular data collection method prior to Round Two (DDOC). This round will also include a challenge process, and this would include Ookla data.

The FCC rejected Frontier's challenges to eligible Census blocks nationwide—about 10% of West Virginia locations. West Virginia's statewide funding was reduced by about 4.7%. Initial funding was \$804,210,520 but post-challenge amount equals \$766,216,280 over 10 years. This is the maximum, opening bid, and this number will decrease. The FCC released "updated eligible areas map" and may further and reduce areas up to three weeks before the auction. This could include potential USDA award locations.

Slide of Eligible Areas Map

There is a surprising lack of eligibility in southern states. This may be improved through the new mapping requirements and challenge process established in Round Two.

8. FCC Rural Digital Opportunity Fund (RDOF)

	Ritchie County is noted also noted as not eligible. Fred Feit explained that this is due to its distinction as a receiving subsidy as a Rate of Return carrier, and Armstrong has undertaken a significant GPON system to its Local Exchange Customers under the ACAM program over the next five years. Chair Hinton said the FCC will release names only of approved applicants and this will not include states, or other information that would affect the competitive nature of the auction. Chair Hinton noted that the State of West Virginia is working on a solution for the RDOF letter of credit issue.			
Legal Services RFP 9.	With assistance from the WV Attorney General's Office, the Council will seek legal assistance specific to WVPSC matters. A committee was appointed to review the proposals. Chair will be Ron Pearson, members include Robbie Morris, Pete Hobbs and others may volunteer.			
Council Member Terms and Officers 10.	Terms for several members expired on July 30, 2020. This matter has been reviewed with legal counsel. Members may continue on "hold over status." Chair Hinton's term has expired, but he plans to continue as chairman. The terms of council members may have expired but they may continue until the Governor appoints new members or they resign.			
11. Other Business	New items were received and circulated on July 15, 2020. This included information from Carol Hieberger regarding a known as project "Light Up West Virginia" (see public comments) and information from Delegate Linville. The Chairman asked the Council to review this information and determine whether this would be added as formal agenda items for the next meeting.			
12. Public Comment	 John Webster reported he has no current comments. Cary Scott, with Countrymen Communications, noted the Educational Broadcast Spectrum (EBS) and requested further discussion in focused discussions. Ms. Scott is interested in seeing the State seek a waiver. The Chair asked that we schedule a meeting. Del. Linville noted that conversations were ongoing on this issue. Ms. Scott noted that the EBS would go to national carriers if it proceeds to auction. Sen. Plymale and several Council members expressed interest in participating in this meeting. Carol Heiberger "Lighting UP West Virginia's 55 counties with fiber optic rings" was shared on a slide. The project would involve the establish 55 fiber optic rings in each county. Funding would come from EDA CARES. A nonprofit organization would be established. This request would include a request from the West Virginia Broadband Council to support it formally. Ron Pearson views this action as a way to attract federal funds to assist local units of government in fiber extension projects. Projects would be publicly owned. Jim Kelsh noted that items cannot be added to the agenda for deliberation or action. While the Council provided this time for public comment, the topic should be added to a future agenda. Eric Kirkland gave no response to comment. Brian Darr presented earlier in the Ookla presentation. 			

			6. Marlene Hackett is owner of the Hackett Praxis in South Charleston. offering services in developing broadband services as a telecommunication professional. She previously worked as a network analysist and regional project manager for Verizon. Ms. Hackett is available for consulting services and specializes strategy execution, wireline and wireless projects. She continues to work with West Virginia users and is committed to the broadband initiative.			
7. Next	Meeting Date		September 17, 2020, 10:00 a.m.; Building 3, First Floor/Conference			
8. Adjournment			The meeting was adjourned at approximately 12 noon. Robbie Morris made a motion to adjourn, second by Bill Bissett.			
			Action Items			
No.	Description	Assig	ned To	Month Identified	Target Completion Date	
1.	Legal and Cooperative Toolkit and Training	WVU	<mark>Law</mark>	June 2017	Underway by WVU Law Clinic	
2.	NTIA/National Broadband Availability Map	K. Wo Tilson	<mark>rkman,</mark>	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.	

The WV Broadband Council did not meet in August 2020





MEETING MINUTES I SEPTEMBER 17, 2020

Meeting Title		WV Broadband Enhancement Council		Time	10:00 a.m.		
Chairman		Robert Hinton			Location	Conference Call	
Mee •					<u>PageSepte</u>		P = Present; TC = Teleconference; VC = Videoconference; _ = Absent
Please register for public comment and hold any public portion of the agenda					s until the p	oublic comment	
	Council Member	Representing			Council I	Mombor	Representing
	Robert Hinton,	Rural Business User			C. Edward G		WV Dept. of Commerce,
TC	Chairman	Congressional Dist. 2		-			Cabinet Secretary
TC	Robert Morris, Vice Chairman	Urban Residential User		TC	Jeff Proctor		Representing Secretary Gaunch
TC	Michael J. Holstine Secretary-Treasurer	Rural Business User Congressional Dist. 3		TC	William D. "	'Bill" Bissett	Urban Business User
TC	Robert Cole	Rural Residential User Congressional Dist. 1		-	Dennis Lee		Business User, Large Scale Broadband
TC	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		TC	Honorable F	Ronald G. Pearson	Rural Residential User Cong. Dist. 2
_	W. Clayton Burch	Dept. of Education, State Superintendent		TC	The Honora Robert Plym		WV Senate (D) (Ex-Officio/Advisory Member)
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_	James Dixon	Representing Joshua Spence		_	The Honora Kenneth Hid		WV House (D) (Ex-Officio/Advisory Member)
_	Matt Turner	Higher Education Policy Commission Vice Chancellor		_	Vacancy: Ru	ıral Business User Cor	ngressional Dist. 1
TC	Dr. Carl R. Powell	Representing Matt Turner		TC	Jeff Whitman, WV Office of Technology		nology
	Representative	Agency			Representa	tive	Agency
TC	Kelly Workman	WV Development Office Administrative Director		_	Alexandra S	hulz	Bowles Rice Legal Counsel
TC	Todd Goddard	WV Development Office Development Manager		TC	Jim Kelsh		Bowles Rice Legal Counsel
_	Wes White	WV Commerce, Deputy Secretary		TC	Fred Feit		Tilson Technology Management
TC	Peter Markham	Bowles Rice Legal Counsel		TC	Jason Pizate	ella	Spilman Thomas & Battle
Age	nda Item		D	etails/I	Minutes		
1.	Call to Order, Opening	Remarks; Roll Call					
Approval of 7/16 Meeting Minutes, Financial Statement			Minutes were approved. Motion by R. Morris; second by R. Pearson and approved.				
3. Update on USDA Programs		Kris Warner, State Director, West Virginia Rural Development, USDA Director Warner provided an update on USDA programs. The Community Connect program will be open for applications starting on September 18, and for 90 days. \$45 million will be available as a minimum. The USDA may allocate FY 21 funding in this round, raising					

the amount by \$100 million, to a total of \$145 million. This is under review by USDA Secretary Perdue.

The DLT Round 1 includes two eligible applicants from WV. One announcement is planned later this month. DLT Round 2 will be announced within 45 days as an estimate. There were 700 applications received, with 27 from WV. USDA is still reviewing at least 400 applications. Applicants that have not received a rejection letter are still under consideration.

Four ReConnect applications from WV are pending, with one being moved forward soon. Others may be announced in November. There may be a Round 2.5, pending approval. This would allow applicants who may need minor adjustments, to compete in an interim round. Director Warner advised that if the application asked for a checklist, the applicants must complete the checklist. If the application requests the most recent financials, submitting 2017 instead of 2019, this may result in a rejection. If given the opportunity, the applicants should make these adjustments quickly.

Director Warner advised that the Council could potentially provide a review committee as previously discussed. ReConnect Round 3 is expected to open in January 2021.

Fred Feit, Broadband Consultant, Tilson Technology, provided an update on the FCC RDOF program, as follows:

- Bidding to start on October 29
- Prohibited communications rules are in effect. Designed to preserved the integrity of the competitive nature of the auction.
- The FCC has released a public notice, detailing receipt of 505 applications to participate in the RDOF Auction including (CAF II included about 300 applications):
 - 121 "Complete" applications
 - 384 "Incomplete" applications
- This concerns the short form application. Majority were deemed incomplete for various reasons, ranging from benign to more serious. However, many incomplete applications can be easily corrected, including those from West Virginia applicants
- The FCC will release another Public Notice prior to the auction start listing all approved applicants
- The auction may take 1.5 to 2 weeks. The communication rules remain in effect following the auction. Successful bidders will then have time to complete ETC certifications and other requirements.

The level of participants in RDOF is greater than the 200-300 applicants in CAFII. The CAF II budget is \$1.98 billion. The CAFII opening budget exceeded the budget by a 3:1 ratio at \$6 billion. The reverse auction process proceeds RDOF includes more funding and more census blocks.

The opening cost is \$30 billion with a 2:1 ratio to the actual budget. Winners could potentially gain more funding per premise than CAF II, which would encourage fiber-based systems.

Chair Hinton reiterated that the deadline for final submission of short form corrections is September 23, 2020. Any incomplete applicants have no further recourse after that date.

4. FCC Rural Digital Opportunity Fund (RDOF)

There was discussion of the potential number of applicants from WV, and whether this was an increase over the pool from CAFII.

The bidding process begins on 10/29 and will continue in multiple rounds with a few days between bids, lasting 1.5 to 2 weeks (based upon CAFII process). The FCC will release a public notice following completion of the auction, then winners will complete the long form process. Mr. Feit advised that approximately 6-9 months following the auction, and completion of long form requirements, funds will begin to be disbursed. The requirement for high cost ETC certification for certain census blocks may be the most time-consuming process, and this is handled through the WV Public Service Commission. This will be unknown until completion of the auction.

Firms that have qualified for the RDOF will be provided by the FCC in a public notice prior to the October 29 auction start date (possibly mid-October). The FCC received 505 applications to participate in the RDOF Auction including (CAF II included about 300 applications):

- 121 "Complete" applications
- 384 "Incomplete" applications

The FCC does not release data concerning the state in which a company is bidding, or the type of technology to be utilized. Company names are released.

Fred Feit, Broadband Consultant, Tilson Technology Bryan Darr, Ookla Supplemental GIS Agreement(s)— Kelly Workman, WVDO

Kelly Workman reiterated a list of updates. Tilson and Ookla have worked together to develop additional mapping products, some of these were developed for the WV Legislature. This includes updated speed test analysis.

Fred Feit detailed the 2020 Ookla speedtest data. The brand name Ookla will be added to these products. The data is filtered for tests initiated using GPS enabled devices for location accuracy. This includes primarily mobile devices of fixed networks cable, DSL, fixed wireless, etc. This does not include cellular data testing. The initial connection is wifi because of the use of a smartphone. The wifi is generally a robust link in the process to measure cable, DSL, and fixed wireless.

Tilson has produced static images. The ability to activate layers is also informative in directing investment, expansion, grant-funded projects. This is especially critical for USDA ReConnect Round 3, in the identification of a PFSA, proposed funded service area served with 90 percent lacking at 10:1.

Fred Feit shared an overview of the online version. The base map is provided on a URL Any Council members who may wanted a more comprehensive review is welcome to check with Tilson. The layer list includes:

- Ookla speedtest data (above and below 25:3),
- unserved and unfunded,
- Kids Connect,
- Funded or pending funding,
- RDOF eligible, and

5. Mapping, Speedtest and GIS Updates

FCC reported data.

The map is based upon the June 2019 FCC Form 477 data as the most recent available data. An update is expected this Fall 2020 Speedtests are conducted voluntarily and users may not be subscribed to the fastest service available.

The Council can now identify unserved and unfunded (not RFOF eligible, no other funding, and areas showing no broadband service), and areas worthy of further investigation, although not at exclusion of other areas. Other considerations should include network viability, fiber backhaul, etc.

Copies of the maps are available for Council members upon request. Tilson will prepare static images for each county along with speed test slides for each county. Tilson can also prepare specific maps upon request.

Member Pearson requested the unserved/unfunded state image. Member Holstine asked if these specific maps were available on the Council website. Fred Feit confirmed that these maps are not on the public website. Bryan Darr with Ookla shared that publishing this information would present some concerns with privacy because this level of detail may not be appropriate for a public link, but would best be shown in static maps that aggregate data at a higher level.

Chair Hinton requested that any public facing products retain privacy and be in aggregate formats. Fred confirmed that a public facing document may be converted to a heat map to show a concentration or cluster of diffuse points rather than a specific location. This format was used to show the unserved/unfunded areas.

Council members may contact Fred Feit for additional assistance and details.

Concerning the Logan-Mingo pilot project with Ookla. The Council is requesting assistance from Tilson and Ookla in discerning the data available, with the Ookla dataset and the Speed Test Custom and survey. Going forward, staff will work with Ookla to push speed testing to

Kelly Workman thanked Tilson for stepping up and providing excellent service. Staff recommends procurement of a contract, similar to the one previously in place with the Geological Survey. This would position the Council with additional resources going forward and would result in a cost savings.

A draft RFP will be available. GIS services within the State, procured by RFP, at about \$50,000 or less.

Bryan Darr with Ookla thanked the Council for its partnership. He stated that WV is well ahead of other states in determining where broadband is and is not. Ookla is impressed with the State's leadership in this area. He stated that interest in speed testing at the federal level is growing, and that WV is in a very good position.

Senator Plymale would like to connect with Bryan Darr in relation to his work on the FCC Intergovermental Committee. Governor's Executive Order; Memo to WV Commerce; and Suggested Schedule. Jim Kelsh, Bowles Rice, provided an overview of the Governor's Executive Order. The EO is designed to facilitate greater access to the RDOF opportunities through access to Letter of Credit assistance under the WVEDA Broadband Loan Insurance (BLINS) program. The Order was issued on 93/2020. Specifically, the Order does three things, including: Removing the total insurance cap of the WVEDA program Removing the \$10 million cap for any one company 6. Broadband Loan Insurance Program Authorizing the WVEDA to modify the BLINS program. The Chairman stated that this action is a bold an innovative measure of support for broadband development under the RDOF program. Mr. Kelsh noted that the WV Legislature would need to enact legislation to make permanent changes in the BLINS program, that would extend beyond the expiration of the state of emergency. Del. Linville affirmed that he is in support of this action. Jason C. Pizatella, Lee F. Feinberg: Spilman Thomas & Battle Mr. Pizatella and Mr. Feinberg described the Council's special meeting on August 27, 2020 and how the Council authorized legal counsel to file petitions to intervene under Rule 12.6 for the 2018 Focused Management Audit Case and 2020 Chapter 11 Reorganization case. Counsel filed these documents with the Public Service Commission ("PSC") on August 27, 2020. Frontier filed motions to oppose those petitions and legal counsel filed replies to the responses. The PSC denied the Council's petitions to intervene on 9/16/2020 in two orders. In the orders, the PSC stated that the interests of the Council would be fairly represented by other parties in the cases, in particular the Consumer Advocate Division (CAD) and the Communications Workers of America (CWA) and that the West Virginia Broadband Council's purpose is to promote and increase the development of broadband and the 7. FCC and WVPSC Matters Public Service Commission has a very limited role with respect to broadband and no ability to direct where and when broadband development should occur. These documents will be shared with the Council and are available on the PSC website. The PSC set a procedural schedule for testimony and hearings if necessary, for the Chapter 11 Reorganization matter. The 2020 Bankruptcy Reorganization case has an October 28 hearing scheduled. (Note: The WVPSC The Commission later moved the hearing to November 5 and states that the public will not be able to attend.) The 2018 Audit case is nearing completion. The Commission has issued a preliminary final order in the Audit case. Chairman Hinton stated that the Council is concerned about the quality and longevity of investment in telecommunications in West Virginia and there should be an emphasis on fiber, as most federal agencies are

directing funds for this purpose. Member Holstine voiced disappointed that the Council is not permitted to comment or intervene. The same infrastructure is being used for dual purposes, and the telephone service is equally poor.

Del. Linville asked if Spilman had been deputized as a Special Assist Attorney General. In this particular RFP, this title was not conveyed because it does not pertain to litigation or court actions. Mr. Pizatella noted that the Council's filings have provoked additional thought related to this matter and that the Council can still work with other interveners such as the CAD and CWA.

Vice Chairman Morris noted that the Council should continue to offer comments to CAD. The Chairman noted that the Council may provide input at the October 28 Public Hearing, as set by the Procedural Schedule.

Jason Roberts, Executive Director, Region 1 PDC John Tuggle, Executive Director, Region 2, PDC

Mr. Roberts explained that Regional Optical Communications, Inc. (ROC) is a 14-county non-profit serving the counties of McDowell, Mercer, Monroe, Raleigh, Summers, Wyoming, Greenbrier, Fayette, Nicholas, Pocahontas, Webster, Clay, Calhoun, and Roane. ROC's mission is to serve as a regional planning entity and to provide open-access middle-mile capacity to improve broadband capacity throughout southern West Virginia. ROC's board consists of the leadership of the Region 1 Planning and Development Council, the Region 4 Planning and Development Council, and leadership from the Clay, Calhoun, and Roane Broadband Planning Group, along with numerous elected officials.

ROC has recently completed a regional analysis that identifies specific areas lacking adequate capacity, provides fiber construction cost estimates for these areas, and also identifies potential funding sources applicable to each specific community. This analysis was funded by the U.S. Economic Development Administration and by U.S. Housing and Urban Development Community Development Block Grant funding and can be viewed at www.wvroc.org.

Multiple project areas identified in the ROC report have already received implementation funding from various grant agencies. The approach has enabled ROC to develop projects in cue, at least one per county, and sometimes more, in each county. ROC ensures equal service and representation to the counties. The regions are covered in RDOF mapping.

All of this work complements site development, business retention and other development efforts. ROC maintains communications with the Broadband Council, economic development authorities, primary broadband partners in southern WV such as American Electric Power, First Energy, Facebook and internet service providers in the area. Monthly meetings and interim meetings are ongoing.

ROC's initial analysis provides a thorough overview and detailed cost estimates for fiber buildouts within the fourteen-county service area.

8. ROC Regional Optical Communications

Mr. Roberts requested Council support for this proposed project. ROC intends to replicate a model that is working for the State. For counties that already have studies, they would be analyzed and correlated. Counties that do not have studies would be rolled into the process.

ROC proposed to procure a consultant with executive level leadership and engineering design. ROC would provide oversight and direction. ROC would continue working through the State's 11 Regional Planning and Development Council system.

The methodology utilized by ROC for the 14-county study would be replicated throughout the remainder of the state. Replication of the ROC model for the remainder of West Virginia counties is estimated to cost \$1.5 million. ROC will apply for \$1,200,000 U.S. Economic Development Administration (EDA) CARES funding for the completion of this study, and match that with the required 20% match (\$300,000) provided the Broadband Enhancement Council, the State of WV, and/or the individual communities served by the study. This two-year project would span two years.

Mr. Tuggle expressed thanks to the Council and the WV Legislature, which spurred this activity in communities. Mr. Tuggle explained that partnership with private providers is a key element of this work.

Senator Plymale asked how broadband planning would correspond to US EDA CEDS plans or existing/ongoing broadband planning. Mr. Roberts explained that a regional approach can enhance county planning from a coordinated and cooperative approach.

Del. Linville asked about ROC's partnership with AEP or FirstEnergy and its role in leasing. Mr. Roberts answered that higher-level administrator would be needed as well as engineering and technical services. Mr. Tuggle explained that any ISP would be procured by the utilities, and that ROC would collaborate in the process and many details are yet to be determined.

Chairman Hinton expressed support for this concept and will continue working with ROC and its partner counties to advance viable projects.

Carol Heiberger, President, https://fiber4wv.org/
Provided a slide presentation titled, Meeting the Challenge of
Fiber Network Design for West Virginia, detailing plans for a
Comprehensive Plan for Broadband. She has previously worked with
communities to establish broadband networks and would propose to
work with counties. Unlike the ROC regional approach, this project
would focus on county projects and county-level networks.

The middle mile projects need a network. The project would utilize new software to connect all county buildings to design a functioning network under county control.

The project would include development of a map and network design for each county. The project team would also share the expertise to help the counties overcome barriers associated with building and operating a network. These software defined networks would be open access for local control. This technology is currently being used by Verizon and Comcast. A company has utilized this system to develop a

9. Light Up West Virginia

county-level management tool that would enable up to 20 ISPs to serve the community. Management would be delegated. Communities could take control where desired.

Ms. Heiberger noted recent software advances that would enable counties to execute fiber projects. She presented a potential project in which Fiber4WV would obtain funding through the U.S. Economic Development Administration to study 55 counties in West Virginia and develop fiber network designs.

The WV Association of Counties would assist in the development of a handbook which would include the design of 55 networks attached to middle miles. The process would also identify all sources of funding, including private funds instead of navigating rules associated with federal funding.

From the Slides, this information was provided: Software Defined Network for management

- County services
- Open architecture inclusive
- Operations can be outsourced

EDA Funding PWEAA2020 NOFO

- Non-construction planning
- "to support economic development, foster job creation, and attract private investment"
- "to leverage existing regional assets and support the implementation of economic development strategies that advance new ideas and creative approaches to advance economic prosperity"

Requested Support

- Matching funds
- In-kind donation
- Participation
- WV Association of Counties (WVACo)
- WV Broadband Enhancement Council (BEC)

Vice Chair Morris asked if any counties have signed on to the projects. Ms. Heiberger stated that the WVACO is a partner and will provide 10 percent of matching funds, and will serve as the applicant, and bookkeeper.

Vice Chair Morris asked how this proposal may differ from ROC's approach, middle mile utility projects, RDOF, USDA, etc. Ms. Heiberger explained that she would design a functioning network for the county, and this would complement other initiatives. These networks would be connected by fiber and by services. She envisions that this process would also support the creation of co-ops.

In terms of funding, the organization is seeking \$600,000. Through fiber optic network design software, the counties could obtain conceptual designs for \$10,000 to \$11,000.

Member Holstine asked if the organization would be the ISP. Ms. Heiberger stated that the county would own the network but would lease to up to 20 companies. Member Cole asked if the network would be survivable. Ms. Heiberger answered that designs would be developed, whether underground or aerial. Three "mappers" would work with 15 or more counties. Member Proctor asked if 50-90 percent of fiber could potentially be in place, and if the project would utilize interconnect agreements. Project would not be designed by following rules of federal programs but would utilize private funding. Member Pearson asked if the systems to be designed are to be fiber and why this is important. Ms. Heiberger answered that fiber connects all other forms of telecommunications. US EDA requires that its funding result in open access networks. [ARC] Coal Impacted Communities was also mentioned. This funding would be used to attract private investment. Ms. Heiberger requested official support. Member Bissett requested that Ms. Heiberger provide a proposal for the specific request for matching funds and other non-cash/in-kind forms of support. Member Pearson reiterated this request for a detailed scope of work and proposal. Member Pearson also requested that this project avoid any duplication of effort with the ROC initiative. Chairman Hinton explained that he will not request another term as a member of the council or as its chairman. While proud of the work achieved, it has demanded a great deal of time. The Chairman's growing family needs to be his primary concern. The Chairman thanked the WVDO, Legislature, Governor's Office and partners for all of the work and support over the past four years. Bowles Rice has advised that in the absence of the chair, the vice-chair will act as chairman. RDOF is a major opportunity for West Virginia. The State has worked hard to catch up and he leaves knowing that this work will continue. Vice Chair Morris thanked Mr. Hinton for his service. He noted that this 10. Remarks from Chairman Hinton loss of leadership was significant. Noting that Ookla has stated that WV is ahead of the curve in terms of mapping and speed testing. The GIgReady WV was a bold initiative. The ROC initiative was born out of the Council's emphasis on local development, outreach and education. Member Pearson asked if Mr. Hinton would still be available as needed. Member Holstine concurred with previous comments and thanked Mr. Hinton for his time and dedication. Member Proctor thanked Mr. Hinton for his work and noted that he will be missed. 11. Other Business

12. Public Comment	Mark Polen with the WV Cable and Telecommunications Association. He provided the following updates: Members support the Governor's Initiative concerning RDOF. The organization pledged to work with ROC and the WVACO in coordinating with fiber projects. Members maintain over 7,000 miles of fiber in 50 WV counties. It is an asset that can be coordinated to maximize buildout to unserved areas. He pledged to continue to work with the Council in its efforts to improve connectivity in WV.
	Del. Barbara Evans Fleischauer, Delegate of Monongalia County, spoke in support of Carol Heiberger's proposed project. The Delegate noted that the issues affecting Monongalia County are affecting all counties in WV. The metrics associated with education have revealed disparity within the county, as the western side of the county lacks service. The Delegate supports the idea of using software to develop the US EDA project as described earlier in the meeting.
13. Next Meeting Date	October 8, 2020; 10:00 a.m.; Conference Call

14. Adjournment

	Action Items								
No.	Description	Assigned To	Month Identified	Target Completion Date					
1.	Legal and Cooperative Toolkit and Training	WVU Law	June 2017	Underway by WVU Law Clinic					
2.	NTIA/National Broadband Availability Map	K. Workman,	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.					





MEETING MINUTES | October 8, 2020

Mee	eting Title	WV Broadband Enhancement Council			il	Time	10:00 a.m.
Chairman Robert L. Morris, Jr., Acti			ting Chairman			Location	Conference Call
•	Meeting Registration: h	nce call due to COVID-19. Updates	Pages/ResponsePageOctober 2 stration			ctober 2020	P = Present; TC = Teleconference; VC = Videoconference; _ = Absent
		c comment; hold any public cor				nt portion of agenda	
		T					
	Council Member	Representing				Member	Representing
VC	Robert L. Morris, Jr. Acting Chairman	Urban Residential User		_	C. Edward		WV Dept. of Commerce, Cabinet Secretary
VC	Michael J. Holstine Secretary-Treasurer	Rural Business User Congressional Dist. 3		VC	Jeff Proctor	ſ	Representing Secretary Gaunch
_	Robert Cole	Rural Residential User Congressional Dist. 1		TC	William D.	"Bill" Bissett	Urban Business User
TC	R.A. "Pete" Hobbs	Rural Residential User Congressional Dist. 3		_	Dennis Lee		Business User, Large Scale Broadband
_	W. Clayton Burch	Dept. of Education, State Superintendent		тс	Honorable	Ronald G. Pearson	Rural Residential User Cong. Dist. 2
TC	Brenda Morris	Representing Clayton Burch		VC	The Honora Robert Plyr		WV Senate (D) (Ex-Officio/Advisory Member)
VC	Joshua D. Spence	WV Office of Technology, Chief Technology Officer		-	The Honora Mark Mayr		WV Senate (R) (Ex-Officio/Advisory Member)
_	James Dixon	Representing Joshua Spence		TC	The Honora Daniel Linv		WV House (R) (Ex-Officio/Advisory Member)
-	Jeff Whitman	Representing Joshua Spence		_	The Honora Kenneth Hi		WV House (D) (Ex-Officio/Advisory Member)
ı	Matt Turner	Higher Education Policy Commission Vice Chancellor		Vacancy: Rural Business User Congressional Dist. 1			
TC	Dr. Carl R. Powell	Representing Matt Turner				ural Business User, Con	
	Representative	Agency			Representa	ative	Agency
VC	Charlie Dennie	WV Development Office Broadband Director		VC	Fred Feit		Tilson Technology Management
VC	Kelly Workman	WV Development Office Administrative Director		_	Alexandra S	Shulz	Bowles Rice Legal Counsel
VC	Todd Goddard	WV Development Office Development Manager		VC	Jim Kelsh		Bowles Rice Legal Counsel
VC	Jamie Hoffmann	WV Development Office GIS Analyst/Development Rep		VC	Jason Pizat		Spilman Thomas & Battle
_	Wes White	WV Commerce, Deputy Secretary		VC	Michael Gr	aney	WV Development Office Executive Director
Age	nda Item		Details/Minutes				
1. Call to Order; Roll Call; Opening Remarks		Chair called meeting to order at 10:00 a.m.					
Approval of 9/17 Meeting Minutes, Financial Statement		A motion for approval of minutes from September 17, 2020 meeting was offered by Pete Hobbs, with a second by Mike Holstine. Motion carried. Financial Report will be provided at a later date after additional invoices are processed.					
	Charles R. Dennie, Dir West Virginia Broadba		Introduction and Remarks. Chairman Morris Introduced Charlie Dennie, Director of WV Broadband Office. Mr. Dennie thanked former Chair Rob				

Hinton and Kelly Workman for their service and work. He stated he agrees with the goals and efforts made by the Council and past Chair. He plans to continue and expand mapping efforts and develop plan for use of State's current resources. Chairman Morris provided comments on the USDA funding. Applications due December 23, 2020. Awards range from \$100,000 to \$3 million with 15 4. USDA Community Connect percent cash match. USDA expects to award 20 grants (about 10 percent of https://www.rd.usda.gov/community-connect applicants). State, local, and tribal governments, and private companies are eligible. More information available at: https://www.rd.usda.gov/sites/default/files/CCApplicationGuideFY21.pdf Jon Webster, External Affairs Manager, Appalachian Power Michael Clemmons, President, GigaBeam Networks, LLC Jim Kelsh, Bowles Rice John Webster presented the Logan and Mingo Broadband Project Update with a draft ISP Agreement with GigaBeam Networks for discussion and Michael Clemmons, President of GigaBeam Network provided a history of the company and next-steps plans for the project. These include: Conducting Service Surveys in the counties to determine unserved customer areas. Completing Agreements between GigaBeam and the Counties. Redefine middle mile network design and estimate with GigaBeam. Develop and submit filing to the WV PSC. Jeff Proctor asked how long it will take to reach 70% of Users in the two counties. Mr. Clemmons responded this was to be determined but should be able to progress fairly quickly once the WV PSC approval is obtained. 5. AEP-APCO Logan Mingo Middle Mile Broadband Del. Linville asked how many strands of fiber will be leased. Mr. Clemmons Draft ISP Agreement Presented for Approval responded that five to ten strands per mile will probably be needed. Jeff Proctor asked which route was chosen and how long will it take to build. Mr. Clemmons responded Route One was chosen, which consists of 400 plus miles. He expects it will take 18-24 months to buildout for the two counties. Chair Morris asked how many strands of fiber are available. Mr. Clemmons responded that 48 strands are available for lease. Attorney, Jim Kelsh provided comments and changes needed to the language in the ISP Agreement as follows: On Page 7; Section 4-1 (5th line from the bottom) he suggests the term "increase" change to "change". On Page 12; Section 7.6 he suggests including Lessee of the fiber will comply with all applicable state and federal statutes, regulations, rules, and regulatory agency orders. Mr. Kelsh advised he will provide the revised Agreement for circulation with the Council Minutes.

	Pete Hobbs moved that the ISP Agreement be approved. Mike Holstine seconded, and motion carried.
	Carl R. Powell, Ph.D. Director, West Virginia Network (WVNET)
C. Kida Cannart Duannan Duanantation	Dr. Powell presented the status of the WV Kids Connect Program. He provided slides showing the resources of the program and how users can access and use the service. Students can login to the system anywhere in the state. Service will be accessible at: • 672 K-12 Schools • 171 Libraries • 39 Colleges/Universities • 26 State Parks • 20 National Guard Armories • 25 DMV Offices • 55 Board of Education Offices
6. Kids Connect Program Presentation	The Kids Connect website https://wvkidsconnect.net/ provides a Sites Map to find locations. The Help Desk is available 24 hours a day. Signs at each location designate it as an Access Point.
	Questions were asked concerning service speeds at the sites. Dr. Powell responded he is unsure, but he agreed to research and provide information later. He advised speeds are slower with the more users accessing a site.
	A question was asked as to how many students do not have access to service now and will use the system. Dr. Powell responded this information is not available now but would be good to determine.
	CTO Josh Spence commented that the Kids Connect system is a good short-term solution to extend access using existing infrastructure.
	Jason C. Pizatella, Spilman Thomas & Battle
7. FCC and WVPSC Matters	Mr. Pizatella provided update concerning the WV PSC matter and the FCC Auction. The PSC will hold a closed-door hearing on the Frontier case on November 5. Any input or comments will need to be provided in writing. The FCC RDOF Auction will begin on October 29, 2020.
	Carol Heiberger, President, WV4Fiber
	Ms. Heiberger presented on her Light Up WV Proposal and Formal Request to the Council.
8. Light Up West Virginia Presentation and Request for Letter of Support and Request for Matching Funds	She presented a slide concerning her Project Objectives for the Open Access Systems all 55 counties. Each county would have an Individual Plan and Manual. She had previously provided her Draft Proposal to all Council Members for review.
	Ms. Heiberger is requesting the Council provide support including cash, matching funds for application to EDA for CARES Grant, and any available In-Kind Services.
	Chair opened discussion and questions concerning the proposal

In the first year of the project, three counties would receive Planning Services. Council members posed several questions.

How will the counties be chosen?

Ms. Heiberger's response was unclear but seems the selections will be made through application process.

Jeff Proctor asked if private funds will be used with existing fiber? Ms. Heiberger responded yes.

Chair asked if federal funding will also be pursued?
Ms. Heiberger responded that EDA funds are federal and require less stringent rules than USDA funds. Less requirements will allow the project to progress faster.

Fred Feit asked if Ms. Heiberger has been in contact with and working with EDA's Regional Economic Development Districts (Regional Planning and Development Councils) on the proposed project. She responded she has been in discussion with EDA Representative, Tracy Rowan.

Question asked concerning any restrictions on use of existing fiber with schools. Ms. Heiberger states her plan is to lessen restrictions to allow more access.

Chair asked Attorney Jim Kelsh opinion concerning if the Council is allowed to use funds to award grants. Mr. Kelsh advised the Council cannot disperse State funds. This does not allow Council to fulfill the financial request.

Jeff Proctor asked if Council could provide in-kind support and a Letter of Support for the EDA Application. Mr. Kelsh advise Council may provide consultation activities and technical information.

Mr. Proctor wants Council to provide in-kind services and EDA Letter of Support. Chair asked Mr. Proctor if he serves on the Board of Directors for Ms. Heiberger's organization. If so, it would be a conflict for him to make the motion. Mr. Proctor stated that he is on the Board and withdrew this request.

Bill Bissett asked if Council and WVDO Staff has capacity to provide in-kind services. Kelly Workman advised there is currently limited WVDO staff and she does not see capacity to add additional duties for this project as presented. Charlie Dennie also advised he does not believe WVDO has current staffing resources to assist with this effort as requested.

Ms. Heiberger states the only in-kind resources she needs is GIS system access and software services. She would employ her own GIS mappers. Ms. Workman and Mr. Kelsh advised that the Council should not assign seats to access the ESRI system.

Ron Pearson made comments of support of Ms.Heiberger's project concepts and activities. He thinks Ms. Heiberger's work may complement the Councils and may assist in reaching even more unserved areas. He wanted to make a motion for the Council to continue to consider the positive aspects of her proposal and how the Council can assist.

Chair asked Council for consideration of Motions as follows:

			1.Is there a motion to provide a Letter of Support for the EDA Application process? No motion proposed, so request failed.				
			2.Is there a motion for Council to approve any In-Kind Services to the project at this time? No Motion proposed, so request failed.				
		Ms. Heiberger	3.Is there a motion for Council and Staff to consider continuing to work with Ms. Heiberger to explore positive aspects of her project? Mr. Pearson made the motion. No second to the motion provided; motion failed.				
9. Other	Business	None.					
		of cooperatives	Carol Heiberger advises that recent State initiatives promote development of cooperatives as a way to provide needed resources and advance projects in communities.				
10. Public	c Comment		Mr. Pearson commented that Cooperative Development as noted by Ms. Heiberger is another reason to explore the Light Up WV initiatives.				
				as at least one Cooperative being onal Broadband Planning project.			
11. Next	Meeting Date	Council's next r It is proposed t different days o Kelly Workman best convenien	Council's next meeting is to be determined. It is proposed that standing monthly Council Meetings be scheduled for different days due to some members having other conflicting meetings. Kelly Workman agreed to send a survey to Council Members to determine best convenient dates/times to set future meetings.				
12. Adjou	irnment		The meeting was adjourned at approximately 12:00 pm. Motion to adjourn made and seconded.				
		Action Iter					
No.	Description	Assigned To	Month Identified	Target Completion Date			
1.	Legal and Cooperative Toolkit and Training	WVU Law	June 2017	Underway by WVU Law Clinic			
2.	NTIA/National Broadband Availability Map	K. Workman, J. Hoffmai	February 2019	Two-year project. 5/10/2019 Initial Data from Phase One States.			