#### **AGENDA**

#### Broadband Advisory Council Virtual Meeting November 13, 2020 2:00 p.m. to 4:00 p.m.

To access the meeting using video

meet.google.com/swn-ggvq-mfy

*To access the meeting using audio* 1(626) 733-8949 PIN: 364 235 895#

I. Opening

a. Call to Orderb. Roll CallChairmanDHCD Staff

II. Consent Agenda Chairman

a. Approval of Minutes: August 14, 2020 meeting

III. Virginia Telecommunication Initiative Tamarah Holmes, Ph.D

(VATI) update

IV. Discussion Overview Erik C. Johnston

Evan Feinman

V. Municipal Broadband Authority Models:

a. Public/Private Partnership Model-Michael Culp, Albemarle County

b. Municipal Broadband Authority -Frank Smith, Roanoke Valley Broadband Authority

c. Municipal Open Access Networks-Jason Grey, City of Danville Utilities

VI. Public Comment Chairman

VII. New Business Council Members

VIII. Adjournment Chairman

# BROADBAND ADVISORY COUNCIL August 14, 2020 3:00 PM UNAPPROVED MINUTES Digital Meeting via Google Meets

#### **Members Present**

Senator Jennifer Boysko, Chair
James Carr
Mike Culp
Senator Ghazala Hashmi
Kristie Helmick Proctor
Delegate Chris Hurst
Mike Keyser
Delegate Paul E. Krizek
Ray LaMura
Richard Schollman
The Honorable Bettina K. Ring
Delegate Roslyn C. Tyler, Vice Chair
Rosemary Wilson
The Honorable Brian Ball ( Proxy by Evan Feinman)

#### Members Absent

Delegate James A. Leftwich, Jr. Senator Lynwood W. Lewis, Jr.

#### Call to Order

Senator Jennifer Boysko, Chair of the Broadband Advisory Council, called the meeting to order at 3:00 p.m.

Dr. Holmes announced that due to the Governor's Declared State of Emergency due to COVID-19, it is impracticable and unsafe for the Broadband Advisory Council to assemble in a single location, so the Council meeting will be held electronically, by video conference and telephone options, pursuant to 2020 Amendments to the 2020 Appropriation Act. The purpose of the meeting is to discuss or transact the business statutorily required or necessary to continue operations of the Broadband Advisory Council and the discharge of its lawful purposes, duties, and responsibilities. The public is welcome to use the link and phone number options made available by staff to attend the meeting electronically. The Broadband Advisory Council will make available a recording or transcript of the meeting on its website in accordance with the timeframes established in Sections 2.2-3707 and 2.2-3701.1 of the Code of Virginia.

Roll Call

Dr. Holmes, Director of the Office of Broadband for the Department of Housing and Community Development (DHCD), called the roll and stated that a guorum was present.

**Approval of Minutes** 

A motion was made by Delegate Hurst and properly seconded by Delegate Krizek to approve the minutes of the July 27, 2020 meeting of the Broadband Advisory Council. The motion passed (Yea: Boysko, Carr, Culp, Feinman, Hashmi, Helmick Proctor, Hurst, Keyser, Krizek, LaMura, Lewis, Showman, Ring, Tyler, ; Nay: None; Abstain: Wilson; No-Vote: None)

Virginia
Telecommunications
Initiative Budget
Overview (VATI)

Dr. Holmes provided the Council with a summary of the VATI application process and the results of the FY20 round of funding. She noted that the Office of Broadband had received 58 notices of application for the FY21 round of funding, which is \$19M in total. It was noted that the Governor's recently released budget proposes \$85M to the VATI program over the FY21 and FY22 application cycles, which will result in an increase in available FY21 funds from \$19M to \$49M.

After discussion, a motion was made by Delegate Krizek and properly seconded by Mr. Feinman to produce both a resolution of support from the Council and a letter of support from the Chair of the Council in support of the Governor's proposed increase in VATI funding. The motion passed (Yea: Boysko, Carr, Culp, Feinman, Hashmi, Helmick Proctor, Hurst, Keyser, Krizek, LaMura, Lewis, Schollman, Ring, Tyler, Wilson; Nay: None; No-Vote: None)

Update on CARES Act Funding

Ms. Caroline Luxhoj, Telecommunication and Broadband Project Manager for the Office of Broadband at DHCD, gave a brief presentation on the CARES Act and how those funds may be utilized to support expansion of broadband in the Commonwealth. She noted that several counties across the state had already committed part of their CARES Act funding to broadband projects.

Mr. Culp presented on how the Albemarle Broadband Authority (ABBA) plans to use CARES Act funds on broadband-related projects in the county. The county is pursuing two projects that will support rural area distance learning, telehealth and other vulnerable resident life needs due to the COVID-19 public health emergency.

Virginia Department of Education Presentation

Dr. Myers from the Virginia Department of Education provided an overview of the ongoing challenges facing schools across the state in terms of providing adequate broadband coverage for students, including supply chain challenges when ordering various technologies.

VCTA, Hotspots, and Keep American's Connected Pledge Presentation Mr. LaMura presented the Keep Americans Connected Pledge, which includes over 800 pledgees. He also relayed information on everything the VCTA is doing to help Virginian's with their broadband needs during the COVID-19 pandemic, including local government sponsorship programs to lower costs of families to access broadband.

**VTIA Presentation** 

Mr. Schollman provided a brief update on VTIA's efforts to make broadband more accessible during the COVID-19 pandemic, including joining the Keep Americans Connected Pledge and providing free hotspots in service areas. VTIA members have also created payment plans to help families adversely affected by the pandemic.

Central Virginia Electric Cooperative and Firefly Presentation Mr. Reece gave a brief update on what Central Virginia Electric Cooperative's broadband subsidiary, Firefly, is doing to help Virginians during the COVID-19 pandemic, including membership in the Keep Americans Connected Pledge, creating payment plans for families adversely affected by the pandemic, waiving connection fees, and providing free hotspots.

**New Business** 

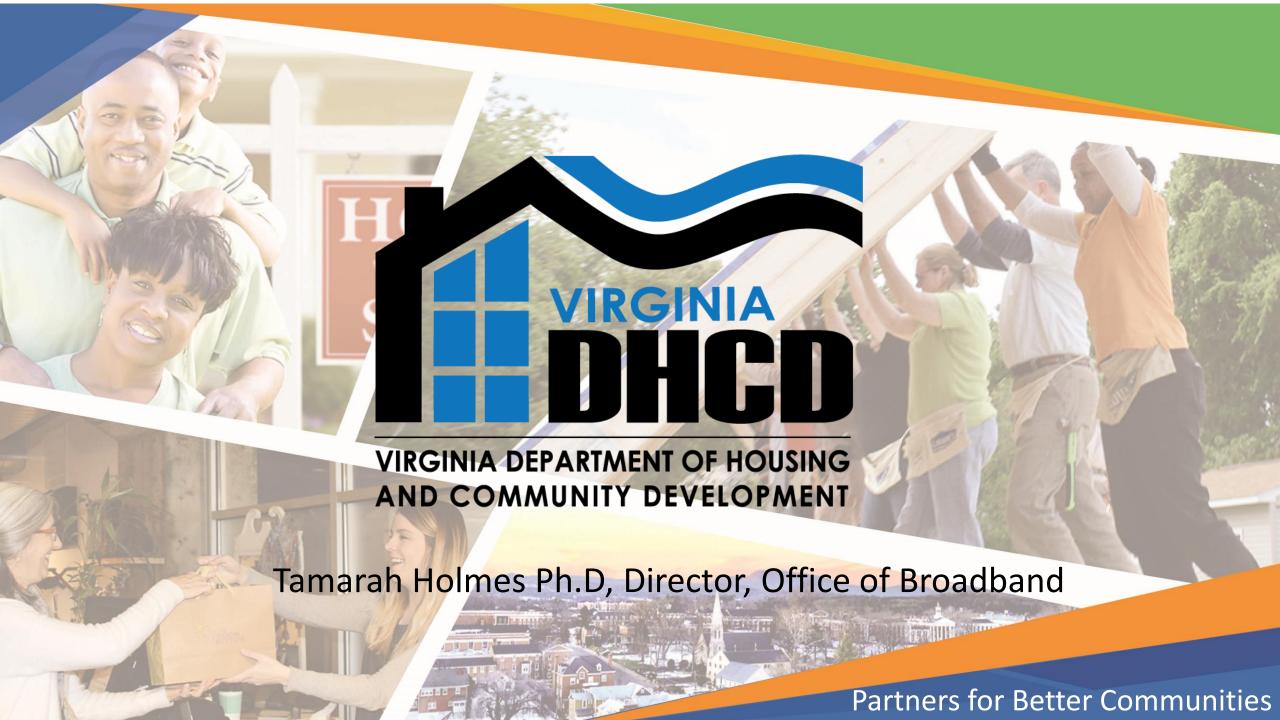
There was no new business.

**Public Comment Period** 

No comments were made by the public; the public comment period was then closed.

Adjournment

Upon a motion duly made and seconded, the meeting was adjourned.

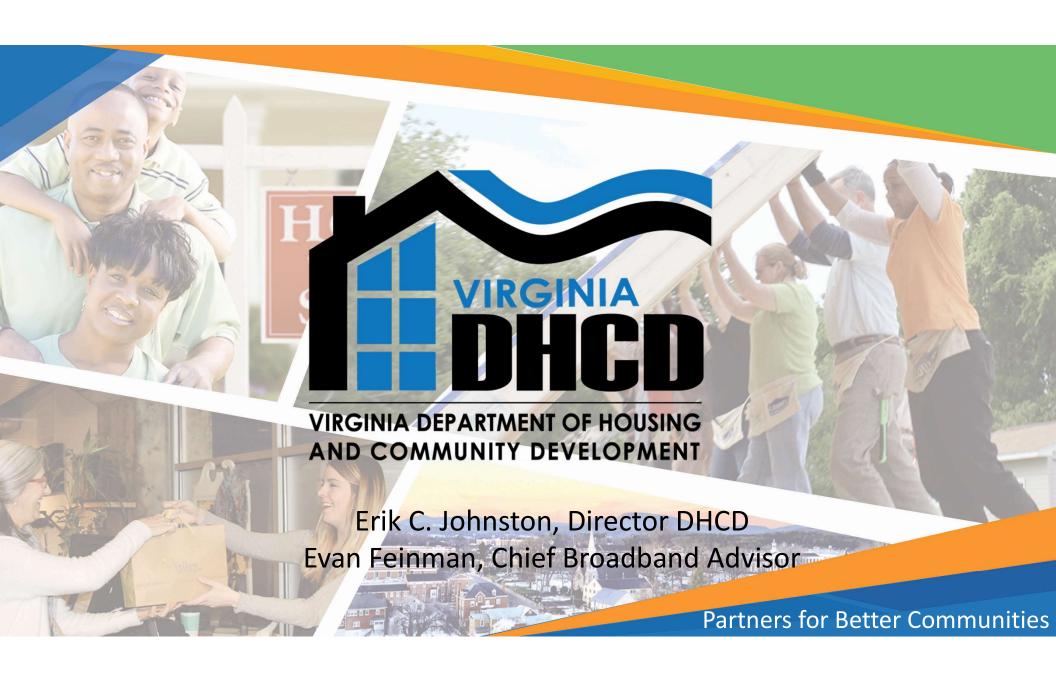


# Virginia Telecommunication Initiative Update

FY 2021	
Appropriation	\$19 million Proposed increased to \$49.7 million
Applications	45 representing 53 localities
Total Funds Requested	\$105 million
Challenges	Received 14 challenges for 13 applications

# VATI Next Steps

- Working with applicants to re-scope projects that received a valid challenge so that their applications can be re-evaluated.
- Waiting for results for the Federal Communication Commission's Rural Digital Opportunity Fund Auction. Auction started October 29, 2020.



### Budget Language

The Broadband Advisory Council shall assess updating the Virginia Telecommunication Initiative (VATI) to allow for public broadband authorities to apply directly for VATI funds without investment from the private sector. The Department of Housing and Community Development on behalf of the Council shall submit feedback on the potential impacts of this policy change to the Chairs of the House Appropriations and Senate Finance and Appropriations Committees on or before the start of the 2021 General Assembly Session."

# BROADBAND IN ALBEMARLE COUNTY, VIRGINIA

Mike Culp mculp@albemarle.org (434) 296-5891 https://www.albemarle.org/broadband

#### Albemarle County Broadband Survey

Haga Clic Aquí para Español

We are gathering information about internet speeds throughout the county, but we need your help!

If you're at the location where you'd like to report your internet access and speed, please click on the "Start" button. After the test is complete, you will need to click on the "Report on Broadband Access" button that will appear.

Even though we prefer you to run the speed test, if you aren't able to run the test (e.g. because you aren't at the location that you'd like to report), you can bypass the automated speed test and click on the "Bypass Speed Test" button to go directly to our brief survey where you can manually give us your internet speed information.

Start

Bypass Speed Test

Ping

0.00

Upload 0.00

0.00

Jitter 0.00

IP Address



# Early Years

2013-2014

2015

2016

1.TJPDC ARRA RUS

2.Broadband Task Force

Gig.U

Google Fiber

\$75,000 Broadband Planning Grant

Initial Broadband Strategies Plan Delivered

Connect America Funding Support

### 2017 Decision Time: Plan to Partner, No Plans to Solo Build

- Broadband Strategies Plan -> Analyzed Options, Costs were a consideration.
- The Board of Supervisors decided against a strategy to own and/operate a network.
- Decided against locality owned fiber with the intention to Lease or otherwise become a "revenue positive" investment.

Category	Albemarle Broadband Authority (ABBA)
Goal Statement	Extend affordable broadband internet service access to every customer in Albemarle county.
Target Services	Residential, Agritourism, and other rural and home-based business.
Network Operation	ABBA does not intend to own or operate a network, but to partner with existing networks to increase connectivity and range and to seek funding to extend or build networks where needed.
Network Owner	Not applicable
Service Provider	Multiple qualified providers will partner with ABBA to extend existing networks or build new infrastructure owned by the provider.
Created By	Albemarle County
Authority Type	Local initially and then integration into a regional authority.
Miles of Fiber	Not applicable
Governance	Volunteer executive committee appointed by the Board of Supervisors.
Rate Structure	Not applicable

### Virginia Telecommunication Initiative History

2017 2018 2019

1.\$118,400 from DHCD

2.284 Locations Passed

3. Albemarle and CenturyLink

4.Albemarle Broadband Authority (ABBA) Incorporated \$473,366 from DHCD 178 Locations Passed Albemarle and Comcast \$301,748 from DHCD 341 Locations Passed ABBA and CVEC/FireFly

### Virginia Telecommunication Initiative

2020

2021

**FUTURE** 

1.\$291,300 from DHCD

2.837 Locations Passed

3.ABBA and CenturyLink

4.Project Underway Delivery by March 15, 2021

5.Governor CARES **\$230,245** for FireFly extension from VATI

6.County CRF funds to Support Shentel BEAM Deployment

\$3,358,476 \* requested from DHCD
2,076 Locations Proposed
ABBA and CenturyLink
Award Notice End of 2020/Start of 2021

**CARES Act** 

**Digital Equity** 

Redundant Fiber Rings for the Region

CVEC/FireFly Continued Work

Additional Partnerships

Potential Telehealth Partnership

### Summary

- Four Years of Success with VATI
- 803 Locations including Rural Businesses offered service
- Upcoming
  - 837 more locations to be offered broadband fiber

Mike Culp

mculp@albemarle.org

(434) 296-5891

https://www.albemarle.org/broadband

- Recent Application with \*Broadband Standard of 25mbps Down/3mbps Up qualifies an area for Grant Application if 90% of area falls beneath standard
  - 2,322 more locations will be offered broadband fiber!
- CARES funding timely for expanding FireFly



# **Community Connectivity**

**Plan & Practice** 

A Presentation to the Broadband Advisory Committee

Friday, November 13, 2020



### Of, By, and For Our Community

- Roanoke City
- Roanoke County
- City of Salem
- Botetourt County
- RVARC
- GE/Meridium
- Eldor

- Western Virginia Water Authority
- Virginia Western Community College
- MtnNet/Bent Mountain
- Blue Ridge PBS
- RBTC / RAMP
- Feeding America SWVA
- Roanoke Libraries

\*Partial List of Partners, Founders, and Early Adopters





# Advancing Regional Infrastructure + Serving the Community:

Fiber Optic Network Built With 100% Carrier Grade Technology Attracting Government, Education and Business Customers

24x7 Local Network with World-Class SLA's & Enterprise Level Response Services 100% Transparent Business Operations (FOIA Obligations) Financially Sound Business Operations (3<sup>rd</sup> Party Audit Published Annually)



#### Status:

- RVBA's <u>100-Mile Fiber Backbone</u> is connecting more businesses than ever before encouraging investment in the region
- <u>Increase in competition</u> has provided measurably more choice, <u>faster</u> <u>speeds</u>, <u>lower costs</u>, and <u>better coverage</u> in each of our four-member localities
- Increased infrastructure (<u>9 switching centers and 3 colocation centers</u>) and reliability has led to innovative <u>new partnerships</u> (Higher Education, Public Health, Public Safety, Social Services, and more)
- <u>Enterprise clients</u> across real estate & development, manufacturing, finance, professional services, education, government, non-profit, and healthcare++

High quality, carrier grade network



**CUSTOMERS** 

#### **Services**

Dark Fiber

 Custom configurations with full and partial ring leases and 10+ year IRU contracts

Transport

High speed ethernet and multiple location connectivity

Internet

 Open access network capable of speeds over 200 Gbps with the right equipment



### Our Ask...

- Remove artificial barriers
- Let the best solutions rise for the committee's consideration
- Allow Virginia's Broadband Authorities to do what they were formed to do – solve each localities biggest and most pressing broadband challenges



### Questions?

Frank M. Smith II

**President & CEO** 

Roanoke Valley Broadband Authority

fsmith@highspeedroanoke.net

540-904-4739

Advancing community objectives with technology infrastructure

### COMMUNITY DRIVEN TECHNOLOGY





Director of Utilities



- Danville has been in the utility business since 1876
  - Natural gas system formed first (April, 1876)
- Danville Utilities functions as a municipal utility department
  - City Council serves as governing board with Danville Utility Commission serving as advisory board to Council

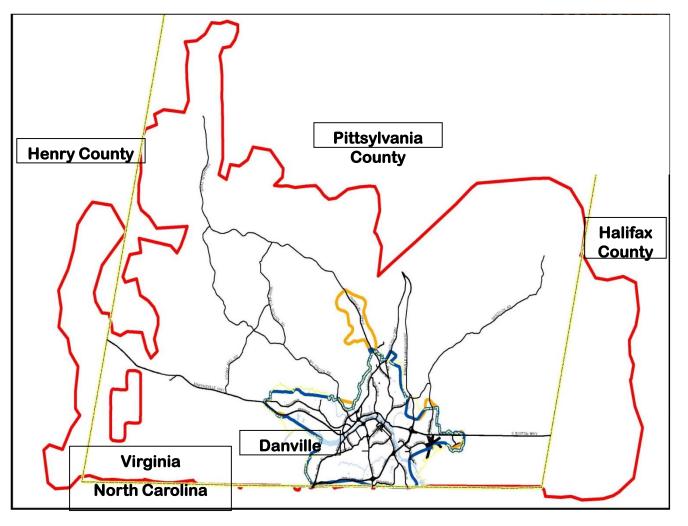


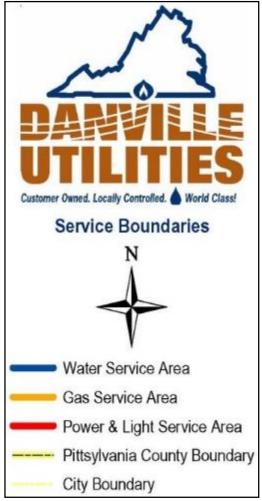
# **Danville Utilities**

- Only city in Virginia to operate all four essential utilities - electricity, natural gas, water and wastewater
  - One of few public telecommunication service providers in Virginia
- \$170 + million operating budget; 130 full-time equivalent employee positions



# Service Area







### Danville's Broadband Dilemma

- Advanced telecommunications capabilities are needed to support the community's economic development and education
- Businesses requiring multiple-megabit connectivity are not well served.
- Fiber to the premises is the best solution, but is expensive. (Installation = \$1,800 per customer served)
- Danville is a moderate/low-income community.
   Utility rates cannot be increased to deploy fiber to the premises.





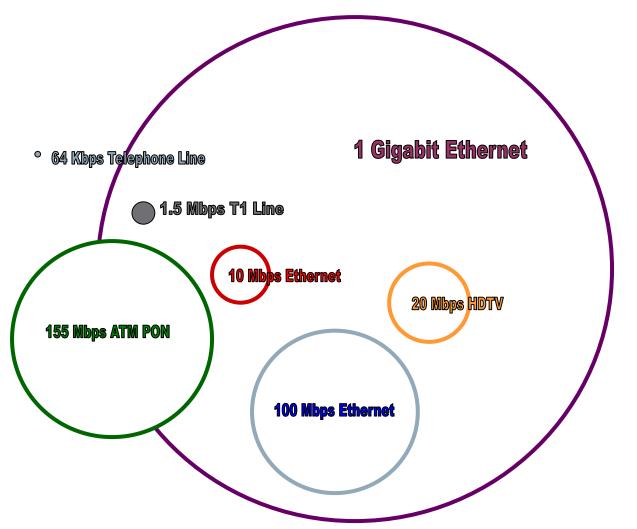
### **Operating Principal**

Danville's businesses, institutions, and households should have affordable broadband services on par with those available elsewhere in Virginia in order to ensure access to entertainment, cultural, health, and <u>especially</u> to educational and economic opportunities.





# **Advanced Broadband Connectivity**









### What role should the City have?

- The private sector should take the lead in providing telecommunications services
- The City should provide open access to nDanville in order to
  - Reduce service provider's cost of market entry
  - Stimulate market competition
  - Encourage private investment
  - Avoid overbuilding infrastructure









- Phase I (Completed 2004): Fiber to government & schools
- Phase II (Ongoing since 2006): Fiber to businesses
- Phase III (ongoing): Fiber to homes



### **Network Fundamentals**

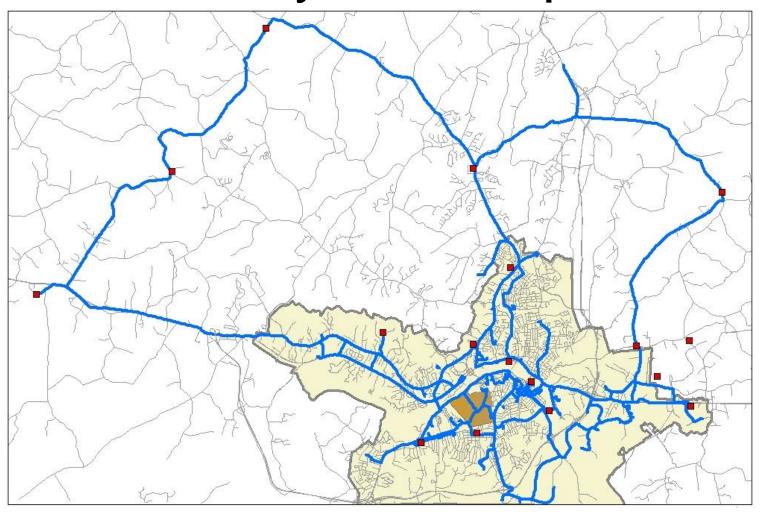


- nDanville is an open-access multiple- service network. City does not provide Internet or TV services but rather bandwidth for providers to sell their own services.
- Danville Utilities maintains all fiber optic cables and customer equipment.
- Customer speeds can reach up to 10 gigabit per second (10 gbps)
- Retail services are provided by private sector telecommunications firms using a revenue sharing basis
- Local government & school needs were the first to be met, financed by federal education (E-rate) service fee revenue
- Industries, large commercial customers & institutions have been connected as part of the City's economic development strategy
- Phase III Fiber to the Home is being funded from customer charges & revenues shared by private sector service providers





# nDanville System Map



nDanville Fiber

Substations

Residential Service Area





### **Smart Grid**

- Danville Utilities has implemented a system-wide two-way advanced metering infrastructure (AMI) deployment (smart meters) in 2009
  - Approximately 75,000 total meters installed
- Smart Meters: Enable two-way communication between the meter and our central system
- Allows more information for customers
  - Customers are able to access account online through My eAccount web portal



# Traffic Signal Coordination









# **QUESTIONS?**