Closing the Digital Divide

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Closing The Digital Divide

- 91.3% of Arlington households have a broadband subscription.
  https://www.census.gov/quickfacts/arlingtoncdpvirginia

- **Unserved** – Properties that currently have access to internet speeds at or below 25 Megabits per second (Mbps) download and 3 Megabits (Mbps) upload.

- **Underserved** – Not clearly defined but used interchangeably with "unserved"

- **Commercial vs. Residential**
    - Commercial - more robust needs than residential customers and can be customized based on needs. Scalable to **100 Gigabits**
    - Residential – all Arlington residents have access to Internet speeds up to **1.2 Gigabits**

FCC BROADBAND DEFINITION OVER TIME

Date Adopted	Minimum Download	Minimum Upload	FCC Commissioner
2015	**25 Mbps**	**3 Mbps**	**Tom Wheeler, D**
2010	10 Mbps	1 Mbps	Julius Genachowski, D
1996	200 Kbps	200 Kbps	William Kennard, D

The Virtual School Year
Keeping Students Connected

For many years VCTA members have recognized the need to provide affordable broadband access solutions for students, including programs such as *Connect2Compete, Internet Essentials, Internet Assist.*

The COVID-19 pandemic has drastically increased the need for these programs.

More than **100,000 Virginians** are connected to in-home internet through Comcast's affordability program

The Virtual School Year

- 50Mbps/5Mbps high-speed Internet to the home.
    - **100% of APS students are connected.** Partnership with APS and the County closed the digital divide for students
    - Option to purchase a laptop or desktop computer at a discounted price.
    - Access to free online digital skills tutorials and in-person classes.
    - Access to WiFi hotspots for continued connectivity outside the home.
    - Complimentary program materials and resources in 30 different languages can be shipped to you free of charge: www.partner.internetessentials.com.

Sponsored Service Agreements
Public Private Partnerships

Localities have an opportunity to partner with broadband providers to provide free, high quality internet connectivity to students and families in need. Arlington has become a model for other communities.

- Sponsored Agreements allow localities to purchase affordability access plans for students and other groups such as seniors and veterans

- Localities may use CARES (Coronavirus Aid, Relief, and Economic Security) Act, ARPA (American Rescue Plan Act) and other federal funds to pay for these sponsored programs

- Several VCTA members have entered into these agreements with numerous localities in Virginia (including Arlington, Alexandria, Chesterfield, Culpepper, and more)

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LIFT Zones

- Launched in 2020; providing free Gig WiFi to community connectivity hubs– Shell, Serrano & La Cocina in Arlington. Free Xfinity wifi for pop up vaccine clinic – Macedonia Baptist Church.

- Free Internet connectivity & access to hundreds of hours of educational and digital skills content to help families and site coordinators navigate online learning.

- "Project UP" is Comcast's $1 Billion commitment to advance digital equity

Emergency Broadband Benefit Program / The Affordable Connectivity Program

- The Coronavirus Response and Relief Supplemental Appropriations Act included $3.2 Billion for an Emergency Broadband Benefit Program (EBB) providing a reimbursement subsidy for the provision of broadband services and equipment to qualifying households up to $50/month.

- The Affordability Connectivity Program is a $14.2 billion government program that extends and modifies the EBB, providing an up to $30/month credit after December 30, 2021

- 43 providers offer internet through EBB in Virginia, including VCTA members
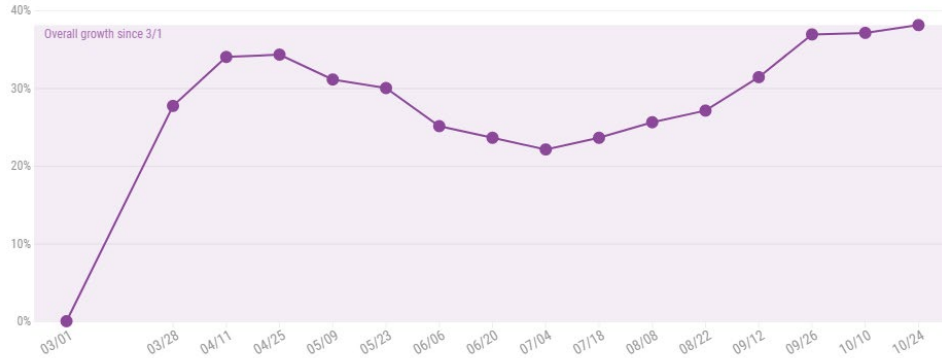   - 153,565 Virginia households using the program

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Prepared For Increased Demand

National Upstream Peak Growth
Observed Increase in Peak Consumer Usage

Change in Pre-COVID Internet Usage Since Early March

● Growth Since 3/1

Source: Data from NCTA Member Companies and Others

- VCTA member systems have been able to handle the surge in internet usage during peak times. Broadband networks are being constantly upgraded to stay ahead of consumer demand

- Members were prepared to handle the increased teleworking and virtual learning broadband traffic

- While upload traffic increased during the pandemic, Internet traffic is still heavily waited towards downstream traffic.

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E-Rate Emergency Connectivity Fund

- The E-Rate program administered by the FCC has traditionally funded broadband service to and within schools and libraries.

- The American Rescue plan includes $7,171,000,000 ($7.17B) for the Emergency Connectivity Fund
  - ARPA expands the usage of E-Rate funds for devices, equipment, and provisions of broadband services for use by students, staff, and library patrons at locations outside the school or library

- Construction must be completed and services provided within one year of funding commitment

Wireless Services Authority Act

The Virginia Wireless Service Authorities Act (Code of Virginia, §15.2-5431.1 et seq.) was enacted by the Virginia General Assembly in 2003. The Act enables counties, cities and towns in Virginia to form their own Wireless Service Authorities to provide certain communications services, including but not limited to, high speed data and Internet access services.

Broadband Authorities are created under the Wireless Service Authorities Act.

Wireless Service Authorities have discretion to own and operate systems that provide qualifying communications services or to partner with the private sector for the deployment, operation, and maintenance of the system. Localities are using the authority in different ways.

Government Owned Networks

- After significant government investment and incurring public debt, nearly all GONs follow a pattern of years of substantial financial losses, putting a city's financial solvency at risk.

  - **Bristol Virginia Utilities** – 2016 Auditor's report found that BVU's OptiNet was operating at a net loss that was expected to continue. They concluded BVU would likely be unable to pay the $45.5 million in bonds, plus interest, issued by the VRA in 2010. Sunset Digital acquired OptiNet's assets for $50 million
  - **Burlington, Vermont:** Excessive borrowing led to a six-level downgrade of the city's credit rating and caused an almost decade-long financial crisis.
  - **Provo, Utah:** The failed iProvo network cost the city $39 million to build but was ultimately sold to Google for $1. Taxpayers are still paying for this failed system.
  - **Powell, Wyoming:** The GON in Powell, Wyoming is estimated to turn a profit in 1,253 years.

- GONs considered the most successful are supported by significant grant funding and the benefits have not endured overtime.
  - **Chattanooga, TN:** A recent study (Ford & Seals, 2019) found no payoffs in the labor market from the GON, which cost approximately $390 million to deploy using $220 million in local revenue bonds and $115 million in state bonds.

Auditor of Public Accounts. (2016, October). *Review Of Bristol Virginia Utilities Authority*. http://www.apa.virginia.gov/reports/BVUA2016-web.pdf

Ford, George S., and Richard A Seals. "The Rewards of Municipal Broadband: An Econometric Analysis of the Labor Market." PHOENIX CENTER POLICY PAPER SERIES, May 2019, https://www.phoenix-center.org/pcpp/PCPP54Final.pdf

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Government Owned Networks

- **GONs put serious economic strain on communities while providing little benefit, are they worth the risk?**

  - Broadband networks are very costly to construct, challenging to operate, and require near continuous updates to meet the demands of the industry.

  - The cable industry has invested over $290 billion in infrastructure and networks over the last 20 years and private providers are continuously investing to support new technologies and faster speeds. Municipalities do not have the resources or expertise to keep up with this demand and need for innovation.

- **Are Municipal Owned Networks an inappropriate use of taxpayer dollars?**
  - Pursuit of a GON diverts scarce public resources from other pressing priorities.

  - After significant government investment and incurring public debt, over half of these municipal fiber networks fail to bring in enough revenue to cover even their ongoing operating costs

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Questions

The public-private partnership model is the most efficient and cost-effective method of broadband deployment. It is the best method to guarantee the continued competitive and innovative development of broadband

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