

HAVE WE BEEN SUCCESSFUL?

Hard to Define

Approximately 200 customers

2 providers currently

Issues

- Funding
 - Fiber, while reliable and fast, is expensive
 - Limited grants
 - Limited local funding
 - Lack of desire to borrow funds
- Providers
 - Lack of marketing effort
 - Cost of operations
 - Customer count/lack of customer density



FUNDING ISSUES

- Fiber, while reliable and fast, is expensive.
 - Region topography - mountains!!
- Limited grants
 - Free funding is gone
 - 1:1 grants
 - Loans - Require locality support
 - Lack of desire to borrow funds
 - Loan within the member jurisdiction?
 - All costs go back to regional partners
- Limited local funding
 - Everyone's local budget is strained



PROVIDER/OPEN ACCESS ISSUES

Wired Road does not provide service directly and relies on private providers.

- Providers
 - Not enough providers
 - Recruitment efforts
 - Incumbents not interested
 - Rural
 - Lack of customer density
- Lack of marketing effort by Providers
 - Low hanging fruit
- Cost of operations
 - Backhaul costs
 - Staffing



NEXT STEPS

- Revisited our broadband plan in 2017
 - Re-focus on wireless last mile
 - Considered being a provider, but lack organizational infrastructure for billing, maintenance, etc.
- Seek matching fund grants
- Take advantage of new cell towers being built
 - Modify zoning ordinances
- Move from full system development to tower leasing
 - Carroll RFP
 - Grayson RFP



HAVE WE BEEN SUCCESSFUL?

Hard to Define

- Approximately 200 customers
- 2 providers currently - reliance on outside entities
- No real ending in sight - 100% coverage??
 - Not like other projects that have milestones for success
- Cannot calculate a guaranteed revenue stream - customers and providers can come and go.
- Changes in boards/memberships/regional priorities
 - Elected and appointed members to board - 4 of 5 members have changed over since 2016.



RECOMMENDATIONS

- Decide on open access, leased equipment, locality run.
- Set your board and look for members that are interested in broadband and have some construction experience.
- Funding Priorities - where are funds coming from?
 - Locality
 - Borrowed
 - Grants
- Decide how you will manage it
 - Consultant vs. Staff
- How will you define success?
 - Customer Count
 - Coverage Area
 - Other

Thank You





**EASTERN SHORE OF VIRGINIA
BROADBAND
AUTHORITY**

An independent, not-for-profit public authority, originally formed by the Counties of Northampton and Accomack, to provide broadband services on the Eastern Shore of Virginia

Start Up

**EASTERN SHORE OF VIRGINIA
BROADBAND
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ESVBA Grant Funding	
Accomack County	\$ 200,000
Northampton County	\$ 66,000
Total Planning Phase Funding	\$266,000
Backbone Construction	
EDA/DHCD Funding	\$4,509,800
NASA 2008	\$1,786,000
NASA 2009	\$2,000,000
Total Backbone Funding	\$8,295,800
Community Network Construction	
Town of Parkley	\$ 450,400
Town of Cape Charles	\$ 489,900
Town of Onancock	\$ 200,000
Town of Chincoteague	\$ 479,500
CDBG-R Grant	\$1,000,000
Total Community Funding	\$2,619,800
Total ESVBA Grant Funds	\$11,181,600

**EASTERN SHORE OF VIRGINIA
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In 2013, at the 21st annual Eastern Shore of Virginia Harvest Festival, ESVBA made its first, non-mandatory, installment payment to reimburse the the two counties for their initial investment.

The ESVBA has since refunded 100% of initial start up contributions from the two counties and continues to operate from a strong financial position.

Payback

Provided from left are Accomack County Supervisor Pamela Major, Broadband Executive Director Nicholas Pascoe, Vice Chair of the Broadband Authority, Oregon Luford, James, State Sen. Roger Northing, Accomack County Administrator Steve Miller, Northampton Supervisor Willie Randall and Northampton Supervisor Rick Hubbard. © Chris Givens-Wilgus

**EASTERN SHORE OF VIRGINIA
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Governance

The ESVBA is still managed by a five member Board of Directors appointed by both Accomack and Northampton Counties.

The current Board of Directors members consists of:

- Elaine Meil, Chair
- Scott Webb, Vice Chair
- Mike Mason, Treasurer
- Charles Kolakowski
- Peter Lalor

**EASTERN SHORE OF VIRGINIA
BROADBAND
AUTHORITY**

~320 mile carrier grade network

10 years of stable operation

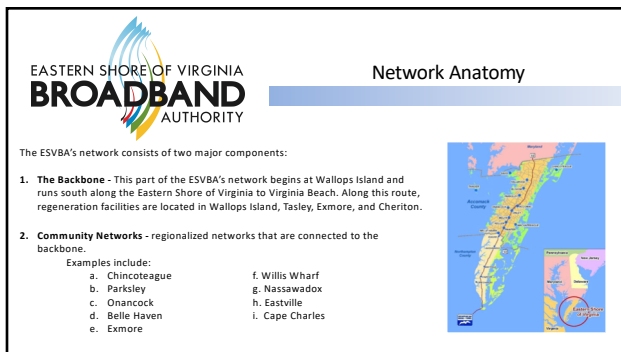
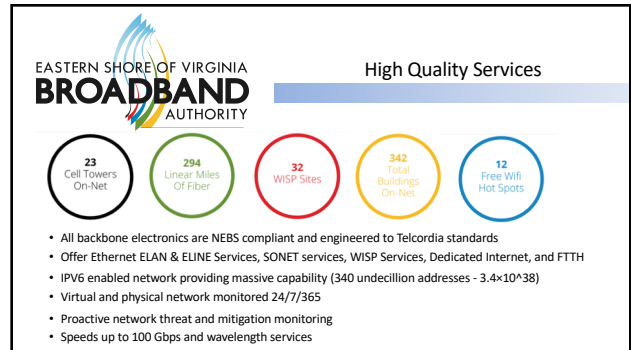
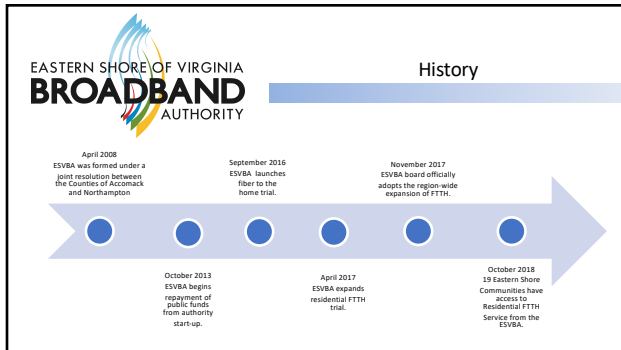
Runs 85 miles from MD border to VA Beach

Serves a variety of industries:

- Education
- Commercial
- Government
- Healthcare
- Wholesale
- Residential

Hundred satisfied customers

Fast Facts





⁴RURALBAND

CONNECTING PEOPLE

Casey Logan, P.E.
Chief Executive Officer

Virginia Local Government Meeting
February 21, 2019



The Need

In Virginia, ~772,000 people lack access to high-speed internet service (25Mb/3Mb)

- **20%** of residents in Prince George County, roughly 6,800 residents, lack access to broadband
- **67%** of residents in Sussex County, roughly 7,800 residents, lack access to broadband
- **100%** of residents in Surry County, roughly 6,500 residents, lack access to broadband
- PGEC has ~12,000 members in these counties, 57% of under served served population

*Data based off of FCC Dec 2016 data for broadband availability



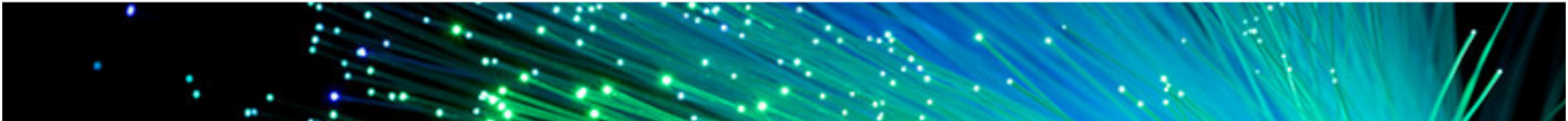
Current Options

Wireless has optimal speeds between 5 Mbps and 12 Mbps

- Netflix movie requires 5 Mbps for streaming, 25 Mbps for 4K UHD
- Each user needs own plan
- Signal strength
- Speed issues with pre-loading video, aka "Buffering"

Cellphone Wireless has data caps

- Average Netflix movie uses between 1-3GB per hour
- Data overage rates could be as high as \$20/GB



Where Are We Going...

- The Cooperative is currently installing a backbone fiber network that will join our substations
- The Cooperative will use the backbone to supply fiber optic cable to its subsidiary, **RURALBAND**, for the purpose of supplying it to our member's homes





- Internet speeds for residents will be package options for **50Mbps**, **100Mbps**, **1G** symmetrical for each installation
- No restrictions for the amount of data a member uses
- Speed is greatly increased for fiber optic cable, “no buffering”
- Cost: **\$74**/50Mbps, **\$99**/100Mbps, **\$179**/1G (router included)



Community Benefits

- **Education**

- Internet is the new encyclopedia
- Homework and assignment management
- Increased parental involvement

- **Telemedicine**

- **Upgrading emergency services buildings and county institutions**

- **Economic Development**, 70% of new businesses are "from home"

- **Average 6% increase in home value**



Current Partnerships

- **RURALBAND** received a **\$1 million** dollar inducement grant, from Prince George County to deploy broadband in the county
- Since then, Sussex County has partnered with **RURALBAND** with a **\$1.25 million** dollar Tobacco Commission grant, for investment in broadband in their county
- Surry County committed **\$500,000** for broadband investment in their county





Questions

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