

# Broadband For Chatham

Opportunities for Collaboration

By Darlene Yudell and Keith Medlin

August 20, 2018

# Broadband For Chatham – Action Driven Year

Feb 2018 BOC Presentation of Update



## Broadband For Chatham – Recommendations From RFI

### Actions based on RFI review:

- Two very reasonable and possible public/private partnership opportunities.
  - ‘Anchor Point’ service agreement
  - A ‘wireless’ feasibility study and pilot project



## Broadband For Chatham – Recommendations From RFI

### **‘Anchor Point’ service agreement**

Identify a County owned property needing internet service, agree to splitting the cost of infrastructure installation and commit to two years of service at the site.

#### **PROS**

Cost share on install of infrastructure is not a big investment to ‘give this a try’.

Anchor site such as a park benefits from the service and could lead to increase park usage.

Anchor site such as a Fire Department would benefit from the service and can be viewed as a community center leading to possibly funding from the USDA.

Provider agrees to install enough infrastructure to offer service to that otherwise unserved area within the two years.

After two years, the service remains available even if no further growth occurs.

Success would lead to consideration for more ‘anchor point’ considerations.

#### **CONS**

Any improvement is very limited in location initially and could stay limited.

## Broadband For Chatham – Recommendations From RFI

### **A ‘wireless’ feasibility study and pilot project**

A wireless provider performs a feasibility study to determine if their solution can be extended into Chatham County to serve a minimum of 200 in a defined area known for underserved citizens.

#### **PROS**

Expectations on a positive feasibility study are high.

Expectations on success serving 200+ are high.

Cost is not a big investment to ‘give this a try’.

Success would lead to expectation of growth in service area without further County cost.

#### **CONS**

Initial pilot project would be on a limited area, not County wide.

Lack of success in pilot project keeps service location limited.

## Broadband For Chatham – Recommendations From RFI

Both 'Anchor Point' and 'Wireless Pilot' are viewed by the Chatham Broadband group as worthy of pursuing and can be initiated immediately.

Timeframe for first service offering on both options would be within one year.





## Broadband For Chatham – A School/County Collaboration Opportunity

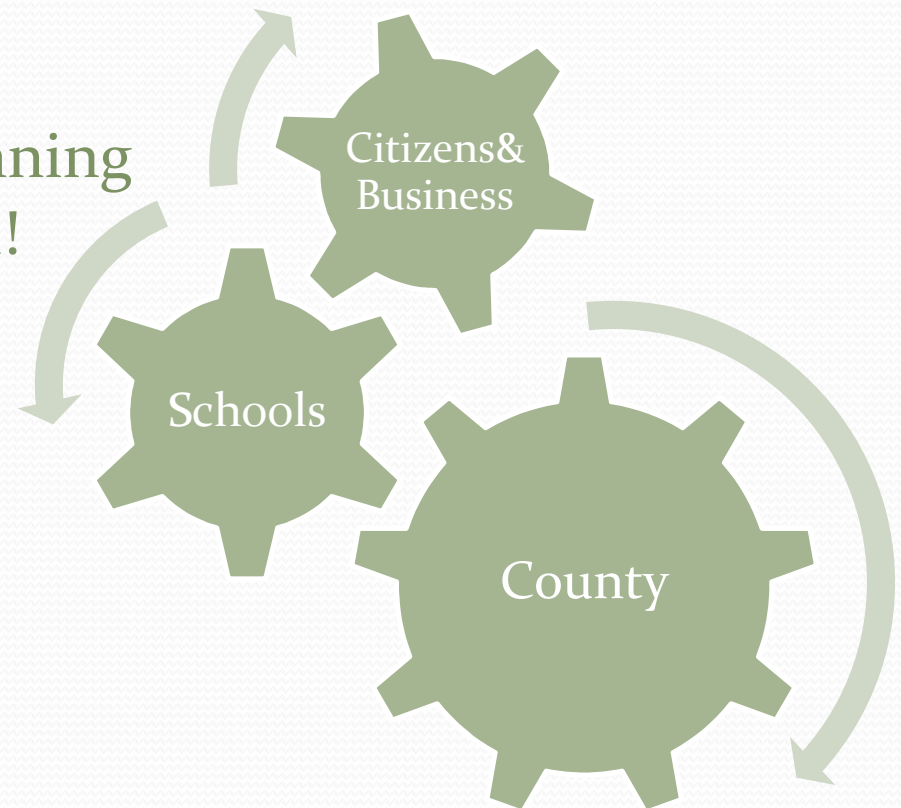
I'm excited about this project and think  
this is an incredible legacy to leave  
behind well after my time in Chatham is  
over.

Keith Medlin  
Chatham County Schools  
Chief Technology & Information Officer

# A Chatham County and School Collaboration

An idea that ties together everything learned to meet multiple needs of:

- County Schools
- County Network
- County Comprehensive Planning
- And Broadband in Chatham!





## Chatham County Schools – *Factors Encouraging Collaboration*

- The FCC cut funding for telecommunications reimbursements and FY2017-18 was the last year of funding for Chatham County Schools.
- Bandwidth needs continue to grow within the district as digital learning accelerates across the county.

## Chatham County Schools – *The Idea*

E-Rate allows school districts to request bids on fiber buildouts connecting their schools and administrative offices.

Using the E-Rate RFP process,  
Chatham County Government and Chatham County Schools could **combine our vision** in a request leading to obtaining.....

## Chatham County Schools – *The Idea*

... a fiber network that

1. Supports the school need for increased connectivity in **all** schools
2. Supports the County need for a wide area network with redundancies on which to operate County business with stability
3. Supports the County Comprehensive Plan for Resiliency and the demands coming with anticipated growth
4. Provides the foundation on which the County can pursue partnerships with ISPs leveraging the unlit fiber to expedite broadband service throughout the County.



# E-Rate Funding

- Chatham County Schools currently qualifies for 80% reimbursement for the proposed buildout based on federal Free & Reduced Lunch Program participation.
- If funded, the state of North Carolina will pick up an additional 10% which is matched by the FCC.

YES!

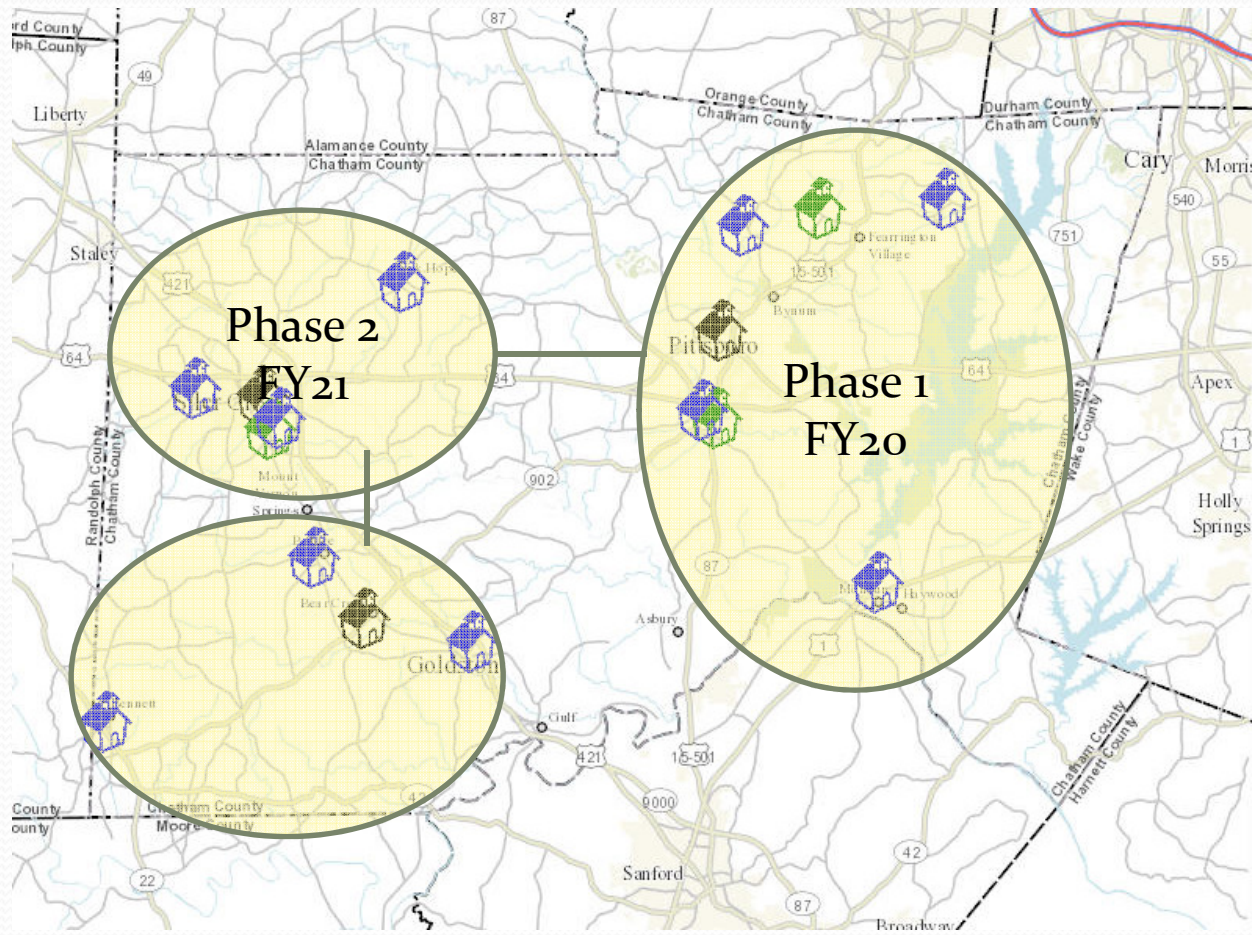
There is the *potential* for the non-reimbursed costs for the buildout to be \$0.

# Collaborative Fiber Plan - Phases

- Buildout serving the eastern half of the county to begin where the district's bandwidth needs are greatest.
- Schools will include:
  - Moncure,
  - Horton Middle,
  - Pittsboro Elementary,
  - Northwood High,
  - Perry Harrison Elementary,
  - Pollard Middle,
  - Chatham Grove Elementary,
  - North Chatham Elementary,
  - and Seaforth High
- Buildout serving the western half of the county will follow as phase 2.
- Linking the eastern and western loops will provide a basic County wide network.

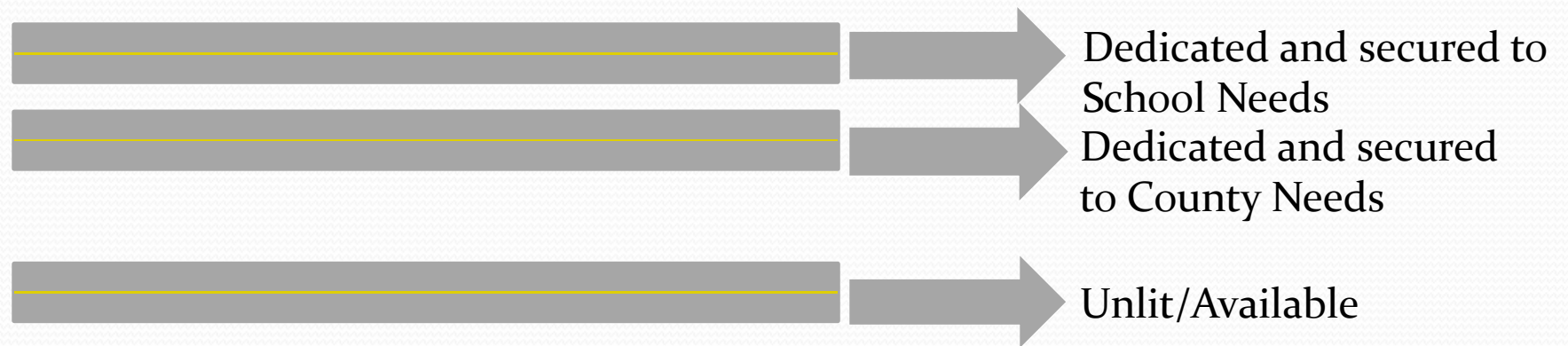


# A Phased Buildout Plan





# Multiple strand fiber highway



*One collaborative effort aimed at placing enough fiber to serve current, future and broadband needs!*



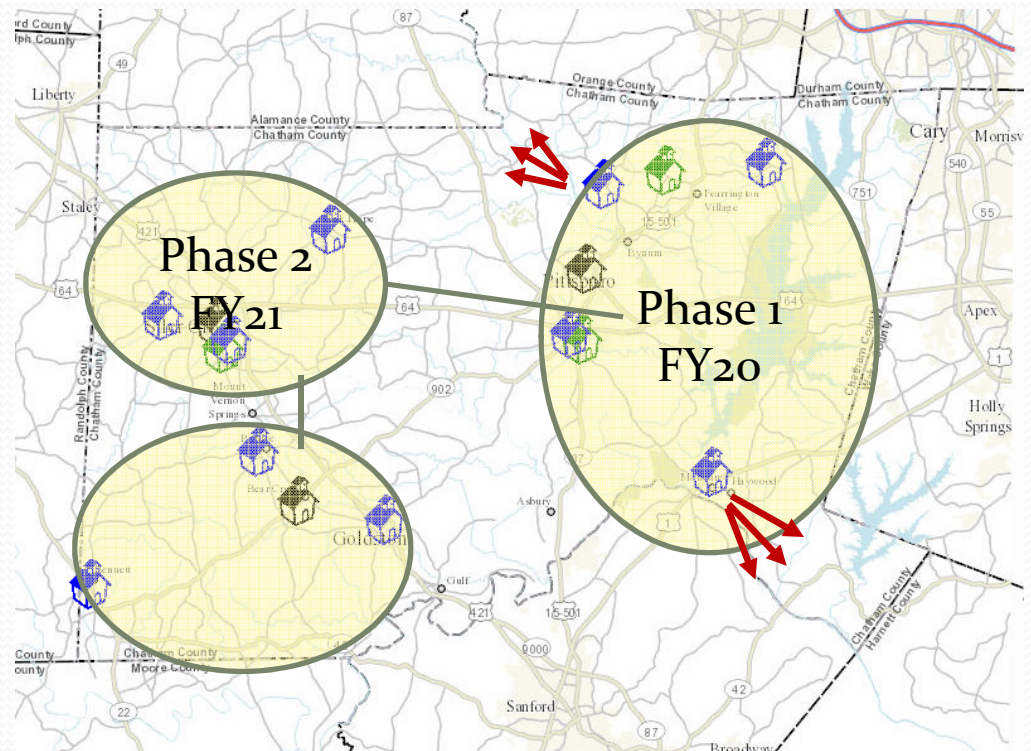
## How Does This Extend Broadband?

- On June 6, the broadband group met with Steve Queen from the USDA.
- The bottom line: We learned the fire stations can be viewed as ‘community centers’ and the Community Connect Grant can be applied for to extend fiber networks. The providers interested in doing so would apply and use this new fiber highway to meet long haul needs and minimize costs and time to implement.
- From the RFI responses we learned the responding ISPs would consider using ‘dark/unlit’ fiber, as a ‘build out’ point.



# Broadband - 'Community Connect Grant' possibility.

- Fiber providers will be encouraged to consider 'building out' from points along the new fiber highway to serve residential and business customers.
- **Note: The E-Rate portion of the work cannot fund anything to do with non-school related connectivity.**
- Providers can apply for Community Connect Grants or fund the shorter distance installs themselves.





# Expertise: Mighty River Consulting

- Joe Freddoso's consulting company can assist.
- We believe Mr. Freddoso is uniquely positioned to assist us because:
  - Helped build the middle-mile fiber connectivity within the state of North Carolina for the North Carolina Research & Education Network (NCREN).
  - Consulted on successful municipal fiber buildouts in places like Broward County, Florida.
  - Consults with school systems and has successfully moved districts through the complicated regulatory and RFP process for funding.
  - Consults with the FCC, teaching them how to review fiber requests from school systems around the county
- **Cost shared 50/50 for RFP development - \$3762.50 County**



## Draft E-Rate Timeline – Planning & Vendor Selection

- **September 2018**  
Draft of RFP for E-Rate Fiber completed with school and county government input.
- **October 2018**  
RFP issued through the E-Rate portal to providers across the country as an open advertisement to respond.
- **October 2018 – February 2019**  
Open period for Q&A with schools and providers, Mighty River will facilitate an on-site vendor Q&A session.
- **February 2019 – April 2019**  
Vendor selection and contract negotiation period

# Draft Timeline - Construction

- **July 2018 – June 2021**  
Construction of fiber **servicing the school** system begins. The FCC allows us to request multiple years of projects and afford 2 fiscal years for the completion of each project because fiber buildout can be slow.
- July 2019 – June 2020
- Installation of fiber **connecting County to School Admin** for new lines of access



## Broadband For Chatham – Draft Timeline

- **July 2019 and on** – Planning for Chatham County business network needs and network connection redundancies could begin (assuming project goes forward).
- **July 2019 or anytime thereafter** – Pursue interests from ISPs in using buildout points (assuming project goes forward).

# Broadband For Chatham

The School and County Collaboration Project offers very long term benefits, appropriately called a 'legacy benefit'.

Yes, there are still some unknowns, but we finally have the right mix of the right people working toward the right results.

Now, we want to move forward with these ideas, take action, stay with them and see it through.



*Thank you for your time today!*

