

# Fiber to the Home in Prince George County, VA



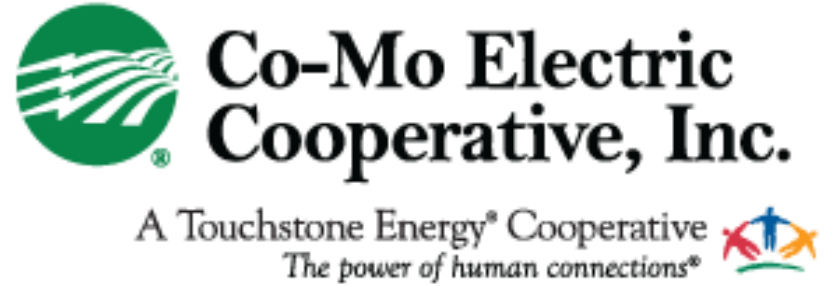
<sup>4</sup>RURALBAND  
CONNECTING PEOPLE

An agreement between PGEC Enterprises,  
Prince George County IDA, and the  
County of Prince George, VA

June 16, 2017

## A tip of the hat....

Thank you, Co-Mo Electric Cooperative, Inc.!  
Tipton Headquarters Office  
29868 Highway 5  
Tipton, Missouri  
P.O. Box 220 65081



### A New Necessity

In the 21st century, a new technology is emerging: broadband Internet. This new technology is transforming lives and bringing economic development to the areas that adopt it.

Co-Mo Comm, a subsidiary of Co-Mo Electric, **began a pilot project in 2010** to determine if it could bring all the cooperative's members a state-of-the-art fiber-to-the-home communications network. In June 2012, the Co-Mo Comm Board of Directors announced it would extend the pilot project to the entire Co-Mo Electric service territory through a four-phase plan over the next four-plus years.

In addition to Internet and telephone service, the communications network, dubbed Co-Mo Connect, would offer television packages over the revolutionary fiber system.

## **Need for broadband in our rural areas:**

- 1) 61% of all businesses in Prince George County, VA are home-based businesses. Small and medium size businesses with greater high-speed internet use grow faster than those with less high-speed internet.
- 2) Enhanced educational opportunities (dual enrollment, complete homework, check grades/lunch account) and furthers workforce development (online training & job search) which supports economic development in Prince George County.
- 3) Availability of secure, reliable, competitive and sustainable broadband infrastructure is essential to meet citizen's needs. Broadband is either not present (coaxial cable), not affordable (wireless systems), or not reliable (satellite service) in rural areas.
- 4) Lack of broadband is the #1 complaint of Prince George County, VA residents.

## **How many of you bought/rented a home without electricity?**

Now, let's go back to The Rural Electrification Act of 1936. Electric cooperatives were formed to provide electric service in rural communities where the electric providers of the time refused to expand due to poor return on investment for their business – does this sound familiar? History is repeating itself. Except, back then, the federal government provided \$410 million in appropriations (\$7.4 billion in today's dollars).

80 years ago you could actually buy a home without electricity. Today, no one buys a home without electricity. We believe, 80 years from now, no one will buy a home without fiber.

Today, on the broadband side, Federal broadband program funding in 2018 was scattered over several departments estimated at about \$937 million most of which goes to consultants and not actual construction. (that would fund ~7 states with fiber using electric numbers from 1936). Though I could be wrong since accurate, consolidated information is hard to come by at the federal level – especially with broadband mapping.

Interesting facts:

Electric power distribution started in 1880, in 1936 rural roll out began – 56 years later  
Fiber, World Wide Web created in 1990, in 2017 rural roll out began – 27 years later

## **Rural Broadband – Is it doable?**

### **Parties to the agreement:**

COUNTY OF PRINCE GEORGE, VIRGINIA (the “County”) a political subdivision of the Commonwealth of Virginia

PGEC ENTERPRISES, LLC (“PGECE”) a Virginia limited liability company authorized to transact business in the Commonwealth of Virginia

INDUSTRIAL DEVELOPMENT AUTHORITY OF THE COUNTY OF PRINCE GEORGE, VIRGINIA (the “Authority”), a political subdivision of the Commonwealth of Virginia

### **Request for \$1 million grant:**

Prince George Electric Cooperative (PGEC) has established a Fiber-To-The-Home (FTTH) pilot project on West Quaker Road and Prince George Drive to test the business model for providing residential/commercial broadband service. The next step would be extending the service in phases throughout the County. The fiber subsidiary created by PGEC , PGEC Enterprises, LLC, is undercapitalized in order to build FTTH connections in the rural community due to the distances between homes/businesses. PGEC Enterprises, LLC is requesting a grant from the Authority of \$1,000,000 to help cover the overhead costs for this project.

### **Grant path:**

The Prince George County Board of Supervisors would allocate \$1,000,000 from taxable bond proceeds to the Prince George County Industrial Development Authority. The Authority would establish a Broadband Expansion Grant in the amount of \$1,000,000 and enter into a contract with the County and PGECE to award the funds.

**Term of agreement:**

Four (4) years - through July 1, 2021.

**Connections:**

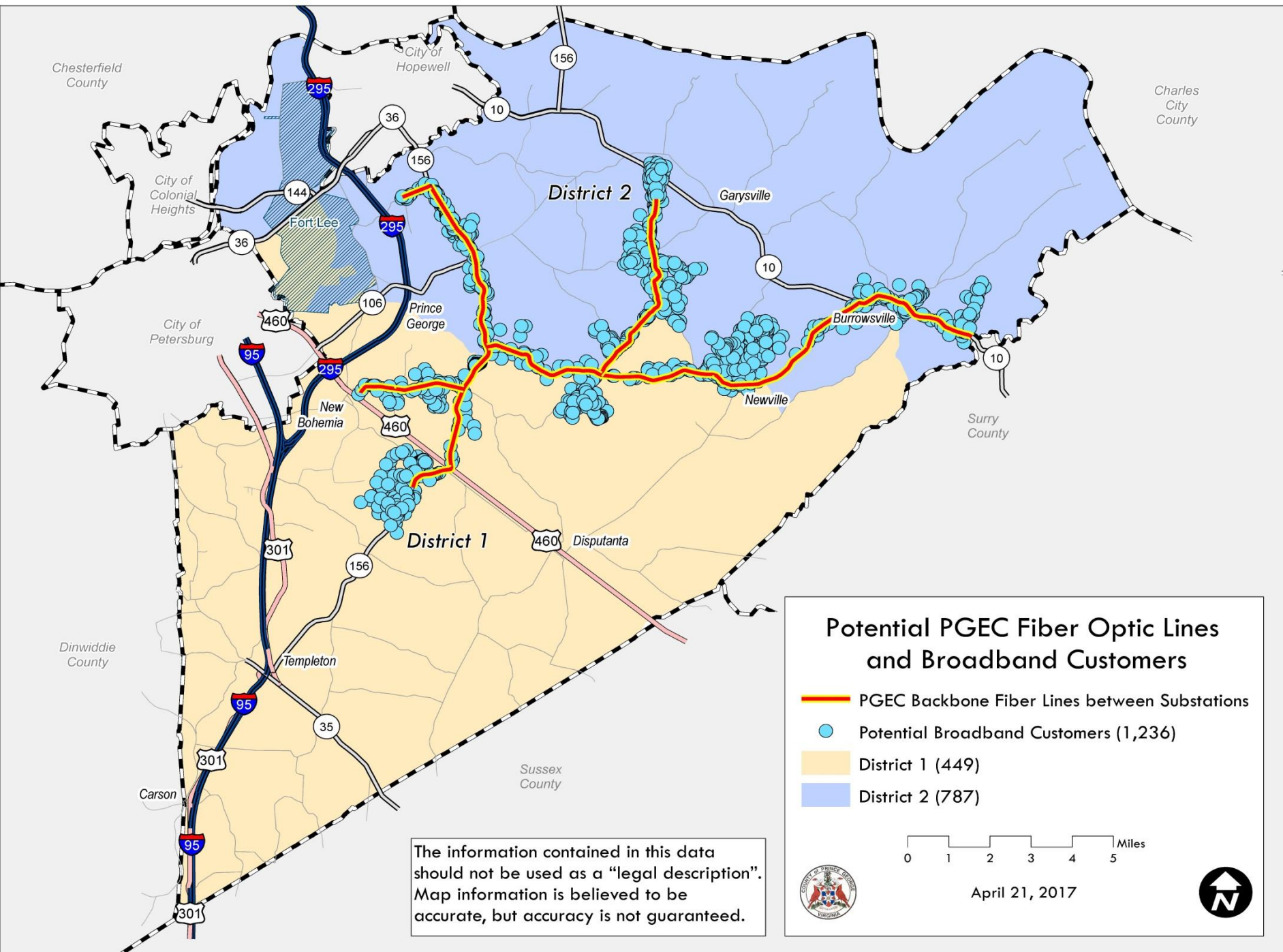
Phase I will include 500 new subscriber connections from execution of agreement. Pilot project homes do not count towards 500 goal. PGECE may continue connections beyond 500 at any time. Customers shall be within 1,000 feet of a VDOT road.

**Speed:**

At a minimum, 25 Mbps download and 3 Mbps upload. PGECE shall ensure that there is no degrading of broadband service to customers during the term of this Agreement. System will use fiber optic cable. There will be no limit on data usage.

**Clawback:**

PGECE will return to the Authority \$2,000/connection for each connection not completed, under the 500 subscription target, after four years.



Chesterfield County

Charles City County

City of Colonial Heights

City of Hopewell

District 2

Garysville

Fort Lee

City of Petersburg

Prince George

Burrowsville

New Bohemia

Newville

Surry County

District 1

Disputanta





Dinwiddie County

Templeton

Sussex County

Carson

### Potential PGEC Fiber Optic Lines and Broadband Customers

-  PGEC Backbone Fiber Lines between Substations
-  Potential Broadband Customers (1,236)
-  District 1 (449)
-  District 2 (787)



April 21, 2017



The information contained in this data should not be used as a "legal description". Map information is believed to be accurate, but accuracy is not guaranteed.



### **Broadband plan:**

Within sixty (60) days of the execution of this agreement, PGECE shall provide to the Authority a broadband installation plan for installation of the Fiber Backbone, in substantial conformity with the proposed map. The broadband installation plan shall include, but not be limited to, the locations where PGECE proposes to install broadband infrastructure, the types of materials proposed to be used, and the capacity and lifespan of the materials.

### **Annual reporting:**

PGECE shall provide documentation to the County and the Authority annually, beginning July 1, 2018 and continuing through July 1, 2021, verifying new subscribers to broadband service with a minimum of one-year subscriptions each.

### **Sale of PGECE:**

In the event of a sale or assignment of PGEC Enterprises, LLC to any person, firm or corporation prior to PGECE's fulfillment of its obligations under the terms of this agreement, such sale or assignment shall be made expressly subject to all terms of this agreement.

## **Community Service Commitments:**

PGECE will construct and make available fiber optic cable connections to all public structures and facilities owned or operated by the County that are within one thousand (1,000) feet of Fiber Backbone including, but not limited to schools, libraries, parks and recreation facilities, fire stations, and wireless communications towers. Internet service charges for these facilities shall be at the commercial rate.

In addition, PGECE will construct and make available to the County's Central Wellness Center, the Prince George Emergency Crew Building, the Burrowsville Volunteer Fire Department and the Burrowsville Community Center internet service at the residential internet service rate (currently \$82/month with leased router) during the term of this agreement. At such time as PGECE has satisfied in full all of the requirements of it under the terms of this agreement, the rate for internet service to the County's Central Wellness Center, the Prince George Emergency Crew building, the Burrowsville Volunteer Fire Department and the Burrowsville Community Center shall be at the PGECE commercial internet rate.

### **Moral of the story for rural broadband:**

Unlike electrification long ago, local governments are going to have to pay their fair share to implement fiber construction. What we realized in Prince George County, VA - federal and state financial resources were not going to solve our broadband issue. Not enough money in the federal and state coffers, we didn't qualify due to stipulations (low/mod) or the incorrect maps said we were already covered, and too many bureaucratic hoops made the business model unattainable.

Respectfully, please, no more studies, no more testing, no more consultants. Last mile fiber internet connections are the only successes that count. The model exists - start installing fiber today.

Project completed July 22, 2019. There are 567 connections, and growing. Fiber went past over 1,000 homes.

RURALBAND: Connecting People - <https://www.ruralband.coop/>

# Questions?