

# UPDATE

## State Broadband Planning Program Update 2019:

The future of broadband in Kentucky will be approached in two phases:

- **PHASE ONE**- Complete the middle mile fiber optic cable project known as KentuckyWired.
- **PHASE TWO**- Engage with community partners to encourage last mile fiber deployment.

*Note- These two phases can and have already occurred simultaneously.*

### PHASE ONE

#### *KentuckyWired*

The KentuckyWired Network is an approximately 3,300-mile long middle mile broadband network currently being built by the Commonwealth and its contractors. This network will be a Commonwealth-owned, leading-edge communication infrastructure service to provide affordable broadband connectivity on a statewide basis, foster collaboration in unlimited ways, and promote innovative use of digital technologies connecting the people of Kentucky to the world.

#### *Project Overview*

KentuckyWired will consist of approximately 3,300 miles of fiber optic cable serving over 1,000 network sites statewide. The fiber optic cable consists of 288 strands, of which 144 strands will be available for government agencies, and the other 144 strands will be available to local common exchange carriers for last mile service to business and individuals.

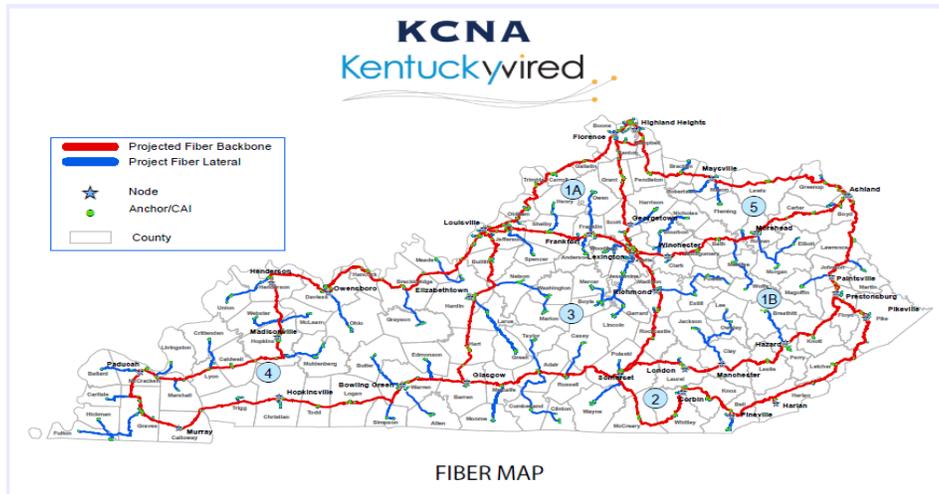
- KentuckyWired is the “interstate highway infrastructure system” connecting the worldwide Internet to “exit ramps” closer to a community.
- The KentuckyWired network will provide broadband services to state government agencies and public postsecondary schools, including the Kentucky Community and Technical College System. This network will also be made available to local government agencies at competitive rates.

## Strategic Plan - KY Broadband Planning: 2019 Update

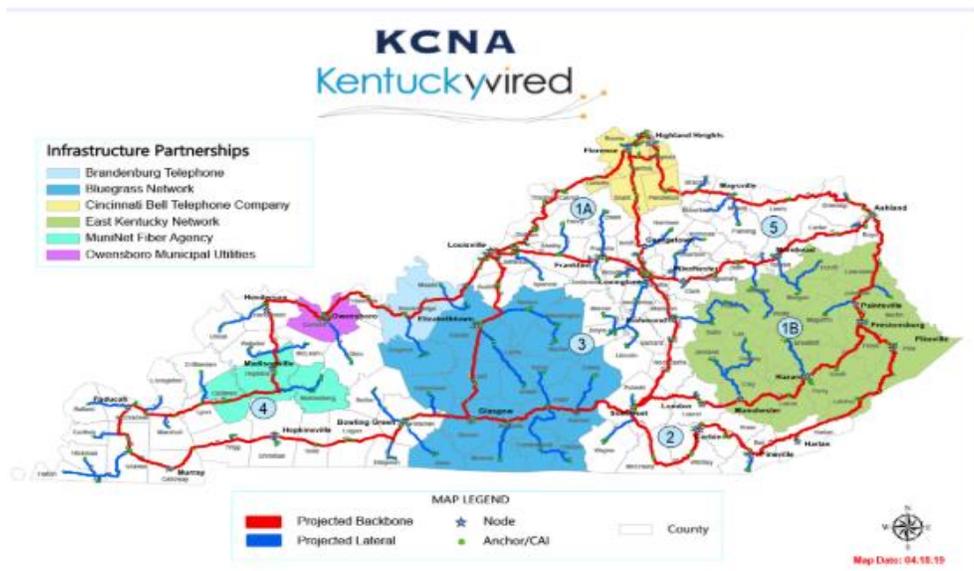
- KentuckyWired will be built based on government/post-secondary education current needs with excess capacity, which allows for future growth.
- KentuckyWired is “open access” meaning that local carriers may acquire access to the network to provide last mile service directly to customers.
- KentuckyWired is not an Internet service provider, and will not provide Internet service to end users such as individuals or businesses.
- Approximately 85% of the fiber will be installed primarily on poles; the remaining 15% will be underground.
- Concurrent construction for Louisville-Lexington-Northern Kentucky allows for connection to worldwide web points of presence in Cincinnati and Louisville. It also provides network redundancy. This portion of KentuckyWired is crucial to broadband expansion in the Appalachian region of Kentucky, which is currently underserved.
- The Commonwealth’s private sector partners are Macquarie Capital, Black & Veatch, Fujitsu, First Solutions and Leducor.
- Partners will design, build, operate and maintain the network for a term of 30 years. The Commonwealth will own the network.
- Local Kentucky companies have been, and will continue to be used when appropriate to provide construction and maintenance services to the network.

Maps

The below map outlines the middle mile network of KentuckyWired. All 120 counties in Kentucky will have either 'backbone' or 'lateral' fiber connected in their communities.



This map displays our strategic partners. KentuckyWired has made every effort to engage local providers to help build this critical network.



The completed network will be open access, meaning that all last mile providers will be able to lease fiber from the state network to run last mile fiber to homes and businesses. This expanded fiber footprint in Kentucky will encourage last mile providers to build off the network and provide service to underserved areas.

## PHASE TWO

The Commonwealth will explore all means to collaborate with community partners to facilitate last mile fiber deployment. As noted earlier, some of this expansion of last mile broadband has already taken place due to the KentuckyWired project.

### *Strategic Objectives*

- Work to improve rates of adoption in the Commonwealth.
- Educate local stakeholders on process and tools for facilitating broadband availability and express the importance of broadband deployment throughout the Commonwealth.
- Work toward improving content provision of broadband information.
- Facilitate discussions with providers to identify last-mile service options for prospective facilities and teleworkers.
- Promote “Customer Demand” as a key benefit to encourage broadband providers to extend their service availability farther and faster.
- Propose solutions to last-mile challenges related to economic development, telework opportunities, and telehealth.

To achieve measurable success on the Strategic Objectives noted above, the Commonwealth and the Kentucky Communications Network Authority will continue with statewide infrastructure and awareness initiatives and community-based broadband projects.

### *Policy Recommendations*

Each of the Policy Recommendations address a specific area where Kentucky could improve its broadband services.

### **Underserved Areas**

- Kentucky still has roughly 145,000 constituents without any access to wired internet providers; there are roughly 695,000 constituents that only have access to one wired provider.

## **Strategic Plan - KY Broadband Planning: 2019 Update**

- Lack of service and competition slows development of underserved areas. The Commonwealth, through community partnerships, must work to expand our broadband footprint.

### **Lack of Providers**

- Of all the states that border Kentucky, the Commonwealth has the second fewest internet service providers operating in the state.
- Competition for end users will help drive down service cost as well as improve customer service. Kentucky must do all it can to encourage providers to locate in the Commonwealth.

### **Insufficient Speeds**

- Only 26% of Kentucky has access to 1 gigabit broadband.
- Improving speeds is the next hurdle in bringing Kentucky into the modern economy. Expanding service and improving speeds work hand in hand to keep Kentucky engaged in the 21<sup>st</sup> century.