

Broadband Quick Facts

Broadband is a high-capacity transmission technique using a wide range of frequencies, which enables a large number of messages to be communicated simultaneously.

The current Federal Communications Commission (FCC) standard designates speeds of 25 MB download and 3 MB upload.

Need

High speed internet connectivity requirements are growing exponentially:

Internet of Things

Visual Experience Era

Big Data

E-commerce Engine

“Broadband is the underpinning for some of today’s most important transformations in business activity and government services”

Reference: “The Economic Development Benefits of Broadband”, BBC Magazine May/June 2017; <http://bbcmag.epubxp.com/i/833421-may-jun-2017>



Broadband delivers benefits across all user sectors.

Last year a federal court defined it as a basic utility like running water or electricity.

In rural areas across America, high-speed internet often ends at the county line.

“The FCC estimates the 10 percent, or 34 million, of all Americans lack access to this benchmark service level, with 39% of rural Americans lacking as well.”

Reference: “The Internet Highway: What Will Tomorrow Bring?”; Sunshine State News; July 26, 2017; <http://www.sunshinestateneews.com>

KY ranks 35th in the nation of the most connected states. Reference: Broadbandnow®; <http://www.broadbandnow.com/Kentucky>

Middle Mile - KentuckyWired (KYW) Impacts

The Broadband Middle Mile is the network connection between the last mile and greater Internet. It is the “interstate highway infrastructure system” connecting the worldwide Internet to “exit ramps” closer to a community.

KYW is the Middle Mile network opportunity for the Commonwealth.

Communities – Last Mile- KYW Impacts

The Last Mile network is the final leg of a connection between a middle mile network provider and the customer (office/home). Reference:

CBS News; <https://www.cbsnews.com/news/rural-areas-internet-access-dawsonville-georgia/>

KYW is routed through every Kentucky county.



KentuckyWired (KYW) Quick Facts

Current Status

- Construction began in mid-2015 and includes make ready engineering, survey and design work, and fiber huts. This includes more than 650 government agency locations, more than 84 KCTCS campuses, all state universities, approximately 120 Administrative Office of the Court locations and additional miscellaneous sites such as the Center for Rural Development.
- Kentucky Communications Network Authority (KCNA) is using existing infrastructure wherever possible, which minimizes costs and engages local providers. The Commonwealth has already entered into agreements with Cincinnati Bell Telephone (CBT), East Kentucky Network (EKN) and Bluegrass Network (BGN) to lease their fiber rather than build new. Additional discussions are ongoing.
- KCNA is in negotiations regarding pole attachment agreements with other local telecom providers, Rural Electric Cooperative Corporations (RECCs), and cities to expand partnerships and leverage existing infrastructure.
- The original completion date was 2018, however delays in getting contracts to use the existing utility poles have caused the completion date to be pushed back. There are many variables that impact the construction schedule, but the first portion of the network should be completed in 2018.

Project Overview

- KYW network will consist of more than 3,000 miles of fiber optic cable serving over 1,000 network sites statewide.
 - ~ KYW is the “interstate highway infrastructure system” connecting the worldwide Internet to “exit ramps” closer to a community.
 - ~ The KYW network will provide broadband services to state government agencies and public postsecondary schools, including KCTCS.
 - ~ KYW will be built based on government/post-secondary education current needs with excess capacity, which allows for future growth; provides service to other public institutions, such as libraries; and potential wholesale use.
 - ~ KYW is “open access” meaning that cities, partners and businesses may acquire access to the network to provide last mile services directly to customers.
 - ~ KYW is not an Internet service provider and will not provide Internet service to end users such as consumers or businesses.
 - ~ Approximately 85% of the fiber will be installed primarily on poles; the remaining 15% will be underground.
- Construction of the network begins in the SOAR region followed by the rest of the state.
 - ~ Concurrent construction for Louisville-Lexington-Northern Kentucky allows for connection to worldwide web points of presence in Cincinnati and Louisville and provides network redundancy. This portion of KYW is crucial to broadband expansion.