

**Kentucky Education Network  
K-12 School District Hub Site to School  
High Speed Internal Connection  
Status Report  
November 15, 2007**

**Executive Summary**

The Kentucky Education Network (KEN) project, which was appropriated funds via HB 380 in April 2006, is intended to help create an education centric network that will connect every college, university, and K-12 school district in the state to enhance the learning experience of all students. Strategically, this project will help achieve objectives identified in the KETS Master Plan (2007-2012), as it is the foundation for the modern infrastructure necessary to support current and future educational initiatives (such as on-line assessment).

One of objectives of the KEN project is to help facilitate all districts upgrade their existing internal connection between schools and the state provided KEN connection with a high speed connection (10 Mbps or higher for primarily “A-1” level schools). By improving the capacity of the district’s internal network we will insure that every school is fully capable of accessing current and future educational programs available through the Internet or KDE using the new KEN connection provided by the state.

As the data below indicates, many of the districts have already upgraded their internal connections. However, for a variety of reasons, there are still a number of schools that don’t currently have high speed internal connections. Therefore, the Kentucky Department of Education has attempted to gather details of each school’s internal connection and assemble the data in a single report. This information is intended to help those districts without high speed internal connections leverage nearby facilities, facilitate discussions with vendors who have successfully provided high speed internal connections in their region, and provide a resource for vendors to identify possible underserved schools.

**Current District Summary**

**260 - Total number of Schools without a high speed internal connection**

**134 - Total number of Districts with all high speed internal connection (76%)**

**17 - Total number of Districts with active projects to deploy high speed internal connections (approximately 169 schools)**

**25 – Approximate number of Districts that intends to deploy high speed internal connections, but don’t have an active project at this time (approximately 91 schools)**

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**Regional Round-up**

**Region 1 – 29 schools without a high speed internal connection; 3 schools have active project**

**Synopsis**

Livingston and Webster are considered primary areas that could use assistance in finding affordable options for improving their internal connectivity from hub site to school. Livingston has only T1 connections (2) Elementary and (1) Middle school (MS), and Webster has T1's to (3) outlying Elementary (EL) schools.

**More Details**

Caldwell . Board of Education (BOE) and alternative school are connected via T1. This should be moving to a Cinergy high-speed internal connection soon (they applied this past year for E-Rate).

Calloway . (3) EL schools currently on T1. This should be moving to a NewWave-based high-speed internal connection soon (they applied this past year for E-Rate and some fiber have been run by the vendor already).

Crittenden - Their EL is currently on T1. CIO has looked into options to locally run fiber, but has to trench under a highway. It is unknown whether or not they're looking at TELCOs to provide alternate options or not. This isn't a long-distance "no access" type of scenario. The county is rural but this run is 3/4 mile or less.

Hopkins - One EL is about 15 miles from the hub site. They had Cinergy run fiber everywhere else but it's cost-prohibitive to get this one site. They may eventually have Cinergy do it or add a second T1.

McCracken - T1's throughout, but they are preparing RFP for an upgrade next year.

**Region 2 – 38 schools without a high speed internal connection; 21 schools have active projects**

**Synopsis**

Logan has (5) EL and McLean (3) EL and BOE that are on T-1 circuits.

**More Details**

Hardin- in the process of upgrading all of their internal connections by Dec 07

Hancock - planning to upgrade their internal system by mid-2008

**Region 3 – 101 schools without a high speed internal connection; 101 schools with an active project**

**Synopsis**

Jefferson Co - has a contract with Cinergy to install Gb fiber. Contract is signed and project is underway.

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**Region 4 – 3 schools without a high speed internal connection; 2 schools with an active project**

**Synopsis**

All districts are high speed with the exception of (3) schools.

**More Details**

Bullitt - owns their fiber, but Nichols EL is not connected and is still on T-1 (15 miles away from Hub site)

Campbell . has one EL and is in process

Walton-Verona . has one EL with T-1 circuit; unlikely to upgrade unless price is much lower

**Region 5 – 32 schools without a high speed internal connection; 12 schools with an active project**

**Synopsis**

Most districts have the majority of their schools on high speed internal fiber. Boyle, Jessamine, Marion, and Powell need help on a few schools in each of these districts.

**More Details**

Boyle Co - has (2) EL schools on T-1 circuits that are about 8-9 miles from the hub site (in two different directions) that need cost effective solutions

Jessamine Co - has a district owned internal fiber WAN with the exception of (3) EL sites that they have encountered extreme difficulty with gaining right of way access on Telco/utility owned poles

Marion Co . (3) EL and (1) MS sites that need internal fiber connectivity; CIO is working on presentation with BOE on benefits of fiber to proceed with pursuing bids

Nelson - working with local cable company to provide internal fiber connections this school year

Powell . (3) EL and BOE on T-1 circuits and has received quotes from the former BellSouth sales reps and from IBM on providing internal fiber connectivity; cost was too high

Woodford . Has issued an RFP and is waiting on BOE approval to proceed

**Region 6 – 17 schools with a high speed internal connection; 9 schools with an active project**

**Synopsis**

Almost all districts are high speed or will have high speed internally in the near future. Harlan has only (1) school at 10M and (10) schools with only T-1 connections. This district is split between AT&T and Windstream with all the T-1 connections in the Windstream area.

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**More Details**

Knox . has (2) EL and a Learning Academy that are remote sites on T-1 circuits

Rockcastle . internal fiber by the first of the year 08

Russell Co. internal fiber for remaining sites by Jun 08

**Region 7 – 39 schools without a high speed internal connection; 25 schools with an active project**

**Synopsis**

Almost all districts are on internal fiber except Ashland Independent. Greenup has four schools that are on a single T-1 circuit.

**More Details**

Bath . has (2) EL schools on T-1 circuits, but these schools are interim until new school is built

Boyd - is in process of upgrading all internal connections with Cinergy

Carter . is in process of upgrading most all internal connections with Cinergy

**Fairview** . has one EL school on T-1 circuit; in process to upgrade internal connections with Cinergy

Greenup . has two EL and two MS on T-1 circuits

Lewis . is in the process of upgrading all internal connections with Windstream

Rowan - is in the process of upgrading all internal connections with Cinergy

**Region 8 – 6 schools without a high speed internal connection; 2 schools with an active project**

**Synopsis**

All districts have some degree of high speed internal connections; Breathitt has (3) EL on T-1 and Letcher with (1) EL.

**More Details**

Lee . has contracted with Cinergy to complete their internal connections

**Detail of All Regions (double click to open attached spreadsheet below)**



20071022KYDistrict\_  
InternalWAN\_Detail\_