

Network to boost reach of scholastic computers

\$7 million deal involves leasing fiber-optic cable

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Mike Lafferty

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When the dot-com bubble burst in 2000, the defunct software and information companies left miles of under- or never-used fiber-optic cable in the wake of their bankruptcies.

Now, the Ohio Supercomputer Center and the Ohio Board of Regents have worked out a \$7 million, 20-year deal to use the cable's lightspeed capability to create a 1,600-mile network connecting Ohio's public and private universities and, eventually, thousands of elementary, middle and high schools.

The network, part of the state's Third Frontier effort to boost Ohio technology, will transform what is now a state academic computing system into a moving sea of information 200 times the current capacity, according to officials, who unveiled the system yesterday at Ohio State University.

"We had a two-lane highway before. We're going to a 16-lane highway, and we have the capacity of going to 192 lanes at some point," said Denis Walsh, director of the new network.

The system has the capacity to transmit the contents of the Library of Congress in 2.5 seconds.

That means a doctor in Cleveland can transmit a magnetic resonance imaging scan to doctors in Columbus and Cincinnati immediately and follow it with a real-time discussion among the experts about what's ailing the patient. Not too long ago, the Cleveland doctor would have had to burn one or more CDs and send them to Cleveland and Columbus by overnight delivery.

The deal involves leasing the fiber-optic cable that companies created in the 1980s and 1990s in anticipation of the needs of the dotcom bonanza.

"Many of the dot-coms went out of business, and that left a glut of cable," said Ted Stine, an official for Time-Warner Cable. The company has bid on providing computer equipment for the network.

The lease agreement is with a half-dozen companies, although AEP Communications and Wil Tel Communications will provide at least 75 percent of the 1,600 miles of cable, according to Walsh. Both companies built cable networks using their utility rights-of-way.

The agreement can be extended for another 20 years.

The lease money and the funds to operate the system came from federal and state funds, including a \$5.1 million federal grant. The Board of Regents is spending \$19 million on construction and equipment needs as well as \$3 million annually to operate the system.

Touted as the most advanced state-based system, the network is needed to boost the medical, materials, genetic, aerospace and other scientific legs of Ohio's effort to transform from a manufacturing

economy.

That effort requires a critical mass of experts from many laboratories working together, said Board of Regents Vice Chancellor Garrison Walters, who came up with the idea for the network.

Scientists at opposite ends of the state will be able to interact as if their labs were next door.

The state's major research universities and medical centers will be online immediately. As broad-band connections are developed, smaller colleges and other research institutions will be added in the next three years.

School buildings, many of which already are wired with fiber-optics, are expected to be linked to the system by 2008, so that students sitting in a classroom will be able to have a real-time video discussion with a scientist sitting in her lab.

mlafferty@dispatch.com