

NIU plans 175-mile high-speed fiber-optic loop

Network would link Naperville, Batavia, DeKalb

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Northern Illinois University Wednesday announced plans to create an ultra-high-speed fiber-optic network that would link northern Illinois to technology currently available only at elite research facilities in Chicago.

NIU officials are touting the plan as a huge boon to research and economic development efforts throughout the region.

The proposed non-residential network, dubbed NIUNet, would consist of a 175-mile fiber-optic loop stretching from DeKalb to Batavia to Naperville along Interstate Highway 88, connecting to Chicago, the I-WIRE Network, Argonne National Laboratory and other national research networks through Fermi National Accelerator Laboratory in Batavia. The network would then loop back along Interstate Highway 90 to Hoffman Estates and west to Rockford before heading south along Interstate Highway 39 to Rochelle and back to DeKalb.

Walter Czerniak, NIU's associate vice president for information technology, said the fiber-optic network is as important as roads, water and sewers, because the number of businesses relying on fiber-optic connectivity is growing rapidly and many wouldn't consider establishing operations in a city unless the infrastructure is there.

Naperville City Manager Peter Burchard supported the importance of businesses having access to fiber-optic cable and said the city provides that service to businesses in city limits through its electrical grid. NIUNet would help connect the city to the outside world, he said.

"This could be the best game around," Burchard said of the proposal. But, he added, "The proof is in the pudding."

For Rochelle Mayor Chet Olson, the network presents an opportunity for the region and the town of

5,900 to compete with big cities for white-collar jobs.

"We are a region that can all benefit from this. We are competing with the big cities [on the East and West Coasts]," said Olson, who is working with the university and Rockford officials to lay new fiber-optic cable between Rochelle and Rockford. That segment would cost about \$2 million, an expense Olson hopes to offset through grants and other collaborations.

The high-speed connection also would advance health-care technology, benefit area schools and keep high-tech jobs from leaving for other areas of the country that already have fiber optic infrastructure, officials said. Schools linked to the network could tap into data-intensive Internet lessons with real-time teleconference instruction led by scientists or educators worldwide. Doctors could transmit MRIs, CAT scans, and X-rays in seconds.

The university will invest about \$1.5 million during the next three years to complete the NIUNet ring. The university expects to receive about \$1 million in state funding; the other half-million dollars will come from university funds.

Czerniak said the first segment of the loop, from NIU's DeKalb campus to its Naperville campus and Fermilab in Batavia, is expected to be completed by spring.