

**DeKalb County Grant
(DATA)
and
Northern Illinois University
IBOP-NW Grant
(iFiber)**

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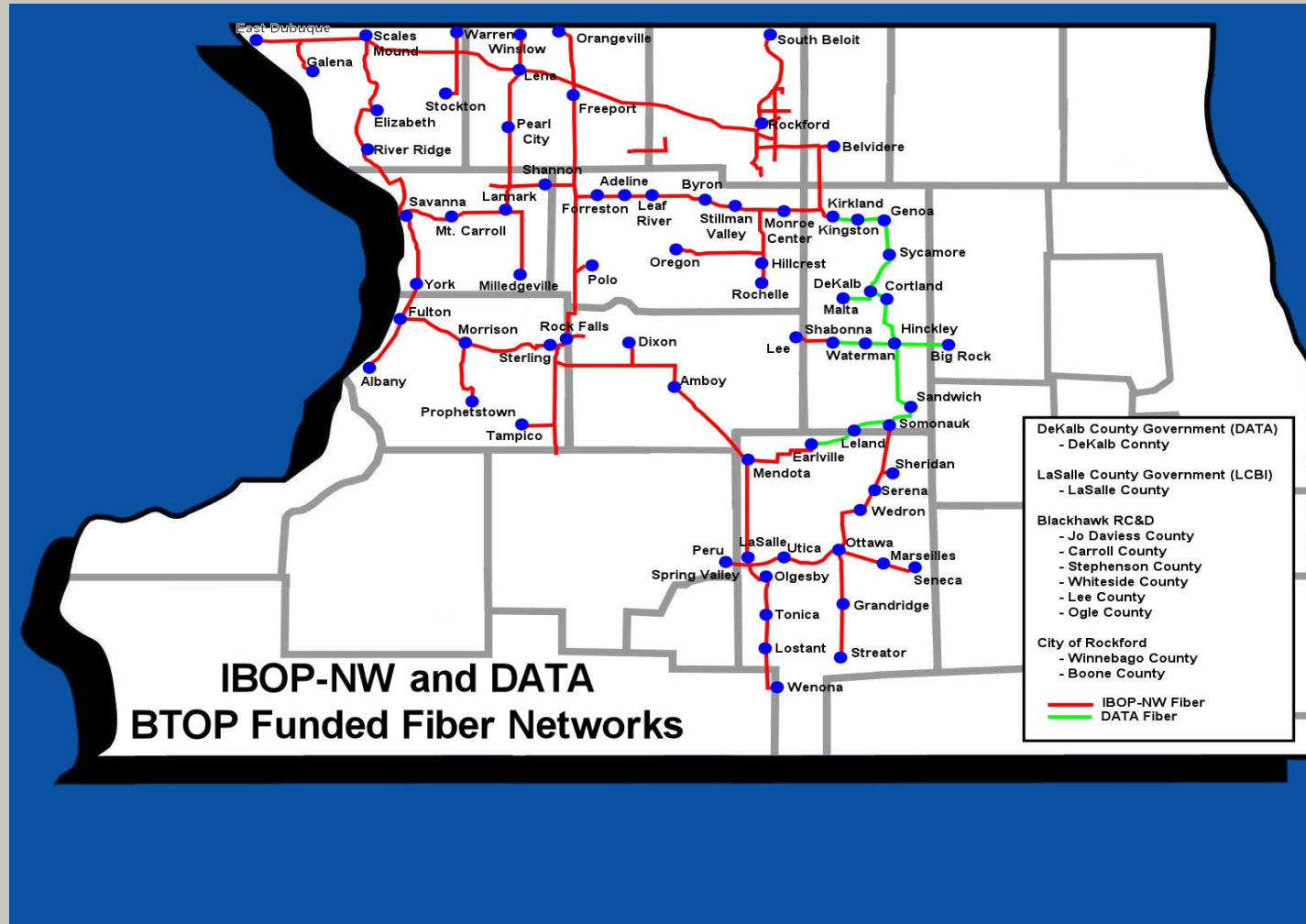


Summary of NIU Broadband Initiatives

- In three years NIU will have strategically planned and assisted in the build out of over 2,200 miles of fiber optics in Illinois.
- Over 600 Community Anchor Institutions (CAI's) will have high speed broadband access capabilities.
 - 7 Community Colleges
 - 227 K-12 Buildings
 - 51 Libraries
 - 221 Health Care Organizations
 - 90 Public Safety
 - 126 State, County Local Gov. Offices
- In Northern Illinois, a 9 county region will have high speed broadband access capabilities directly into NIU and the ICN.



IBOP-NW and DATA



Primary Reasons for public broadband fiber networks is cost avoidance

- Local schools, Municipals, E-911 and County will have un-restricted communications for the future (dark fiber or multi-gigabit speeds).
- Consolidation of servers in buildings reducing hardware and software costs up to 50%.
- Ability to share/combine services or licensing for reducing costs by collaborating with other institutions (Ilini Cloud for Schools, GIS for Government, Data Centers Exchanges for Healthcare, United Streaming).
- Reduction of phone costs and increasing capacity of coverage for phone services. (District 428 High School reduced from over \$2,000/Month to \$480/Month, District 427 from over 8,0000/Month to \$2,000/Month)

New Tools for Research and Development

- Educators and Researchers have access to high speed, unrestricted broadband to all community anchor institutions to create a new network model and development strategies (Schools, Libraries, Municipals, Healthcare, Agriculture etc..).
- Development of new applications and programs for P-20 education throughout all of Northern Illinois and the State of Illinois.
- Connection between National Labs and databases throughout Northern Illinois.
- High Speed connections to local businesses for expanded partnerships.

Tax Base Increase (Private Sector)

- Support our local Internet Service Providers (ISP) and reduce the costs for transport for connections to the internet.
 - Help providers to expand services for faster speeds to business and home owners at low cost.
 - Give the providers a reliable backhaul connection this is high speed (100Mb or greater).
- Provide a new level of service for local businesses.
 - Connect facilities together with high speed services or fiber (Banks, Car Dealership, Factory to Warehouse, Business to Supplier).
 - Provide high speed communications for business sustainability.
 - Provide multiple options for a healthy competitive environment avoiding monopolies and duopolies.
- Tools for attracting new business to the area.
 - Northern Illinois Technology Triangle (NITT)
 - Dark Fiber Options throughout the region with major east and west routes.
 - Ultra High Speed Connections into Chicago.
 - Northern Illinois University research and development/Delivering an educated workforce.



Challenges Meeting 2/3 Spent Target

- The NTIA changing what was agreed on with due-diligence and making significant changes in process resulting in delays.
- Difficulties in process for route changes and getting responses from SHPO, over 4 weeks in process.
- The iFiber grant was awarded in September and our quarter started in July automatically putting us behind two months.

Closing the Digital Divide

- Equalizing costs and speeds for rural CAI's equivalent or exceeding what is available in urban areas.
- Providing dark fiber or gigabit services to local ISP's that work with less profit margins and are successful in small communities.
- Providing access to Tier 1 providers that have bandwidth < \$10/Mb.



• Providing a fiber optic highway to small communities that would never see this type

THANKS

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