

Northern Illinois University and Broadband Technology Deployment

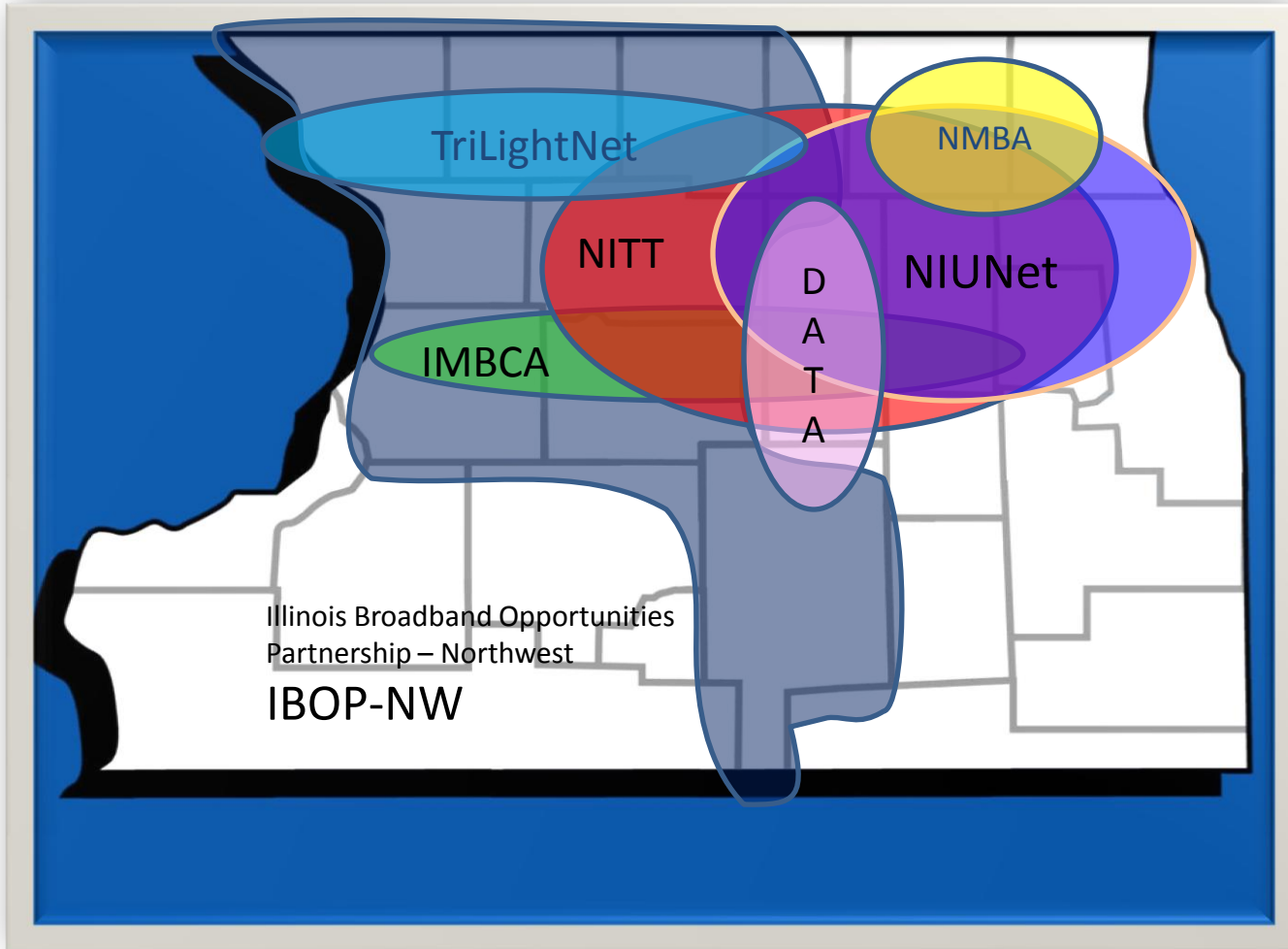
PCI Conference

NIU Naperville

3/7/11

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Associate VP, NIU
Project Director, IBOP-NW

NIU Participation in Broad Band Initiatives



NIUNet - Northern Illinois University Research and Education Network.

IMBCA – Illinois Municipal Broadband Communications Association for Economic Development.

NITT – Northern Illinois Technology Triangle for Economic Development.

TriLightNet – A medical network for HIE development and healthcare.

NMBA – Northwest Municipal Broadband Authority – A municipal and education network.

DATA – DeKalb Advancement of Technology Authority – A BTOP funded grant for DeKalb County.

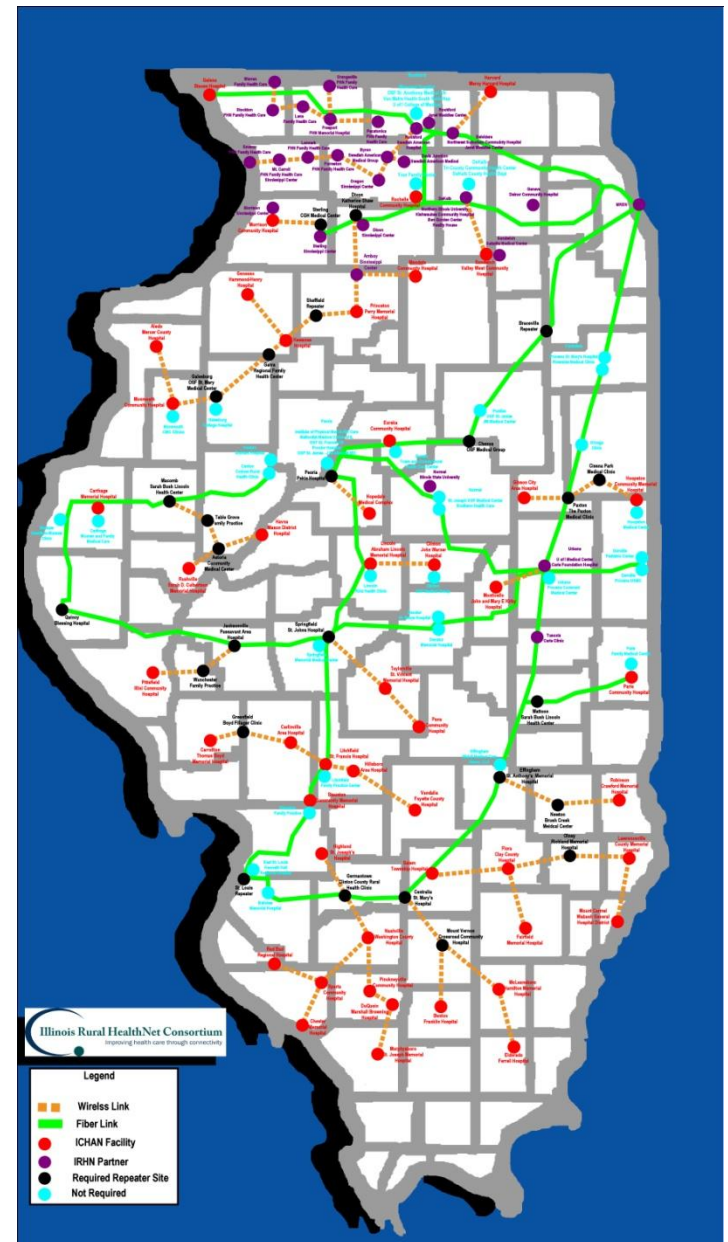
IBOP-NW – The Illinois Broadband Opportunities Partnership – A nine county BTOP funded grant awarded to Northern Illinois University.

Illinois Rural HealthNet (IRHN)

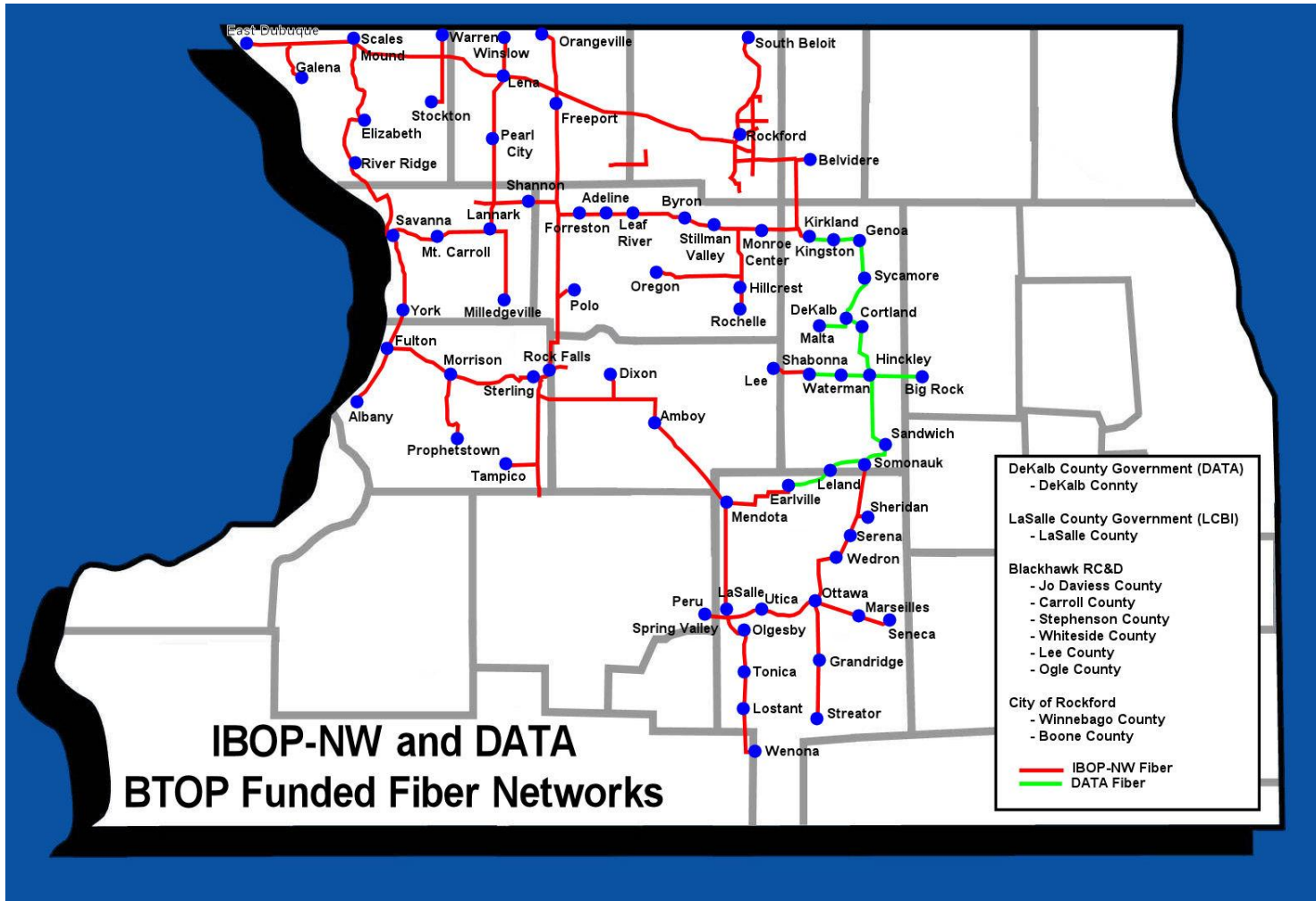
Connecting over 150 HealthCare Facilities in Illinois

\$22M Grant awarded to create the IRHN modeling NIUNet.

Used primarily for Health Information Exchange (HIE), Telemedicine and Telehealth.



IBOP-NW and DATA



BTOP Goals

- To provide access to broadband service to consumers residing in unserved areas of the country;
- To provide improved access to broadband service to consumers residing in underserved areas of the country;
- To provide broadband education, awareness, training, access, equipment, and support to:
 - schools, libraries, medical and healthcare providers, community colleges and other institutions of higher learning, and other community support organizations;
 - organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband services by vulnerable populations (*e.g.*, low-income, unemployed, aged) or
 - job-creating strategic facilities located in state- or federally-designated economic development zones;
- To improve access to, and use of, broadband service by public safety agencies
- To stimulate the demand for broadband, economic growth, and job creation.

NTIA Evaluation Metrics

- Economic Impact
 - Employment
 - Output
 - Wealth
 - Change in broadband access and adoption
- Social Impact
 - Civic participation
 - Healthcare outcomes
 - Educational opportunities
 - Quality of life

Demographics of Region

Category	NW IL	DeKalb
• Population	699,712	107,333
• Households	257,006	31,674
• Establishments	16,342	2,069
• Establishments <100	15,122	2,018
Employment		

Community Anchor Institutions

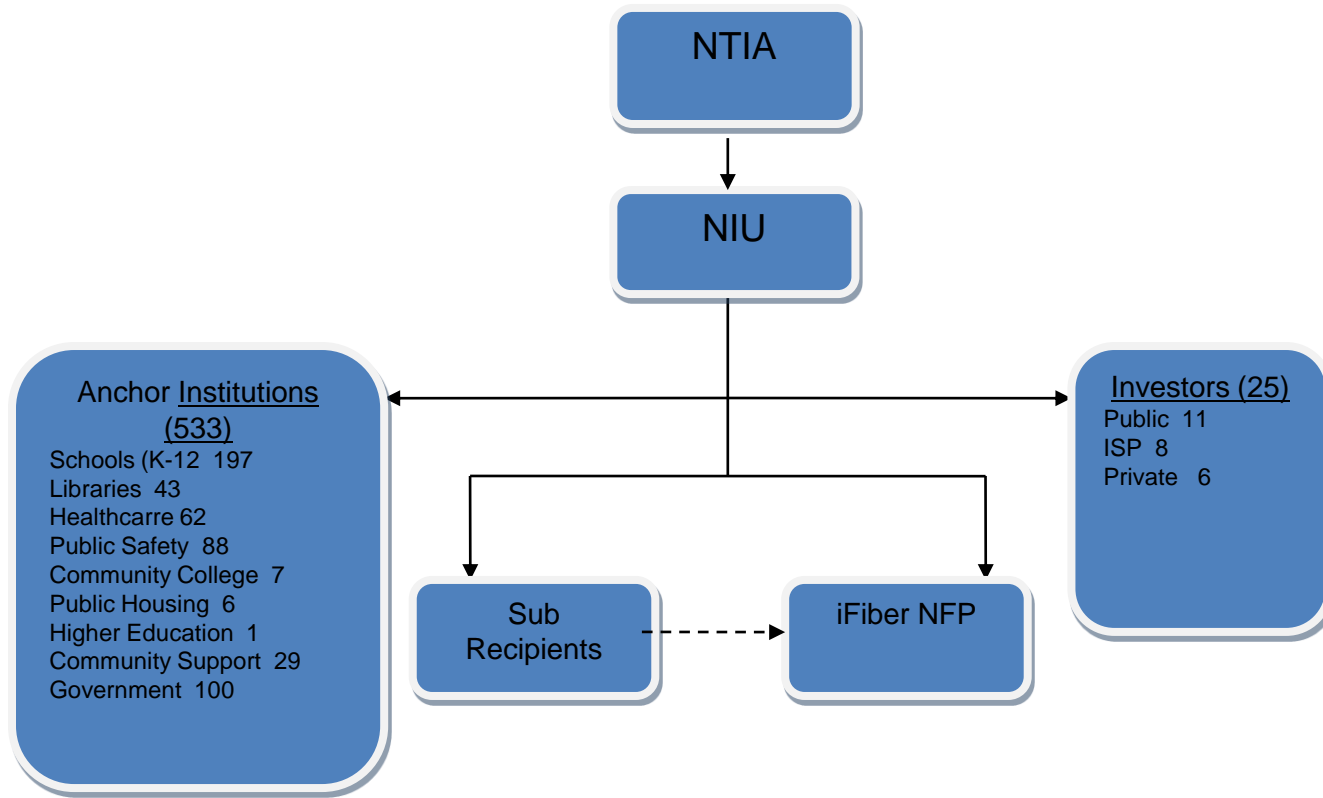
- **IBOP-NW**
 - Community Colleges **8**
 - K-12 school buildings **197**
 - Libraries **43**
 - Health Care Centers **62**
 - Public Safety **88**
 - State, county, local gov. offices **106**
 - Other **29**
- **DATA**
 - Total **115**

NIU's BTOP Philosophy

- Work with community and economic development organization
 - Work with local government, E/D organizations, local educational groups, health care organization
 - Maximize economic and social impact of network on the region
 - Work with anchor institutions to effectively use the expanded bandwidth

NIU's BTOP Philosophy (con't)

- Develop private sector partnerships at the beginning
 - Regional ISP's are project partners and have contributed cash and in-kind match
 - These ISP's will provide last mile access
 - Assist in developing effective demand for broadband
 - Make sure the public sector investment is passed on the end user



Project Timeline

DATA Project

- Funded February 2010
- EA Completed June 2010
- FONSI August 2010
- Begin Cons't January 2010
- Projected completed February 2012

Project Timeline

BTOP NW

- Funded Sept 2010
- EA Completed January 2011
- FONSI March 2011
- Begin Cons't March 2010
- Projected completed August 2013

Project Accountability

- Program Evaluation
 - Completed according to grant requirements?
 - Completed according the proposed timeline?
 - Completed within budget?
 - Effectiveness of marketing to anchor institutions?
 - Success of sustainability plan?

Program Accountability

- Impact Evaluation
 - Effectiveness in increasing use and value added within region?
 - How did project impact access to households and businesses in the region?
 - How did project impact use of broadband by households and businesses in the region
 - How did project impact employment in the region?
 - How did project impact business vitality in the region?
 - How are households and businesses using the increased bandwidth capacity?

Need for Baseline Data

- Current use of broadband services
- Current price of broadband services
- Potential market for broadband services
- Regional wages
- Regional domestic product

Measure impact

- Metrics used for economic impact
 - Employment change related to broadband
 - Business sales related to broadband access
 - ????
- Metrics used for economic impact
 - Increased access and use by households
 - Quality of life in region ??
 - Improvement of health care ??

Proposed next steps

- Develop metrics to be used for evaluation
- Collect baseline data for a valid evaluation from:
 - Project proposal
 - Anchor institutions
 - Household
 - Businesses
 - Healthcare providers
 - ???????

Proposed Data Collection Process

- Work with anchor institutions to collect information on current supply and demand and effective demand and supply for the future
- Develop survey instruments for collection of data from regional households, businesses, healthcare providers, etc.
- Conduct an electronic survey of market segments
- Analyze survey results and conduct additional data to fill any gaps

- Share results of the data collection with representatives of the various market segments to validate and begin discussion of how to make sure the new infrastructure will increase the economic and social vitality of the region
- Prepare final reports
- Work with regional E-Teams to implement regional strategies.

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