Northern Illinois University is revolutionizing communications in Illinois by laying 2,200 miles of fiber optics that will connect 9 counties across the region and provide high-speed broadband access capabilities to over 600 community anchor institutions. To complete this network, NIU received a $68.5 million grant—the largest in the university’s history—which includes $46.1 million from the National Telecommunications and Information Administration, a $14 million grant from the State of Illinois; and an additional $8.4 million from various partner agencies and businesses.

**Healthcare Applications**
- Reduce costs by avoiding duplicate services and improving monitoring of chronic disease patients
- Increase involvement of patient and family in managing the healthcare process
- Improve access to training and continuing education for providers
- Create new demands for skilled technical people at a variety of levels in all aspects of healthcare
- Allow hospitals and clinics to participate in state- and nation-wide health information exchanges and federal incentive programs tied to the use of electronic medical records

**Education Applications**
- Improve access to education in rural areas by offering online classes in foreign languages or AP
- Facilitate teaching at-risk youth job-readiness and technology skills
- Implement new ideas for educating people with disabilities
- Include aspects of social networking in the classroom and make use of Virtual Learning Environments (VLE) (Blackboard)
- Teach students visual and information literacy
- Allow teachers to earn certifications and attend professional development training online

**Business and Economic Development Applications**
- Allow organizations to video conference and be connected to professionals at other sites
- Provide staff more opportunities for professional development through online research, live webinars, and online courses
- Increase revenue by an estimated 14 to 18% by using online tools for
  - Purchasing
  - Shipment and Tracking
  - Banking
  - Customer Support
  - Inventory Tracking

**Higher Education and Outreach Applications**
- Help educators electronically manage interactions with and between students
- Develop new programs for P-20 education throughout Illinois
- Connect students to national labs and databases
- Connect to local businesses and community organizations for expanded partnerships
- Facilitate the exchange of new social, cultural, and artistic ideas
- Deliver performances, offer master classes, and conduct rehearsals to dispersed audiences live and in real-time.