KINBER
Keystone Initiative for Network Based Education and Research
April 2010
State-based Research and Education Networks

Pennsylvania

KANSAS
CALIFORNIA
FLORIDA
COLORADO
INDIANA
ILLINOIS
CONNECTICUT
MASSACHUSETTS
RHODE ISLAND
OREGON
OHIO
WISCONSIN
IDAHO
TEXAS
LOUISIANA
MARYLAND
MICHIGAN
MISSOURI
NORTH CAROLINA
VIRGINIA
MINNESOTA
NEW YORK
OKLAHOMA
WASHINGTON
UTAH
MAINE
NEW JERSEY
GEORGIA
NEW MEXICO
SOUTH CAROLINA
**KINBER**

**Board Members**
- Bucknell University
- Carnegie Mellon University
- Drexel University
- Lehigh University
- University of Pittsburgh
- University of Pennsylvania
- The Pennsylvania State University
- Pennsylvania State System of Higher Education
- Commission for Community Colleges
- Hospital and Healthcare Association of Pennsylvania
- Association of Independent Colleges and Universities of PA

**Potential Partners**
- Intermediary Units, PA Economic Development Assn, PA E-Health Initiative, Hershey Medical Center, public television stations, UPMC, Temple, University of Scranton, Magpi, Three Rocks, Fibertech Networks, Ciena, Juniper Systems and other private sector providers

**KINBER Organization Staff**
- Executive Director
- 3 Network Engineers
- Administrative Support

**PennREN Support Resources**
- Project management Support
- Accounting Support
- Compliance Support

**Advisory Council**

**KINBER Board and 501(c)3 organization**

**PennREN project team**
Proposed Network Details

- Capital Budget - $128,958,031
  - Matching Funds - $29,297,353
  - Federal Stimulus Funds - $99,660,678
- 96 Strands Constructed by Fibertech
  - 48 Strands to KINBER for PennREN
  - 1696 Route Miles
  - Fibertech to Maintain Fiber
- 13 Optical Regeneration Service Core Nodes
- 47 Service Distribution Local Nodes
PennREN Network Services

- Classic Commodity Internet at Bulk Rates
- Access to National R&E Backbones
- Shared Pennsylvania R&E Backbone
- Private Network Creation Between Members
Potential Applications Beyond Education

• To enable health care organizations to expand their infrastructure capabilities to enable better health information exchange including the exchange of video, MRIs and other images.

• To increase access to world-wide medical expertise and remote medical intervention by connecting medical facilities to global medical institutions.

• To provide disaster-recovery and public safety services to state and local governments by providing strategic redundancy in networking services.

• To allow economic development for communities to better market their capabilities and form regional partnerships for maximizing connectivity to such services and to attract new businesses.
Risks?

- We Build It and They Don’t Come
  - Sustainability Model in Jeopardy

- Continued Support from the KINBER Membership
  - Membership Fees
  - Purchase of PennREN Services
  - Contributing Level-of-Effort Support in Labor

- Fibertech Unable to Deliver in the Time-frame of the Stimulus Award
  - Contractual Language Protection

- Member’s Planning for PennREN Services at Start-up and Letting Existing Contracts Lapse
Risks?

- NTIA Grant Process, Terms & Conditions
  - Continuing Evolution in Procedures
  - No Negotiation Post-Award
  - Hinted-at Penalties for non-Compliance

- Post-Award Level of Attention by Vendors and Politicos
Thanks!

Jeff Reel
jreel@kinber.org
www.kinber.org