



NATIONAL LAMBDA RAIL

National LambdaRail, the States and the Mutual Opportunity in Broadband

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The Network for Advanced Research and Innovation



What is National LambdaRail (NLR)?

The national broadband network infrastructure serving research, education and private industry

- 10GE, 40GE and path to 100GE
- Services at Layer 1, Layer 2 and Layer 3
- 12,000 miles coast to coast, points of presence in 31 cities in 21 states
- Non-commercial: Owned by the research and higher education community



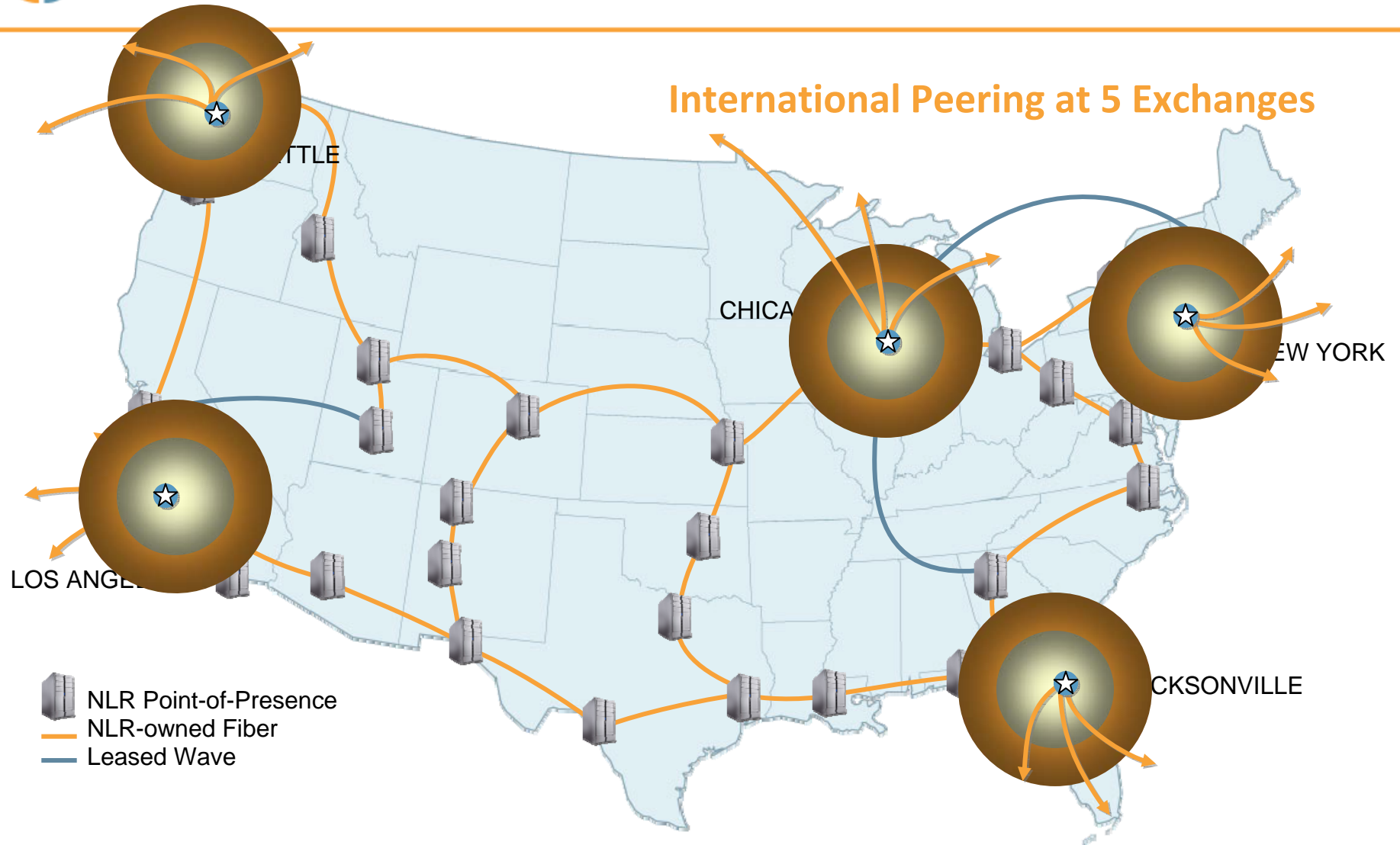
The NLR Broadband Platform



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The NLR Broadband Platform

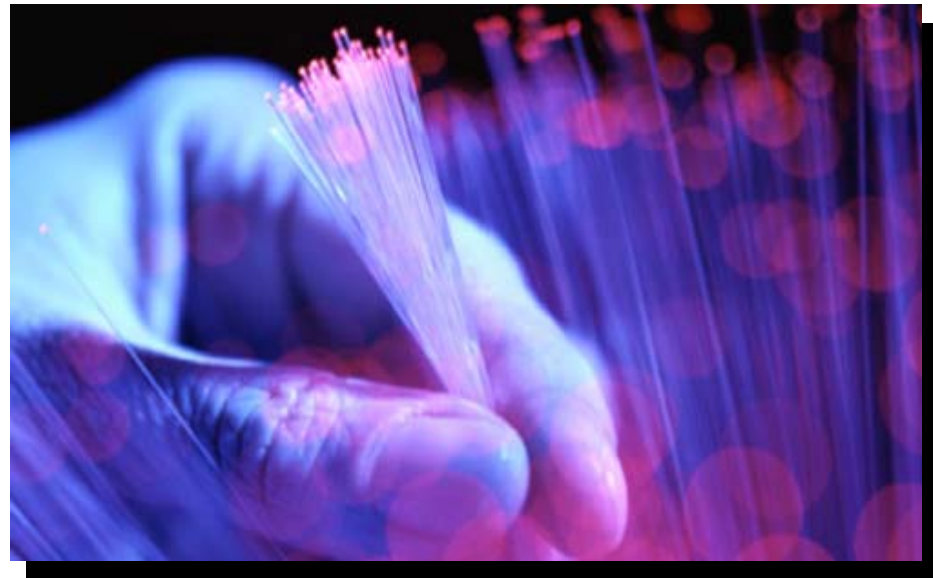


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Potential Capacity

- The equivalent of 160 nationwide 40-GigE networks.





NLR and Economic Development: Research – Industry Alliances for Commercialization

NLR Commercial Partner Darkstrand Links University Research Teams and Computing Resources with Private Industry



DARKSTRAND

PRESS RELEASE May 14, 2009

Pittsburgh Supercomputing Center Joins Forces with Darkstrand to Advance Innovation and Collaboration

LEADING NETWORK RESEARCH

CHICAGO high-speed announce Supercon connecte time with product d with a din supercom

DARKSTRAND

PRESS RELEASE June 3, 2009

Darkstrand and Ohio Supercomputer Center Join Forces for Corporate Supercomputing Access

OHIO SUPERCOMPUTER CENTER BRINGS EXPERTISE AND

DARKSTRAND

PRESS RELEASE April 14, 2009

Calit2 at UC San Diego Teams with Darkstrand to Speed Innovation from Lab to Marketplace

SOLVE REAL WORKFLOW, DEVELOPMENT AND COLLABORATION CHALLENGES THROUGH HIGH-SPEED CONNECTIVITY AND SUPERCOMPUTING

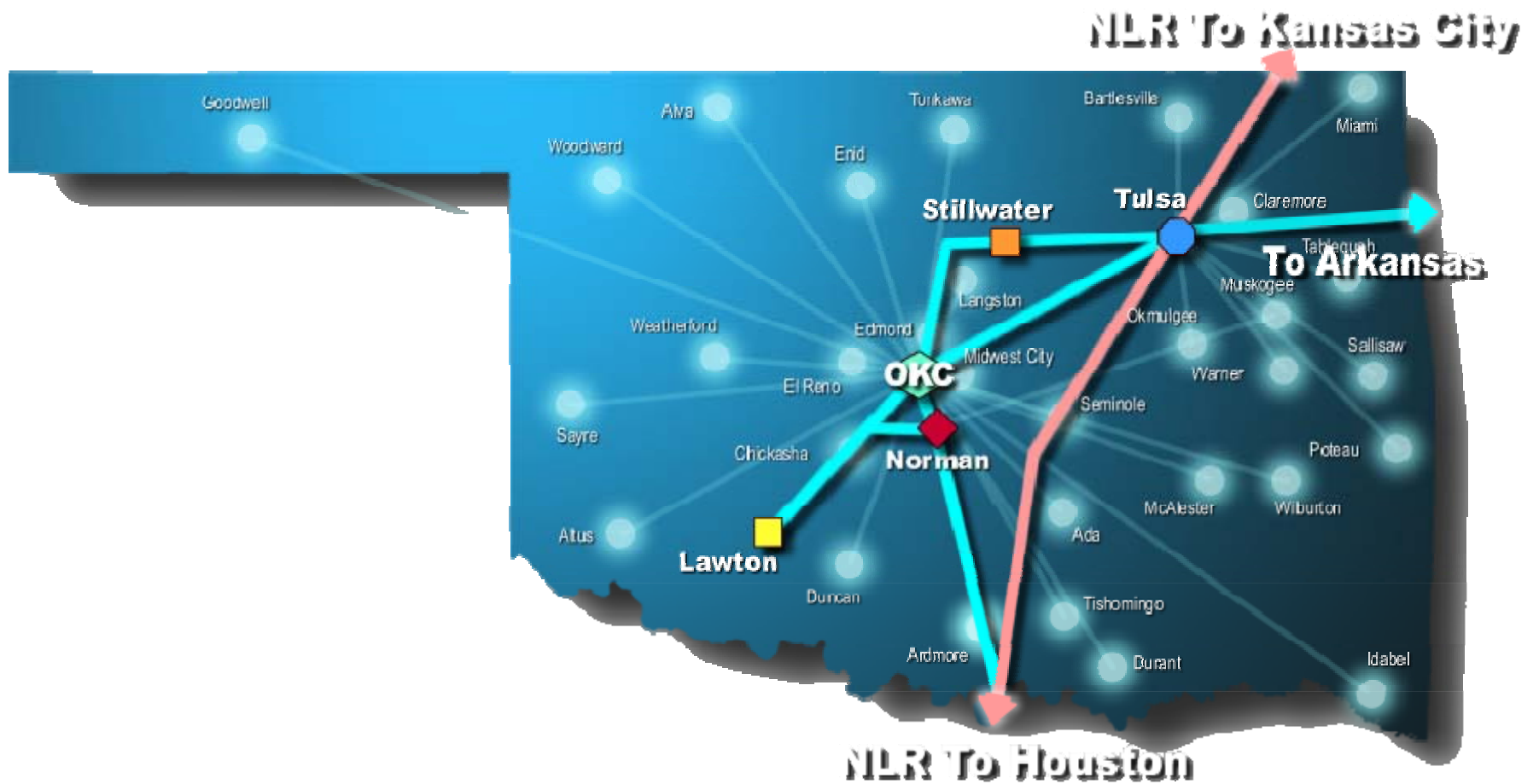
Chicago, IL (April 14, 2009) — Darkstrand, a pioneer in corporate high-speed connectivity bridging research and commercialization, announced today a collaborative agreement with the California Institute for Telecommunications and Information Technology (Calit2) at the University of California, San Diego. Corporations connected to the Darkstrand Network can now drive real-time, high-performance computing (HPC) initiatives working with an elite team of UC San Diego researchers who are evolving new Internet technologies to advance industries within genomic medicine, new media, environmental science and other emerging fields.

Calit2 is a premier research institute built in 2000 by the State of California to accelerate innovation through research in telecommunications and technology. The center provides

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NLR and Economic Development: Oklahoma Research Network



Statewide Scope

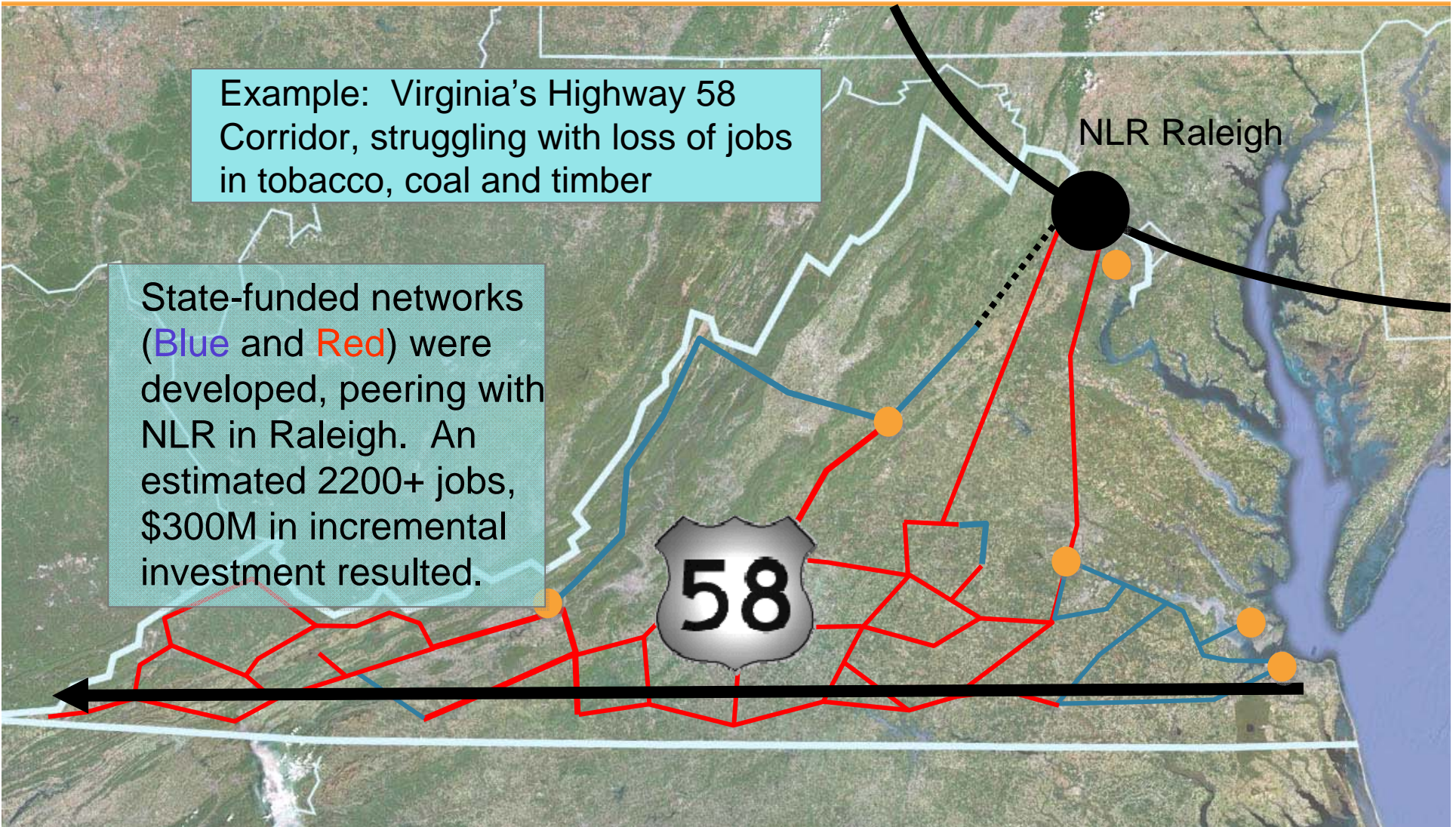
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NLR and Economic Development: Rural Access to Broadband

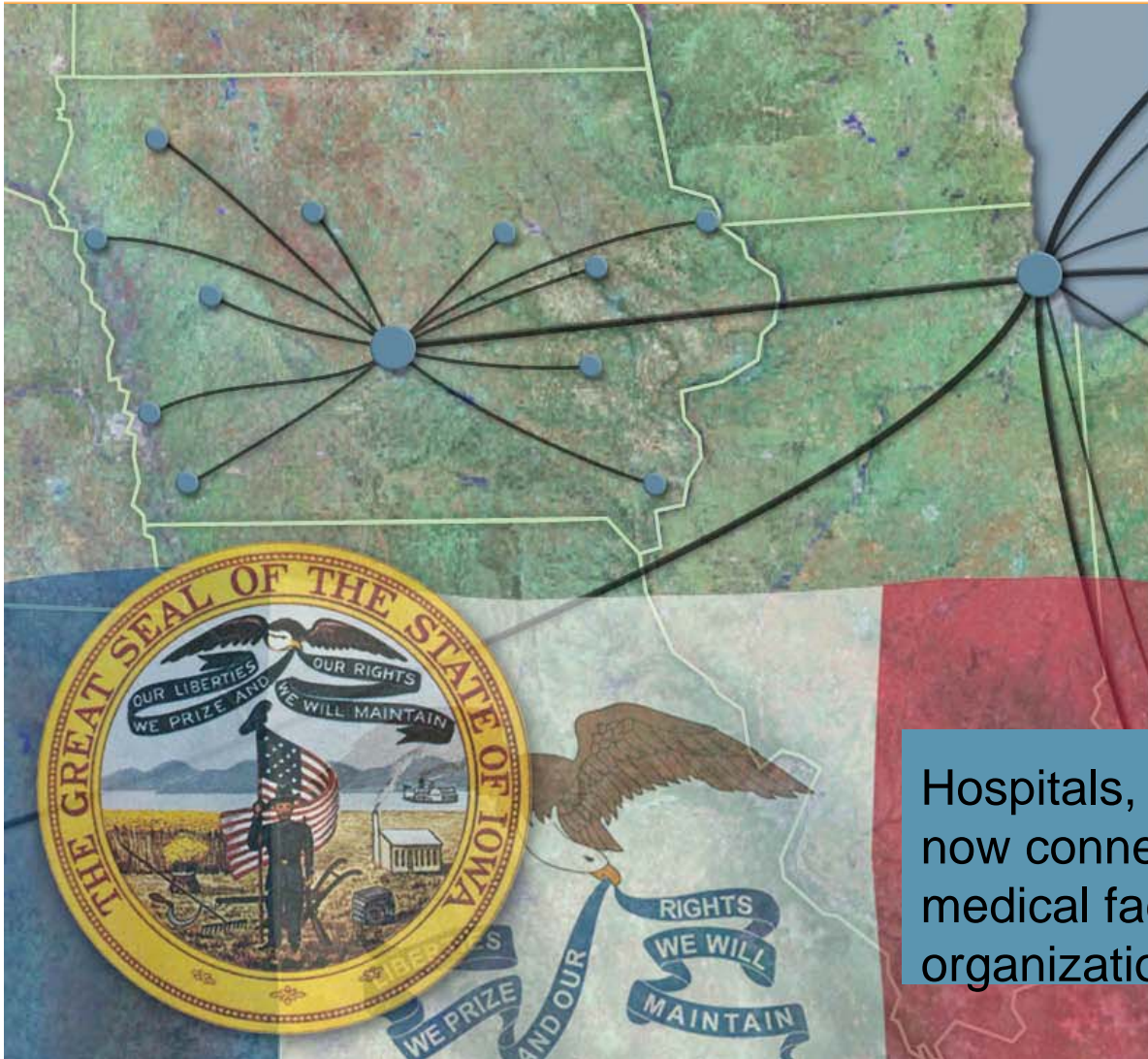
Example: Virginia's Highway 58 Corridor, struggling with loss of jobs in tobacco, coal and timber

State-funded networks (Blue and Red) were developed, peering with NLR in Raleigh. An estimated 2200+ jobs, \$300M in incremental investment resulted.





NLR and Economic Development: Platform for New Applications: Remote Medicine, Research



Hospitals, clinics in 70+ communities now connected with world-class medical facilities and research organizations across the U.S.

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NLR's Unique Offer for National Broadband

- Existing, national broadband footprint
- Neutral, non-commercial partner
- Leading-edge technology
- Ownership of infrastructure
- Unconstrained use policies (Open AUP!)
- User empowerment
- State and regional networks linked to each other and to international and national networks
- Enablement of leading-edge research and technologies
- Provides for partnerships with industry
- Demonstrated success accomodating diverse needs of diverse user groups
- Cost effective: NLR passes savings on to members/users





The States and NLR: The Shared Opportunity

Promote innovation, economic growth and competitiveness, and quality of life across the U.S. . . . through highly leveraged investments while maximizing flexibility and control.



www.nlr.net



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