



## A MODEL FOR NATIONAL BROADBAND

National LambdaRail (NLR) is unique among national broadband networks around the globe. NLR has been highly successful at creating a community-owned, technically leading-edge platform with proven effectiveness at exceeding the expectations of a diverse set of network users. NLR is thus able to provide fresh insights into the discussion around a national broadband plan for the U.S.

### The NLR Vision

To serve as the innovation platform for U.S. universities, colleges and other research institutions by offering affordable, flexible and technically superior national broadband services.



### Community-Owned

NLR's fiber-optic network is owned and managed by the U.S. research and education community, on behalf of the community.



### National Coverage

The 12,000 mile, coast-to-coast NLR platform offers easy connectivity to over 30 states and has major nodes in 30 cities.



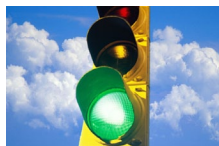
### Technically Leading-Edge

NLR has an unmatched total capacity of 1600 Gigabits per second (Gbps) and offers the latest in high-performance networking applications such as multi-point, ultra high-definition video conferencing or TelePresence via the only TelePresence exchange of any non-commercial network in the world.



### Cost-Effective

Because it owns its own fiber and operates as a community-owned non-profit, NLR passes on technology savings to its users. In the last year alone, NLR cut fees by over 50%.



### Open Access, Unrestricted Usage, Carrier-Neutral

NLR offers connectivity with any other network in the world requested by our users, private or commercial, and imposes no restrictions on network usage. This is in contrast to networks provided or managed by commercial carriers which impose an 'Acceptable Use Policy.'

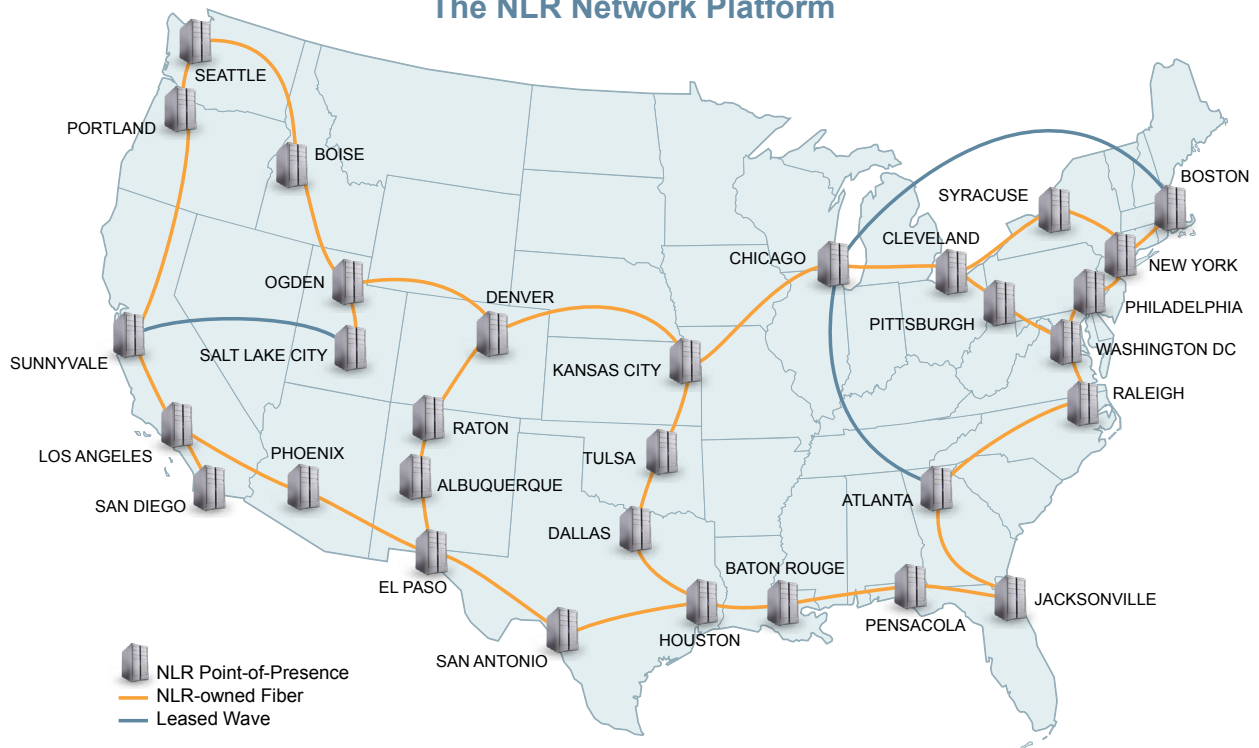


### Catalyst for Regional Development

NLR's offer to provide a high-speed, national backbone helped spur the development of multiple regional optical networks, contributing to broadband access and economic development of geographies around the country.

# ABOUT NATIONAL LAMBDA RAIL “NLR”

## The NLR Network Platform



### Key Facts

- Capacity: Up to 1600 Gigabits per second (Gbps)
- Ownership: U.S. research and education community
- Participating universities: 280+
- Participating federal agencies: Department of Energy, NASA
- Coverage: 30+ states, 12,000 miles
- International peering: PacificWave; StarLight; Manhattan LAN (MAN LAN)
- Founded: 2003
- Headquarters: Cypress, CA

### Innovation Leadership

- First high-performance national infrastructure owned by the research and education community
- First transcontinental production 10-gigabit Ethernet network
- First intelligently managed nationwide peering and transit program focused on research applications
- First national TelePresence network for the research and education community
- First international TelePresence session over a research and education network

### Examples of NLR Users and Applications

- NASA uses NLR for high-speed links between its facilities in California, Houston, Maryland and others.
- TeraGrid, the world's largest, distributed cyberinfrastructure for scientific research funded by a major grant from the National Science Foundation, uses NLR for major portions of its backbone network.
- The U.S. Large Hadron Collider network, funded by the Department of Energy, leverages the NLR platform to connect U.S. institutions to the Collider in Geneva, Switzerland.
- NLR helped enable the supercomputer Ranger, located at the Texas Advanced Computing Center in Austin, to retrieve and analyze comprehensive U.S. and global data in order to study mutations of the H1N1 virus that could lead to drug resistance.
- Schools in Barrow County, Georgia are using NLR to bring top scientists in to the classroom via real-time, high-definition video.
- The Iowa Health System peers with NLR so that its hospitals and clinics in over 70 communities in Iowa, Illinois and Nebraska can securely and reliably connect with data and specialists elsewhere in the U.S. and in other countries.



NATIONAL LAMBDA RAIL

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