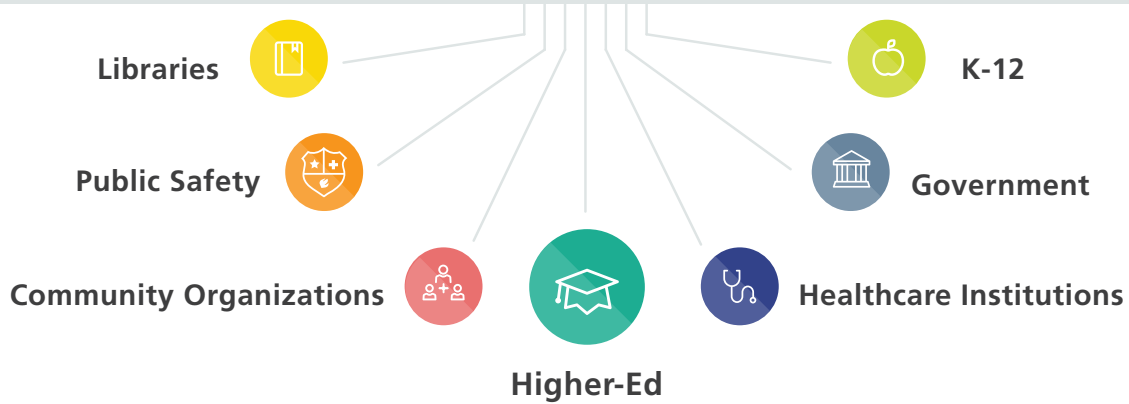


# Research and Education Networks:

## Enabling Breakthrough Innovations that Power the Greater Good

Research and Education networks provide secure, high-capacity, high-performance network infrastructure and related technical and operational support for:



### Fastest, Most Advanced Technical Infrastructure

Purpose built and dedicated to meeting the needs of our communities.

Unparalleled levels of performance, reliability and security.

Redundant connectivity to other regional, national and international research and education networks.

Separate experimental networks, which foster networking or application research or very large point to point data transfers.

Multiple colocation facilities providing participants with geographically separate locations to land different connections.

Networks offer Netflix and Akamai caching to offset commercial traffic draws, as well as direct peering with entities such as Google, which all result in better end use experience with better network performance.

### Trusted Network-to-Network Collaboration

Secure and lightning-fast networks connect schools to hospitals to research centers and beyond – enabling exciting new research and education opportunities.

Networks are often part of multi-state regional partnerships that provide shared network services across communities as well as diverse backup and connectivity options.

Nationwide research and education communities regularly share technical and operational information and expertise for the betterment of all.

Networks create a trust fabric between research and educational communities.

Member driven collaboration – not a vendor / customer relationship.

### Resource Sharing and Cost Reduction

Participants enjoy reduced costs for the entirety of services provided due to the shared expertise and services, increased buying power and economies of scale participants obtain from being part of the larger R&E networking group.

Equitable and shared cost recovery model that seeks to minimize costs and maximize benefits across the membership by offering participants a way to be a part of regional or national buying aggregation efforts.

R&E networks can offer another avenue for participant advocacy, outreach and education around common topics or areas that may benefit from a larger, aggregated voice.

### Research & Education Networks are the Ultimate Facilitators of Innovation, including:

- Access Control
- Big Data Solutions
- Climate Modeling
- Cloud Computing
- Cybersecurity
- Disaster Recovery
- Genomic Research
- Global Research
- Healthcare
- Museum Science Centers
- Supercomputing
- Telemedicine
- Transportation
- University Research
- Video Collaboration
- Video Streaming