

Network Nebraska

www.networknebraska.net

Vision

Government, educational institutions, and the private sector working together to insure that Nebraska has an efficient, affordable, reliable and scalable telecommunications infrastructure, widespread communications networks and sufficient network support functions.

Benefits

Through aggregation of demand, adoption of common standards, and collaboration with network services and applications, participants are achieving many benefits, including:

- ✓ Reduced network costs
- ✓ Greater efficiency for participating entities
- ✓ Interoperability of video conferencing systems
- ✓ Increased K-20 educational collaboration
- ✓ New educational opportunities
- ✓ Competitiveness with surrounding states
- ✓ Improving the effectiveness of public investments

For more information, contact the
Network Nebraska Information Desk
at 1-888-NET-NEBR or via email at
info@networknebraska.net



A Value Proposition for Nebraska K-12 Districts



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Network Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and all of its associated applications, such as Internet2, traffic shaping, network monitoring and management, and an automated notification system. Network Nebraska is operated by a collaborative partnership of the State Office of the Chief Information Officer, University of Nebraska system, the State of Nebraska Educational Service Units, and Nebraska Educational Telecommunications. Supporting agencies include the Public Service Commission, Department of Education, and the Nebraska Information Technology Commission (NITC).

Network Nebraska - Education currently reaches 232 educational entities with extremely high bandwidth fiber and offers additional services, including statewide Intranet, Internet1, and Internet2 routing. Among its many benefits, Network Nebraska offers the most affordable Internet access in the state. It offers statewide Intranet routing between school districts and NDE and is the only pathway to Internet2 in Nebraska. Network Nebraska offers a statewide clearinghouse for distance learning course sharing and provides opportunity to develop statewide applications. Network Nebraska interconnects Wide Area Networking speeds of 40Mbps to 1000Mbps service from participating school districts and colleges infinitely. Network Nebraska also has a scalable backbone that is procured at the next highest increment to its demand and is reviewed and expanded as needed on a yearly basis. Currently it is 600Mbps from Grand Island to Omaha, 600 Mbps from Omaha to Lincoln and 200 Mbps from Lincoln to Grand Island.

Because of the intelligent routing design, when the need arises, Network Nebraska is prepared to “tag” and prioritize video/audio traffic so that it can travel unimpeded through the various routing devices. This allows the amorphous data stream to be routed using the fastest and most reliable pathway through any one of three aggregation points and on to the Internet2 Gigapop in Kansas City, if applicable.

A reimbursable equipment benefit of \$20,000 for each high school and ESU providing distance learning courses is coupled with low participation fees, which are currently set at \$192.47 per month plus the Interregional Transport fees of \$34.48/month for K-12 or \$92.72/month for non-K-12, bringing the total fees for K-12 entities to \$2,723.40 per year. Network Nebraska also qualifies the participating entity for distance education incentives of \$1,000 per semester high school video course sent or received, \$1,000 per high school online course sent, and \$10/instructional hour for K-8 video courses sent or received. With only three high school courses sent or received per year, any school district providing distance learning courses would actually more than offset their participation fees. In addition, the Nebraska Department of Education has qualified the Network Nebraska Participation Fee as an eligible expense for the state aid Technology Allowance of 85%, bringing the net cost per year per state aid school districts providing distance learning courses to \$408.51.

Additionally, as the network grows and services are added, this federated cost sharing model will continue to keep fees affordable, even when expenses increase. Further, because each individual entity pays its own way to a Network Nebraska aggregation point and then shares costs from there, no fees are used to subsidize any one type of entity. A network advisory group, comprised of representatives from K-12 and higher education, has been established to provide guidance on services and costs.

For more information about Network Nebraska, please contact one of the following:

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Services Existing as of July 1, 2009

- ✓ Intranet ethernet connectivity to all Network Nebraska participants
- ✓ Internet1 access
- ✓ Internet2 access
- ✓ Interregional (high bandwidth backbone) Transport between Grand Island, Lincoln and Omaha
- ✓ Dynamic, real-time routing at the core network locations to deliver the fastest and most efficient Intranet, Internet 1 and Internet 2 pathways
- ✓ E-rate filing on the K-12 eligible portion of the Interregional Transport
- ✓ Limited co-location rack space at Grand Island, Lincoln and Omaha on a space available basis
- ✓ 24/7 network monitoring and call center
- ✓ Network abuse and nefarious activity monitoring
- ✓ Level 1 network troubleshooting and support on Network Nebraska - Education backbone, core network devices and State Master Contract internet access
- ✓ Level 2 network troubleshooting and support on wide area networking and other participant routing and DNS issues
- ✓ Level 2 video/scheduling troubleshooting and support
- ✓ Bandwidth measuring and assistance
- ✓ RFP and State Master Contract negotiations
- ✓ Establishing the yearly eligibility list for LB 1208 Distance Education Incentive Dollars and Equipment Reimbursements
- ✓ Packet shaping of Network Nebraska internet bandwidth
- ✓ Internet2 Commodity Peering/Routing to over 60,000 companies, which saves Internet1 bandwidth and costs