

Network Nebraska & Internet2 Information Sheet

What is Network Nebraska?

Network Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and all of its associated applications (i.e. Internet1 service, Internet2 service, etc...) Network Nebraska is operated by a collaborative partnership of the University of Nebraska System, the State of Nebraska Division of Communications, and Nebraska Educational Telecommunications. Supporting agencies include the Public Service Commission, Department of Education, and the Nebraska Information Technology Commission.

What is the cost of Internet2 through Network Nebraska?

- For the first performance year (7-1-04 to 6-30-05), customers who purchase their Internet1 service from Network Nebraska will automatically be provided Internet2 service by the University of Nebraska at no additional charge. Since University of Nebraska and Network Nebraska network devices detect Internet2-eligible entities at both ends of the Internet Protocol connection, the devices route the data accordingly. The University of Nebraska is the only authorized provider of Internet2 in the State of Nebraska and has also agreed to pay the first year's SEGP membership and Internet2 transport fees.
- The current cost of utilization of Internet1 by partners of Network Nebraska is determined by the cost of Internet1 bandwidth purchased (# megabits per month x \$100/megabit¹) plus the cost of transport from the customer's Internet egress point to the University of Nebraska-Lincoln, with greater distances necessitating higher transport costs. UNO is also being considered as an Internet aggregation site.
EXAMPLE: Southeast Nebraska Distance Learning Consortium or **Educational Service Unit (ESU)** 4, 5, 6 decides to purchase 3 megabits of Internet1 service (3 x \$100/month = \$300/month) PLUS the cost of transport from their closest SNDLC partner (e.g. Southeast Community College) to UNL. Both Internet service costs and transport costs are Federal [e-Rate](#) eligible.

¹ Network Nebraska is doing everything it can to achieve the most favorable Internet1 pricing through aggregation, recent bids have dramatically reduced costs.

What is a Network Nebraska partner?

Partner: "those entities with the capacity to provide local technical service and network support to other participants, including the end users. This encompasses the critical function of providing the local network aggregation point for connecting to the statewide telecommunications network (Network Nebraska). All smaller entities without this technical capacity will need to aggregate or contract with a customer who does."

EXAMPLE: ESU consortia who have their own network operations center can qualify as partners.

What technological advantages would Internet2 have for my school?

Internet2 high-speed transmission automatically kicks in when the Sponsored Education Group Participant (SEGP Nebraska school) exchanges data with any of more than 7,000 SEGP schools or more than 1,000 Internet2 colleges and universities in any one of 32 other SEGP states. This high-speed data transmission includes web pages, e-mail, voice communication or H.323 video to any other entity or entities. It should be made clear that Internet2 is only as good as the slowest connection. If local access is throttled or slow at either end, Internet2 will not improve that performance.

What programmatic or curriculum advantages would Internet2 have for my school?

- Currently, the Internet2 K-20 Initiative has posted over 60 collaborative, web-based projects on their project website and more are being organized every month.
http://k20.internet2.edu/projectfinder_index.php
- These projects range from elementary to college age, covering topics from oceanography to Lewis and Clark, and activities ranging from an "hour with a scientist" to joint orchestral performances.

Do Internet2 K-20 projects align with the State of Nebraska academic standards?

- Although the originators of most of the collaborative projects are educators and very mindful of standards and appropriate assessments, most of the curriculum alignment work is left up to the receive-site educators, since state standards differ from state to state.
- As the number of projects and their sophistication grows, it is entirely possible that projects will be constructed with suggested assessments and specific content objectives in mind.

How many Nebraska school districts have opted to participate in Network Nebraska?

- Project 42 (ESUs 10, 11, 15, 16) and Lincoln Public Schools/ESU 18 are already connected to Network Nebraska and are also able to receive Internet2 services. This represents a total of 164 school districts and approximately 80,000 students on Network Nebraska thus far. More ESUs are expected to join as Internet costs come down and their present Internet service contracts expire. Additionally, several of the community colleges and state colleges are contemplating Network Nebraska connection by winter, 2004.

How would a consortium or school district go about becoming a Network Nebraska partner?

Prospective **partners**² are encouraged to contact Rick Golden, the Director of Networking for the University of Nebraska System, rgolden@nebraska.edu or 402-472-7626 to discuss specific Internet pricing and transport. A contractual agreement would be signed between the DAS Division of Communications (on behalf of Network Nebraska) and the eligible **partner** (on behalf of their member schools).

² As defined earlier, a partner is described as an entity who has their own technical support or network operations center.

Who would we talk to if we wanted to know more about the educational opportunities available through Internet2 or SEGP?

The NITC Education Council recommended a team of five individuals to begin representing Nebraska at Internet2 K-20 Initiative meetings. This team's responsibilities are to begin the discussions at a national level and to organize and promote Internet2 awareness and opportunities at the local level.

These individuals are John Stritt, Tri-Valley Distance Learning Consortium; Eddie Elfers, Wayne State College; Wayne Fisher, Nebraska Department of Education; Pam Holley-Wilcox, UNL; and Terry Dugas, NET. Tom Rolfes, Office of the CIO/NITC can also assist in answering questions, trolfes@cio.state.ne.us, 402-471-7969.