

Network Nebraska—Education Advisory Group Meeting #5
Thursday, January 28, 2010; 1:00pm-4:00pm CT

Remote 1: ESU 10, Videoconference Room, 76 Plaza Blvd., Kearney, NE

Remote 2: Varner Hall, Lower Level VC Room, 3835 Holdrege St., Lincoln, NE

Remote 3: Wayne State College, Technology Building, Wayne, NE

Remote 4:

Remote 5:

Bridge IP Address: 204.234.17.150##71100

Agenda (downloadable pdf)

1. Welcome
2. Roll Call & Introductions
3. Review 12/17/2009 Meeting (Co-chairs)
 - a. [Meeting Notes of 12/17/2009](#)
4. Update on the Internet2 Commodity Peering Service (Michael Ruhrdanz)
5. LB 1069 & [LB 1069 Summary](#) (Tom Rolfes)
6. [Network Nebraska Marketing Survey](#) update (SuAnn Witt/Arnold Bateman)
 - a. 2010 Report
7. Network Nebraska--Education 2010-11 Budget
 - a. Interregional Transport Fee
 - i. Internet Access Costs and Total Bandwidth
 - ii. [Q-MOE & Aggregation Connections](#)
 - iii. Transport Segments
 - b. Participation Fee
 - i. Traffic Shaper Service
 - c. Recommendation of [Affiliate Member Category and Associated Fees](#)
 - i. Affiliate Member Category Names
 - ii. Affiliate Member Category Fees
 - iii. Affiliate Member Category Criteria for Membership
8. Review [Draft Charter](#) Language
9. Presentation: [History of CAP & Network Nebraska](#) (Tom Rolfes for Rick Golden)
10. Other Agenda Items/Future Agenda Items
11. Next Meeting Date & Location

List of Supporting Documents:

- Meeting notes, 12-17-2009
- LB 1069 & LB 1069 summary
- Network Nebraska Marketing Survey Report
- Diagram of Network Nebraska Backbone segments and costs
- Affiliate Member Proposal Document

- Network Nebraska Advisory Group Charter
- History of CAP & Network Nebraska

Network Nebraska—Education Advisory Group Meeting #4
Thursday, December 17, 2009; 1:00pm-4:00pm CT

Remote 1: Varner Hall, Lower Level VC Room, 3835 Holdrege St., Lincoln, NE

Remote 2: ESU 10, Videoconference Room, 76 Plaza Blvd., Kearney, NE

Remote 3: Wayne State College, Technology Building, Wayne, NE

Remote 4: Elwood Public Schools

Remote 5: SCC, Milford

Remote 6: MPCC, North Platte

Remote 7: Pope John XXIII, Elgin

Meeting Notes

K-12 Attendance: John Stritt (Kearney), Bob Uhing (Wayne), Scott Jones (Elwood), Betty Getzfred (Elgin), Kirk Langer (Lincoln), Mike Danahy (Fremont)

H.E. Attendance: Mike Ruhrdanz (Lincoln), Debbie Schroeder (Kearney), Gene Beardslee (Peru), Dennis Linster (Wayne), Ken Clipperton (Lincoln), Lyle Neal (Milford), Charles Osteen (North Platte)

CAP Liaison Attendance: Rick Golden, Walter Weir

Absent: Dan Hoelsing, Gary Monter, Gene Beardslee, Tip O'Neill, Michael Winkle, Stacey Decker, Brenda Decker, Don Phares

Staff: SuAnn Witt, Tom Rolfes

1. Co-Chair John Stritt convened the meeting at 1:02pm and welcomed all of the videoconferencing sites to the meeting. Roll Call found twelve members and two CAP liaisons present to start the meeting.
2. Review 11/16/2009 Meeting (Co-chairs)
 - a. [Meeting Notes of 11/16/2009](#)—No changes were made to the Meeting #3 notes.
 - b. Feedback from November Meeting -- John Stritt asked for feedback on previous meetings as members introduced themselves.
 - i. Charles Osteen asked that meeting notes be sent earlier.
 - ii. John Stritt mentioned that we have every possible codec technology present today and interconnected over the ESU 10 bridge.
 - iii. Scott Jones appreciated the videoconferencing access.
 - iv. Bob Uhing thanked Tom Rolfes for generating the downloadable pdf of meeting documents.
 - v. John Stritt highlighted items from the November 16 meeting: network characteristics, participation fee balance sheet, Network Nebraska survey, charter, new membership.
 - c. Comment on the meeting format
 - i. No changes, videoconferencing is appreciated and should continue.
 - d. What can we do to improve the flow of the meeting?
 - i. No changes
3. Network Nebraska [Marketing Survey](#) update (SuAnn Witt)
 - a. Timeline: Survey was issued on November 30 and closes on December 18. Initial data will be ready for report on or about the January 7 Ed Council meeting.
 - b. Distribution: Invitations to participate were sent out by various individuals to every educational sector in the state, to members and nonmembers of Network Nebraska. A reminder broadcast was sent out on December 11. Ken Clipperton reported receiving multiple reminders to complete the survey from different sources.
 - c. [Sample Data:](#)

- i. SuAnn Witt reported that as of December 16, 328 individuals had opened the survey and 231 had completed the survey, yielding a 70% completion rate.
- ii. Dennis Linster asked if the responses can be sorted by administrator, instructor, technical. Answer: only by IP address.
- iii. John asked if the answers can be sorted by geography? Answer: No, but can be next year.
- iv. Mike Danahy offered that other survey products other than Survey Monkey do perform this function.
- v. Dennis Linster offered his survey product for next year. Mike Danahy suggested that if IP addresses are to be used for data analysis, then the participants should be told. All members were in agreement with this warning.

4. Network Nebraska Budget

- a. Revisions to the [2009-2010 document](#) (e.g. Revenue received)—Tom Rolfes highlighted the changes to the Participation Fee budget document, including category subtotals and “revenue received” at the bottom of the spreadsheet. Tom Rolfes and Rick Golden reported that two new independent colleges will be joining Network Nebraska in the next month, Doane College and Clarkson College.
- b. Discussion of the 2010-2011 Network Nebraska Participation Fee—Tom Rolfes and Rick Golden highlighted the changes and expenditures that will change for 2010-11, based on 2009-10.
 - i. Input from advisory members—Dennis Linster shared that the current fee structure for the participation fee does not make any sense. Trafficshaping, as a service, needs to be discussed before fees are set. If the Network were to charge for services ala carte, then each service could begin to be more expensive. Kirk Langer agreed that we need to identify the core services and the premium services. Keeping costs low is a very important benefit identified by our participants. Lyle Neal said that if a tiered service would be provided, the more entities that used it, the less expensive the service would become. **John Stritt asked that all advisory group members use the next 30 days to consider different tiered service structures and be ready to discuss at the January meeting.**
 - ii. [Traffic Shaper RFP](#)—Tom Rolfes reported that the Traffic Shaper RFP was posted on the UNL Purchasing website on 12/3/2009 and the bids will be opened on 1/5/2010. Dennis Linster commented that most higher education entities would not find much value with such a service, if charged to all the members equally. Mike Danahy said that using the traffic shaper to control the traffic into K-12 is very important, especially if it originates from higher education in the form of videoconferencing.
 - iii. Help desk—There are some differentially tiered services that could be employed that may better address the needs of higher education vs. K-12 with respect to help desk services.
- c. Recommendation of [Affiliate Member Category and Associated Fees](#)—Tom Rolfes introduced the 3-page handout that defined the current “Full Membership” and proposed “Affiliate Membership” membership criteria and fee structure. John Stritt and Dennis Linster reinforced that we need to explore the value that Affiliate entities bring to the network. If the participation fee is made to be too high, then it may be too inhibitive for these entities to join. Walter Weir expressed that the future of Network Nebraska could offer virtualization of servers and services that may prove of value to new network members. John Stritt commented that potential programming and marketing of services needs to be a growth process. Dennis Linster asked what the fixed costs would be to

Network Nebraska if Affiliate entities would be brought on with little or no fee. Rick Golden responded that there could be additional support costs, especially if the new Affiliate Members did not have their own technical support staff and that additional T-1 ports could cost more to add to our core routers. TLS, MPLS and Q-MOE bandwidth would not cost anything as long as bandwidth is available. Scott Jones commented that museums and science centers offer unique programming that are of tremendous value to schools and they could be incentivized with rebated costs. **Dennis Linster asked that group members recommend a win-win entry level fee and service structure at their January meeting.** Dennis Linster said that Wayne State already has a relationship with the Wayne public library and municipality via a wireless Internet service. As a related issue, Mike Danahy had a question about a new middle school in his area that wants to connect directly to Network Nebraska at 10Mbps. Mike asked what fee would be charged to public schools who don't compete for LB 1208 funds but who want a more substantial connection for Internet. Tom Rolfes responded that the closest example we have to this situation is a former high school that has turned into a middle school, but still kept their separate fiber connection and who pay the full Network Nebraska Participation and Interregional Transport fees. The reverse example is a middle school that connects up to their neighboring high school and then connects to Network Nebraska. This middle school would not be charged a separate fee. If elementary and middle schools want to join Network Nebraska at 10Mbps and be eligible for LB 1208 funds, then a separate fee structure could be developed to encourage their membership.

- i. Affiliate Member Category Names—**Advisory Group members were asked to review the concept of “Affiliate Membership” and be prepared to discuss at their January meeting.**
 - ii. Affiliate Member Category Fees-- **Advisory Group members were asked to review the proposed fees for “Affiliate Membership” and be prepared to discuss at their January meeting.**
 - iii. Affiliate Member Category Criteria for Membership-- **Advisory Group members were asked to review the criteria for “Affiliate Membership” and be prepared to discuss at their January meeting.**
 - d. Discussion of the 2010-2011 Network Nebraska Interregional Transport Fee
 - i. Transport costs—Tom Rolfes reviewed the factors that will affect the 2010-2011 Interregional Transport Fee: Amount and locations for Internet access, amount of backbone transport bandwidth selected, location and number of traffic shaper devices, number of new Network Nebraska members.
 - ii. [New College Park Aggregation Circuit RFP](#)—Tom Rolfes reported that the new aggregation circuit RFP was posted on the OCIO website on 12/15/2009 and bids will be opened on 1/13/2010.
 - iii. [Internet Access RFP](#)—Tom Rolfes reported that the Internet Access RFP was posted on the State Purchasing website on 11/23/2009 and bids will be opened on 12/22/2009.
5. ADD: Review Charter language—Dennis Linster asked that we table the amending of the Advisory Group Charter until the next meeting when the members can have the Charter in front of them.
6. Next Meeting Date & Location—Next meeting date will be considered for January 19-20, 27-29. **John Stritt will post a Doodle poll.** Meeting locations will be via videoconferencing. John Stritt reviewed the assignments given to all Advisory Group members over the holiday break:
- a. **Contact museums/science center staff about the concept of Affiliate Membership**
 - b. **Contact colleagues from their sectors about Affiliate membership and fees**
 - c. **How do we better disseminate information from Advisory Group meetings?**

Items for the January agenda also included: Results of the Internet, Traffic Shaper and College Park aggregation circuit RFPs; Network Nebraska Marketing Survey results.

7. The Advisory Group reached consensus to adjourn at 3:02pm

List of Supporting Documents:

- Meeting notes, 11-16-2009
- Internet Access RFP
- Traffic Shaper RFP
- College Park Aggregation Circuit RFP
- Network Nebraska Participation Fee Budget
- Interregional Transport Fee Budget
- Affiliate Member Proposal Document
- Diagram of Network Nebraska Backbone segments and costs

LEGISLATURE OF NEBRASKA

ONE HUNDRED FIRST LEGISLATURE

SECOND SESSION

LEGISLATIVE BILL 1069

Introduced by Adams, 24.

Read first time January 21, 2010

Committee:

A BILL

1 FOR AN ACT relating to educational service units; to amend
2 sections 79-1233, 79-1241.02, 79-1245, 79-1247, 79-1248,
3 79-1249, 86-516, 86-520, 86-521, and 86-5,100, Reissue
4 Revised Statutes of Nebraska, and sections 79-1241.01
5 and 79-1241.03, Revised Statutes Supplement, 2009; to
6 change and eliminate provisions relating to core services
7 and technology infrastructure purchase and funding; to
8 change provisions relating to the Educational Service
9 Unit Coordinating Council and Network Nebraska; to
10 provide, change, and eliminate duties for the Nebraska
11 Information Technology Council and Chief Information
12 Officer; to harmonize provisions; to repeal the original
13 sections; to outright repeal sections 79-1243 and
14 79-1331, Reissue Revised Statutes of Nebraska; and to

1 declare an emergency.

2 Be it enacted by the people of the State of Nebraska,

1 Section 1. Section 79-1233, Reissue Revised Statutes of
2 Nebraska, is amended to read:

3 79-1233 Each educational service unit shall provide
4 access for all school districts within the geographical area
5 served by the unit to telecomputing resources, which shall include
6 the capacity to receive and transmit distance education courses
7 on at least a regional basis beginning on or before August 1,
8 2007, through the installation of necessary equipment at each
9 educational service unit location or through interlocal agreements
10 with other educational service units and shall provide support for
11 training users to meet their specific telecomputing and distance
12 education needs. School districts may annually elect prior to a
13 date determined by the educational service unit not to connect to
14 such telecomputing resources. Each educational service unit shall
15 also develop, with the State Department of Education, a plan which
16 provides for connecting the telecomputing and distance education
17 equipment of such school districts with the telecomputing and
18 distance education equipment of the unit.

19 The leasing or purchase of ~~and planning for telecomputing~~
20 ~~or distance education equipment and software for the educational~~
21 ~~service units~~ any technology infrastructure hardware component
22 using state funds or local tax receipts and costing in excess of
23 ten thousand dollars shall meet the ~~minimum~~ technical standards
24 as set by the Nebraska Information Technology Commission. The
25 Chief Information Officer ~~shall~~ may bid for such equipment and

1 software and ~~shall~~ allow educational entities to participate
2 in such statewide leasing or purchasing contracts. Educational
3 service units may enter into agreements pursuant to the Interlocal
4 Cooperation Act and the Joint Public Agency Act to carry out this
5 section. Such agreements may include, but need not be limited
6 to, provisions requiring any school district having telecomputing
7 or distance education equipment connected to the educational
8 service unit's telecomputing or distance education equipment to
9 pay periodic fees necessary to cover the cost of such usage.

10 Sec. 2. Section 79-1241.01, Revised Statutes Supplement,
11 2009, is amended to read:

12 79-1241.01 To carry out ~~sections 79-1241.03 and 79-1243,~~
13 section 79-1241.03, it is the intent of the Legislature to
14 appropriate for each fiscal year the amount appropriated in
15 the prior year increased by the percentage growth in the fall
16 membership of member districts plus the basic allowable growth
17 rate described in section 79-1025. For purposes of this section,
18 fall membership has the same meaning as in section 79-1003. Fall
19 membership data used to compute growth shall be from the two most
20 recently available fall membership reports.

21 Sec. 3. Section 79-1241.02, Reissue Revised Statutes of
22 Nebraska, is amended to read:

23 79-1241.02 It is the intent of the Legislature that any
24 technology infrastructure hardware components purchased with funds
25 appropriated pursuant to section 79-1241.01, ~~79-1241.03, or 79-1243~~

1 and used for technology-related projects or technology initiatives
2 undertaken by an educational service unit follow the review process
3 established in sections ~~86-512 to 86-524~~, including the review
4 or 79-1241.03 be reviewed by the technical panel of the Nebraska
5 Information Technology Commission for compliance with technical
6 standards if the cost of such components exceeds ten thousand
7 dollars.

8 Sec. 4. Section 79-1241.03, Revised Statutes Supplement,
9 2009, is amended to read:

10 79-1241.03 ~~For school fiscal year 2008-09 and each school~~
11 ~~fiscal year thereafter.~~

12 (1) One percent of the funds appropriated for core
13 services and technology infrastructure shall be transferred to
14 the Educational Service Unit Coordinating Council. The remainder
15 of such funds shall be distributed pursuant to ~~subdivisions~~
16 subsections (2) through (6) of this section.~~.~~

17 (2)(a) The distance education and telecommunications
18 allowance for each educational service unit shall equal eighty-five
19 percent of the difference of the costs for telecommunications
20 services, for access to data transmission networks that transmit
21 data to and from the educational service unit, and for the
22 transmission of data on such networks paid by the educational
23 service unit as reported on the annual financial report for the
24 most recently available complete data year minus the receipts from
25 the federal Universal Service Fund pursuant to 47 U.S.C. 254,

1 as such section existed on January 1, 2007, for the educational
2 service unit as reported on the annual financial report for the
3 most recently available complete data year and minus any receipts
4 from school districts or other educational entities for payment
5 of such costs as reported on the annual financial report of the
6 educational service unit;

7 (b) The base allocation of each educational service unit
8 shall equal two and one-half percent of the funds appropriated for
9 distribution pursuant to this section;

10 (c) The satellite office allocation for each educational
11 service unit shall equal one percent of the funds appropriated
12 for distribution pursuant to this section for each office of
13 the educational service unit, except the educational service unit
14 headquarters, up to the maximum number of satellite offices. The
15 maximum number of satellite offices used for the calculation of
16 the satellite office allocation for any educational service unit
17 shall equal the difference of the ratio of the number of square
18 miles within the boundaries of the educational service unit divided
19 by four thousand minus one with the result rounded to the closest
20 whole number;

21 (d) The statewide adjusted valuation shall equal the
22 total adjusted valuation for all member districts of educational
23 service units pursuant to section 79-1016 used for the calculation
24 of state aid for school districts pursuant to the Tax Equity and
25 Educational Opportunities Support Act for the school fiscal year

1 for which the distribution is being calculated pursuant to this
2 section;

3 (e) The adjusted valuation for each educational service
4 unit shall equal the total adjusted valuation of the member school
5 districts pursuant to section 79-1016 used for the calculation of
6 state aid for school districts pursuant to the act for the school
7 fiscal year for which the distribution is being calculated pursuant
8 to this section, except that such adjusted valuation for member
9 school districts that are also member districts of a learning
10 community shall be reduced by fifty percent. The adjusted valuation
11 for each learning community shall equal fifty percent of the total
12 adjusted valuation of the member school districts pursuant to
13 section 79-1016 used for the calculation of state aid for school
14 districts pursuant to the act for the school fiscal year for which
15 the distribution is being calculated pursuant to this section;

16 (f) The local effort rate shall equal \$0.0135 per one
17 hundred dollars of adjusted valuation;

18 (g) ~~Except as provided in subdivision (5) of this~~
19 ~~section,~~ the The statewide student allocation shall equal the
20 difference of the sum of the amount appropriated for distribution
21 pursuant to this section plus the product of the statewide adjusted
22 valuation multiplied by the local effort rate minus the distance
23 education and telecommunications allowance, base allocation, and
24 satellite office allocation for all educational service units and
25 minus any adjustments required by subsection (5) of this section;

1 (h) The sparsity adjustment for each educational service
2 unit and learning community shall equal the sum of one plus
3 one-tenth of the ratio of the square miles within the boundaries
4 of the educational service unit divided by the fall membership of
5 the member school districts for the school fiscal year immediately
6 preceding the school fiscal year for which the distribution is
7 being calculated pursuant to this section;

8 (i) The adjusted students for each educational service
9 unit shall equal the fall membership for the school fiscal year
10 immediately preceding the school fiscal year for which aid is being
11 calculated of the member school districts that will not be members
12 of a learning community and fifty percent of the fall membership
13 for such school fiscal year of the member school districts that
14 will be members of a learning community pursuant to this section
15 multiplied by the sparsity adjustment for the educational service
16 unit, and the adjusted students for each learning community shall
17 equal fifty percent of the fall membership for such school fiscal
18 year of the member school districts multiplied by the sparsity
19 adjustment for the learning community;

20 (j) The per student allocation shall equal the statewide
21 student allocation divided by the total adjusted students for all
22 educational service units and learning communities;

23 (k) The student allocation for each educational service
24 unit and learning community shall equal the per student allocation
25 multiplied by the adjusted students for the educational service

1 unit or learning community;

2 (l) The needs for each educational service unit shall
 3 equal the sum of the distance education and telecommunications
 4 allowance, base allocation, satellite office allocation, and
 5 student allocation for the educational service unit and the needs
 6 for each learning community shall equal the student allocation for
 7 the learning community; and

8 (m) The distribution of core services and technology
 9 infrastructure funds for each educational service unit and learning
 10 community shall equal the needs for each educational service unit
 11 or learning community minus the product of the adjusted valuation
 12 for the educational service unit or learning community multiplied
 13 by the local effort rate.†

14 (3) If an educational service unit is the result of
 15 a merger or received new member school districts from another
 16 educational service unit, ~~such~~ the educational service unit shall
 17 be considered a new educational service unit for purposes of this
 18 section. For each new educational service unit, the needs minus
 19 the distance education and telecommunications allowance for such
 20 new educational service unit shall, for each of the three fiscal
 21 years following the fiscal year in which the merger takes place or
 22 the new member school districts are received, receive core services
 23 and technology infrastructure funds pursuant to subdivisions (2)
 24 through (6) of this section in equal an amount not less than
 25 the core services and technology infrastructure funds received

1 ~~in~~ needs minus the distance education and telecommunications
2 allowance for the portions of the educational service units
3 transferred to the new educational service unit for the fiscal
4 year immediately preceding the merger or receipt of new member
5 school districts, except that if the total amount available to be
6 distributed pursuant to ~~subdivisions~~ subsections (2) through (6)
7 of this section for ~~such year~~ the year for which needs are being
8 calculated is less than the total amount distributed pursuant
9 to such ~~subdivisions~~ or section 79-1243 for the immediately
10 preceding fiscal year, ~~the minimum core services and technology~~
11 infrastructure funds subsections for the fiscal year immediately
12 preceding the merger or receipt of new member school districts,
13 the minimum needs for each educational service unit pursuant to
14 this ~~subdivision~~ subsection shall be reduced by a percentage equal
15 to the ratio of ~~the difference of the total amount distributed~~
16 pursuant to subdivisions (2) through (6) of this section or section
17 79-1243 for the immediately preceding fiscal year minus the total
18 amount available to be distributed pursuant to subdivisions (2)
19 through (6) of this section for the fiscal year in question
20 such difference divided by the total amount distributed pursuant
21 to ~~subdivisions~~ subsections (2) through (6) of this section ~~or~~
22 section 79-1243 for the immediately preceding fiscal year. The core
23 services and technology infrastructure funds received in for the
24 fiscal year immediately preceding the merger or receipt of new
25 member school districts. The needs minus the distance education

1 and telecommunications allowance for the portions of educational
 2 service units transferred to the new educational service unit
 3 for the fiscal year immediately preceding a merger or receipt
 4 of new member school districts ~~for an educational service unit~~
 5 shall equal the ~~amount received in~~ needs minus the distance
 6 education and telecommunications allowance calculated for such
 7 fiscal year pursuant to ~~subdivisions~~ subsections (2) through (6)
 8 of this section ~~or section 79-1243~~ by for any educational service
 9 unit affected by the merger or the transfer of school districts
 10 multiplied by a ratio equal to the valuation that was transferred
 11 to ~~or retained by~~ the new educational service unit for which the
 12 minimum is being calculated divided by the total valuation of the
 13 educational service unit transferring ~~or retaining~~ the territory.

14 (4) For fiscal years 2008-09 2010-11 through 2013-14,
 15 each educational service unit which will not have any member
 16 school districts that are members of a learning community shall
 17 ~~receive core services and technology infrastructure funds under~~
 18 ~~this section in an amount not less than ninety-five percent of~~
 19 ~~the total of the core services and technology infrastructure funds~~
 20 ~~that the educational service unit received in the immediately~~
 21 ~~preceding fiscal year either pursuant to subdivisions (2) through~~
 22 ~~(6) of this section or pursuant to section 79-1243,~~ have needs
 23 minus the distance education and telecommunications allowance
 24 equal to an amount not less than ninety-five percent of the
 25 needs minus the distance education and telecommunications allowance

1 for the immediately preceding fiscal year, except that if the
 2 total amount available to be distributed pursuant to ~~subdivisions~~
 3 subsections (2) through (6) of this section for ~~such year~~ the
 4 year for which needs are being calculated is less than the
 5 total amount distributed pursuant to such ~~subdivisions~~ ~~or section~~
 6 ~~79-1243~~ subsections for the immediately preceding fiscal year,
 7 the minimum core services and technology infrastructure funds
 8 for each educational service unit pursuant to this ~~subdivision~~
 9 subsection shall be reduced by a percentage equal to the ratio
 10 of the difference of the total amount distributed pursuant to
 11 ~~subdivisions~~ ~~(2)~~ through ~~(6)~~ of this section ~~or section 79-1243~~
 12 ~~for the immediately preceding fiscal year~~ minus the total amount
 13 available to be distributed pursuant to ~~subdivisions~~ ~~(2)~~ through
 14 ~~(6)~~ of this section for the fiscal year in question such difference
 15 divided by the total amount distributed pursuant to ~~subdivisions~~
 16 subsections (2) through (6) of this section ~~or section 79-1243~~ for
 17 the immediately preceding fiscal year.†

18 (5) If the minimum core services and technology
 19 infrastructure funds pursuant to ~~subdivision~~ needs minus the
 20 distance education and telecommunications allowance pursuant to
 21 subsection (3) or (4) of this section for any educational service
 22 unit ~~exceed~~ exceeds the amount that would otherwise be distributed
 23 ~~to~~ calculated for such educational service unit pursuant to
 24 ~~subdivision~~ subsection (2) of this section, the statewide student
 25 allocation shall be reduced such that the total amount to be

1 distributed pursuant to this section equals the appropriation
2 for core services and technology infrastructure funds and no
3 educational service unit ~~receives~~ has needs minus the distance
4 education and telecommunications allowance less than the greater of
5 any minimum amounts calculated for such educational service unit
6 pursuant to ~~subdivisions~~ subsections (3) and (4) of this section, ~~+~~
7 ~~and~~

8 (6) The State Department of Education shall certify the
9 distribution of core services and technology infrastructure funds
10 pursuant to ~~subdivisions~~ subsections (2) through (6) of this
11 section to each educational service unit and learning community
12 on or before July 1, ~~2008,~~ for school fiscal year 2008-09 and
13 ~~on or before July 1 of each year thereafter~~ of each year for
14 the following school fiscal year. Any funds appropriated for
15 distribution pursuant to this section shall be distributed in
16 ten as nearly as possible equal payments on the first business
17 day of each month beginning in September of each school fiscal
18 year and ending in June. Funds distributed to educational service
19 units pursuant to this section shall be used for core services
20 and technology infrastructure with the approval of representatives
21 of two-thirds of the member school districts of the educational
22 service unit, representing a majority of the adjusted students in
23 the member school districts used in calculations pursuant to this
24 section for such funds. Funds distributed to learning communities
25 shall be used for learning community purposes pursuant to sections

1 ~~79-2104 and 79-2115,~~ 79-2101 to 79-2120, with the approval of the
2 learning community coordinating council.

3 For purposes of this section, the determination of
4 whether or not a school district will be a member of an educational
5 service unit or a learning community shall be based on the
6 information available May 1 for the following school fiscal year.

7 Sec. 5. Section 79-1245, Reissue Revised Statutes of
8 Nebraska, is amended to read:

9 79-1245 The Educational Service Unit Coordinating Council
10 is created as of July 1, 2008. On such date the assets and
11 liabilities of the Distance Education Council shall be transferred
12 to the Educational Service Unit Coordinating Council. The council
13 shall be composed of one administrator from each educational
14 service unit. The council shall be funded from one percent of the
15 core services and technology infrastructure funding appropriated
16 pursuant to section 79-1241.03, appropriations by the Legislature
17 for distance education, and fees established for services provided
18 to educational entities.

19 The council is a political subdivision and a public
20 body corporate and politic of this state, exercising public powers
21 separate from the participating educational service units. The
22 council shall have the duties, privileges, immunities, rights,
23 liabilities, and disabilities of a political subdivision and a
24 public body corporate and politic but shall not have taxing
25 power. The council shall have power (1) to sue and be sued,

1 (2) to have a seal and alter the same at will or to dispense
2 with the necessity thereof, (3) to make and execute contracts
3 and other instruments, (4) to receive, hold, and use money and
4 real and personal property, (5) to hire and compensate employees,
5 including certificated employees, (6) to act as a fiscal agent for
6 statewide initiatives being implemented by employees of one or more
7 educational service units, and (6) from time to time, to make,
8 amend, and repeal bylaws, rules, and regulations not inconsistent
9 with sections 79-1245 to 79-1249. Such power shall only be used as
10 necessary or convenient to carry out and effectuate the powers and
11 purposes of the council.

12 Sec. 6. Section 79-1247, Reissue Revised Statutes of
13 Nebraska, is amended to read:

14 79-1247 The Educational Service Unit Coordinating Council
15 shall appoint a distance education director and may appoint a
16 council director, both of whom shall hold office at the pleasure of
17 the council. ~~7~~ except that the person serving as the administrator
18 of the Distance Education Council immediately preceding July 1,
19 2008, shall be the initial distance education director under
20 this section. The council director and the distance education
21 director shall receive such salaries as the council determines
22 and shall be reimbursed for their actual expenses incurred in
23 the performance of their duties. The council may contract with
24 individual educational service units for the employment of the
25 council director or the distance education director, except that

1 the supervisory responsibilities for such employees shall remain
2 with the council. ~~as provided in sections 81-1174 to 81-1177.~~

3 The council director and the distance education director
4 shall perform duties as the council directs and shall not be
5 members of the council. The council may also appoint or retain
6 such other persons as it may deem necessary for the performance
7 of its functions and shall prescribe their duties, fix their
8 compensation, and provide for reimbursement of their actual and
9 necessary expenses as provided in sections 81-1174 to 81-1177
10 within the amounts available in the budget of the council.

11 Sec. 7. Section 79-1248, Reissue Revised Statutes of
12 Nebraska, is amended to read:

13 79-1248 The powers and duties of the Educational Service
14 Unit Coordinating Council include, but are not limited to:

15 (1) Providing public access to lists of qualified
16 distance education courses;

17 (2) Collecting and providing school schedules for
18 participating educational entities;

19 (3) Facilitation of scheduling for qualified distance
20 education courses;

21 (4) Brokering of qualified distance education courses to
22 be purchased by educational entities;

23 (5) Assessment of distance education needs and evaluation
24 of distance education services;

25 (6) Compliance with technical standards as set forth

1 by the Nebraska Information Technology Commission and academic
2 standards as set forth by the State Department of Education related
3 to distance education;

4 (7) Establishment of a system for prioritizing courses if
5 the demand for Network Nebraska exceeds the capacity available for
6 distance education and for choosing receiving educational entities
7 when the demand for a course exceeds the capacity as determined by
8 either the technology available or the course provider;

9 (8) Scheduling and prioritization for access to Network
10 Nebraska by educational entities in cooperation with the Chief
11 Information Officer and using scheduling software or scheduling
12 services which meet ~~any applicable~~ technical standards established
13 by the commission;

14 (9) Administration of learning management systems that
15 are in compliance with ~~any applicable~~ technical standards of the
16 commission either through the staff of the council or by delegation
17 to an appropriate educational entity with the funding for such
18 systems provided by participating educational entities; and

19 (10) Coordination with educational service units and
20 postsecondary educational institutions to provide assistance for
21 instructional design for both two-way interactive video distance
22 education courses and the offering of graduate credit courses in
23 distance education.

24 Sec. 8. Section 79-1249, Reissue Revised Statutes of
25 Nebraska, is amended to read:

1 79-1249 The Educational Service Unit Coordinating Council
2 shall only provide assistance in brokering or scheduling courses
3 to educational entities that have access to Network Nebraska.
4 All costs to the council associated with assisting private,
5 denominational, or parochial schools and private postsecondary
6 educational institutions shall be paid by such private,
7 denominational, or parochial school or private postsecondary
8 educational institution. Any services of the council may also be
9 offered to other public entities with access to Network Nebraska
10 on a contractual basis. The council shall not approve ~~technology~~
11 ~~purchases for the council in excess of ten thousand dollars~~ the
12 purchase of any technology infrastructure hardware component for
13 the council if the cost of such component is in excess of ten
14 thousand dollars and if such cost will be paid with state funds or
15 local tax receipts without approval of the technical panel of the
16 Nebraska Information Technology Commission that the ~~purchases are~~
17 component is in compliance with any applicable commission technical
18 standards.

19 Sec. 9. Section 86-516, Reissue Revised Statutes of
20 Nebraska, is amended to read:

21 86-516 The commission shall:

22 (1) Annually by July 1, adopt policies and procedures
23 used to develop, review, and annually update a statewide technology
24 plan;

25 (2) Create an information technology clearinghouse to

1 identify and share best practices and new developments, as well as
2 identify existing problems and deficiencies;

3 (3) Review and adopt policies to provide incentives for
4 investments in information technology infrastructure services;

5 (4) Determine a broad strategy and objectives for
6 developing and sustaining information technology development in
7 Nebraska, including long-range funding strategies, research and
8 development investment, support and maintenance requirements, and
9 system usage and assessment guidelines;

10 (5) Adopt guidelines regarding project planning and
11 management and administrative and technical review procedures
12 involving state-owned or state-supported technology and
13 infrastructure. Governmental entities, state agencies, and
14 noneducation political subdivisions shall submit all projects which
15 use any combination of general funds, federal funds, or cash funds
16 for information technology purposes to the process established
17 by sections 86-512 to 86-524. Purchases of any technology
18 infrastructure hardware component by an education-related political
19 subdivision shall be reviewed and approved by the technical panel
20 before purchase to assure compliance with technical standards if
21 the cost of such component exceeds ten thousand dollars and such
22 cost will be paid with state funds or local tax receipts. The
23 commission may adopt policies that establish the format and minimum
24 requirements for project submissions. The commission may monitor
25 the progress of any such project and may require progress reports;

1 (6) Adopt minimum technical standards, guidelines, and
2 architectures upon recommendation by the technical panel;

3 (7) Establish ad hoc technical advisory groups to study
4 and make recommendations on specific topics, including workgroups
5 to establish, coordinate, and prioritize needs for education,
6 local communities, intergovernmental data communications, and state
7 agencies;

8 (8) By November 15 of each even-numbered year, make
9 recommendations on technology investments to the Governor and the
10 Legislature, including a prioritized list of projects, reviewed by
11 the technical panel pursuant to section 86-521;

12 (9) Approve grants from the Community Technology Fund and
13 Government Technology Collaboration Fund;

14 (10) Adopt schedules and procedures for reporting needs,
15 priorities, and recommended projects;

16 (11) Assist the Chief Information Officer in developing
17 and maintaining Network Nebraska pursuant to section 86-5,100; and

18 (12) Determine the format that state agencies, boards,
19 and commissions shall use to report their information technology
20 plans under section 86-524.01. The commission shall include an
21 analysis of such plans in the statewide technology plan.

22 Sec. 10. Section 86-520, Reissue Revised Statutes of
23 Nebraska, is amended to read:

24 86-520 The Chief Information Officer shall:

25 (1) Maintain, in cooperation with the Department of

1 Administrative Services, an inventory of noneducation state
2 government technology assets, including hardware, applications, and
3 data bases;

4 (2) Recommend policies and guidelines for acceptable and
5 cost-effective use of information technology in noneducation state
6 government;

7 (3) Advise the Governor and Legislature on policy issues
8 affecting noneducation state government related to information
9 technology;

10 (4) Coordinate efforts among other noneducation state
11 government technology agencies and coordinating bodies;

12 (5) Implement a strategic, tactical, and project planning
13 process for noneducation state government information technology
14 that is linked to the budget process;

15 (6) Assist the budget division of the Department
16 of Administrative Services and Legislative Fiscal Analyst in
17 evaluating technology-related budget requests;

18 (7) Work with each governmental department and
19 noneducation state agency to evaluate and act upon opportunities
20 to more efficiently and effectively deliver government services
21 through the use of information technology;

22 (8) Recommend to the Governor and Legislature methods for
23 improving the organization and management of data by noneducation
24 agencies to achieve the goals of making information sharable and
25 reusable, eliminating redundancy of data and programs, improving

1 the quality and usefulness of data, and improving access to data,
2 and implement such recommendations as the Governor or Legislature
3 may direct;

4 (9) Monitor the status of major noneducation state
5 government technology projects;

6 (10) Establish and maintain Network Nebraska pursuant to
7 section 86-5,100;

8 ~~(11) Bid for telecomputing and distance education~~
9 ~~equipment pursuant to section 79-1233;~~

10 ~~(12)~~ (11) Apply in aggregate for reimbursements from
11 the federal Universal Service Fund pursuant to section 254 of
12 the Telecommunications Act of 1996, 47 U.S.C. 254, as such
13 section existed on January 1, 2006, on behalf of school districts
14 requesting to be included in such aggregated application;

15 ~~(13)~~ (12) Administer such funds as may be appropriated to
16 the Chief Information Officer by the Legislature;

17 ~~(14)~~ (13) Monitor the status of information technology
18 projects that are enterprise projects;

19 ~~(15)~~ (14) Collect information from state agencies,
20 boards, and commissions as provided in section 86-524.01; and

21 ~~(16)~~ (15) Complete other tasks as assigned by the
22 Governor.

23 Sec. 11. Section 86-521, Reissue Revised Statutes of
24 Nebraska, is amended to read:

25 86-521 (1) A technical panel is created. The technical

1 panel shall be comprised of one representative from the Nebraska
2 Educational Telecommunications Commission, one representative from
3 the office of Chief Information Officer, one representative from
4 the University of Nebraska Computing Services Network, and such
5 other members as specified by the Nebraska Information Technology
6 Commission.

7 (2) The technical panel shall review any technology
8 project presented to the Nebraska Information Technology Commission
9 including any recommendations by working groups established under
10 sections 86-512 to 86-524. Upon the conclusion of the review
11 of a technology project or request for additional funding, the
12 technical panel shall provide its analysis to the commission. The
13 technical panel may recommend technical standards and guidelines to
14 be considered for adoption by the commission. Such standards
15 and guidelines shall not unnecessarily restrict the use of
16 new technologies or prevent commercial competition, including
17 competition with Network Nebraska.

18 (3) At the request of any education-related political
19 subdivision, the technical panel shall review proposed technology
20 infrastructure hardware component purchases for compliance with
21 the commission's technical standards. The findings shall be shared
22 with the education-related political subdivision that requested
23 the review within sixty days after receipt of the request by the
24 technical panel.

25 Sec. 12. Section 86-5,100, Reissue Revised Statutes of

1 Nebraska, is amended to read:

2 86-5,100 The Chief Information Officer, in partnership
3 with the University of Nebraska, shall develop and maintain a
4 statewide, multipurpose, high capacity, scalable telecommunications
5 network to be called Network Nebraska. The network shall consist of
6 contractual arrangements with providers to meet the demand of state
7 agencies, local governments, and educational entities as defined in
8 section 79-1201.01. Such network shall provide access to a reliable
9 and affordable infrastructure capable of carrying a spectrum of
10 services and applications, including distance education, across
11 the state. The Chief Information Officer shall provide access to
12 each school district, each educational service unit, each community
13 college, each state college, and the University of Nebraska at the
14 earliest feasible date and no later than July 1, 2012. Access may
15 be provided through educational service units or other aggregation
16 points. Participation in Network Nebraska shall not be required for
17 any educational entity except the University of Nebraska. The Chief
18 Information Officer shall aggregate demand for those state agencies
19 and educational entities choosing to participate and shall reduce
20 costs for participants whenever feasible. The Chief Information
21 Officer shall establish a cost structure based on actual costs,
22 including necessary ~~plus~~ administrative expenses but not including
23 travel or conference expenses, and shall charge participants
24 according to such cost structure. The Chief Information Officer
25 shall annually provide a detailed report of such costs to each

1 participant and to the Legislative Fiscal Analyst.

2 Sec. 13. Original sections 79-1233, 79-1241.02, 79-1245,
3 79-1247, 79-1248, 79-1249, 86-516, 86-520, 86-521, and 86-5,100,
4 Reissue Revised Statutes of Nebraska, and sections 79-1241.01 and
5 79-1241.03, Revised Statutes Supplement, 2009, are repealed.

6 Sec. 14. The following sections are outright repealed:
7 Sections 79-1243 and 79-1331, Reissue Revised Statutes of Nebraska.

8 Sec. 15. Since an emergency exists, this act takes effect
9 when passed and approved according to law.

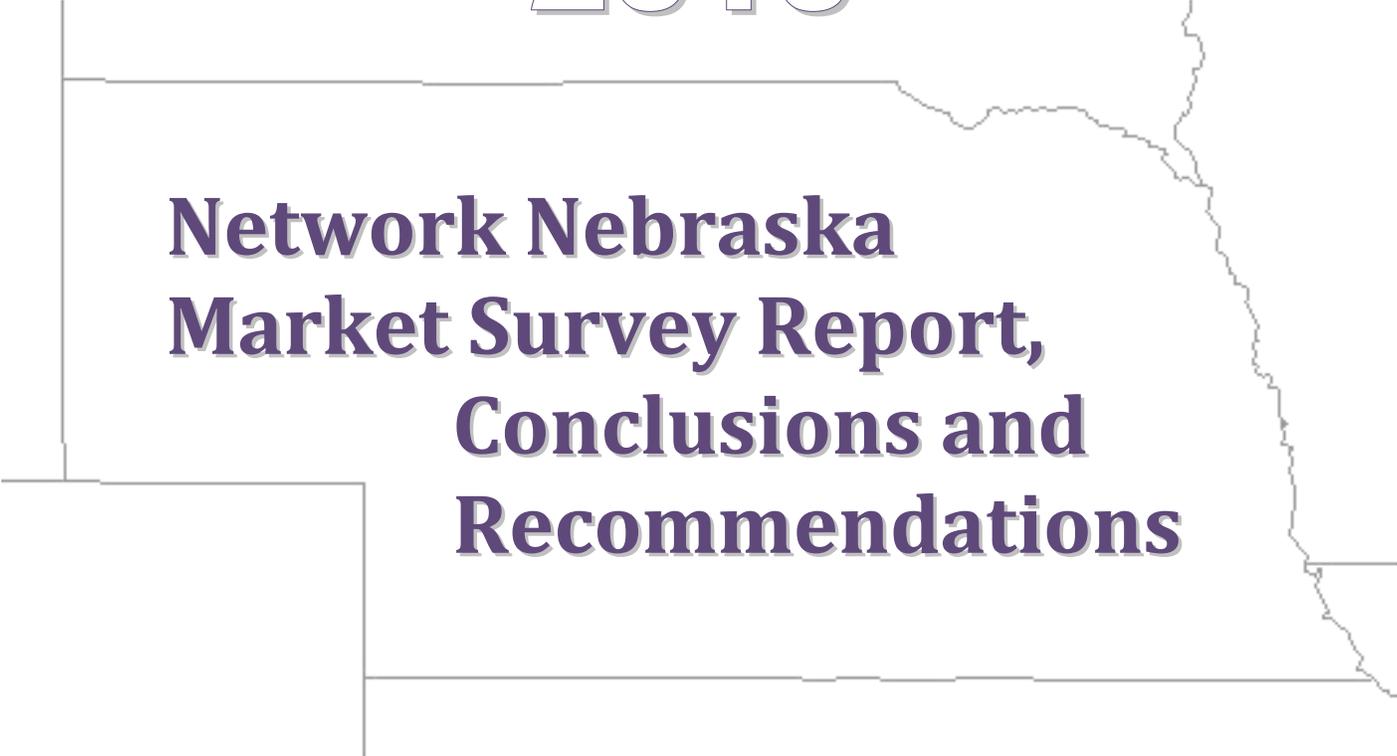
Summary of **LB 1069**--Change technology purchase and funding provisions relating to educational service units. Introduced by Senator Adams, 1/21/2010; Education Committee Hearing scheduled for 2/2/2010

1. P. 3, lines 19: The leasing or purchase of any technology infrastructure hardware component* using state funds or local tax receipts and costing in excess of ten thousand dollars shall meet the technical standards as set by the Nebraska Information Technology Commission.
2. P. 3, line 24: Changes the Chief Information Officer's responsibilities for bidding equipment and software for education entities from "shall" to "may".
3. P. 4, line 23: Purchases of any technology infrastructure hardware components paid for by 79-1241.01 or 79-1241.03 (**Core Services and Technology Infrastructure funds by ESUs**) shall be reviewed and approved by the technical panel before purchase to assure compliance with NITC technical standards if the cost of such component exceeds ten thousand dollars.
4. PP. 9-14: Introduces language concerning the technology funding distributions of educational service units.
5. PP. 14-15: Reinforces the Educational Service Unit Coordinating Council (ESUCC) as a political subdivision, but without taxing authority.
6. PP. 15-16: Allows the ESUCC to contract with an ESU for the employment of the ESUCC Executive Director or Distance Education Director, with supervision remaining with the ESUCC.
7. P. 18, line 10: Purchases of any technology infrastructure hardware component by the **ESUCC** shall be reviewed and approved by the technical panel before purchase to assure compliance with NITC technical standards if the cost of such component exceeds ten thousand dollars and such cost will be paid with state funds or local tax receipts.
8. P. 19, line 14: Exempts education-related political subdivisions from having to submit Technology Project proposals to the NITC for review and prioritization.
9. P. 19, line 17: Purchases of any technology infrastructure hardware component by an **education-related political subdivision (e.g. school districts and community colleges)** shall be reviewed and approved by the technical panel before purchase to assure compliance with NITC technical standards if the cost of such component exceeds ten thousand dollars and such cost will be paid with state funds or local tax receipts.
10. P. 22, line 8: Removes the 79-1233 'bidding for telecomputing and distance education equipment' from the required responsibilities of the Chief Information Officer.
11. P.23, line 14: Declares that NITC Technical Panel standards and guidelines shall not unnecessarily restrict the use of new technologies or prevent commercial competition, including competition with Network Nebraska.
12. P. 23, line 18: Declares that the findings of any technical review of any infrastructure hardware component shall be shared with the requesting entity within 60 days of receipt of the request by the Technical Panel.
13. P. 24, line 16: Declares that participation in Network Nebraska shall not be required for any educational entity except the University of Nebraska.
14. P. 24, line 20: **Removes "travel and conference costs" from necessary administrative costs billable to the participating entities of Network Nebraska.**
15. P. 24, line 24: Requires the Chief Information Officer to annually provide a detailed cost report to each participant and to the Legislative Fiscal Office.

* "Technology infrastructure hardware component" is not defined in LB 1069.

Summary provided by Tom Rolfes, Office of the CIO/NITC, State of Nebraska; 1/26/2010

2010



Network Nebraska Market Survey Report, Conclusions and Recommendations

Nebraska Information Technology Commission

Education Council

Prepared by: Marketing Task Group

January 7, 2010

DRAFT

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About the Nebraska Information Technology Commission and the Education Council...

The Nebraska Information Technology Commission (NITC) was formed by the Nebraska Legislature in 1998 to “determine a broad strategy and objectives for developing and sustaining information technology development in Nebraska, including long-range funding strategies, research and development investment, support and maintenance requirements, and system usage and assessment guidelines; and to establish ad hoc technical advisory groups to study and make recommendations on specific topics, including workgroups to establish, coordinate, and prioritize needs for education, local communities, intergovernmental data communications, and state agencies.” (Neb. Rev. Stat. 86-516)

The Education Council of the NITC is one of the Commission’s six advisory workgroups. The Education Council is composed of 16 members, 8 from K-12 and 8 from Higher Education, to represent the educational technology interests of public and private education. By its charter, the Education Council may convene task groups to carry out its responsibilities. The Marketing Task Group is one of five such task groups to carry out the Statewide Technology Plan, which includes the strategic initiative called Network Nebraska.

Network Nebraska Market Survey

Report and Recommendations

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 - iii. Potential Partner Results
- VIII. Appendices
 - a. *Appendix A*: NITC Education Council Network Nebraska Survey Instrument
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 - c. *Appendix C*: Survey Responses
 - d. *Appendix D*: “Other (Please specify) Responses

Network Nebraska Market Survey

• Report, Conclusions, and Recommendations •

Introduction

Network Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and all of its associated service offerings and support. Network Nebraska—Education, serving public and private K-12 and higher education, offers network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet2 research and education network. Network Nebraska--Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is funded by the participating public and private education entities of Nebraska.

This survey, conducted via Internet among current and potential K-12 and higher education public and private users, was designed to provide quantifiable baseline data to guide the Education Council's communications and marketing strategies by providing data on the following:

- General information on strengths and weaknesses of Network Nebraska services.
- Specific perceptions about Network Nebraska services by current and potential users.
- Motivational drivers in choosing Network Nebraska services.
- Current awareness level and perceptions toward Network Nebraska.
- Differences in perceptions between current users and potential users of Network Nebraska.

See Appendix A: NITC Education Council Network Nebraska Survey Instrument

Executive Summary

This is the second year in which the Network Nebraska market survey has been conducted. In December 2008, 364 survey participants started the survey while 178 or 48.9% completed the survey compared to 335 starting the survey in December 2009 with 236 or 70.4% completing the survey. This is a 32% increase in the total number of surveys completed in 2009 over 2008. The largest increase was in the interested party and potential Network Nebraska partner responses. December 2009 survey results suggest that existing users are shifting their attention more toward student learning opportunities, followed by increased bandwidth and cost sharing as being most important to their institution. In December 2008 lower cost was defined as the single most important strength and compelling competitive advantage of the network services. As the network environment grows and matures, it is logical that constituents' interests and concerns migrate from network stability to more applications and teaching and learning opportunities; and the 2009 survey data begins to demonstrate that trend.

Existing Network Nebraska Partners

- Among current partners of Network Nebraska the network is becoming increasingly important as a vehicle for providing student learning opportunities. Of the 172 who rated network attributes based on relative importance to their institution, 97.6% said student learning opportunities were either very important or important. This was followed by increased bandwidth and cost sharing as being very important or important.
- Among current partners of Network Nebraska other attributes considered to be important to their institution are distance learning and video conferencing, shared services, technical support services, communication and collaboration, and Internet 2.
- Among current partners of Network Nebraska, student learning opportunities was identified as the number one strength followed by reduced costs/cost sharing.
- When Network Nebraska partners were asked about their top concerns, they identified increasing costs, reliability of the network and network speed.
- Existing Network Nebraska partners identified distance education coordination and connectivity concerns as the biggest weaknesses followed by communications and collaboration.
- The single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates educational entities to partner with Network Nebraska is reduced costs, followed by student learning opportunities and statewide Intranet.
- Current Network Nebraska partners responding to the survey identified enhanced educational opportunities, improved connectivity and overarching principles as guiding principles or slogan that they believe Network Nebraska's services should stand for in the hearts and minds of its partners.

- When current users were asked what services or modifications to existing services they would like Network Nebraska-Education to provide, the largest number of respondents did not identify any followed by new services and more information related to Renovo scheduling/distance learning issues.

Potential Network Nebraska Partners:

- Potential users responding to the survey identified student learning opportunities and cost sharing as the two most important attributes for their institution if they were to become a Network Nebraska partner.
- Potential users identified reliability, membership/participation fees, network speed and technical support as their biggest concerns if their institution was to become a member of Network Nebraska.
- When potential users were asked what they know or have heard about Network Nebraska-Education the majority stated that they had limited or no knowledge. When asked about what questions they have about Network Nebraska-Education many responded with none/not enough information followed by questions about benefits and related services.
- Potential users responding to the survey said that educational partnerships should be the most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities to partner with Network Nebraska. The same number of potential users responded by saying that more information was needed in order to respond to the question.
- Learner focused followed by network focused are the two short phrases defined by potential partners for the guiding principle or slogan that Network Nebraska-Education services should stand for in the hearts and minds of its partners.

Conclusions

The survey highlights both challenges and opportunities for Network Nebraska to better serve existing partners and adding new partners to the network.

1. With the maturing of Network Nebraska and Network Nebraska-Education as a service provider for public and private K-12 and higher education, existing partner interests are shifting more to student learning opportunities and coordination of distance learning opportunities. However, this doesn't diminish the importance of network reliability, reduced cost/cost sharing, and continuing to improve the governance structure.
2. For both existing partners and potential new partners there continues to be limited knowledge of network benefits, costs and services.
3. Existing partner public relations initiatives and new partner marketing campaigns should focus on reduced costs, shared resources, student learning opportunities and statewide access. Each of these initiatives should be customized for the intended target audience.

Recommendations

1. Marketing Task Group should use the findings from the 2009 Market Survey Report and update the Network Nebraska marketing plan by April 1, 2010.
2. Network Nebraska–Education Advisory Group to utilize the 2009 Market Survey Report data to guide development of network leadership, services and support.
3. Continue to annually reissue the survey to evaluate the success of the recommended Action Plan(s) and ensure the future of Network Nebraska values. Add survey branching to better identify the opinions of: K-12 and higher education, partners and potential partners, geographically separated institutions, to determine if responses are different for each of the subgroups.
4. Put in place a more aggressive communications plan for existing partners and potential new partners.

Methodology

The survey was developed using an online survey tool, *Survey Monkey*, and an invitation to participate was distributed by members of the Education Council Marketing task group to administrative and technical staff of the following public and non-public education entities around the State. A reminder was sent midway through the 18-day survey period.

- Community Colleges
- State Colleges
- University of Nebraska
- Independent Colleges and Universities of Nebraska
- Educational Service Units
- K-12 public and nonpublic schools

See Appendix B: Invitation to Participate

Results of the survey were evaluated in two processes. The first process categorized the data into themes by sorting the responses to each question with specific topics listed in highest to lowest significance for each question. Pie charts were created from the demographic data and bar graphs created from the categorized data to provide a graphical interpretation of the results.

The second process reviewed the questions and responses using a SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats). Each category determined in the first process was tagged as a strength, weakness, threat, or opportunity referring to the specific responses when needed to verify the validity of the tag. These tags were then sorted with the top four concentrations presented for each element. It should be noted that strengths and weaknesses are considered *internal* elements, and opportunities and threats *external* elements of a SWOT analysis from which action plans are determined.

See Appendix C: Survey Responses

Study Limitations/Biases

The reader should keep in mind the response rate when interpreting the results. The total number of survey log-ins from current and interested Network Nebraska partners was 335. Approximately 332 individuals completed the demographic questions, of which 236 (70.4%) of the respondents completed one or more textual responses originating from existing and potential Network Nebraska partner elements of the survey.

While the study provides useful information in understanding motivations and perceptions of current and potential users of Network Nebraska—Education, further research is necessary to address items listed under both opportunities and threats in the SWOT Analysis section of the survey. As with any web-based survey, each respondent was motivated enough to open the survey link which may indicate biases, either positive or negative, towards Network Nebraska—Education. The thematic categorization of textual responses for each question was the opinion of two researchers and could be categorized differently by different reviewers.

Survey 2009 vs. Survey 2010—What’s different?

Although the basic survey and survey methodology remained the same from December 2008 to December 2009, some questions for prospective users were modified slightly to better gauge their perceptions of Network Nebraska—Education. If a respondent checked “Other” (i.e. job role), a comment box was included to have them identify their particular job role. Survey participants were asked to rate particular attributes of the network based on the relative importance or level of concern to them or their institution.

Survey Results and Analysis

SWOT Analysis from Survey Data

<p style="text-align: center;">STRENGTHS</p> <p style="text-align: center;"><i>Characteristics important to the execution and ultimate success of the project</i></p>	<p style="text-align: center;">WEAKNESSES</p> <p style="text-align: center;"><i>Internal factors that could prevent the achievement of a successful project result</i></p>
<ul style="list-style-type: none"> • Student Learning Opportunities • Partnering/Equity <i>(includes shared services, costs, and technical support)</i> • Improved Connectivity <i>(includes Intra/Internet, 1-2, bandwidth, and reliability)</i> • Shared Costs 	<ul style="list-style-type: none"> • Communication <i>Limited or no knowledge of benefits, costs, and services</i> • DL Coordination
<p style="text-align: center;">OPPORTUNITIES</p> <p style="text-align: center;"><i>External elements helpful in achieving the goals of the project</i></p>	<p style="text-align: center;">THREATS</p> <p style="text-align: center;"><i>External factors that threaten project success</i></p>
<ul style="list-style-type: none"> • New / Shared Services <i>(includes applications as well as network support and infrastructure)</i> • DL and IVC <i>(includes course offerings and quality, coordination, and Renovo improvements)</i> • Leadership / Governance • Membership 	<ul style="list-style-type: none"> • Membership <i>(includes adding new members and retention of existing members)</i> • Increases in costs • Technical Support • Network concerns <i>(includes speed, reliability, equity)</i>

2009 vs. 2010 Trends—What Network Nebraska entities are telling us

After having administered the survey for two consecutive years, it affords the opportunity to compare data and begin to assess whether the perception of the network environment has changed, based on the responses of the participants and potential participants. Certainly, there have been changes in perceptions, as evidenced by the following table. As with any uncontrolled survey sample, longitudinal data has some intrinsic variability due to the fact that different individuals take the survey each year.

Comparisons of 2008 and 2009 Survey Results

Key Indicator	2008 Survey Response	2009 Survey Response
Strengths	Reduced/shared costs Bandwidth/Speed/Capacity/I-2Statewide connectivity Technical experience & support	Student Learning Opportunities Partnering/Equity Improved connectivity Shared costs
Weaknesses	Leadership/Governance Membership Communication Help Desk/Support	Communication (limited or no knowledge of benefits, costs, and services) DL Coordination
Opportunities	IVC/Dist Learning & Collaboration Shared Resources Advanced Services Training/Professional Development	New/Shared Services DL and IVC Leadership/Governance Membership
Threats	Cost/Funding Loss of control at local level Redundancy/Reliability Equity	Membership Increases in costs Technical support Network concerns (speed, reliability, equity)
Existing Network Partners	2008 Survey Response	2009 Survey Response
Strengths of NN Services	Lower costs Statewide Access/Geographical Network Services/Internet 2 Distance learning & IVC	Student learning opportunities Reduced cost/cost sharing Reliability Communication/collaboration
Weakness of NN Services	Governance leadership Reliability Slow network Communication/collaboration	Distance education coordination Connectivity concerns No known weaknesses Communication and collaboration
Most Compelling Competitive Advantage of NN	Lower cost Shared resources	Reduced costs Student learning opportunities
Guiding Principle/Slogan of NN	Shared resources Advanced Technology/Bandwidth	Enhanced educational opportunities Improved connectivity
Services or Modification to Existing Services Desired	Help Desk/Support Faster/More Internet Leadership/Governance	None expressed New Services Renovo/Distance Learning Issues

Potential Network Partners	2008 Survey Response	2009 Survey Response
Most Compelling Competitive Advantage of NN	Don't know Cost Shared resources	More information needed Professional/educational partnerships Bandwidth/connectivity
Guiding Principle/Slogan of NN	Cost over bandwidth Equity and accessibility Student centered	Learner focused Network focused Unknown
What Services Would Benefit your Organization	Access Specific Services Profession Development/Training	More student learning opportunities Services and support Internet and transport

ACTION PLAN(s)

To be completed by task groups (see *Recommendations* section of this report).

Survey Results and Analysis

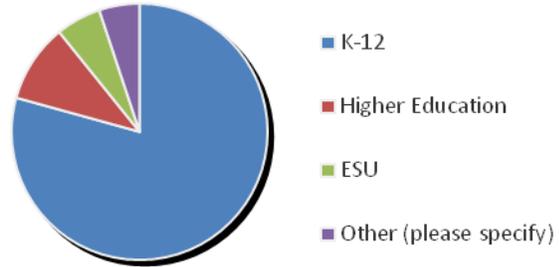
NITC Education Council
Market Survey • Dec 2009

Total Surveys Started	335	
Total Surveys Completed	236	70.4%

1. Please choose one for each of the following that best describes you:

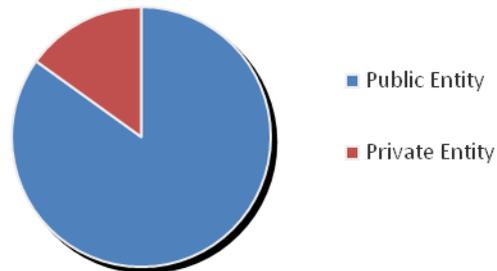
1a

	Percent	Responses
K-12	79.2%	263
Higher Education	9.9%	33
ESU	5.7%	19
Other (please specify)	5.1%	17
Answered question		332
Skipped question		3



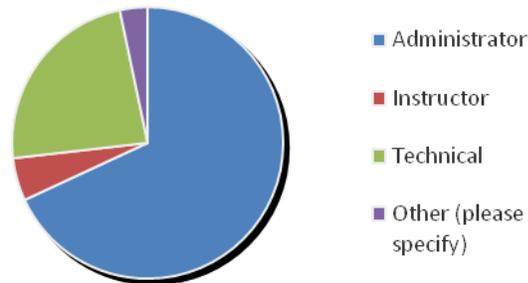
1b

Public Entity	84.9%	282
Private Entity	15.1%	50
Answered question		332
Skipped question		3



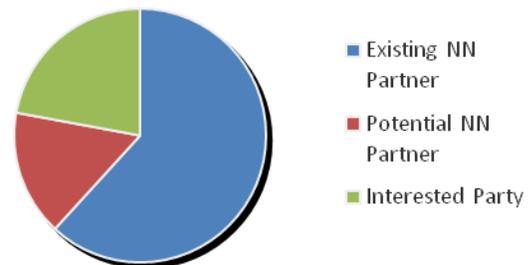
1c

Administrator	68.10%	226
Technician/Technical	23.50%	78
Instructor	5.10%	17
Other (please specify)	3.30%	11
Answered questions		332
skipped question		3

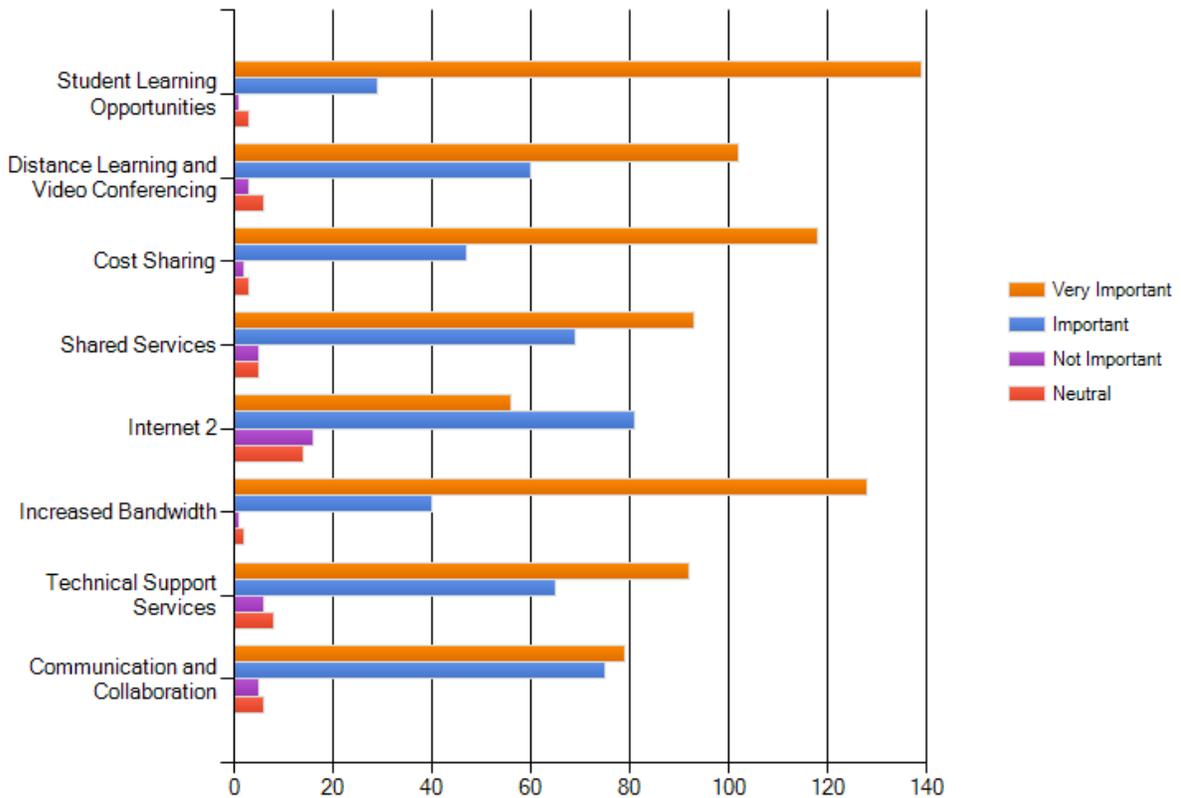


1d

Existing NN Partner	61.8%	207
Interested Party	22.1%	74
Potential NN Partner	16.1%	54
Answered question		335
Skipped question		0



2a. Reflecting on your experience as a Network Nebraska-Education partner please rate the following attributes based on their relative important to your institution:

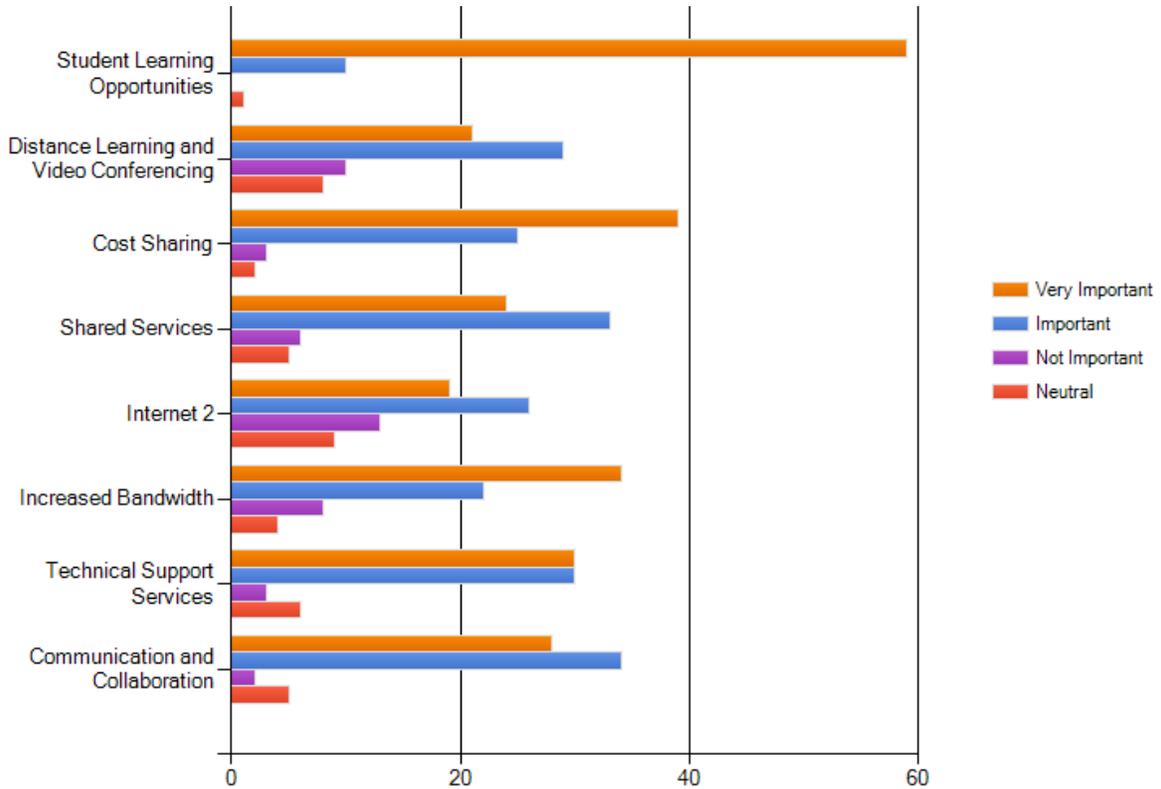


N = 170

Comments:

1. Need to continue to increase student use and principal knowledge of the system
2. So far we have not benefited a whole lot for what we are spending.
3. faster faster faster

2b. If you were to become a Network Nebraska-Education partner, rate the following attributes based on their relative importance to your institution:

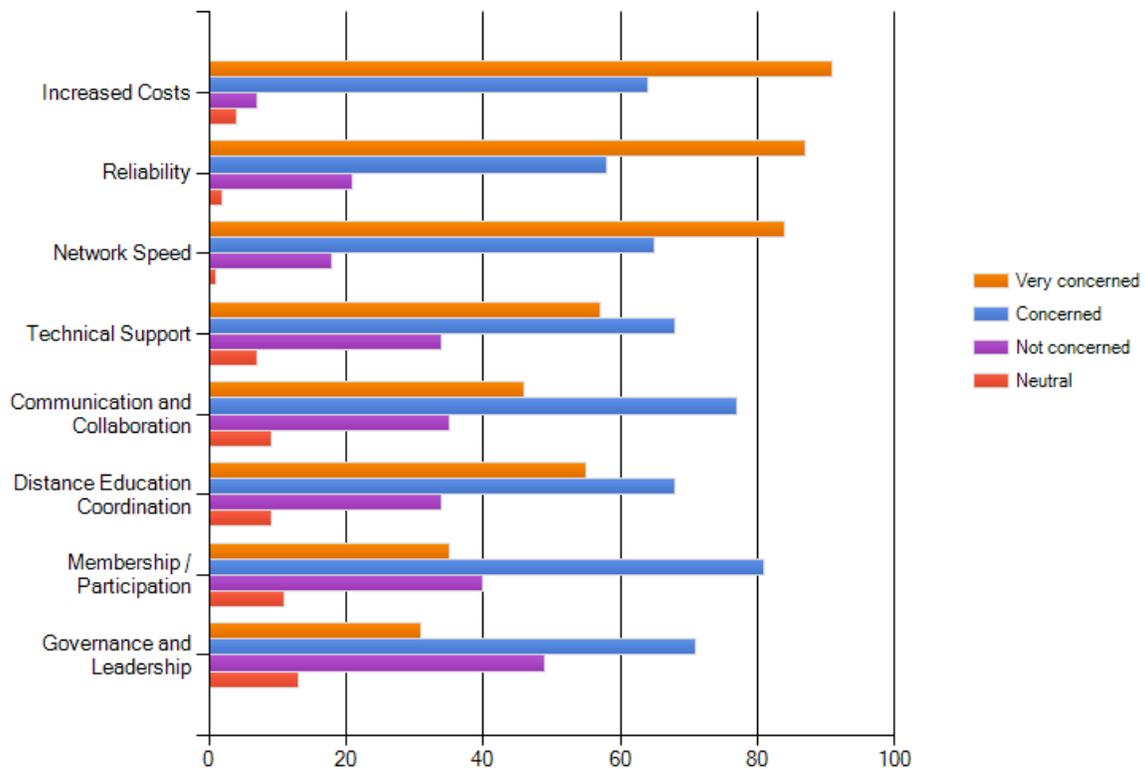


N= 69

Comments:

1. Using Network Nebraska would be decrease in bandwidth for us.

3a. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution:

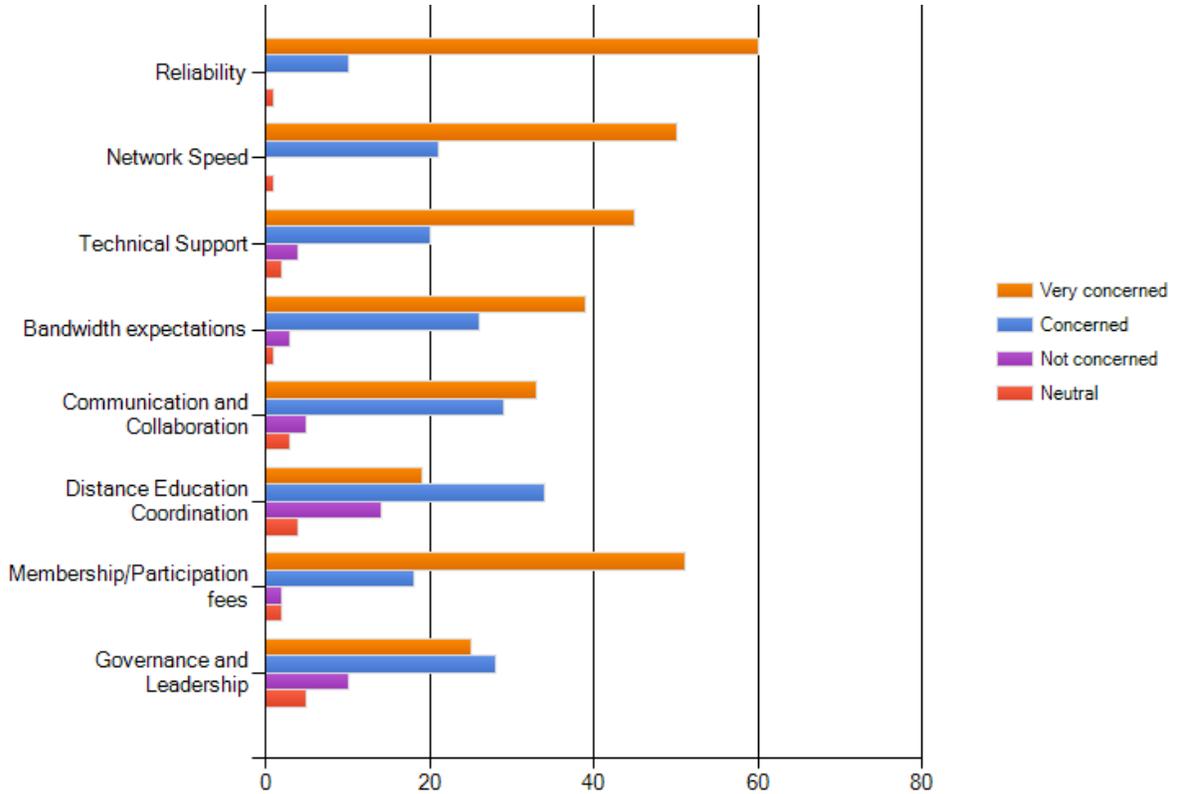


N = 167

Comments:

1. This network needs daily attention and leadership--like an Executive Director
2. What's wrong with the southeast schools--why haven't they joined the network?
3. Quality of courses, based on teacher effectiveness, is critical. Also, increasing dual credit courses is needed.
4. We need someone that has technical and excellent communication skills to advocate and provide trainings.
5. Money is a driving factor for us in everything we do. More for less is the mantra!
6. The one on the first page about being an existing, potential, or interested NN partner was unknown to me--I put existing even though I don't know.
7. I checked "Not concerned" for all these areas because I understood this as an evaluation of the services we have received. We are happy with the services we have received over the last year. We are especially pleased that the costs have been moving down, especially the declines in cost for Internet 1 access.

3b. If you were to become a Network Nebraska-Education partner, what would be your institution's level of concern with the following attributes?



N = 71

Comments:

1. For us the primary issues would be technical, especially any issue surrounding the transition from our current ISP.

Count responses for questions 2 and 3:

2. Please rate the following attributes based on their relative importance to your institution:

2a: Existing Network Nebraska-Education partner:					
Answer Options	Very Important	Important	Not Important	Neutral	Response Count
Student Learning Opportunities	139	29	1	3	172
Distance Learning and Video Conf	102	60	3	6	171
Cost Sharing	118	47	2	3	170
Shared Services	93	69	5	5	172
Internet 2	56	81	16	14	167
Increased Bandwidth	128	40	1	2	171
Technical Support Services	92	65	6	8	171
Communication and Collaboration	79	75	5	6	165

2b: Potential Partner / Interest party					
Student Learning Opportunities	59	10	0	1	70
Distance Learning and Video Conf	21	29	10	8	68
Cost Sharing	39	25	3	2	69
Shared Services	24	33	6	5	68
Internet 2	19	26	13	9	67
Increased Bandwidth	34	22	8	4	68
Technical Support Services	30	30	3	6	69
Communication and Collaboration	28	34	2	5	69

3. Please rate the following attributes based on the level of concern to your institution:

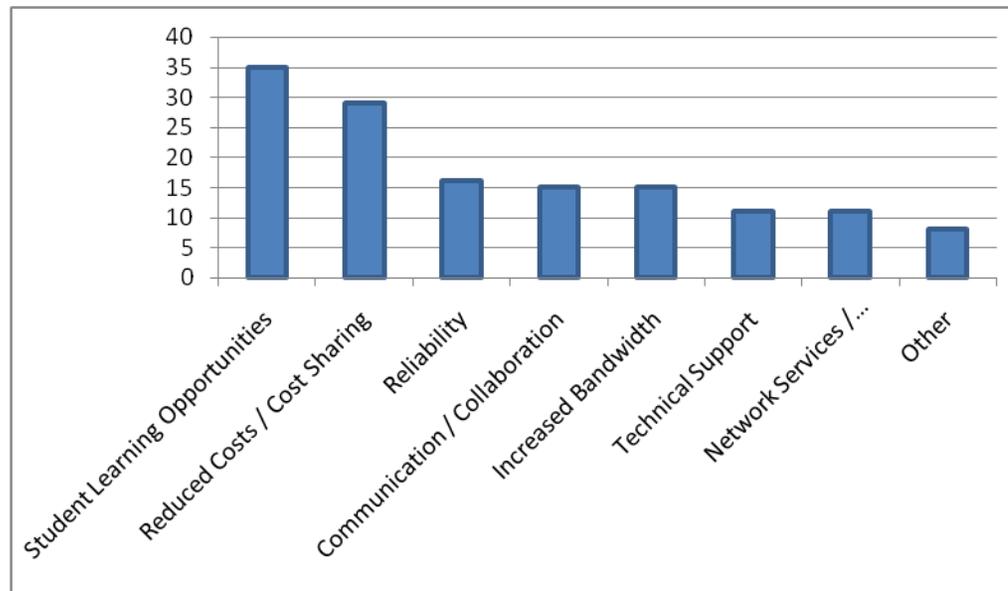
3a: Network Nebraska-Education partner:					
Answer Options	Very concerned	Concerned	Not concerned	Neutral	Response Count
Increased Costs	91	64	7	4	166
Reliability	87	58	21	2	168
Network Speed	84	65	18	1	168
Technical Support	57	68	34	7	166
Communication and Collaboration	46	77	35	9	167
Distance Education Coordination	55	68	34	9	166
Membership / Participation	35	81	40	11	167
Governance and Leadership	31	71	49	13	164

3b: Potential Partner / Interest party					
Reliability	60	10	0	1	71
Network Speed	50	21	0	1	72
Technical Support	45	20	4	2	71
Bandwidth expectations	39	26	3	1	69
Communication and Collaboration	33	29	5	3	70
Distance Education Coordination	19	34	14	4	71
Membership/Participation fees	51	18	2	2	73
Governance and Leadership	25	28	10	5	68

Pareto Charts of Survey Results from EXISTING users of Network Nebraska

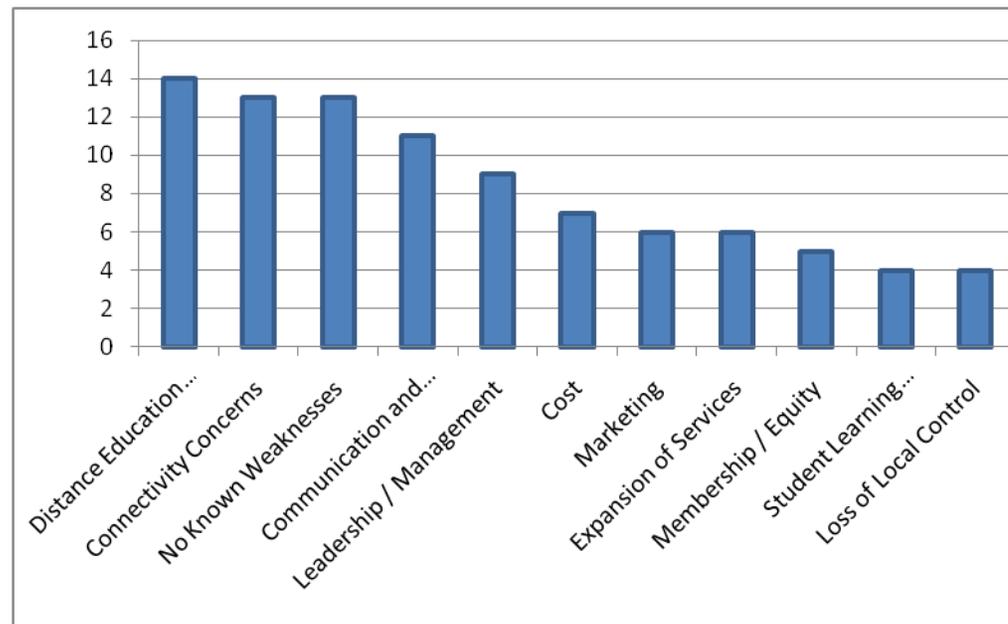
4. What are the strengths of Network Nebraska-Education services?

Student Learning Opportunities	35
Reduced Costs / Cost Sharing	29
Reliability	16
Communication / Collaboration	15
Increased Bandwidth	15
Technical Support	11
Network Services / Responsiveness	11
Other	8
	140



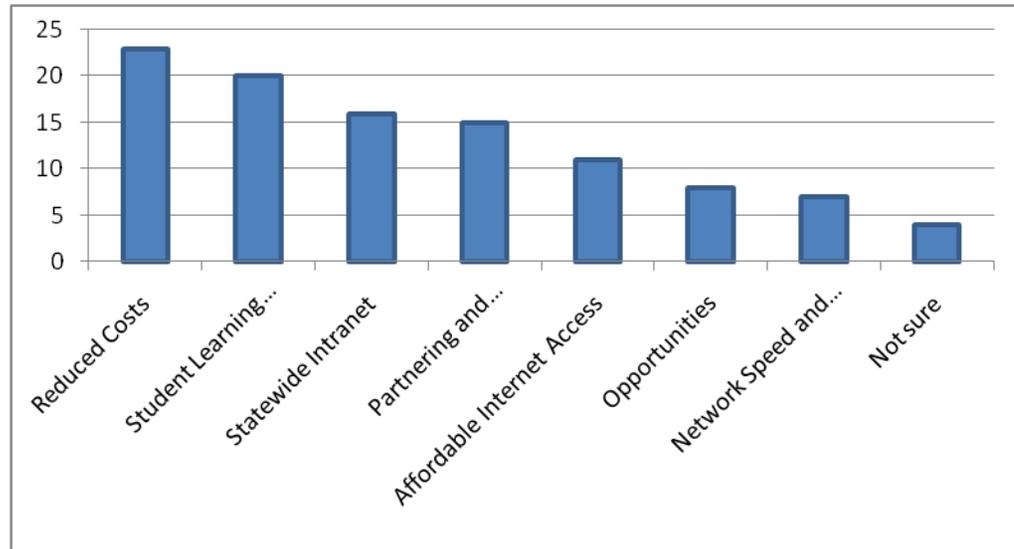
5. What are the weaknesses of Network Nebraska-Education services?

Distance Education Coordination	14
Connectivity Concerns	13
No Known Weaknesses	13
Communication and Collaboration	11
Leadership / Management	9
Cost	7
Marketing	6
Expansion of Services	6
Membership / Equity	5
Student Learning Opportunities	4
Loss of Local Control	4
	92



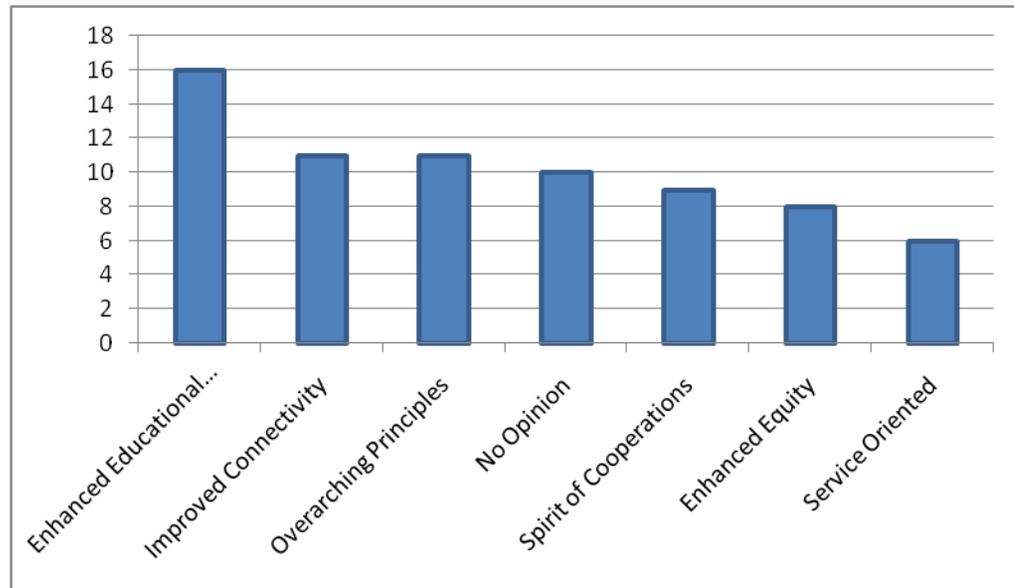
6. What is the single most compelling competitive advantage that makes Network Nebraska’s services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner with Network Nebraska?

Reduced Costs	23
Student Learning Opportunities	20
Statewide Intranet	16
Partnering and Collaboration	15
Affordable Internet Access	11
Unique Opportunities	8
Network Speed and Reliability	7
Not sure	4
	104



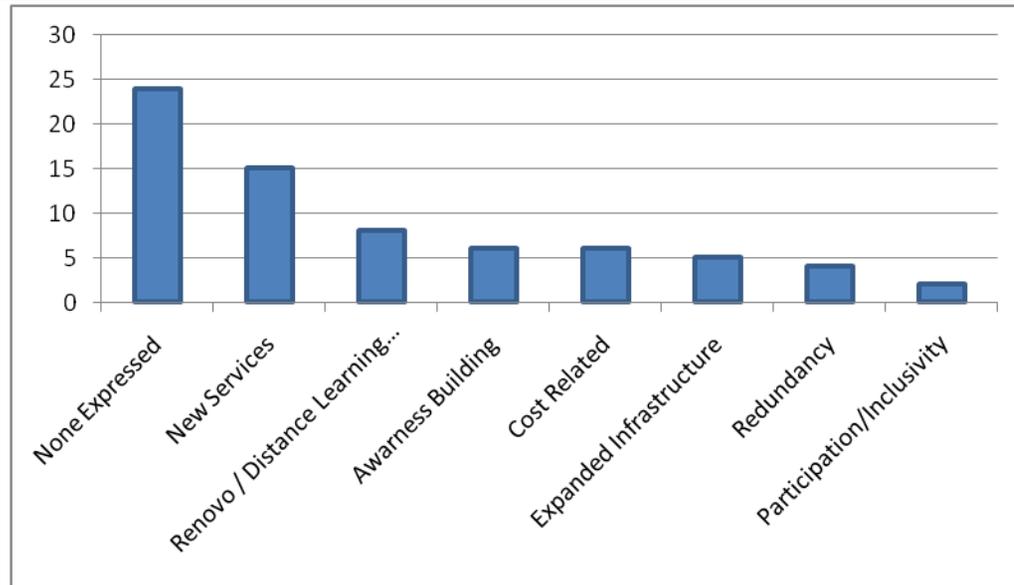
7. In a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services should stand for in the hearts and minds of its partners?

Enhanced Educational Opportunities	16
Improved Connectivity	11
Overarching Principles	11
No Opinion	10
Spirit of Cooperation	9
Enhanced Equity	8
Service-Oriented	6
	71



8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

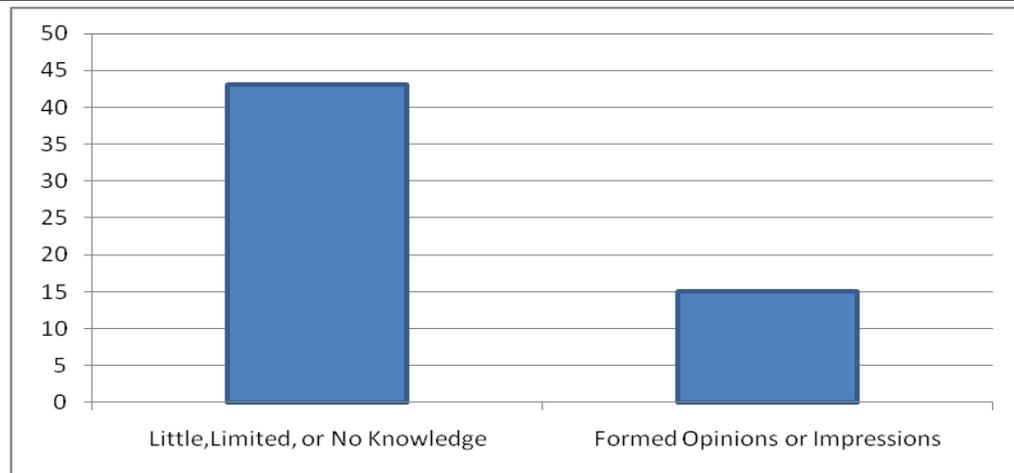
None Expressed	24
New Services	15
Renovo / Distance Learning Issues	8
Awareness Building	6
Cost-Related	6
Expanded Infrastructure	5
Redundancy	4
Participation/Inclusivity	2
	70



Pareto Charts of Survey Results from POTENTIAL users of Network Nebraska

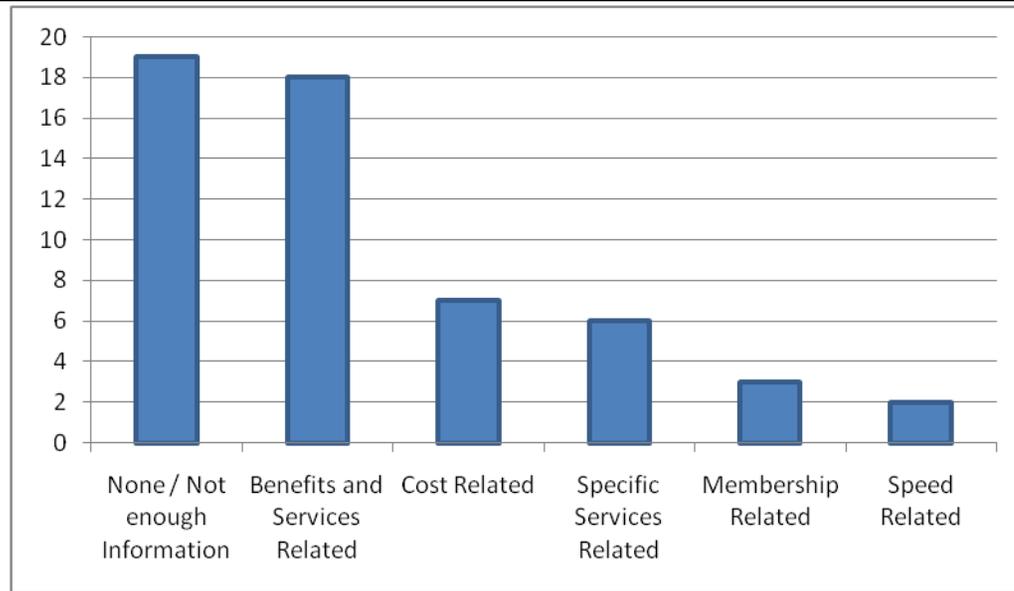
9. What do you know or have you heard about Network Nebraska-Education?

Little, Limited, or No Knowledge	43
Formed Opinions or Impressions	15
	58



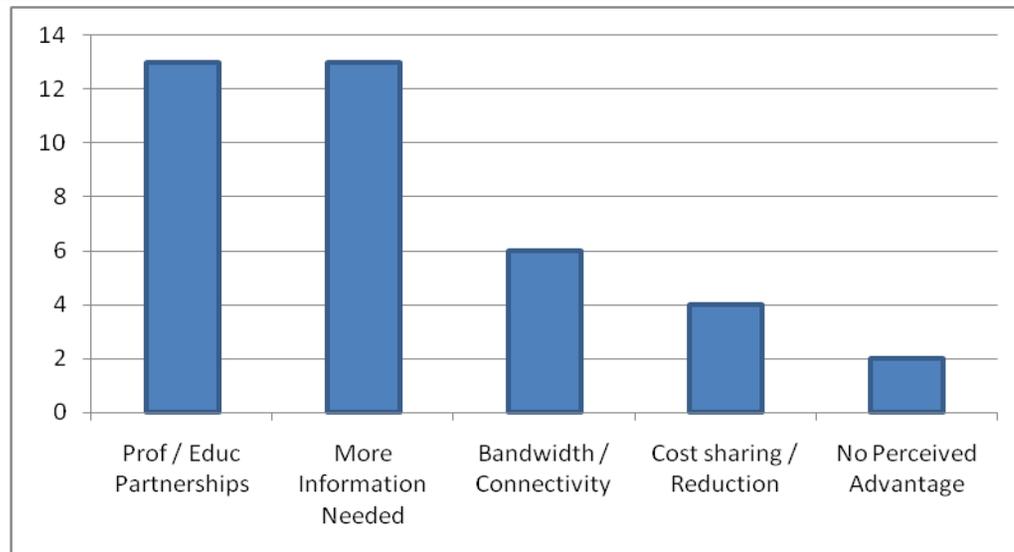
10. What questions do you have about Network Nebraska-Education?

None / Not enough Information	19
Benefits and Services Related	18
Cost Related	7
Specific Services Related	6
Membership Related	3
Speed Related	2
	<hr/>
	55



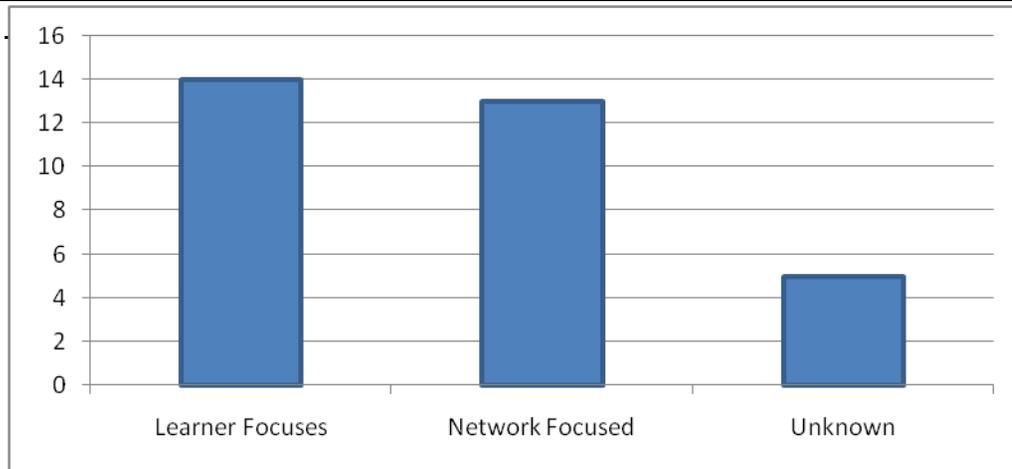
11. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner in Network Nebraska?

Prof / Educ Partnerships	13
More Information Needed	13
Bandwidth / Connectivity	6
Cost sharing / Reduction	4
No Perceived Advantage	2
	<hr/>
	38



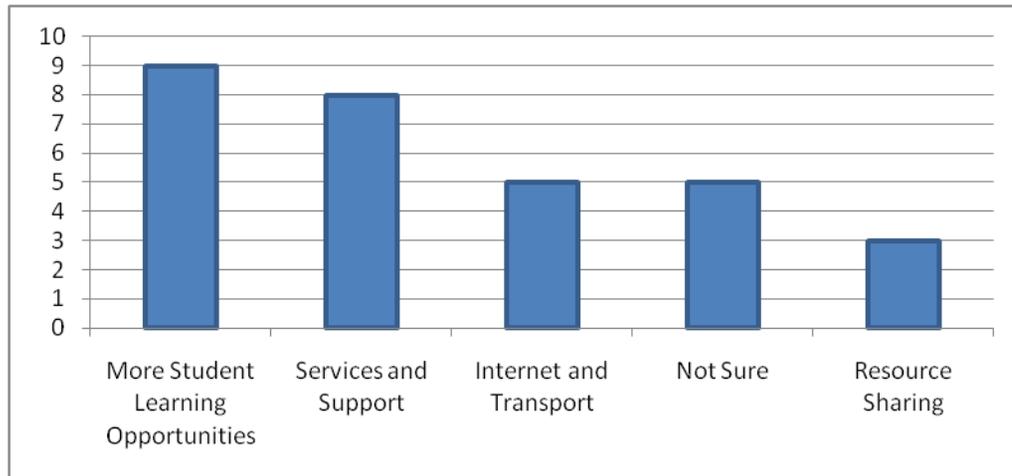
12. In a short phrase, what do you think should be the guiding principle or slogan that you believe Network Nebraska-Education services should stand for in the hearts and minds of its partners?

Learner Focused	14
Network Focused	13
Unknown	5
	32



13. What services would benefit your organization as a partner in Network Nebraska-Education?

More Student Learning Opportunities	9
Services and Support	8
Internet and Transport	5
Not Sure	5
Resource Sharing	3
	30



*** APPENDIX: A – Survey Instrument ***



Thank you for participating in the Network Nebraska-Education Market Survey. Its goal is to provide the Education Council with information to assist in developing a strategic plan that improves the visibility, awareness, and services associated with Network Nebraska-Education.

Network Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and associated service offerings and support. It is comprised of several subnetworks that includes Telehealth, Government, and K-20 Education.

Network Nebraska-Education offers network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet2 research and education network. Network Nebraska-Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is made possible by the public and private education entities of Nebraska.

All responses to this short survey will be kept confidential. Comments will be compiled and synthesized by members of the Education Council Marketing Task Group. Information will help improve both the quality and types of services provided by Network Nebraska-Education. Results will be posted on the NITC website.

More information can be found at:
NITC Education Council (www.nitc.nebraska.gov/ec)
Network Nebraska (www.networknebraska.net)

[Demographics for all survey respondents of Network Nebraska—Education]

Please choose one for each of the following that best describes you:

- ESU
- K-12
- Higher Education
- Other (please specify)

And choose one:

- Private Entity
- Public Entity

And choose one:

- Administrator
- Instructor
- Technical
- Other (please specify)

*** And choose one:**

- Existing NN Partner
- Potential NN Partner
- Interested Party

** At this point in the survey, respondents are directed to questions specific for existing partners or to questions specific for potential/interested partners.*

[Questions for existing partners of Network Nebraska—Education]

Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on their relative importance to your institution:

	Very Important	Important	Not Important	Neutral
Student Learning Opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance Learning and Video Conferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shared Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased Bandwidth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical Support Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication and Collaboration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other / Comments:	<input type="text"/>			

Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution:

	Very concerned	Concerned	Not concerned	Neutral
Increased Costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Network Speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical Support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication and Collaboration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance Education Coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Membership / Participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Governance and Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other / Comments:	<input type="text"/>			

What are the strengths of Network Nebraska-Education services?

What are the weaknesses of Network Nebraska-Education services?

What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities (Educational Service Units, public and private colleges, and public and private K-12 institutions) to partner with Network Nebraska?

In a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services stands for in the hearts and minds of its partners?

What services or modifications to existing services would you like Network Nebraska-Education to provide?

[Next, questions specific to Potential or Interested partners of Network Nebraska—Education]

Network Nebraska-Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is made possible by the public and private education entities of Nebraska. It offers its partners network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet2 research and education network. LB1208 (2006) tasked the Office of the CIO with providing access to every education entity (public and private, K-20 institutions) by July 1, 2012.

What do you know, or have you heard, about Network Nebraska-Education?

What questions do you have about Network Nebraska-Education?

If you were to become a Network Nebraska-Education partner, rate the following attributes based on their relative importance to your institution:

	Very Important	Important	Not Important	Neutral
Student Learning Opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance Learning and Video Conferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shared Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased Bandwidth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical Support Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication and Collaboration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other / Comments:

If you were to become a Network Nebraska-Education partner, what would be your institution's level of concern with the following attributes?

	Very concerned	Concerned	Not concerned	Neutral
Reliability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Network Speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical Support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bandwidth expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication and Collaboration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance Education Coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Membership/Participation fees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Governance and Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other / Comments:

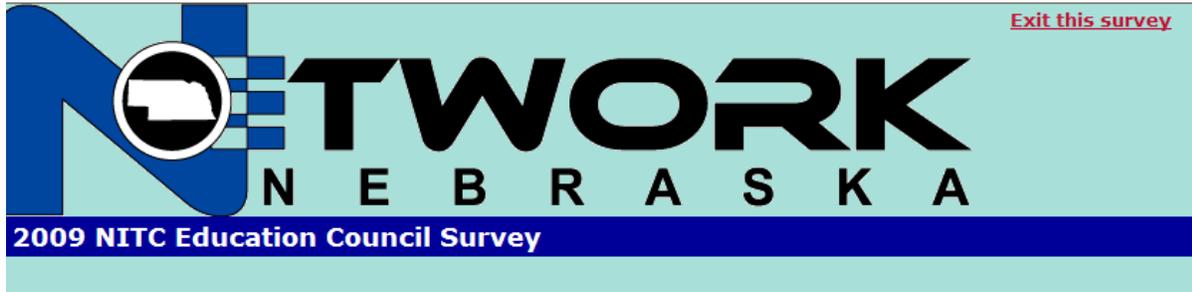
What is the single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner in Network Nebraska?

In a short phrase, what do you think should be the guiding principle or slogan that you believe Network Nebraska's services should stand for in the hearts and minds of its partners?

What services would benefit your organization as a partner in Network Nebraska?

[Prev](#) [Next](#)

[Final screen for both Existing and Potential Partners of Network Nebraska—Education]



If you have questions or would like to know more about Network Nebraska, contact:
Tom Rolfes (402.471.7969 or tom.rolfes@nebraska.gov)

You may share link to this survey with others in your organization.

NITC EDUCATION COUNCIL
MARKETING TASK GROUP

* * *

You will now be connected to the 2008 Network Nebraska Market Survey Report, Conclusions and Recommendations that resulted from last year's NITC Education Council survey. We welcome your comments and feedback.

[Prev](#) [Done](#)

[After completing the survey, respondents were connected to a URL displaying a PDF copy of the 2008 Network Nebraska Survey Report to reveal how their input directed decisions and changes in NN services.]

* APPENDIX: B – Invitation to Participate *

From: Arnold J Bateman [mailto:abateman@unlnotes.unl.edu]

To: Witt, SuAnn; Chuck Lenosky (clenosky@creighton.edu); Hoffman, Ed; Kozak, Mike; Golden, Rick; Steven Stortz (sstortz@clnorfok.org); Rolfes, Tom

Subject: Re: FW: DRAFT Survey and Cover Letter

Colleagues:

Thank you for meeting by conference call to work out final details on the survey. If I missed something of importance in the meeting summary let me know.

To maximize completion of the survey the task force members are asking that the following people forward the e-mail inviting individuals to complete the online survey. The following individuals will send out the e-mail invitation on Monday, November 30, 2009 or shortly thereafter:

Rick Golden --- University of Nebraska

Ed Hoffman --- State Colleges

Tom Rolfes --- Community Colleges

Tip O'Neill --- Independent Colleges and Universities

Mike Kozak --- Public K-12 schools and administrators

Mike Dulaney --- Public K-12 school administrators

Tom Rolfes --- ESU-Network Operations Committee, ESU-Technology Affiliate Group

Tom Rolfes --- NETA Technology Coordinators

Tom Rolfes --- NEHEIT (Nebraska Higher Education Information Technology group)

Steve Stortz --- Lutheran Schools of Nebraska

Jeremy Murphy --- Catholic Schools of Nebraska

Schedule:

◆Survey will be finalized and posted to *Survey Monkey*, November 25, 2009

◆First e-mail invitations will be sent Monday, November 30, 2009

◆Reminder e-mail should be sent on or about Friday, December 11, 2009

◆Last day to complete the survey is December 18, 2009

◆Data analysis to be performed December 21-30, 2009

◆Marketing group conference call the week of January 4 to discuss survey data and make assignments for conclusions, recommendations, SWOT analysis

◆Preliminary survey data will be presented at the Education Council meeting, January 7, 2010

◆Follow up meeting late January 2010 to complete the report and prepare presentation for the CAP, Technical Panel, Education Council, and Network Nebraska Advisory Group meetings in February 2010

Arnold Bateman

Associate Vice Chancellor for Extended Education & Outreach
and Director Extended Education & Outreach

University of Nebraska-Lincoln

Copy of Introductory email sent by NITC Education Council members to respective constituents

Dear Education Partner,

The Nebraska Information Technology Commission--Education Council has undertaken an important survey process to help the Network Nebraska statewide network enhance its position as a service provider and to better serve the needs of its partners.

This survey is designed to collect input from Network Nebraska's current and future partners in order to assist staff in improving the number, variety, and quality of services on the network.

As a result of responses from last year's survey

- A network advisory group was formed, providing a direct voice from partners to Network Nebraska operations.
- Services were expanded (e.g. traffic shaping, automatic notification system, and a 24/7 helpdesk).
- While increasing bandwidth, Network Nebraska participation fees and interregional transport costs remained level.
- Membership increased by 49 new entities due to increased outreach and communication.

The link below will take you to the short online survey (estimated time for completion is 5-10 minutes).

We would appreciate the participation of both the administrator and technology and distance learning coordinator most closely associated with Network Nebraska services. You may also forward this email and survey link to others within your organization or outside of your organization who have interest in Network Nebraska services. All input is appreciated.

If you have any questions about this survey, please contact SuAnn Witt suann.witt@nebraska.gov

Please complete no later than December 18, 2009.

Upon completion of the survey, you will be provided a link to view a copy of last year's survey report and recommendations. Your thoughtful feedback is appreciated.

The survey is available at: <http://www.surveymonkey.com/s/NDYJC2P>

Sincerely,
Marketing Task Group Members

NITC Education Council
<http://www.nitc.nebraska.gov/ec>

Network Nebraska
<http://www.networknebraska.net>

* APPENDIX: C – Survey Responses *

Survey Responses Processed by Common Theme

Numbers next to responses only indicate the order in which the response was listed in the text file and cannot be used to identify individual respondents. Repeated numbers indicate multiple categories implied.

[Responses to questions 1-3 are included in the analysis beginning on Page 10 of this report]

Responses from Existing Network Nebraska—Education Partners

4. What are the strengths of Network Nebraska-Education services?

- Communication and collaboration

2. The potential to share services
4. Collaboration and coordination.
5. We are becoming a larger group
6. Wonderful collaborative effort between K-12 and higher ed, public and private. The sky's the limit (eventually) with this self-funded network!
11. Having all K12 and education institutions on the same network. Having the tech support of Ben M.
15. The support and ability to collaborate with other schools.
21. standards across the state, cost sharing, collaboration among partners
36. Potential for Statewide increased communication
38. The ability to communicate throughout the state.
46. Distance Education Coordination and Communication
56. Increased education collaboration
58. Collaboration among members
76. Bandwidth and reliability provides potential for much greater sharing of resources and collaboration.
86. coordination, collaboration, cost effectiveness
92. Standing together for staff and students

- Reduced Costs / Cost Sharing

1. The basics are covered by Network Nebraska in a cost effective manner.
3. Lower costs
9. Lower costs
17. Cost sharing has reduced the impact on our institution.
18. Good bandwidth at an affordable price.
21. cost sharing
22. Cost effective solution for distance education
25. Cost is excellent
28. Good cost-sharing
29. Acquiring cost effective contracts with service providers
31. cost sharing
41. growth potential, cost effectiveness
45. Lower cost for bandwidth
51. At this point I would say shared cost and the possible ability to receive discounts for being part of a group.
55. Affordability,
56. Reduced costs
53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow us lower prices
63. Large group costs
72. Low price

- 75. Large entity thereby spreading costs & services.
- 77. Cost control
- 80. Costs
- 86. Cost effectiveness
- 88. Economies of scale in a state where this is difficult to achieve.
- 91. Cost-effective, coordinated, enterprise-class
- 93. Avoidance of Internet 1 bandwidth costs. Cost of Internet 1 access being pushed down through collaborative purchasing
- 94. The ability to purchase large amounts of bandwidth below normal prices those individual organizations would expect to pay.
- 95. The NN opportunities have greatly reduced our ongoing operating costs for internet bandwidth.
- 96. The potential to save costs to its members
- Increased Bandwidth
- 3. High speed access between sites
- 7. Band width
- 9. Bigger pipeline
- 17. Flexibility to add bandwidth
- 18. Good bandwidth to central NE.
- 36. Speed of IP services
- 40. Great connections between partners
- 45. Provides statewide backbone
- 48. More speed than we had before
- 54. Increased access/faster internet
- 55. Increased bandwidth
- 57. The speeds so far is awesome so hope that will continue
- 60. Internet access
- 77. Speed and reliability especially compared to schools in other states
- 80. Bandwidth
- Reliability
- 8. It has been a very dependable system
- 10. reliability
- 13. To this point it has been very stable & reliable.
- 16. Reliability
- 19. Very little downtime
- 22. Very reliable services
- 25. The reliability is great
- 27. For the most part it thinks NN is a solid reliable network
- 35. Our bandwidth and connection has been good so far this year. In the past, with other providers, we've lost connection on a regular basis and none of that has gone on this year.
- 41. Dependability
- 44. Reliability
- 50. Smooth connections from one school to the next... flexibility, connectivity
- 74. Reliability
- 78. This is the first year I have had comments that the internet seems to be faster. That is because we purchased extra bandwidth.
- 78. We haven't had any major issues with our DL or internet connection. Reliability is the biggest strength.
- 80. Reliability
- Technical Support
- 7. Technical service
- 11. Having the tech support of Ben M.
- 25. Support is very good
- 26. Ben Mientka does a good job of providing support for entities.
- 31. Technical support

- 60. Guidance
- 88. Professional management of a large network where finding that experience can be difficult
- 62. Quality assistance as needed.
- 80. Network support
- 83. Availability and response to problems.
- Network Services / Responsiveness
- 2. The ability to control traffic and provide reliable services.
- 19. Efficient, comprehensive service; consistent service;
- 39. Statewide services
- 52. Great service!!!!
- 57. Also the added level of Security to the network.
- 64. Depth of services
- 72. Ability to purchase gear like the packet shaper for services
- 93. Connection to Internet 2
- 93. Opportunities to improve disaster recovery and business continuity
- 93. Options through placing servers/services at the core nodes of the network.
- 96. Sharing services that drain resources at the local level.
- Other
- 2. Local Ownership
- 22. Telehealth delivery
- 30. First Year
- 49. We are a new member and have only used NN for our connections for about 4 months for video and 2 months for data (Intranet) I can't say what the strengths, weaknesses are at this time. We would need more time to evaluate this.
- 59. Its strength is its potential.
- 70. The overall goal is the strength.
- 71. It is still too early to tell...I believe we are still in the infancy stage, therefore, I am not sure we have been at it long enough to identify strengths.
- 79. Unknown
- Student Learning Opportunities
- 8. Provided excellent opportunities for our rural area.
- 12. Ability to meet educational needs of students and staff.
- 14. Gives all school equal opportunities
- 16. Shared resources with institutions of similar interest
- 20. Providing quality education throughout Nebraska
- 23. Availability of resources/classes.
- 24. Potential for options for students.
- 32. Ability to reach more students with added efficiency
- 33. opens rural NE students to the world; we are desperately in need of foreign languages.
- 34. Possibility for increased offering in small rural schools.
- 36. Increased access to classes for student
- 36. Increased information available to students, faculty and staff
- 37. Wide range of opportunities for class offerings
- 42. Allowing rural areas, especially those in western Nebraska, the opportunity to access a wider variety of courses via distance learning
- 43. Expanded choices for our students.
- 47. The many opportunities for students.
- 53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow increased opportunities in the future. I am more concerned with the increased in educational opportunities and services however.
- 55. More technology services are available to students and staff
- 56. Education opportunities.
- 57. DL I think is the most.

- 58. Collaboration among members.
- 60. Distance learning access
- 61. The ability to go statewide for DL courses
- 65. Increased offerings to our students of smaller schools
- 66. Rural schools with limited resources can access quality educational opportunities for students via Network Nebraska
- 67. We just have to have technology with our rural situation.
- 68. Able to receive classes from other districts. This gives a broader variety of classes for your students.
- 69. Opportunities for students.
- 73. More opportunities
- 81. Opportunity to share with other schools across the state.
- 82. Able to find classes for a variety of students across the state. Helps with accreditation issues and teacher shortage in certain areas.
- 84. The service is always available providing classes or educational opportunities for all of our students.
- 85. Increased course offerings. Dual credit classes
- 89. Our school has grown its capacity in 21st century learning which would not have been possible without NN.
- 90. Access to the internet and many distance learning offerings that our school would not have.

5. What are the weaknesses of Network Nebraska-Education services?

- Distance Education Coordination

- 19. Still not enough information about classes outside of our esu area.
- 29. Limited scheduling availability.
- 34. Class times do not always match school times
- 35. Scheduling
- 36. The Distance Learning system - Renovo - does not work well. It needs to be updated or get a new partner.
- 38. Scheduling issues for DL classes from one time zone to another and from one school district's bell schedule to ours
- 39. Need greater communication as to what is available for students k-12.
- 56. School agreements with other schools do not allow for any other institution to take the class.
- 60. Don't always hear about classes until there is no space left.
- 75. Coordinating class times.
- 76. Renovo scheduler
- 77. Distance Education Coordination
- 79. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 80. Distance learning is a concern since not all schools are not on the lifesize system. It creates connection problems and sound and video problems.
- 82. Not able to match more schools across the state with offerings

- Student Learning Opportunities

- 1. Not much thinking about "last mile" or curb to household connection. As we move to 1:1 models in our schools, we'll need to be able to guarantee access to our digital resources from our students' homes. What should this look like? What will this mean for NN?
- 43. Lack of dual credit classes.
- 49. The need for virtual learning/High School
- 72. If you open up the curriculum for all students in NN then the concern is paying for all the classes. I would hope we can all work together when we share teachers.

- Connectivity Concerns

- 3. No redundancy or alternative infrastructure available if a network outage occurs
- 11. Easy of access to the CCC college locations.
- 12. Large network possible breakdowns
- 13. The reliability of the network is low.
- 21. Use by school districts.

23. Redundancy

24. A "statewide" network that stops at Grand Island; lack of redundancy

28. The speed and the glitches experienced periodically.

51. At the present time, Network Nebraska has focused on educational needs. As we grow in educational needs, more bandwidth will be needed to expand our resources.

55. It doesn't always work the way we want it to (connections)

64. Tech issues

68. Lack of lower-end options for schools not needing to take full advantage of distance education services. We have an elementary school in a different city (through school merger), but it is cost prohibitive to bring them on Network Nebraska. We have a residential DSL connection, which means none of their traffic can see the benefits of the closed NN network.

80. Network speed is very much an issue.

• Marketing

7. Student and principal knowledge of how to best use the system to expand student learning opportunities

47. I believe the current weakness of Network Nebraska is the angle we're currently using to sell the viability of this union of educational institutions. We need to get out and show people how we're using the capabilities that NN has brought about instead of just telling them.

58. Not a lot of participation and not very well advertised for the benefits to educators

67. Not enough publicity to techs/admins about what it is and what it is for, how it can be leveraged for the future, etc.

83. Marketing of the advantages that Network Nebraska-Education offers.

85. Awareness of opportunities.

• Expansion of Services

2. Lack of value added services beyond collaborative

15. Technical training

41. Do not duplicate services that ESU's can provide, such as Tech support.

53. Services aren't really anything more than we received prior to Network Nebraska except for additional costs for the Network.

69. The coordinators for the DL system rely on the local school technician to fix issues with the DL system. If they are going to rely on that then they need to have some sort of training on the equipment.

81. Limited number of application services. The mantra, "if you build it, they will come" definitely applies. I might add, "If you don't increase the application services they may leave" as vendor pricing in large metros will rival NN. The differentiation comes in the application services. NDE needs to become a player and figure out how they can provide services including statewide learning management, statewide content management, statewide student information, statewide ERP. The vision should be toward a service-optimized cloud connected to NN and offering better applications at lower prices than individual entities could possibly afford.

• Cost

2. The threat of increased costs for K12.

9. Cost

30. Cost of the equipment and services.

40. Cost

49. Always concerned about costs.

61. Cost is still high.

83. High connectivity costs for some locations to get on the network (conduit).

• Communication and Collaboration

15. Transparency of connection and cost information

16. We feel pretty removed from the process out here in central/western NE. The service has gotten better and I know you try and inform us about what is going on, our remoteness just limits the contact and personal attention.

17. MAKING NETWORK CHANGES THAT AFFECT US and OUR PARTNER INSTITUTIONS AND FAILING TO NOTIFY THOSE INVOLVED...this happens frequently and causes havoc with our events/classes.

20. Lack of communication statewide.

22. More updates of future directions would be nice.

32. Need more/better communication about how to access some of the Net 2 services
 -Could use more communication about how higher education can benefit from Net Neb since there is no E-rate benefits or financial reimbursements.
39. Need greater communication as to what is available for students k-12.
54. Not much is known by administrators in districts with technology director or solely utilizes ESUs
63. Communication had previously been low until Ben was hired
66. Overall size results in sometimes delayed services and communication.
78. Lack of communication regarding network services and offerings as the network grows. Unknown channel of communication other than through my ESU. (maybe that is preferred. It would be good to know that.)
- Membership / Equity
4. Voluntary option rather than mandatory.
5. Too many are not in the group.
8. Far Western NE not as well served as the Eastern half
33. Seems some districts are looked out for over other districts.
59. We are concerned with distances involved with communication, infrastructure issues, and equity of educational opportunities.
- Loss of Local Control
2. Local Ownership
10. Not having more control of the NET Ne costs to schools for services.
41. Loss of local control is a concern
42. Increased levels of state involvement and accountability
- Leadership / Management
2. Lack of clear cut policies that are enforceable!
2. Too much administrative overhead; lack of direction.
6. That it cannot grow as fast as other networks, given that it is self-funded.
14. The organization should have an "elected" board that represents ALL levels of institutions.
25. No one in the current leadership has the pulse of all Education sector needs and vision to provide those needed services; NN response to needs is often delayed because of purchasing rules, requirements, or other political hurdles
37. Over sold connections to the internet. We also potentially have some configuration needs and issues.
83. Still dealing with a lack of trust and therefore cooperation from some potential participants.
84. Doesn't have the ability to act in a quick manner due to needs of users because of bidding requirements.
86. Lack of go-to leadership directly responsible for achieving NN-Education goals on behalf of its members.
- Continuing to grow the network so its benefits extend beyond LB1208 for K-12
- No Known Weaknesses
18. None come to mind.
27. None
31. None I can see.
45. None
46. None so far for us.
48. NA
50. I have not found any as of yet. This is a great system that allows us to be connected and reduce travel time in this remote area
52. None
65. None.
70. Unknown
71. None
73. None that I can think of at this time.
74. I have not found any at this point.
- ?????
26. First Year
44. See above answer
57. Only as strong as its members

62. Not there yet.

6. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities (Educational Service Units, public and private colleges, and public and private K-12 institutions) to partner with Network Nebraska?

• Network Speed and Reliability

1. Comprehensive service at value.

28. Large network with adequate bandwidth at cost effective prices

31. Technical support services

51. However, I believe that when we begin to look at the future implications of building the net work we're going to find that increases in bandwidth and speed

70. More classes and network speed

71. Reliability

84. Reliability

• Unique Opportunities

17. Only game in town

23. Uniqueness of options.

39. We also need NDE to be more flexible and willing to not tie funding to traditional classroom attendance.

52. Ease of use/accessibility

65. We are all trying to manage a small number of students into a broad market.

73. State aid incentives

89. Ultimately, it will need to be about the application services.

93. Administration and service management - coordination of the complex elements including RFPs, Erate, billing, troubleshooting, etc.

• Affordable Internet Access

3. increased bandwidth and connectivity for all

7. Cheap and reliable Internet

18. Strength of being able to purchase bandwidth at a more competitive price.

21. Provides statewide network reach at an affordable price. Provides internet 1 and 2 services as a very reasonable price.

40. Cost per meg of bandwidth

49. For us the huge increase in bandwidth.

63. Safe internet usage by students

69. Cheap internet access

86. Inexpensive Internet services.

90. From a private college perspective it is Internet1/Internet2 access at comparatively low prices.

91. Amount of bandwidth that we have been able to purchase at a reasonable cost.

• Statewide Intranet

2. The ability to tie all institutions together via a reliable and effective network.

4. High speed connections to various office locations across the state to allow video-conferencing, collaboration, etc.

5. Leveraging buying power of the educational group.

11. All on the same network, before hitting the internet.

13. The opportunity to access the entire state

24. The connections to other educational institutions is very helpful. This helps us save cost and complications on any collaboration.

25. Network connectivity/close proximity to other educational entities within Nebraska.

27. Plus once you are a NN member you can video conference, etc. with other NN members without major concern of bandwidth limitations

34. All based on same system.

47. Inter-connectivity with all other schools belonging to NN as well as overall speed of connections.

50. Everybody has the same capabilities, such as speed of internet, etc.

- 54. Connectivity with the all institutions to enhance video conferencing without travel time.
- 62. State wide access and coordination between schools
- 64. Common communication network.
- 74. It is a closed, controlled network with many levels of network protection from outside intruders.
- 81. Statewide link.
- Student Learning Opportunities
- 8. Expanded academic opportunities for students
- 9. Online courses
- 10. The ability to connect over high bandwidth to other schools in the state for distance learning opportunities.
- 19. I thought we had to join to gain access to classes outside of our area.
- 32. Increased opportunities for our students.
- 35. Potential for offering more courses to more students.
- 39. The continuing ed opportunities are endless.
- 41. Being able to offer courses to our students (dual credit, college level, etc.) that we would not be able to otherwise due to staff limitations
- 42. Dual credit classes.
- 45. Statewide distance education opportunities
- 46. Scheduling and ease of scheduling
- 48. It expands the learning opportunity for students.
- 51. Will allow us to make better use of DL possibilities such as collaborations, virtual field trips, and shared resources.
- 56. Ability to provide services to a wide variety of students and communities.
- 57. The whole concept of DL and what you can do with it. Also purchasing power on internet speeds.
- 60. Make distance learning available to districts who must have it to survive
- 70. More Classes
- 79. The curriculum opportunities for all students.
- 82. Schools can offer services or classes for their students that they would not be able to have monetarily without it.
- 88. Distance Learning Opportunities.
- Reduced Costs
- 14. I think the cost sharing...with today's budgets we have to cut costs wherever we can!
- 15. Cost reduction thru cost sharing
- 16. Cost savings! and grant money available.
- 20. Cost
- 26. Cost
- 27. The cost is probably the biggest advantage,
- 30. Cost
- 31. Cost sharing and
- 33. Shared costs for the services
- 36. Shared cost
- 38. Opportunities and cost of those opportunities with fast internet
- 51. I believe the overall current belief is cost effectiveness.
- 53. Low cost Bandwidth
- 55. Reduced costs
- 57. Also purchasing power on internet speed
- 60. Keep internet cost reasonable for educational purposes
- 66. It does decrease the cost involved.
- 71. Cost reduction
- 75. Keeps the costs down.
- 80. Relatively low costs.
- 83. Cost
- 89. At this time it is the coordination and pricing.

92. Cost

• Partnering and Collaboration (Collegiality)

- 6. One group, one voice is the most power we can have.
- 12. Ability to share costs and service coordination.
- 22. Having all entities working together in one organization.
- 33. Shared costs for the services
- 37. Communication
- 43. Who's involved (schools)
- 44. Statewide network and having everyone on board
- 58. People working together for the same mission, educating kids.
- 61. Potential sources and resources.
- 68. Network Nebraska involves more partners which may provide more opportunities for students in the state of Nebraska.
- 72. Strength in numbers supports cost efficiencies & services.
- 77. Collaborative efforts
- 78. Collaboration.
- 85. It is available to schools of all sizes.
- 87. Consortium participation

• Unknown

- 29. First Year Member
- 59. Don't know.
- 67. No opinion.
- 76. Unknown

7. Provide in a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services stands for in the hearts and minds of its partners?

• Enhanced Equity

- 20. Reaching out to more students in rural/remote areas
- 28. Bringing bandwidth equality to Nebraska education entities.
- 32. Hopefully a State wide effort for cooperation in providing this service to all the schools in the state
- 38. Equal access to all entities
- 47. Equitable opportunities for all students in Nebraska.
- 53. "Outstate" entities benefit more, collectively, instead of being "2nd" to eastern competitors.
- 68. Equalized access for all entities.
- 70. Equitable access to network resources for the importance of educating future generations.

• Improved Connectivity

- 1. Our digital backbone!
- 4. Increase bandwidth and opportunities across the state of Nebraska
- 12. Increased infrastructure, bandwidth, and service.
- 15. Statewide network!
- 16. Remove the distance barriers!
- 17. Connecting K-20 entities in Nebraska
- 27. Many connections
- 30. Connecting students through technology.
- 35. Connecting Nebraskans in Learning
- 40. Connectivity today and tomorrow around the state.
- 54. Provide high quality bandwidth for educational use.

• Enhanced Educational Opportunities

- 6. Network Nebraska--delivering educational opportunities at the speed of light
- 7. Making a difference in student learning
- 9. Not sure perhaps educational opportunities for all Nebraskans
- 21. Opening schools' doors to the world...

- 22. Offering more learning to more students.
- 24. Increased opportunity for statewide academic partnerships and expanding information horizons.
- 29. Equal educational opportunity for all
- 33. Statewide distance education opportunities
- 34. Increased opportunities for students
- 39. 21st Century Learning opportunities
- 45. The ability to go statewide for assistance in obtaining courses.
- 46. Providing educational opportunities for all Nebraska schools
- 49. Working to improve student learning in Nebraska.
- 58. Enhance educational opportunities for students throughout our state.
- 61. The ability to expand opportunities for students.
- 63. Variety of educational opportunities
- Service Oriented
- 5. Quality of service
- 10. Network Nebraska is focused on providing cost effective technology service and support to all its partners.
- 41. Providing strong partner support and quality of service
- 60. Offering a wide-range of highly useful services at a low cost.
- 65. Service providers for all schools in the state.
- 67. Access to services through intelligent cooperation.
- Spirit of Cooperation
- 2. The ability to communicate reliably with any institution in the state.
- 3. Connecting and collaboration for Nebraska's youth and citizens
- 11. A shared resource with reduced costs that users guide.
- 13. Collaboration
- 14. Partnering for best use of Nebraska resources and to provide educational opportunities for all Nebraskans
- 19. Partner in cost sharing
- 25. Communication and collaboration
- 43. All educational institutions working together.
- 62. Communication
- Overarching Principles
- 8. Technology Innovation in education
- 23. network-internet-schools-education
- 26. We are there for you
- 26. many cities, one community – Network Nebraska
- 31. Network built for Education with student in mind
- 37. Education Today for the Needs of Tomorrow
- 44. Electronic access to knowledge is an educational right
- 52. Always there when you need them.
- 57. Providing technical solutions for online education efforts
- 66. Value conscious, learning focused
- 69. One network, endless potential.
- No Opinion
- 18. First Year Member
- 36. I hate slogans. Don't try to describe an experience with a cheap quip.
- 42. Don't have one.
- 48. ???
- 50. No opinion.
- 51. n/a
- 55. This isn't my bag.
- 56. Unknown
- 59. NA
- 64. Not familiar with one

8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

• Participation and Inclusivity

- 6. Increased participation in the service
- 42. More participation from other educational institutions

• Redundancy

- 4. Redundancy is critical for minimal downtime in the event that part of the system fails.
- 16. I would like to see a fault tolerant links established so that if a fiber line is cut between Omaha, Lincoln, GI, Kearney, there is an alternate route for traffic to flow, if not already in place.
- 17. I feel that a redundant connection to commodity internet possibly out of Grand Island would be beneficial
- 18. Redundant backbone and ISP's

• Awareness Building

- 4. Provide better understanding of the existing system setup and provide updates on growth/changes to the network.
- 10. Enhanced technical training for network staff
- 12. Don't make infrastructure changes without notifying customers
- 14. Counseling and direct work with school districts to utilize.
- 33. I would like information on what services are available.
- 48. Outreach and education to administrators and technical workers about what Network Nebraska is and how it can be useful.

• Cost Related

- 41. Find various funding resources to help lessen the costs schools have to endure.
- 45. Costs that are equal throughout the state.
- 47. As usual, greater variety of services at a decreased cost.
- 49. I would like to see a lower-cost option (and lower bandwidth option as well) to bring on elementary schools who will not be taking advantage of dist NCE education services.
- 63. Transport cost negotiation for Rural areas is the biggest cost hindrance for small schools compared to their counterparts in the Metro and larger cities.
- 64. Find ways to help make partner fees more worthwhile - how can we invest in the network to take full advantage of its capabilities?

• Expanded Infrastructure

- 11. Continue increasing bandwidth and reliability to remote areas in central and western Nebraska.
- 17. I think NN needs to maintain a circuit west of GI, probably to Scottsbluff or Sidney;
- 18. Backbone extended to western Nebraska
- 35. Increased bandwidth
- 43. I am not qualified enough to answer that. I do have rural sites that have to use satellite for service that are not able to communicate as effectively as we need.

• Renovo / DL Issues

- 21. Continued refining the RENOVO software.
- 25. Improve Renovo.
- 27. Statewide scheduling of all DL classes with a consistent schedule and course offering
- 36. Continue to expand learning opportunities for students and training for teachers/administrators.
- 44. More email updates on schedules of course offerings.
- 57. Replace Renovo
- 59. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 62. Provision/coordination of teacher/faculty training in effective online instruction.

• New Services

- 1. As I said above, we need to have a variety of "last mile" or curb to home solutions being developed before too many more of our students face the digital divide.
- 2. Security. Would like to see some of the organizational structure modeled after the 10 domains as taught in a university data assurance curriculum. The model can easily be adopted by all if formalized.
- 5. More shared services and enterprise services, like a statewide digital content repository.

- 8. Improving diagnostics to the end users
- 15. Packet shaping
- 18. Traffic shaping at the ISP edge(s)
- 29. VOIP
- 30. Internet 2
- 34. I would like to look at the services that network Nebraska could provide in the area of Learning Management Systems. We currently have Moodle and Angel/Blackboard being used across the state. With the combined efforts of the NN partners I could see us getting a uniform package deal and making these accounts available to all students and teachers.
- 38. A firewall and more security between internet and schools. My biggest worry with my network and I know would be hard to put in for the whole network Nebraska.
- 40. Robust desktop video conferencing for meetings and conferences. (i.e. NDE meetings)
- 58. If there is an affordable way to do it, collocation services for disaster recovery, ability to create a private cloud. Links into such services as might be needed by many schools (state testing system, etc.)
- 62. Hosting of services on their servers/equipment.
- 62. Provision of or coordinating the low-cost purchase of technical training -- examples include ITIL service management, COMPTIA Network+ or A+ certification.
- 62. Options to cost-effectively attach to the intranet a gigabit speeds.
- None expressed
- 3. not sure
- 7. None
- 9. Not aware of any at this time
- 13. Not sure.
- 19. First Year Member
- 20. continue what they are already doing
- 22. None
- 23. I believe we will have more answers to this question as more and more members experience the system, and begin to discover the potential(s). I don't have any recommendations at the moment.
- 24. N/A
- 28. ?
- 31. None to think of at this time.
- 32. none
- 37. At this time, I cannot come up with anything but I may at a later date.
- 39. None
- 46. None.
- 50. Seems to working.
- 51. Unknown
- 52. None
- 53. NA
- 54. None that I can think of at this time.
- 55. None.
- 56. Nothing.
- 60. I can't think of anything right now.
- 61. See above

<i>Responses from Potential Partners / Interested Parties</i>

9. What do you know, or have you heard, about Network Nebraska-Education?

• Formed Opinions / Impressions

- 7. NN is the potential opportunity to get reasonably priced internet access and opportunities for distance learning and significant bandwidth between member institutions.

11. I was kindly visited by the folks directly involved, and the Network was explained to me at that time.
12. Not much. Costly.
17. It's optional.
18. What I know is through my administrative professional organization and being involved with the NETA organization. I have also gained knowledge of this initiative through being involved with E-Rate.
28. Educational resource via Internet
31. As I understand it, this was started as a way for western schools to access the internet more efficiently??
32. I've heard pricing is more than I currently pay for network access.
38. Network Nebraska is a state wide network that supports on-line education.
40. Good in Panhandle. Haven't seen a lot of use in our system.
43. I believe that Network Nebraska-Education has done an outstanding job as a lobbying agency to get support to provide schools with high-speed internet access.
44. Cost is high, Limited bandwidth. It would be a step backward for those of us in the Southeast Consortium.
47. It has linked many of the public educational facilities across the state.
52. I have heard of Network Nebraska-Education. From my understanding, it is a backbone for internet traffic for educational institutions. That is about all I know about it.
56. Attended a NETA session on Network Nebraska last year, this was the first I'd heard about it. High speed network connecting most ESUs in the state. I've heard conflicting information about whether we can participate as a private school.

• Little, Limited, or No Knowledge

1. Nothing or very little
2. I really do not know anything about this group.
3. Only what I have read today on your website.
4. I do not know anything about Network Nebraska-Education.
5. I have not heard of it.
6. Very Little
8. I am new to the state of Nebraska, so I am not aware of your program or offerings.
9. I don't know about Network Nebraska-Education.
10. Never heard of it.
13. Nothing
14. I had not heard of this until Msgr. Gilg sent the survey.
15. Only what I read in the above paragraph
16. Nothing
19. Nothing
20. Very little as a school administrator.
21. no have not heard of this.
22. I know very little about Network Nebraska-Education.
23. Not much
24. nothing.
25. Very little, beyond reading through your website.
26. nothing, I'm sorry.
27. Nothing
29. I am not familiar with your organization
30. Just what I have read above
33. nothing
34. only heard of this through this survey
35. Virtually nothing.
36. Have heard about it.
37. Have not heard about NN.
39. Just the information listed here.
41. I know only a little about NN beyond the details provided in the description above. We are in the process of considering a partnership with NN.
42. I Have not heard about this before but i am a new administrator

- 45. Nothing.
- 46. Very limited information received at this time.
- 48. Nothing
- 49. I am familiar with NN.
- 50. No.
- 51. Very little.
- 53. Nothing
- 54. Nothing - until I received this survey
- 55. Not very much.
- 57. Nothing
- 58. Nothing

10. What questions do you have about Network Nebraska-Education?

• Cost Related

- 2. Is there a membership fee?
- 5. What is it? How expensive is it?
- 20. The cost?
- 25. What are the costs of providing Internet services to k-12 schools?
- 26. Will this increase the cost to us?
- 27. Cost to my district
- 33. Is there a cost?
- 45. What would the costs be?

• Speed Related

- 26. Will this change the way we are connected to the internet?
- 26. Will this increase the speed or decrease it?

• Membership Related

- 2. Can parochial schools get help?
- 38. How can a private college join the mix?
- 45. How would we participate as a private school? Would we work through an ESU?

• Related to Specific Services

- 6. How would this impact what we are currently doing with our current Parent Information System (Sycamore), or like other schools are doing with a program like Powerschool?
- 21. How will this improve the Education process in Nebraska?
- 22. Are you involving tech directors across the state? Have you asked those people to share with the administrators in the district?
- 25. What is the possibility of providing school information services state-wide for every K-12 school? Schools would have access only to their data. For example, having a State-wide PowerSchool or Infinite Campus and each school seeing only their data. NDE would have superuser access so that when they needed a report they could pull the data they needed in the way they needed it. It would also be a huge cost savings and time savings for each school district.
- 31. Are web based asynchronous courses supported?
- 34. We would be interested in knowing the NN schedule for supporting IPv6 traffic, as well as the opportunities for participation in Internet2. We are also interested in learning more about potential educational content available through NN.

• Related to Benefits and Services

- 1. Could opportunities be provided for our teachers to have access to educational ideas for their classrooms?
- 2. What services or help do they offer schools?
- 3. What benefit would there be for us to be a member?
- 4. How would it help a k-6 school?
- 5. What are the benefits to it for small private schools?
- 8. Applications for public schools.
- 14. What benefits are available to me if my school becomes a partner?

- 24. How can being a member benefit small schools in Nebraska
- 27. benefit to my district
- 28. How can it help Rule 18 providers and Special Purpose Rule 10 schools
- 30. How will it enhance the educational process in my building?
- 33. What are the benefits that we don't already have?
- 35. What services do you offer?
- 37. How will it work for me?
- 42. What can NN do for the OPS Career Center and what can we do for NN?
- 43. How can it benefit my teachers and families?
- 44. What do you do and how can you benefit my school?
- 46. Is this something that would benefit our school?
- None / Not enough Information
- 7. I would need to learn all about your program and the services that it offers to public schools.
- 9. What is it?
- 10. No questions at this time. Our problem at the present is fiscal. We do not have the money to invest. If we can get that issue resolved we will be wanting to join.
- 11. None
- 12. Do not know enough about it to question it
- 13. How can I receive more information about this program?
- 15. None
- 16. None.
- 17. None at this time.
- 18. I need more information before asking questions.
- 19. Don't know what to ask given how little I even know about what this resource is...(other than what I just read in the intro to this survey)
- 21. What will the information be used for?
- 23. None
- 29. Since I know virtually nothing about it, I have no basis to form questions.
- 32. More details
- 39. None
- 40. None
- 41. Why would we be interested in it?
- 47. I wouldn't know what to ask

11. What is the single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner in Network Nebraska?

- Cost sharing / Reduction
- 3. The price of internet access.
- 15. Easy and affordable access
- 17. Costs
- 34. Cost sharing
- Bandwidth / Connectivity
- 5. Bandwidth and support are the things that would make it attractive to us.
- 21. Improved bandwidth
- 24. The opportunity to gain additional bandwidth at lower costs is the most compelling short term advantage.
- 26. State wide connectivity
- 31. Bandwidth availability.
- 35. Increased bandwidth
- Professional and Educational Partnerships
- 1. Pooling resources saves money and just makes sense.
- 2. Increased communication
- 8. Communication and collaboration between educational entities across the state of Nebraska.

- 11. To make a bridge for our state and build strong relationships across the state
- 12. Sharing information that will help students learn in a 21st Century world.
- 16. Having access to experts in an every changing technology landscape.
- 19. To level the playing field for all Nebraska K-12 schools.
- 21. Increased access to resources and information
- 22. Collaboration state wide
- 25. The lobbying power of the organization to get support to provide access to students by keeping the costs low and the access superior.
- 28. To be able to reach so many audiences across the state.
- 29. The size of the network and number of partners.
- 29. The potential to share resources across many schools and other institutions
- No Perceived Advantage
- 6. Currently does not compete in price and band width.
- 23. Stay with ESU 5 & 6 -- they keep us informed on new programs.
- More Information Needed
- 4. I need more information before answering.
- 7. I couldn't tell you.
- 9. I do not have enough information to answer this .
- 10. No idea...this question implies I have a more thorough understanding of NN.
- 13. We are not familiar enough with your services to comment.
- 14. Not sure
- 18. I don't know enough to answer this question.
- 20. No idea
- 27. I don't know.
- 30. Don't know.
- 32. Unknown
- 33. I don't know enough about Network Nebraska to answer this question.
- 36. Since I don't know anything about Network Nebraska, I really can't answer this question

12. In a short phrase, what do you think should be the guiding principle or slogan that you believe Network Nebraska's services should stand for in the hearts and minds of its partners?

- Learner Focused
- 1. Accountability for the Education of our Youth
- 6. Bringing together all of Nebraska under one shared vision of educating all of our students.
- 10. Creating students equipped to compete in the modern work-force.
- 12. Together we educate for the future
- 13. Network Nebraska - Making Sure Technology Opportunities are Available for Every Nebraska Student
- 16. Equal Access for All
- 18. Keeping up with the present by planning for the future
- 19. Serving all educational entities in the state, formal and informal
- 20. Broad range individual student education and assistance to teachers.
- 22. Connecting all Nebraska students with 21st Century tools.
- 25. Education for everyone
- 28. Building knowledge is about building connections.
- 30. Improving opportunities to learn for students of all ages.
- 31. Technological experiences, advantages and knowledge is a must for our schools and children.
- Network Focused
- 2. Collaboration, not competition
- 3. Quality, reliable connectivity for all schools/participants.
- 4. State wide sharing of resources.
- 5. It's low-cost and optional.

- 9. Triple "N": Nebraska's Neighboring Network: From county lines to networking lines, they are all drawn in the heart of Nebraska
- 11. Reliable, cost-effective bandwidth with functionally rich services.
- 14. Making Network Nebraska work for you.
- 17. U CANS: Universally Connecting All Nebraska Schools
- 21. Reliable performance on a forward-looking technological base.
- 23. Service
- 26. Efficiency, effectiveness and reliability.
- 27. Reliability and quality of services
- 29. Providing resources to 21st century learning
- Unknown
- 7. I do not have enough information to answer this.
- 8. Given my lack of knowledge, I'm not one to say...
- 15. I don't know enough to answer this question.
- 24. ??????
- 32. ???

13. What services would benefit your organization as a partner in Network Nebraska?

- Resource Sharing
- 9. Always open to collaboration and sharing resources...
- 23. Good Product at a reasonable price.
- 29. Cost sharing, funding (or assistance in securing funds), in-service on new technologies
- Internet and Transport
- 3. Internet access
- 12. Reliable, cost-effective bandwidth.
- 19. We really need better bandwidth to take advantage of the many resources that are available on the internet.
- 22. To continue to reliable high speed Internet access and technical support.
- 27. High speed, reliable internet access.
- Not Sure
- 8. I do not have enough information to answer this.
- 16. I don't know enough to answer this question.
- 18. Not sure - would need to know more.
- 28. Unknown
- 31. ???
- Services and Support
- 1. Network support and availability of services
- 4. Many of these services are currently being provided through our Educational Service Unit. Seamless coordination would be valuable.
- 10. Networking, local technology assistance, internet
- 11. Technology improvements within in our school.
- 14. More in-service opportunities and technical support
- 15. Shared school information services - PowerSchool, Infinite Campus, SASI, etc.
- 17. Completing e-rate forms.
- 26. Expanding to share with more schools.
- More Student Learning Opportunities
- 2. Distance Learning
- 5. Distance education would be our first interest. I personally would like to see it become possible for Catholic schools around the state to all afford to be involved so that we could share resources that might not otherwise be available to us from both public and non-public schools.
- 6. Increased courses for credit.
- 7. Distance Learning, Communication services, and sharing information.

- 20. Web based asynchronous courses
- 21. Receiving courses of study that is of interest to our students that are not currently available.
- 24. Having access to programs, learning opportunities for students, and easy to navigate and use for students and staff.
- 25. Providing us access to all of the affiliates so that we can offer educational programs to students (both traditional and non-traditional) and faculty across the state.
- 30. Online courses.

Unprocessed Survey Responses

Raw Data from the NITC Ed Council / Mktg Survey of December, 2009

[Responses from Existing members of Network Nebraska: numbers next to responses only indicate the order in which the response was listed in the text file and cannot be used to identify individual respondents.]

2. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on their relative importance to your institution (comments received):

Need to continue to increase student use and principal knowledge of the system
 So far we have not benefited a whole lot for what we are spending.
 Faster, faster, faster

3. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution (comments received):

This network needs daily attention and leadership--like an Executive Director
 What's wrong with the southeast schools--why haven't they joined the network?
 Quality of courses, based on teacher effectiveness, is critical. Also, increasing dual credit courses is needed.
 We need someone that has technical and excellent communication skills to advocate and provide trainings.
 Money is a driving factor for us in everything we do. More for less is the mantra!
 I don't know enough to answer these questions. The one on the first page about being an existing, potential, or interested NN partner was unknown to me--I put existing even though I don't know.
 I checked "Not concerned" for all these areas because I understood this as an evaluation of the services we have received.
 We are happy with the services we have received over the last year. We are especially pleased that the costs have been moving down, especially the declines in cost for Internet 1 access.

4. What are the strengths of Network Nebraska-Education services?

- 1. The basics are covered by Network Nebraska in a cost effective manner.
- 2. The ability to control traffic and provide reliable services.
The potential to share services
Local Ownership
- 3. Lower costs, high speed access between sites
- 4. Collaboration and coordination.
- 5. We are becoming a larger group.
- 6. Wonderful collaborative effort between K-12 and higher ed, public and private. The sky's the limit (eventually) with this self-funded network!
- 7. Band width, technical service
- 8. It has been a very dependable system and provided excellent opportunities for our rural area.
- 9. Bigger pipeline, lower costs
- 10. reliability
- 11. Having all K12 and education institutions on the same network. Having the tech support of Ben M.
- 12. Ability to meet educational needs of students and staff.
- 13. To this point it has been very stable & reliable.
- 14. Gives all school equal opportunities
- 15. The support and ability to collaborate with other schools.
- 16. Shared resources with institutions of similar interest
- 17. Cost sharing has reduced the impact on our institution.
Reliability
Flexibility to add bandwidth
- 18. Good bandwidth to central NE at an affordable price.

19. Efficient, comprehensive service; consistent service; very little downtime
20. Providing quality education throughout Nebraska
21. Standards across the state, cost sharing, collaboration among partners
22. Very reliable services. Cost effective solution for distance education, tele-health delivery
23. Availability of resources/classes.
24. Potential for options for students.
25. Support is very good. Cost is excellent. The reliability is great.
26. Ben Mientka does a good job of providing support for entities.
27. For the most part it think NN is a solid reliable network.
28. Good cost-sharing
29. Acquiring cost effective contracts with service providers
30. First Year
31. cost sharing and technical support
32. Ability to reach more students with added efficiency
33. Opens rural NE students to the world; we are desperately in need of foreign languages.
34. Possibility for increased offering in small rural schools.
35. Our bandwidth and connection has been good so far this year. In the past, with other providers, we've lost connection on regular basis and none of that has gone on this year.
36. -Increased access to classes for student
-Increased information available to students, faculty and staff
-Potential for Statewide increased communication
-Speed of IP services
37. Wide range of opportunities for class offerings
38. The ability to communicate throughout the state.
39. Statewide services
40. Great connections between partners.
41. Dependability, growth potential, cost effectiveness,
42. Allowing rural areas, especially those in western Nebraska, the opportunity to access a wider variety of courses via distance learning
43. Expanded choices for our students.
44. Reliability
45. Provides statewide backbone
lower cost for bandwidth
46. Distance Education Coordination and Communication
47. The many opportunities for students.
48. More speed than we had before.
49. We are a new member and have only used NN for our connections for about 4 months for video and 2 months for data (Internet) I can't say what the strengths, weaknesses are at this time. We would need more time to evaluate this.
50. Smooth connections from one school to the next.. flexibility, connectivity
51. At this point I would say shared cost and the possible ability to receive discounts for being part of a group.
52. Great service!!!!
53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow us lower prices and increased opportunities in the future. I am more concerned with the increased in educational opportunities and services however.
54. Increased access/faster internet.
55. Affordability, increased bandwidth, more technology services are available to students and staff
56. The strengths are: reduced costs, increased education collaboration and education opportunities.
57. DL I think is the most. Also the added level of Security to the network. The speeds so far is awesome so hope that will continue.
58. Collaboration among members.
59. Its strength is its potential.
60. Internet access
Distance learning access
Guidance
61. The ability to go statewide for DL courses
62. Quality assistance as needed.
63. Large group costs
64. depth of services

65. Increased offerings to our students of smaller schools
66. Rural schools with limited resources can access quality educational opportunities for students via Network Nebraska
67. We just have to have technology with our rural situation.
68. Able to receive classes from other districts. This gives a broader variety of classes for your students.
69. Opportunities for students.
70. The overall goal is the strength.
71. It is still too early to tell...I believe we are still in the infancy stage, therefore, I am not sure we have been at it long enough to identify strengths.
72. Low price, ability to purchase gear like the packetshaper for services
73. More opportunities
74. Reliability.
75. Large entity thereby spreading costs & services.
76. Bandwidth and reliability provides potential for much greater sharing of resources and collaboration.
77. Cost control, speed and reliability, especially compared to schools in other states.
78. We haven't had any major issues with our DL or internet connection. Reliability is the biggest strength. This is the first year I have had comments that the internet seems to be faster. That is because we purchased extra bandwidth.
79. Unknown
80. Network support; reliability; costs; bandwidth
81. Opportunity to share with other schools across the state.
82. Able to find classes for a variety of students across the state. Helps with accreditation issues and teacher shortage in certain areas.
83. Availability and response to problems.
84. The service is always available providing classes or educational opportunities for all of our students.
85. Increased course offerings. dual credit classes
86. Coordination, collaboration, cost effectiveness
87. Tech support
88. Economies of scale in a state where this is difficult to achieve.
Professional management of a large network where finding that experience can be difficult.
89. Our school has grown its capacity in 21st century learning which would not have been possible without NN.
90. Access to the internet and many distance learning offerings that our school would not have.
91. Cost-effective, coordinated, enterprise-class
92. Standing together for staff and students
93. Cost of Internet 1 access being pushed down through collaborative purchasing.
Connection to Internet 2 and avoidance of Internet 1 bandwidth costs.
Opportunities to improve disaster recovery and business continuity options through placing servers/services at the core nodes of the network.
94. The ability to purchase large amounts of bandwidth below normal prices that individual organizations would expect to pay.
95. The NN opportunities have greatly reduced our ongoing operating costs for internet bandwidth.
96. The potential to save costs to its members through sharing services that drain resources at the local level.

5. What are the weaknesses of Network Nebraska-Education services?

1. Not much thinking about "last mile" or curb to household connection. As we move to 1:1 models in our schools, we'll need to be able to guarantee access to our digital resources from our students homes. What should this look like? What will this mean for NN?
2. lack of clear cut policies that are enforceable!
Local Ownership
Too much administrative overhead; lack of direction.
The threat of increased costs for k12.
lack of value added services beyond colaborativ
3. no redundancy or alternative infrastructure available if a network outage occurs
4. Voluntary option rather than mandatory.
5. Too many are not in the group.
6. That it cannot grow as fast as other networks, given that it is self-funded.
7. Student and principal knowledge of how to best use the system to expand student learning opportunities
8. Far Western NE not as well served as the Eastern half
9. cost
10. Not having more control of the NET Ne costs to schools for services.
11. Easy of access to the CCC college locations.

12. Large network possible breakdowns
13. The reliability of the network is low.
14. the organization should have an "elected" board that represents ALL levels of institutions.
15. Technical training
- Transparency of connection and cost information
16. We feel pretty removed from the process out here in central/western NE. The service has gotten better and I know you try and inform us about what is going on, our remoteness just limits the contact and personal attention.
17. MAKING NETWORK CHANGES THAT AFFECT US and OUR PARTNER INSTITUTIONS AND FAILING TO NOTIFY THOSE INVOLVED...this happens frequently and causes havoc with our events/classes.
18. None come to mind.
19. Still not enough information about classes outside of our esu area.
20. Lack of communication statewide.
21. Use by school districts.
22. More updates of future directions would be nice.
23. Redundancy
24. A "statewide" network that stops at Grand Island; lack of redundancy
25. no one in the current leadership has the pulse of all Education sector needs and vision to provide those needed services; NN response to needs is often delayed because of purchasing rules, requirements, or other political hurdles
26. First Year
27. none
28. Teh speed and the glitches experienced periodically.
29. Limited scheduling availability.
30. Cost of the equipment and services.
31. None I can see.
32. Need more/better communication about how to access some of the Net 2 services
-Could use more communication about how higher education can benefit from Net Neb since there is no E-rate benefits or financial reimbursements.
33. Seems some districts are looked out for over other districts.
34. Class times do not always match school times
35. Scheduling
36. The Distance Learning system - Renovo - does not work well. It needs to be updated or get a new partner.
37. Over sold connections to the internet. We also potentially have some configuration needs and issues.
38. Scheduling issues for DL classes from one time zone to another and from one school district's bell schedule to ours
39. Need greater communication as to what is available for students k-12.
40. Cost
41. do not duplicate services that ESU's can provide, such as Tech support.
Loss of local control is a concern
42. Increased levels of state involvement and accountability
43. Lack of dual credit classes.
44. see above answer
45. none
46. None so far for us.
47. I believe the current weakness of Network Nebraska is the angle we're currently using to sell the viability of this union of educational institutions. We need to get out and show people how we're using the capabilities that NN has brought about instead of just telling them.
48. NA
49. Always concerned about costs.
The need for virtual learning/High School
50. I have not found any as of yet. This is a great system that allows us to be connected and reduce travel time in this remote area
51. At the present time, Network Nebraska has focused one educational needs. As we grow in educational needs, more bandwidth will be needed to expand our resources.
52. None
53. Services aren't really anything more than we received prior to Network Nebraska except for additional costs for the Network.
54. Not much is known by administrators in districts with technology director or solely utilize ESUs
55. It doesn't always work the way we want it to (connections)
56. School agreements with other schools do not allow for any other institution to take the class.

57. Only as strong as its members
58. Not alot of participation and not very well advertised for the benefits to educators
59. We are concerned with distances involved with communication, infrastructure issues, and equity of educational opportunities.
60. Don't always hear about classes until there is no space left.
61. Cost is still high.
62. Not there yet.
63. Communication had previously been low until Ben was hired
64. Tech issues
65. None.
66. Overall size results in sometimes delayed services and communication.
67. Not enough publicity to techs/admins about what it is and what it is for, how it can be leveraged for the future, etc.
68. Lack of lower-end options for schools not needing to take full advantage of distance education services. We have an elementary school in a different city (through school merge), but it is cost prohibative to bring them on Network Nebraska. We have a residential DSL connection, which means none of their traffic can see the benefits of the closed NN network.
69. The coordinators for the DL system rely on the local school technician to fix issues with the DL system. If they are going to rely on that then they need to have some sort of training on the equipment.
70. unknown
71. None
72. If you open up the curriculum for all students in NN then the concern is paying for all the classes. I would hope we can all work together when we share teachers.
73. None that I can think of at this time.
74. I have not found any at this point.
75. coordinating class times.
76. Renvo scheduler
77. Distance Education Coordination
78. Lack of communication regarding network services and offerings as the network grows. Unknown channel of communication other than through my ESU. (maybe that is preferred. It would be good to know that.)
79. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
80. Network speed is very much an issue. Distancde learning is a concern since not all schools are not on the lifesize system. It creates connection probelms and sound and video problems.
81. Limited number of application services. The mantra, "if you build it, they will come" definitely applies. I might add, "if you don't increase the application services they may leave" as vendor pricing in large metros will rival NN. The differentiation comes in the application services. NDE needs to become a player and figure out how they can provide services including statewide learning management, statewide content management, statewide student information, statewide ERP. The vision should be toward a service-optimized cloud connected to NN and offering better applications at lower prices than individual entities could possibly afford.
82. Not able to match more schools across the state with offerings
83. Still dealing with a lack of trust and therefore cooperation from some potential participants.
Marketing of the advantages that Network Nebraska-Education offers.
High connectivity costs for some locations to get on the network (conduit).
84. Doesn't have the ability to act in a quick manner due to needs of users because of bidding requirements.
85. Awareness of opportunities.
86. Lack of go-to leadership directly responsible for achieving NN-Education goals on behalf of its members. Continuing to grow the network so its benefits extend beyond LB1208 for K-12

6. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities (Educational Service Units, public and private colleges, and public and private K-12 institutions) to partner with Network Nebraska?

1. Comprehensive service at value.
2. The ability to tie all institutions together via a reliable and effective network.
3. increased bandwidth and connectivity for all
4. high speed connections to various office locations across the state to allow video-conferencing, collaboration, etc.
5. Leveraging buying power of the educational group.
6. One group, one boice is the most power we can have.
7. Cheap and reliable Internet
8. Expanded academic opportunities for students
9. Online courses
10. Th ability to connect over high bandwidth to other schools in the state for distance learning opportunities.

11. All on the same network, before hitting the internet.
12. Ability to share costs and service coordination.
13. The opportunity to access the entire state
14. I think the cost sharing...with today's budgets we have to cut costs wherever we can!
15. Cost reduction thru cost sharing
16. Cost savings! and grant money available.
17. Only game in town
18. Strength of being able to purchase bandwidth at a more competitive price.
19. I thought we had to join to gain access to classes outside of our area.
20. Cost
21. Provides statewide network reach at an affordable price. Provides internet 1 and 2 services as a very reasonable price.
22. Having all entities working together in one organization.
23. Uniqueness of options.
24. The connections to other educational institutions is very helpful. This helps us save cost and complications on any collaboration.
25. Network connectivity/close proximity to other educational entities within Nebraska.
26. Cost
27. The cost is probably the biggest advantage, plus once you are a NN member you can video conference, etc. with other NN members without major concern of bandwidth limitations
28. large network with adequate bandwidth at cost effective prices
29. First Year Member
30. cost
31. cost sharing and technical support services
32. Increased opportunities for our students.
33. Shared costs for the services
34. All based on same system.
35. Potential for offering more courses to more students.
36. Shared cost
37. Communication
38. Opportunities and cost of those opportunities with fast internet
39. The continuing ed opportunities are endless. We also need NDE to be more flexible and willing to not tie funding to traditional classroom attendance.
40. cost per meg of bandwidth
41. Being able to offer courses to our students (dual credit, college level, etc.) that we would not be able to otherwise due to staff limitations
42. Dual credit classes.
43. Who's involved (schools)
44. Statewide network and having everyone on board
45. Statewide distance education opportunities
46. Scheduling and ease of scheduling
47. Inter-connectivity with all other schools belonging to NN as well as overall speed of connections.
48. It expands the learning opportunity for students.
49. For us the huge increase in bandwidth.
50. Everybody has the same capabilities, such as speed of internet, etc.
51. I believe the overall current belief is cost effectiveness. However, I believe that when we begin to look at the future implications of building the net work we're going to find that increases in bandwith and speed will allow us to make better use of DL possibilities such as collaborations, virtual field trips, and shared resources.
52. Ease of use/accessibility
53. Low cost Bandwidth
54. Connectivity with the all institutions to enhance video conferencing without travel time.
55. reduced costs
56. Ability to provide services to a wide variety of students and communities.
57. The whole concept of DL and what you can do with it. Also purchasing power on internet speeds.
58. People working together for the same mission, educating kids.
59. Don't know.
60. Keep internet cost reasonable for educational purposes
Make distance learning available to districts who must have it to survive
61. Potential sources and resources.

62. State wide access and coordination between schools
63. Safe internet usage by students
64. Common communication network.
65. We are all trying to manage a small number of students into a broad market.
66. It does decrease the cost involved.
67. No opinion.
68. Network Nebraska involves more partners which may provide more opportunities for students in the state of Nebraska.
69. Cheap internet access
70. more classes and network speed
71. Reliability and cost reduction.
72. Strength in numbers supports cost efficiencies & services.
73. State aid incentives
74. It is a closed, controlled network with many levels of network protection from outside intruders.
75. Keeps the costs down.
76. unknown
77. Collaborative efforts
78. Collaboration.
79. The curriculum opportunities for all students.
80. Relatively low costs.
81. Statewide link.
82. Schools can offer services or classes for their students that they would not be able to have monetarily without it.
83. cost
84. reliability
85. It is available to schools of all sizes.
86. Inexpensive Internet services.
87. Consortium participation
88. Distance Learning Opportunities.
89. At this time it is the coordination and pricing. Ultimately, it will need to be about the application services.
90. From a private college perspective it is Internet1/Internet2 access at comparatively low prices.
91. Amount of bandwidth that we have been able to purchase at a reasonable cost.
92. Cost
93. Administration and service management - coordination of the complex elements including RFPs, Erate, billing, troubleshooting, etc.

7. In a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services stands for in the hearts and minds of its partners?

1. Our digital backbone!
2. The ability to communicate reliably with any institution in the state.
3. connecting and collaboration for Nebraska's youth and citizens
4. increase bandwidth and opportunities across the state of Nebraska
5. quality of service
6. Network Nebraska--delivering educational opportunities at the speed of light
7. Making a difference in student learning
8. Technology Innovation in education
9. not sure perhaps educational opportunities for all Nebraskans
10. Network Nebraska is focused on providing cost effective technology service and support to all its partners.
11. A shared resource with reduced costs, that users guide.
12. Increased infrastructure, bandwidth, and service.
13. Collaboration
14. partnering for best use of Nebraska resources and to provide educational opportunities for all Nebraskans
15. Statewide network!
16. Remove the distance barriers!
17. Connecting K-20 entities in Nebraska
18. First Year Member
19. partner in cost sharing
20. Reaching out to more students in rural/remote areas
21. Opening schools' doors to the world...
22. Offering more learning to more students.

23. network-internet-schools-education
24. ncreased opportunity for Statewide academic partnerships and expanding information horizons.
25. Communication and collaboration
26. We are there for you
27. many connections
28. Bringing bandwidth equality to Nebraska education entities.
29. Equal educational opportunity for all
30. Conecting students through technology.
31. Network built for Education with student in mind.
32. Hopefully a State wide effort for cooperation in providing this service to all the schools in the state
33. Statewide distance education opportunities
34. Increased opportunities for students
35. Connecting Nebraskans in Learning
36. I hate slogans. Don't try to describe an experience with a cheap quip.
37. Education Today for the Needs of Tomorrow
38. equal access to all entities
39. 21st Century Learning opportunities
40. onnectivity today and tomorrow around the state.
41. Providing strong partner support and quality of service
42. Don't have one.
43. All educational institutions working together.
44. Electronic access to knowledge is an educational right
45. The ability to go statewide for assistance in obtaining courses.
46. Providing educational opportunities for all Nebraska schools
47. Equitable opportunities for all students in Nebraska.
48. ???
49. Working to improve student learning in Nebraska.
50. No opinion.
51. na
52. Always there when you need them.
53. "Outstate" entities benefit more, collectively, instead of being "2nd" to eastern competitors.
54. Provide high quality bandwidth for educational use.
55. this isn't my bag.
56. known
57. Providing technical solutions for online education efforts
58. Enhance educational opportunities for students throughout our state.
59. NA
60. Offering a wide-range of highly useful services at a low cost.
61. The ability to expand opportunities for students.
62. communication
63. Variety of educational opportunities
64. Not familiar with one
65. Service providers for all schools in the state.
66. Value conscious, learning focused
67. Access to services through intelligent cooperation.
68. Equallized access for all entities.
69. One network, endless potential.
70. Equitable access to network resources for the importance of educating future generations.

8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

1. As I said above, we need to have a variety of "last mile" or curb to home solutions being developed before too many more of our students face the digital divide.
2. Security. Would like to see some of the organizational structure modeled after the 10 domains as taught in a univerisity data assurance curriculum. The model can easily be adopted by all if formalized.
3. not sure
4. Provide better understanding of the existing system setup and provide updates on growth/changes to the network. Redundancy is critical for minimal downtime in the event that part of the system fails.
5. More shared services and enterprise services, like a statewide digital content repository.
6. Increased participation in the service

7. None
8. improving diagnostics to the end users
9. Not aware of any at this time
10. Enhanced technical training for network staff
11. Continue increasing bandwidth and reliability to remote areas in central and western Nebraska.
12. Don't make infrastructure changes without notifying customers
13. Not sure.
14. Counseling and direct work with school districts to utilize.
15. Packetshaping
16. I would like to see a fault tolerant links established so that if a fiber line is cut between Omaha, Lincoln, GI, Kearney, there is an alternate route for traffice to flow, if not already in place.
17. I think NN needs to maintain a circuit west of GI, probably to Scottsbluff or Sidney; I feel that a redundant connection to commodity internet possibly out of Grand Island would be beneficial
18. Backbone extended to western Nebraska
Redundant backbone and ISP's
Traffic shaping at the ISP edge(s)
19. First Year Member
20. continue what they are already doing
21. Continued refining the RENOVO software.
22. none
23. I believe we will have more answers to this question as more and more members experience the system, and begin to discover the potential(s). I don t have any recommendations at the moment.
24. N/A
25. Improve Renovo.
26. many cities, one community – Network Nebraska
27. state wide scheduling of all DL classes with a consistent schedule and course offering
28. ?
29. VOIP
30. Internet 2
31. None to think of at this time.
32. none
33. I would like information on what services are available.
34. I would like to look at the services that network nebraska could provide in the area of Learning Management Systems. We currently have Moodle and Angel/Blakcboard being used across the state. With the combined efforts of the NN partners I could see us getting a uniform package deal and making these accounts available to all students and teachers.
35. increased bandwidth
36. Continue to expand learning opportunities for students and training for teachers/administrators.
37. At this time, I cannot come up with anything but I may at a later date.
38. A firewall and more security between internet and schools. My biggest worry with my network and I know would be hard to put in for the whole net ork nebraska.
39. None
40. Robust desktop video conferencing for meetings and conferences. (i.e. NDE meetings)
41. Find various funding resources to help lessen the costs schools are having to endure.
42. more participation from other educational institutions
43. I am not qualified enough to answer that. I do have rural sites that have to use satellite for service that are not able to communicate as effectively as we need.
44. More email updates on schedules of course offerings.
45. Costs that are equal throughout the state.
46. None.
47. As usual, greater variety of services at a decreased cost.
48. Outreach and education to administrators and technical workers about what Network Nebraska is and how it can be useful.
49. I would like to see a lower-cost option (and lower bandwidth option as well) to bring on elementary schools who will not be taking advantage of dist nce education services.
50. Seems to working.
51. known
52. None
53. NA

54. None that I can think of at this time.

55. None.

56. Nothing.

57. replace Renovo

58. If there is an affordable way to do it, colocation services for disaster recovery, ability to create a private cloud. Links into such services as might be needed by many schools (state testing system, etc.)

59. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.

60. I can't think of anything right now.

61. See above

62. Hosting of services on their servers/equipment.

Provision of or coordinating the low-cost purchase of technical training -- examples include ITIL service management, COMPTIA Network+ or A+ certification.

Provision/coordination of teacher/faculty training in effective online instruction.

Options to cost-effectively attach to the intranet a gigabit speeds.

63. Transport cost negotiation for Rural areas is the biggest cost hinderance for small schools compared to their counterparts in the Metro and larger cities.

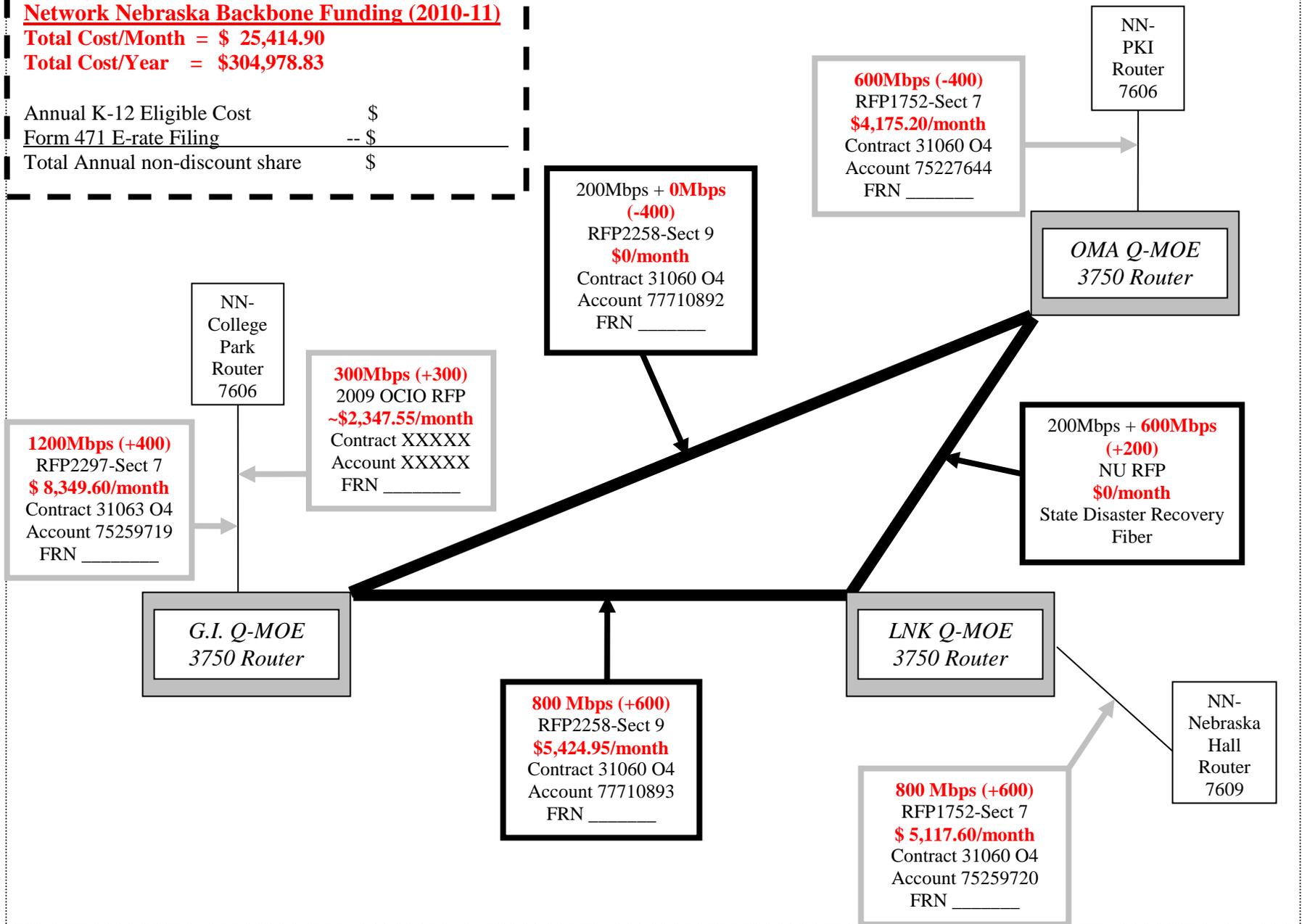
64. Find ways to help make partner fees more worthwhile - how can we invest in the network to take full advantage of its capabilities?

Network Nebraska Backbone Funding (2010-11)

Total Cost/Month = \$ 25,414.90

Total Cost/Year = \$304,978.83

Annual K-12 Eligible Cost	\$
Form 471 E-rate Filing	-- \$
Total Annual non-discount share	\$



Membership Categories for Network Nebraska—Education (12/17/2009)

Current “Full Membership” comprises:

014 ESU entities (16, if including LPS and OPS)
206 K-12 public entities
001 K-12 nonpublic entity
010 Higher Ed entities
231 TOTAL ENTITIES

Growth Potential:

003 ESU entities
057 K-12 public entities
004 K-12 nonpublic entities
013 Higher Ed entities
077 TOTAL ENTITIES

Criteria for Full Membership:

- Assume the monthly Network Nebraska Participation Fee (\$192.47 for 2009-10)
- Assume the monthly Network Nebraska Interregional Transport Fee (\$34.48 for K-12 for 2009-10 & \$92.72 for Higher Ed for 2009-10)
- Compliance with NITC Technical Standards <http://nitc.nebraska.gov/standards/>, including CISSP CBK
- Purchase appropriate WAN transport to one of three Network Nebraska aggregation points (Omaha-PKI, Lincoln-Nebraska Hall, Grand Island-College Park)
- And for LB 1208 funding eligibility, K-12 public must connect with 30Mbps WAN transport or greater with fiber-based Ethernet or with fast Ethernet over copper
- And for E-rate eligibility, K-12 public/private entities must have current Letter of Agency on file with the Office of the CIO; current Technology Plan approved by the Nebraska Dept of Education; and also demonstrate CIPA compliance via Form 479

Proposed “Affiliate Membership” would comprise:

XXX Nonprofit Museums, Science Centers
XXX Public Libraries or Public Library Consortia
XXX Private Career Schools
XXX Nonprofit Associations of Education
XXX Natural Resource Districts
XXX TOTAL ENTITIES

Maximum Growth Potential:

~020 Museums, Science Centers
~010 Public Libraries and/or Consortia
~010 Private Career Schools
~010 Nonprofit Education Associations
~023 Natural Resource Districts
~073 TOTAL ENTITIES

Proposed Criteria “Option 1” for Affiliate Membership:

- Assume 1/3 of the monthly Network Nebraska Participation Fee (\$64.16 for 2009-10)
- Assume 1/3 of the monthly Network Nebraska Interregional Transport Fee (\$30.91 for 2009-10)
- Compliance with NITC Technical Standards <http://nitc.nebraska.gov/standards/>, including CISSP CBK
- Purchase appropriate WAN transport (e.g. 3Mbps-10Mbps) to one of three Network Nebraska aggregation points (Omaha-PKI, Lincoln-Nebraska Hall, Grand Island-College Park)
- [\$95.07/month OR \$1,140.84/year x # entities, up to \$83,281/year]

Proposed Criteria “Option 2” for Affiliate Membership:

- Assume 1/2 of the monthly Network Nebraska Participation Fee (\$96.24 for 2009-10)
- Assume 1/2 of the monthly Network Nebraska Interregional Transport Fee (\$46.36 for 2009-10)
- Compliance with NITC Technical Standards <http://nitc.nebraska.gov/standards/>, including CISSP security
- Purchase appropriate WAN transport (e.g. 3Mbps-10Mbps) to one of three Network Nebraska aggregation points (Omaha-PKI, Lincoln-Nebraska Hall, Grand Island-College Park)
- [\$140.60/month OR \$1,712.20/year x # entities, up to \$124,917/year]
- Use Affiliate Membership funds to rebate \$50/hour for value-added seminars and programming extended to Network Nebraska “Full Membership” entities
- Would require licensing of one or more codecs with the Renovo Event Scheduling and Clearinghouse

Related Statutes:

86-5,100 *The Chief Information Officer shall provide access to each school district, each educational service unit, each community college, each state college, and the University of Nebraska at the earliest feasible date and no later than July 1, 2012. The network shall consist of contractual arrangements with providers to meet the demand of state agencies, local governments, and educational entities as defined in section [79-1201.01](#). The Chief Information Officer shall establish a cost structure based on actual costs plus administrative expenses and shall charge participants according to such cost structure.*

79-1201.01(3) *Educational entity means a school district, a private, denominational, or parochial school, an educational service unit, a community college, a state college, the University of Nebraska, or a nonprofit private postsecondary educational institution;*

NOTE: A billed "Entity", for purposes of Network Nebraska is as defined as 79-1201.01, except when an entity has multiple offices or locations with separate circuits that are not sub-aggregated at the entity level (e.g. ESU 13, Creek Valley Public Schools). In these cases, the second or third location will be charged additional Network Nebraska fees.

CISSP CBK (Certified Information Systems Security Professional Common Body of Knowledge)-- is an independent information security certification governed by the not-for-profit International Information Systems Security Certification Consortium, commonly known as (ISC). The CISSP CBK establishes a common framework of information security terms and principles that allow information security professionals worldwide to discuss, debate and resolve matters pertaining to the information security profession with a common understanding.

Museums, Science Centers include, but are not limited to:

Ashfall Fossil Beds (Royal)
Strategic Air and Space Museum (Ashland)
Homestead National Monument (Beatrice)
Stuhr Museum of the Prairie Pioneer (Grand Island)
Scotts Bluff National Monument (Scottsbluff)
Museum of Natural History [Morrill Hall] (Lincoln)
Lincoln Children's Zoo & LPS Science Focus Program (Lincoln)
Henry Doorly Zoo (Omaha)
Joslyn Art Museum (Omaha)
Durham Museum (Omaha)
Museum of Nebraska History (Lincoln)
Museum of Nebraska Art (Kearney)
Edgerton Explor-It Center (Aurora)
Hastings Museum & Planetarium (Hastings)
Harold Warp Pioneer Village (Minden)
Bailey Railroad Yard & Museum (North Platte)
Chimney Rock National Historic Site (Bridgeport)
The Museum of the Fur Trader (Chadron)
Mari Sandoz High Plains Heritage Center (Chadron)
Fort Robinson (Crawford)

Public Library and/or Consortia include, but are not limited to:

Nebraska Library Commission
Regional Library Systems (Omaha, Lincoln, Columbus, Kearney, Hastings, Scottsbluff)
Local Libraries (Bellevue, Grand Island, Fremont, North Platte, Norfolk, Papillion, Beatrice, etc...)

Private Career Schools include, but are not limited to:

Schools of barbering/cosmetology, business, driver training, massage therapy, modeling, nursing & allied health, real estate, trades & technical, miscellaneous

Nonprofit Education Associations include, but are not limited to:

- Nebraska Association of School Boards
 - Nebraska Council of School Administrators
 - ESU Coordinating Council
 - Nebraska School Activities Association
 - Nebraska Community College Association
 - Association of Independent Colleges and Universities of Nebraska
 - Nebraska Bar Association Foundation
 - Nebraska Humanities Council
 - Nebraska Art Council
-
-

Other statewide network fee structures....

MORENET (Missouri Research and Education Network)

- Based on student FTE as reported by the Missouri Department of Higher Education
 - 0 to 1,500 FTE: \$6,160/year
 - 1,501 to 5,000 FTE: \$8,065/year
 - 5,000+ FTE: \$11,200/year
- Plus an annual connectivity fee of \$1500/T-1, \$4800/10Mbps, \$13,200/40Mbps, \$28,000/100Mbps

Washington K-20 Network

- Annual Connectivity fee of \$2400/T-1, \$10,560/10Mbps, \$17,760/40Mbps, \$32,160/100Mbps
- Plus an Internet fee of \$12.33/Mbps/month (after E-rate discounts) or \$20.55/Mbps/month before E-rate

Kansas KAN-REN Network

- Based on network reliability and response time

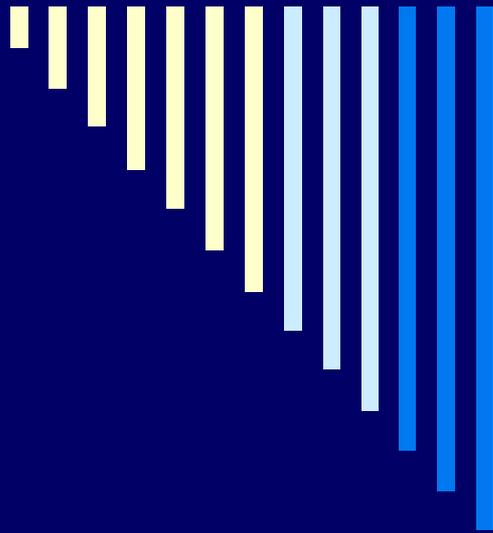
Member Class:	Uptime Target:	Support Hours:	Support Depth:	Annual Fee:
Class A1:	99.99%	24/7	15min/1hr + Holidays	\$64,000
Class A2:	99.99%	24/7	15min/1hr + Holidays	\$45,000
Class B:	99.9%	24/7 (no holidays)	1hr/4hrs	\$7,500
Class C:	99.9%	7-7 M-F	1hr	\$2,500
Class D:	N/A (non-connected)	N/A	N/A	\$500

- Plus a Backbone Fee by Class A1/A2 of \$4,000/month or Class B/C of \$52.75/Mbps/month

Network Nebraska—Education Advisory Group Charter

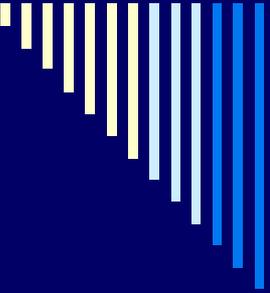
Purpose	The purpose of the Ad Hoc Advisory Group for Network Nebraska—Education is to assist the State of Nebraska Chief Information Officer in crafting the vision and strategic direction for Network Nebraska—Education based on the NITC Education Council marketing survey and Ad Hoc Education Advisory Group participant input.
Sponsor	Brenda Decker, State CIO
Scope/Boundaries	This work group’s input and recommendations should be representative of Network Nebraska members’ needs and pertain to the administration, budget, infrastructure, technical support, costs, membership categories, and present and future services of Network Nebraska.
Desired Goals and Outcomes	<ul style="list-style-type: none"> a. Conduct informative and working sessions to recommend the best technical and operational oversight of Network Nebraska; b. Research other statewide networks in order to emulate their success and import best practices; c. Explore emerging technologies to enhance the network’s ability to deliver services; d. Provide advice on technical issues to the Collaborative Aggregation Partnership as they aggregate bandwidth and develop a shared network; e. Convene meetings with stakeholders to discuss network performance, growth projections, emerging technologies, vendor service, and reliability; f. Identify and recommend applications and services that would increase the value and benefits of the network; g. Make recommendations on available service levels, membership categories, and membership costs.
Authority	This work group will be chartered by the NITC Education Council. Representatives serve on behalf of their subsectors and provide input to the State CIO and Collaborative Aggregation Partnership in order to better serve the telecommunications needs of Network Nebraska members.
Membership	Each Network Nebraska--Education Subsector should have two representatives (one urban representative and one rural representative) and be evenly balanced (8 and 8 between K-12 and Higher Education). Representatives’ institutions (employers) must also be members of Network Nebraska.

Leadership	The advisory group shall elect or select its own co-chairs (one from K-12 and one from higher education) to preside at meetings, appoint subcommittees, and work with staff to develop meeting agendas and determine topics of interest.
Reporting	Advisory group minutes must be shared in a timely manner with the NITC Education Council and the CAP.
Timeframe	The advisory group should meet a minimum of six times per year. At the end of the first year (July 2009-June 2010), the Chief Information Officer - State of Nebraska and the NITC Education Council should re-evaluate the effectiveness of the advisory group and make recommendations as appropriate. This charter remains in effect until repealed by the Education Council of the NITC.



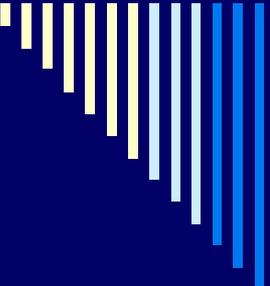
Collaborative Aggregation Partnership (CAP) and Network Nebraska

**Rick Golden, University of Nebraska
Education Council Presentation,
May 1, 2008 (updated 1/26/2010)**



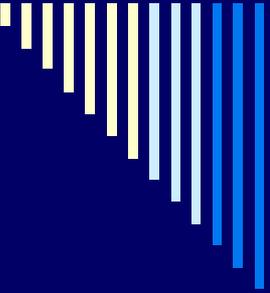
NITC Technical Panel

- Five member panel charged with advising the NITC on technical issues and assisting in the development of a statewide technical infrastructure that will be scalable, reliable, and efficient.
 - Created and included in statute in 1998 as an advisory body to the NITC.
-



Technical Panel Members

- ❑ Walter Weir, University of Nebraska
CIO, Chair
 - ❑ Brenda Decker, State of Nebraska
CIO,
 - ❑ Christy Horn, Assistive Technology
 - ❑ Kirk Langer, K-12 representative
 - ❑ Michael Winkle, Nebraska
Educational Telecommunications
 - ❑ Alternates to each of the above
-



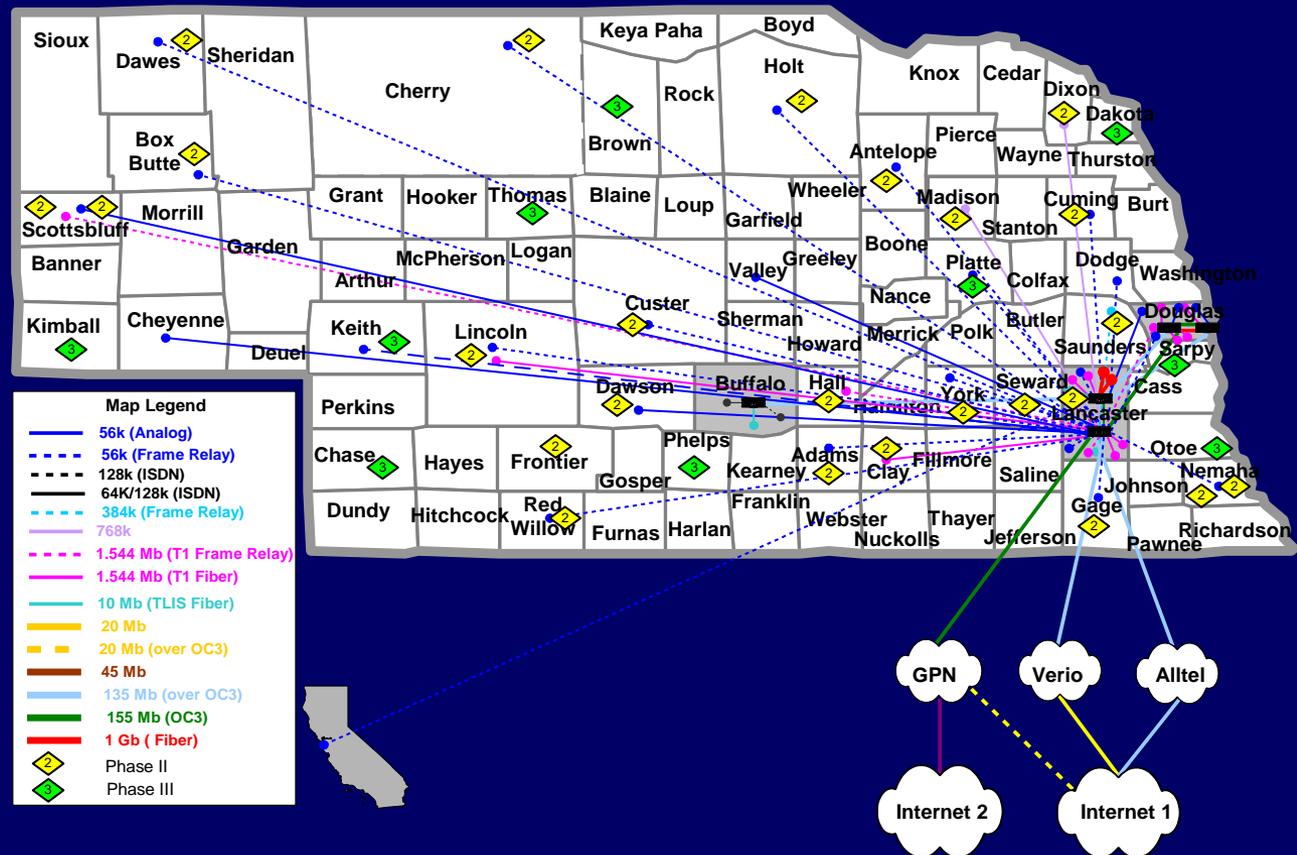
Early Days of the “Network”

- Lt. Governor Heineman
 - University President Dennis Smith

 - Created partnership to aggregate network services
 - Show a cost savings
 - Make IT Happen
-

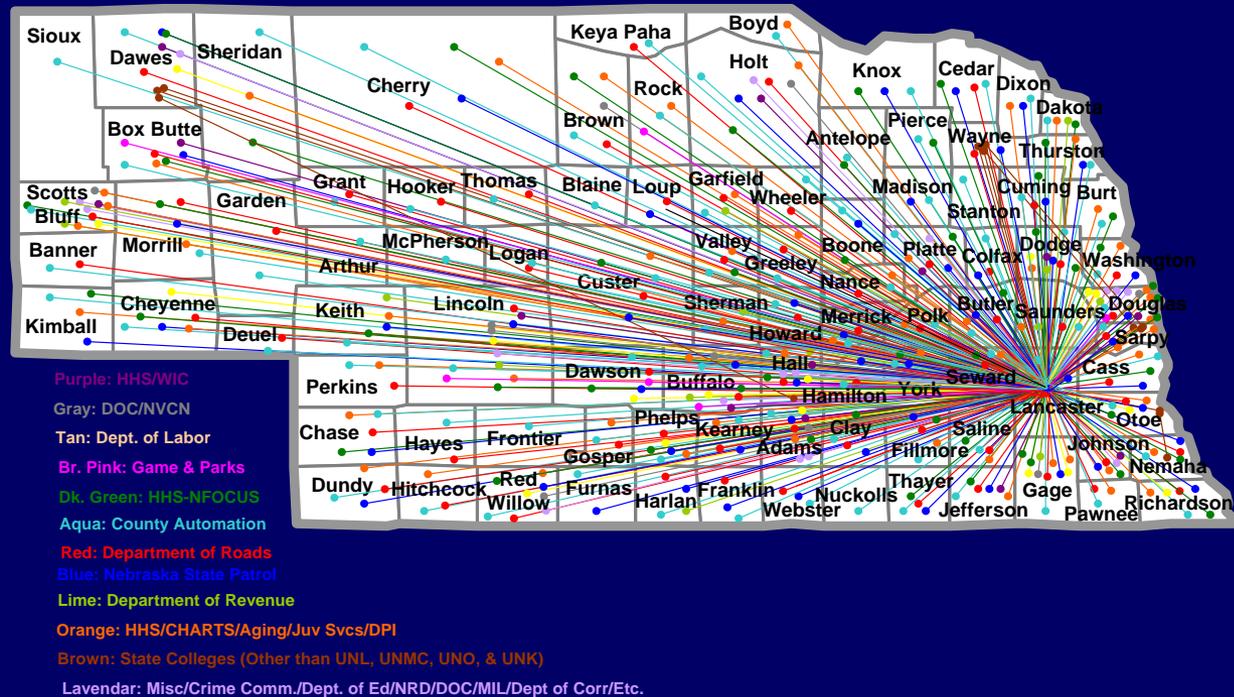
University Network - 2000

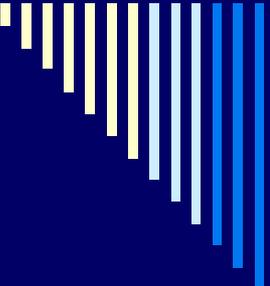
University of Nebraska State Wide Network



State Network - 2000

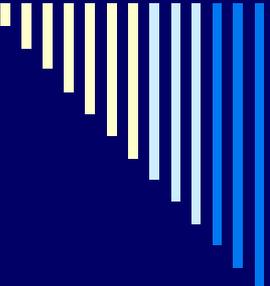
State of Nebraska Widen Project State Networks





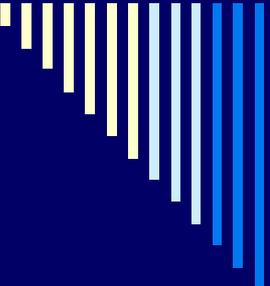
TINA – Widen - Netcom

- Several early attempts to get a network started.
 - Including surveys, RFPs, etc.
 - Learned our lessons
 - Pilot connection to Scottsbluff
 - NU and State
 - Split a DS3 – 45 mbps
 - Saved considerable \$\$s
 - More importantly, we made it work
-



New Network Strategy - 2002

- Divide the state and implement in phases
 - State and University as anchor
 - Phase 1 RFP – Lincoln, Omaha, Kearney
 - Phase 2 RFP – Northeast and Western Nebraska
 - Two logical networks, shared contracts
 - Qwest and Alltel (now Windstream)
 - Redundancy from DFS
-

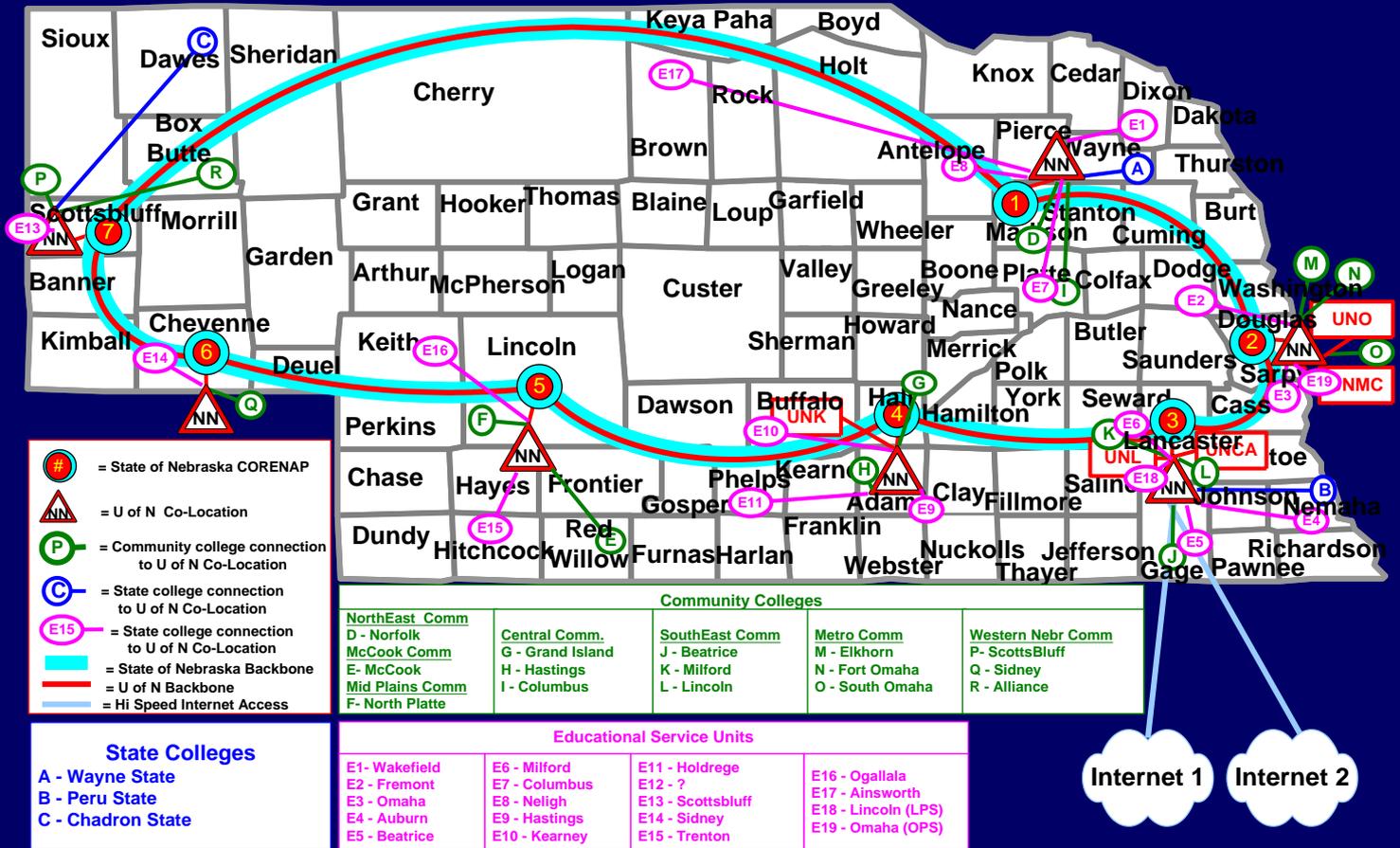


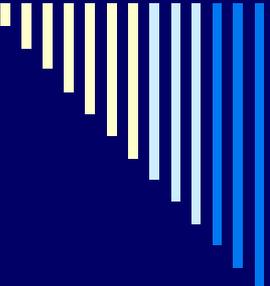
Network Nebraska - 2003

- USAC – SPIN Provider (via State)
 - Responded to school E-rate applications
 - Not a lot of belief that the State and University could provide the service
 - November – Project 42 becomes first customer/partner.
 - ESU 10's ISP had financial problems
 - Alan Wibbels was willing to take a chance on NN
-

University of Nebraska & NETCOM Network

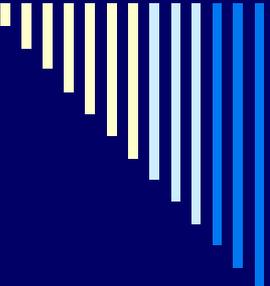
with U of N campuses, State College, Community College & ESU connections





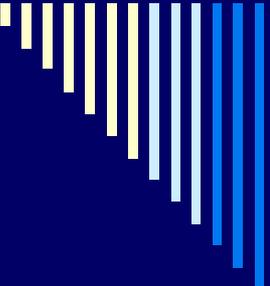
CAP Formation (Collaborative Aggregation Partnership)-2003

- Mission – “Make it happen”
 - Network Nebraska needed a steering group to help set direction
 - Primary Members
 - NU CIO
 - State CIO
 - NET
 - Since have added:
 - PSC
 - K-12
 - NDE
 - Unicameral
 - NITC
-



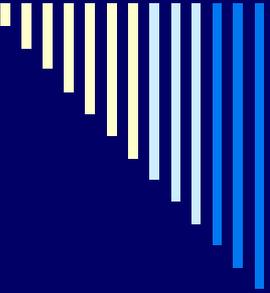
CAP Initiatives

- Aggregate Internet bandwidth
 - Pricing was all over the place -- \$250 to \$1,400 per megabit (and going up) – total purchased statewide ~ 150 megabits
 - Current pricing - \$5 - \$15 per megabit – over 1.2 gigabits in use now + Internet 2
 - Web Site for distribution of information
 - www.networknebraska.net
 - Information Desk
 - At NET 1-888-NET-NEBR
 - info@networknebraska.net
-



CAP Initiatives (2006-present)

- Build LB 1208 Educational Network--K20
 - Develop Partnerships
 - Define services – primary ISP role
 - Provide connectivity/backbone
 - Manage network
 - Internet 2
 - Sponsored Education Group Participant
 - Now include Commodity Peering Service
 - Google, Yahoo, etc
-



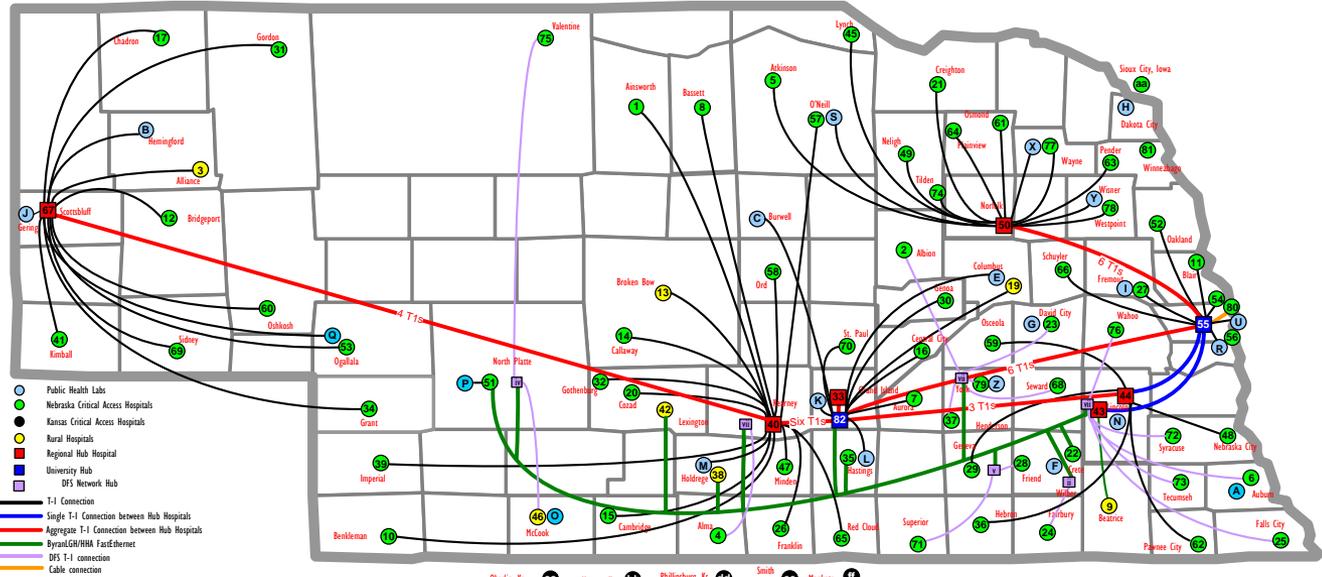
CAP Initiatives

□ Telehealth Network

- 80+ Hospitals
 - 20+ Public Health Departments
 - Private network – UNMC is the common connection point to Education Network
 - Qwest, Action Communications
Windstream and Dark Fiber Solutions
 - Network management
-



Nebraska Telehealth Network

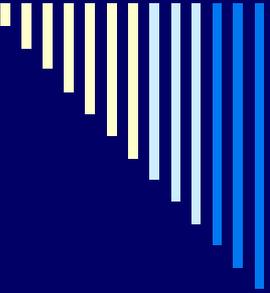


Nebraska Hospitals					
1. Ainsworth	Brown County	30. Genoa	Genoa Community	57. O'Neill	Avera St. Anthony's
2. Albion	Boone County	31. Gordon	Gordon Memorial	58. Ord	Valley County
3. Alliance	Box Butte General	32. Gothenberg	Gothenberg Memorial	59. Osceola	Garden County
4. Alma	Harlan County Health Sys	33. Grand Island	St. Francis Medical Center	60. Osmond	Osmond General
5. Atkinson	West Holt	34. Grant	Perkins County	61. Pawnee City	Pawnee County
6. Auburn	Nemaha County	35. Hastings	Mary Lanning Memorial	62. Pawnee	Pender Community
7. Aurora	Memorial	36. Hebron	Thayer County	63. Pender	Plainview Public
8. Bassett	Rock County	37. Henderson	Henderson Health Services	64. Plainview	Webster County
9. Beatrice	Beatrice Community	38. Holdrege	Phelps Memorial	65. Red Cloud	Alegent Health
10. Benkelman	Dundy County	39. Imperial	Good Samaritan Health Sys	66. Scottsbluff	Regional West Medical Center
11. Blair	Memorial Community	40. Kearney	Kimball County	67. Seward	Seward Memorial
12. Bridgeport	Morrill County	41. Kimball	Tri-County	68. Sidney	Memorial Health
13. Broken Bow	Jennie Melham	42. Lexington	Bryan/LGH	69. St. Paul	Howard County
14. Callaway	Callaway District	43. Lincoln	St. Elizabeth's	70. Superior	Broadstone Memorial
15. Cambridge	Tri-Valley Health System	44. Lincoln	Niobrara Valley	71. Superior	Community Memorial
16. Central City	Litzenberg Memorial	45. Lynch	Kearney County	72. Tecumseh	Johnson County Hospital
17. Chadron	Chadron Community	46. McCook	Community Hospital	73. Tilden	Tilden Community
18. Columbus	Columbus Community	47. Minden	St. Mary's	74. Tilden	Cherry County
20. Cozad	Cozad Community	48. Nebraska City	Antelope Memorial	75. Valentine	Saunders County
21. Creighton	Creighton Area	49. Neligh	Faith Regional Health Srvc	76. Wahoo	Providence
22. Crete	Butler Area	50. Norfolk	Ogallala Community Hospital	77. Wayne	St. Francis
23. David City	Jefferson County	51. North Platte	Great Plains Regional Medical Ctr	78. West Point	York General
24. Fairbury	Community Medical Ctr.	52. Oakland	Ogallala Community Hospital	79. York	Creighton Hospital
25. Falls City	Franklin County	53. Ogallala	Methodist Hospital	80. Omaha	Winnebago Indian Hospital
26. Franklin	Franklin County	54. Omaha	University of Nebraska Medical Ctr	81. Winnebago	College Park
27. Fremont	Warren Memorial	55. Omaha	Alegant Health Immanuel	82. Grand Island	
28. Friend	Fillmore County	56. Omaha			
29. Geneva					

Hospitals From Other States	
aa. Sioux City, Iowa	
bb. Norton, KS	Norton County Hospital
cc. Oberlin, KS	Decatur County Hospital
dd. Phillipsburg, KS	Jewell County Hospital
ff. Mankato, KS	Jewell County Hospital

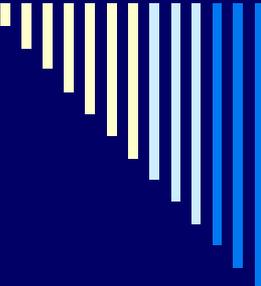
Dark Fiber Solutions Network Hubs		
i. Lincoln Bryan LGH, 1600 S. 48th	iv. NP GPRMC, 601 W. Leota St., North Platte	
ii. Wilber Head End, 901 N. Main, Wilber	v. Geneva Head End, 300 C. St. Geneva	
iii. DFS York, 600 1/2 Grand Ave, York	vi. Kearney Head End, 804 Ave. A., Kearney	

Nebraska Public Health Depts.	
A. Auburn	Southeast District Health Dept.
B. Hamlingford	Panhandle Public Health Dept.
C. Burwell	Loup Basin Public Health Dept.
E. Columbus	East Central District Health Dept.
F. Crete	Public Health Solutions
G. David City	Butler County Health Dept.
H. Dakota City	Dakota County Health Dept.
I. Fremont	Three Rivers Health Dept.
J. Gering	Scotts Bluff County Health Dept.
K. Grand Island	Central District Health Dept.
L. Hastings	South Heartland District Health Dept.
M. Holdrege	Two Rivers Public Health Dept.
N. Lincoln	Lincoln-Lancaster County Health Dept.
O. McCook	Red Willow County Health Dept.
P. North Platte	West Central District Health Dept.
Q. Ogallala	Sandhills District Health Dept.
R. Omaha	Douglas County Health Dept.
S. O'Neill	North Central District Health Dept.
U. Papillion	Sarpy/Cass Dept. of Health and Wellness
X. Wayne	Northeast Nebraska Public Health Dept.
Y. Wisner	Eikhorn Logan Valley Public Health Dept.
Z. York	Four Corners Health Dept.



CAP Initiatives

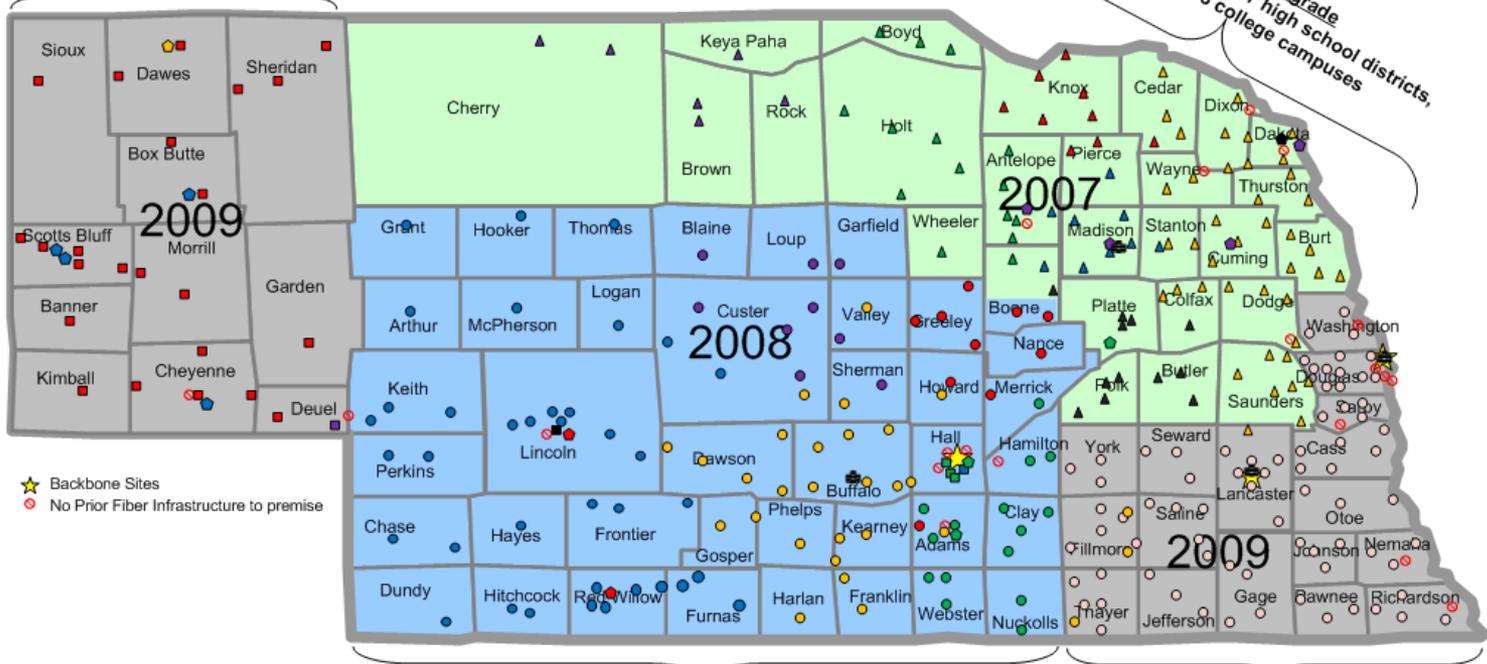
- LB1208 – Distance Learning
 - Design and implement new network
 - IP Centric
 - Include all areas of State
 - Phased implementation
 - High bandwidth
 - Inter-regional Transport - backbone
 - Replace obsolete distance learning equipment
 - Network Operations Center
-



LB1208 Map by Year

Phase III Upgrade
 Panhandle Region: 23 high school districts, 2 ESU offices, 2 college campuses

Phase I Upgrade
 Northeast Region: 87 high school districts, 5 ESUs, 3 college campuses



★ Backbone Sites
 ○ No Prior Fiber Infrastructure to premise

- Phase I – Green Shading on Counties**
- ▲ NE-NEDLC (9 sites)
 - ▲ ENDLC (32 sites)
 - ▲ NVTP (14 sites)
 - ▲ NENELA (10 sites)
 - ▲ NCDLS (6 sites)
 - ▲ Crossroads (13 sites)
 - ▲ NECC (4 sites)
 - ▲ WSC (2 sites)
 - ▲ NU

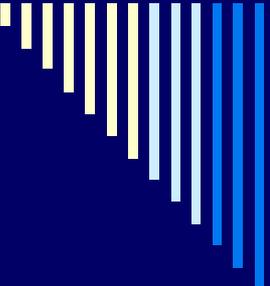
- Phase II – Blue Shading on Counties**
- TriValley-North (12 sites)
 - TriValley-South (28 sites)
 - CNDC (17 sites)
 - SNDC (35 sites)
 - STEP (9 sites)
 - MPCC
 - CSC
 - CCC

- Phase III – Gray Shading on Counties**
- WNDLC (25 sites)
 - Giltner Public Schools
 - G.I. Public Schools
 - G.I. NorthWest High School
 - South Platte-Big Springs
 - North Platte St. Patrick's
 - WNCC

Phase II Upgrade
 Central Region: 102 high school districts, 6 ESUs, 7 college campuses

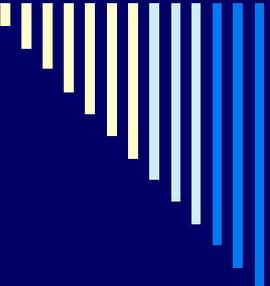
Phase III Upgrade
 Southeast Region: 84 high schools, 6 ESUs, 12+ college campuses

Revised: 02/29/2008 LLR
 S:\networking\State Network\LB1208\LB1208 Map by Year 02/29/2008



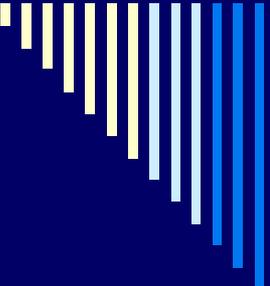
CAP – Network Nebraska's Future

- Further develop service level agreements
 - Improve Network Operations Center
 - Network management products
 - Partner access
 - Implement “trouble ticket” system
 - Define other services
 - Disaster recovery
 - Server Hosting
 - Email
 - Content streaming
 - Security
-



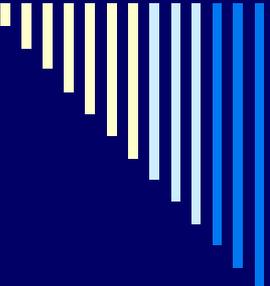
CAP – Network Nebraska's Future

- Formalize CAP membership
 - Formalize Network Operations
 - Formalize Advisory Groups
 - Advanced Network initiatives
 - Continue QOS implementation
 - IPV6
 - Converged Networking
 - Even more security
 - Network traffic engineering
 - Create redundancy in network
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Additional Partnerships

- State and University Disaster Recovery
 - Fiber ring between Omaha and Lincoln
 - Potential other fiber needs
 - State Colleges and University
 - ERP System
 - SIS System
 - National network partnerships
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