

Nebraska Information Technology Commission

# **Education Council**

Prepared by: Marketing Task Group

August 15, 2012



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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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# Network Nebraska Market Survey

## • Report, Conclusions, and Recommendations •

### I. Introduction

Network Nebraska is the term used to describe the statewide multipurpose, highbandwidth, telecommunications backbone and all of its associated service offerings and support. Network Nebraska-Education serves public and private K-12 and higher education. It offers network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet 2 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.
- Services that might be of interest to the member community.
- 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

### II. Executive Summary

This is the fourth year in which the Network Nebraska (NN) market survey has been conducted. Each year a larger percentage of those who start the survey complete the survey – an average increase of about 3% over each of the last three years. The overall participation, that is the number of participants starting the survey, has declined annually from 335 in 2008 to 217 this year.

The survey was issued in December 2011. Of the 217 participants who started the survey, 165 or 76% completed it. In December 2010, 178 individuals completed the survey out of 242 who attempted the survey, or a 73.6% completion rate. 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.

**Partners**: December 2011 survey results suggest that for existing members in both the K-12 and higher education demographic groups the top three attributes of Network Nebraska include student learning opportunities, increased bandwidth, and cost sharing. This is consistent with results in both the 2009 and 2010 surveys. In 2008 lower cost was defined as the single most important attribute. But, as a stable and trusted network was realized, partner interests migrated to better utilization of the shared resource.

**Potential Partners:** This year there were very few potential member responses to the survey in the K-12 demographic and even fewer in the higher education demographic. Issues of greatest importance for K-12 were student learning opportunities, increased bandwidth, and Interactive Video Conferencing. Of potential partners in the higher education community recruiting and retaining members, communication and collaboration, as well as new shared services ranked as the top issues of importance.

### **Overview of Existing Network Nebraska Partner Results**

K-12 partners:

- Of the 129 who rated network attributes based on relative importance to their institutions, 98.5% 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.
- Other attributes rated highly important to current K-12 partner institutions are distance learning and video conferencing, communication and collaboration, shared services, and technical support services.

- Among current K-12 partner respondents, value, governance, and Esprit de Corps were identified as strengths of Network Nebraska compared to last year's results of reduced costs, bandwidth, collaboration and shared services.
- Weaknesses of the Network included reliability, improvements and governance compared to last year's results of distance education coordination, connectivity concerns, and communication and collaboration.
- Indicated as the single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates educational entities to partner with Network Nebraska is its value followed by teacher and learning, and partnering.
- When asked what services current Network Nebraska partners would be most likely participate in, data backup and recovery received the highest score followed by virus/spam filtering, shared email, and cloud computing.
- Recruiting and retaining members was identified as less important to current partners
- K-12 members indicated they would be least likely to participate in IPv6 workshops and VOIP services.

Higher Education partners:

- Among current Higher Education partners 95% felt that student learning opportunities, increased bandwidth and cost sharing as the most important attributes of Network Nebraska.
- Other attributes considered to be highly important to current higher ed partner institutions include value, Esprit de Corps, and network reliability.
- Existing Network Nebraska higher ed partners identified reliability, improvements, and governance as network weaknesses.
- The single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates educational entities to partner with Network Nebraska is value followed by partnering and programs and services.
- When asked what services current higher ed partners would most likely participate in, security workshops, cloud computing, and data backup and recovery received the highest scores followed by virus/spam filtering, directory services/single sign-on, and IPv6 workshops.
- Scheduling distance education classes was identified as a service less important to current higher ed partners followed by Internet 2.
- Services that members indicated they would least likely participate in included web hosting and email services.

### **Overview of Potential Network Nebraska Partner Results:**

There were no survey responses in this category from higher ed institutions.

- K-12 respondents identified costs savings, quality of service, and more distance learning resources as compelling advantages of Network Nebraska that would encourage them to partner.
- Little to nothing was the answer most received when potential partners were asked what they knew or had heard about Network Nebraska. Additional responses included that it was a collaborative and worthwhile endeavor.

### **Conclusions**

This is the fourth year in which the Network Nebraska-Education survey has been conducted. Total logins and responses are down overall. This may be due to acceptance of the service as a normal day-to-day expectation as long as there are no outages or other issues.

Partner concerns of reliability, improvements on the network, and governance, as well as newer realizations of Esprit de Corp and creating a culture of entrepreneurship, it seems the membership has embraced the network as its own.

This survey instrument has been replicated with very few changes since it was first administered in December 2008. Initially the purpose of the survey was to understand member and non-member perceptions of Network Nebraska and determine ways to meet identified needs. While the total percentage of those starting and completing the survey has shown a steady increase, the total number of individuals completing the survey has decreased. In addition, the number of responses to all questions has decreased over time. This suggests that perhaps this survey instrument is in need of change to reflect the changing needs of its members.

### **Recommendations**

Network Nebraska partners are beginning to seek ways to contribute to the partner community. A significant effort needs to be put into developing a process for identifying partnerships in providing supports structues that the network would provides its members and how to make available those services. This challenge will require significant time and effort from a broad representation of interests. Failure to do so could be devastating to retention of members as K-12 incentives begin to sunset.

- New terms like *entrepreneurship* and *Esprit de Corps* were gleaned in this data collection. These are important avenues of growth across the network. Determine how network leadership, task groups, and local agencies can build on these concepts.
- 2. Institutions find great value in partnering over Network Nebraska. Shared services are the obvious next step in bringing additional value to Network partners. All Education Council representatives and task groups need to work with stakeholders to identify and marketing these resources.
- 3. The Marketing task group needs to determine the ongoing value of this survey instrument and the role it plays in governance and decision making for Network Nebraska. Identify also the role that other groups such as the Network Nebraska Advisory Group, ESUCC, and others should play in these efforts.
- 4. The Network Nebraska web page needs to become active and kept current as a primary means of disseminating information and a as communication tool for existing partners and potential new partners.

See Appendix E: Work Group Action Plans

### **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 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. Each category determined in the first process was tagged as a strength, weakness, opportunity or threat, or opportunity referring to the specific responses when needing 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 study provides useful information in understanding motivations and perceptions of current and potential users of Network Nebraska. Further research is necessary to address items listed under both opportunities and threats in the SWOT Analysis section of the survey. As with any voluntary web-based survey, each respondent was motivated enough to open the survey link which may indicate biases, either positive or negative, towards Network Nebraska. The thematic categorization of textual responses for each question was the opinion of two researchers and could be categorized differently by different reviewers.

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 217. Approximately 217 individuals completed the demographic questions, of which 165 (76%) of the respondents completed one or more textual responses originating from existing and potential Network Nebraska partner elements of the survey.

### Survey 2011 vs. Survey 2012-What's different?

While the basic survey and survey methodology remained the same since December 2008, some questions for prospective users were modified slightly to better gauge their perceptions of Network Nebraska. With the increased interest in shared services, this year's instrument included a list of potential services that might be available over the shared backbone, and asked respondents to indicate the likelihood that their institution would participate.

## **Survey Results and Analysis**

### **SWOT** Analysis from Survey Data

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
Characteristics important to the execution and	Internal factors that could prevent the
ultimate success of the project	achievement of a successful project result
<ul> <li>Membership - increased buying power, overall value</li> <li>Rural / Urban Equity - shared services, costs, and technical support</li> <li>Learner Opportunities</li> <li>Reliability</li> </ul>	<ul> <li>Communication – network offerings and including JIT events</li> <li>Marketing - Return on Investment (ROI) needs to be clear</li> <li>Access to NN personnel</li> <li>Standing still - having a vision of what to do next</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
External elements helpful in achieving	External factors that
the goals of the project	threaten project success
<ul> <li>New / Shared Services - and assistance in implementing services</li> <li>Forum for members to communicate with each other</li> <li>Culture of entrepreneurship and community</li> </ul>	<ul> <li>Service Provider outages</li> <li>Loss of Incentives</li> <li>Loss of members</li> </ul>

### 2011 vs. 2012 Trends-What Network Nebraska entities are telling us

In 2011 it was noted that partners are beginning to realize that Network Nebraska is more than just a physical backbone. This potential has an even stronger presence in this year's results. In 2012 awareness of the potential for community collaboration and development of resources from professional development to shared applications is rising. Members are seeking more communication about what their contribution is purchasing and how to enhance services and supports through more shared opportunities. There is a new trend of ownership and contribution to the community from the local level, and a desire to take some ownership in working with others through member interaction to achieve like goals.

# Comparisons of 2010 and 2011 Survey Results

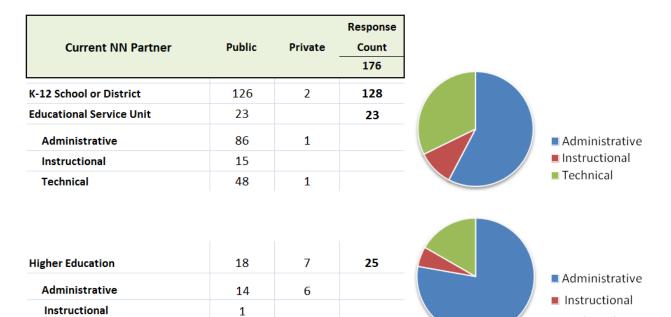
Key Indicator	2010 Survey Response	2011 Survey Response
Strengths	Reduced costs Bandwidth / Connectivity Partnering / Equity Student Learning Opportunities	Membership Rural / Urban Equity Learner opportunities Reliability
Weaknesses	Leadership and Administration Lack of Redundancy Lack of Entrepreneurialism Occasional reliability issues	Communication Marketing - <i>ROI</i> Access to NN personnel Standing still
Opportunities	New / Shared Services Online and virtual learning experiences Collaborative Purchasing	New / Shared Forum for members to communicate with each other Culture of entrepreneurship and community
Threats	DL Coordination and Scheduling Local infrastructure Funding Negative association with Network Nebraska because of elements outside of its control	Service Provider outages Loss of Incentives Loss of members
Existing Partners	2010 Survey Response	2011 Survey Response
Strengths of NN Services	Reduced costs Bandwidth/connectivity Collaboration and shared services	Value Governance Esprit de Corps
Weakness of NN Services	Distance education coordination Connectivity concerns No known weaknesses Communication and collaboration	Reliability Improvements Governance
Most Compelling Competitive Advantage of NN	Reduced costs Student learning opportunities	Value Teaching and Learning Partnering
Guiding Principle/Slogan of NN	Service-oriented phrases Enhanced equity	(not asked in 2011)
Services or Modification to Existing Services Desired	Satisfied with existing services Distance education enhancements Technical support	(not asked in 2011)
Potential Partners	2010 Survey Response	2011 Survey Response
Most Compelling Competitive Advantage of NN	Reduced costs Student learning opportunities Increased collaboration	Cost Savings QoS for all More DL resources
Guiding Principle/Slogan of NN	Network focused Learner focused Unknown	(not asked in 2011)
What Services Would Benefit your Organization	Internet transport Services and support Student learning opportunities Resource sharing	(not asked in 2011)

### Survey Results and Analysis **NITC Education Council**

Market Survey • Dec 2011

Technical

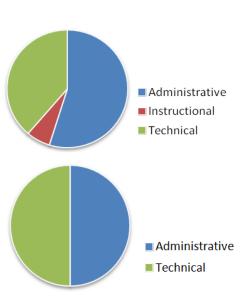
**Total Surveys Started** 217 76% **Total Surveys Completed** 165



1

Potential NN Partner	Public	Private	Response Count 41
K-12 School or District	31	3	35
Educational Service Unit	3	3	6
Administrative	17	2	
Instructional	2		
Technical	12	1	
Higher Education		2	2
Administrative	1	1	
Instructional			
Technical	1	1	

3

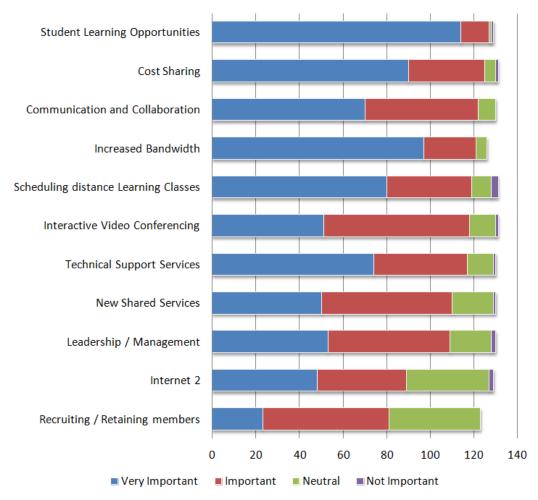


Technical

### K-12 Partner Responses

(includes public, non-public and ESUs)

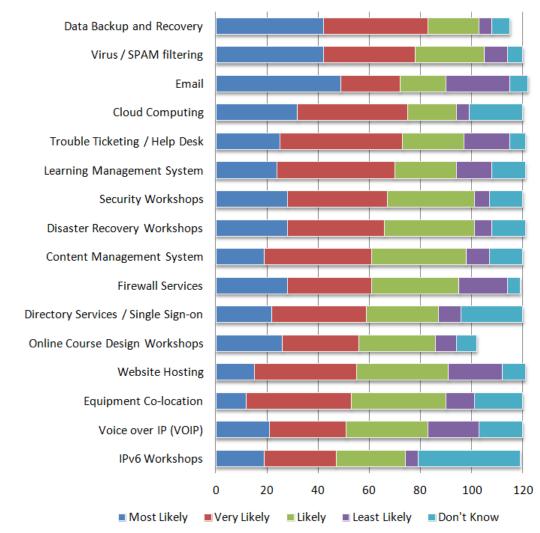
**<u>Question</u>**: Reflecting on your experience as a Network *Nebraska-Education partner*, please rate the following attributes based on their relative importance to your institution:



Comments:

- Elaboration on a few responses above: \*new shared services and internet 2: I don't know what those would be so am neutral \*increased bandwidth and communication: it seems from time to time that bandwidth gets seriously compromised and delivery/access is slowed noticeably; from time to time we get no service -- it would be nice to know of those lapses in advance!
- I feel this question was worded poorly. Do you want to know whether these things are important specifically in relation to NN-E's role in their use in my district, or important to my district in general? I answered based on the former.
- Portable video units were rarely used if ever. Waste of resources!
- Redundant Links need to be established throughout the state
- When I marked neutral it is because I was unclear as to what was being referred to in the selection....in other words, I do not know what Internet 2 means, I don't know what new shared services you are referring to and I am a little unclear on exactly what you mean for Leadership/Management in relation to this topic.
- Not particularly familiar with the services provided by Network Nebraska

Question: Past survey responses have indicated that sharing services is a significant benefit to Network Nebraska members by reducing costs locally and increasing statewide collaboration. For example, by aggregating demand, members of Network Nebraska have enjoyed a reduction of Internet costs of more than 90% over the past five years. If Network Nebraska -- through partnering with members or through hosted services -- were to offer any of the following, please rate from 1 to 4 (with 4 being the most likely) the likelihood that your institution would purchase or participate in the following shared service(s):



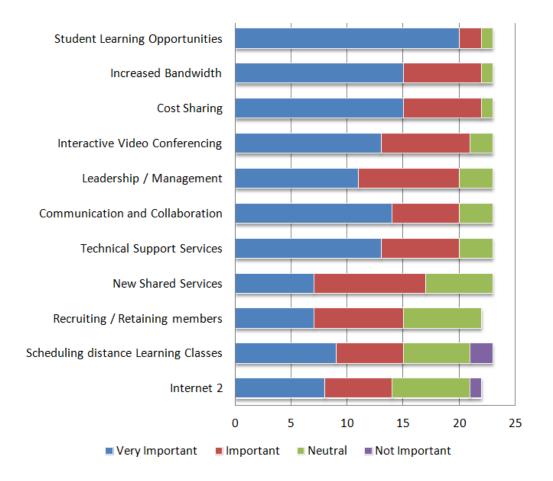
#### Comments:

- I am not sure how the ESU services and NN would work and therefore was unsure how to answer some of the above.
- Am unfamiliar with some of the services being suggested
- These questions are broad enough that the answer in every case is "it depends." We have a strategic plan and when the product lines up, we will participate. When it doesn't we'll shop elsewhere. Opportunities to learn are always welcomed. Answers above are based on my understanding of NN-E as portrayed by my ESU
- Schools need this very much!
- Interested in a statewide system/services that will reduce costs
- I am not a tech person, so am unable to respond to a lot of these. I do not however, understand the need to purchase a learning management system when we have access to Moodle free of charge and it works well for my needs as an instructor. I guess, I also am not sure about the exact difference between LMS and CMS. In my mind Moodle is an LMS, so if a CMS is a repository site, then I think we probably need that, but again, I am not sure.
- I really don't know about Network Nebraska-Education, so am unable to answer the questions below. The questions I answered above were my thoughts on the subject and do not reflect the organization I work for.

# Higher Education Partner Responses

(includes public and private institutions)

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

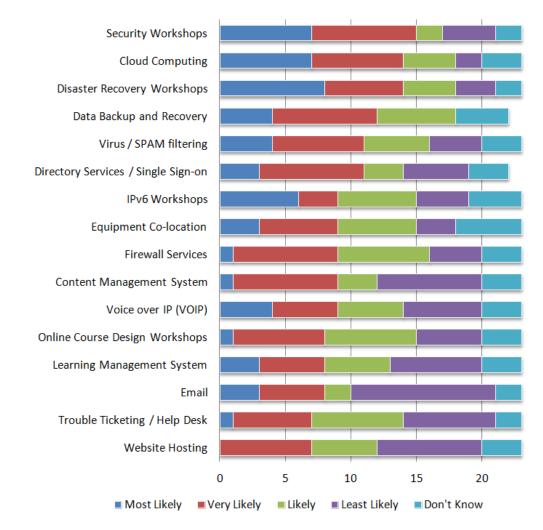


#### **Comments:**

• Network Nebraska can be an effective primary source for Internet but large institutions need alternate connections, in the event of Network Nebraska downtime, to provide seamless services that are expected 24x7.

•NN is an excellent support mechanism. We need to ensure that the potential members are personally persuaded to join as it will greatly help them with technology support and cost controls and will continue to lower the cost of operations as the membership grows.

**Question**: Past survey responses have indicated that sharing services is a significant benefit to Network Nebraska members by reducing costs locally and increasing statewide collaboration. For example, by aggregating demand, members of Network Nebraska have enjoyed a reduction of Internet costs of more than 90% over the past five years. If Network Nebraska -- through partnering with members or through hosted services -- were to offer any of the following, please rate from 1 to 4 (with 4 being the most likely) the likelihood that your institution would purchase or participate in the following shared service(s):



#### Comments:

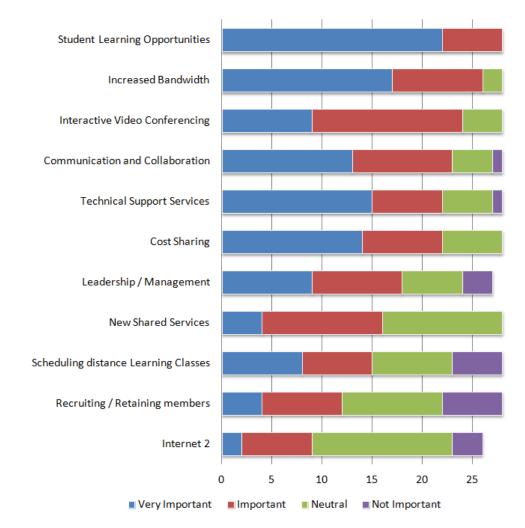
• Leased or managed WAN Links between participant locations included on bids or the possibility of using Network Nebraska as the WAN.

• Shared resources are great in our area for online LMS systems and cloud computing. I'm glad to see these questions being asked. We pay a premium price for having Blackboard and an ever expanding server farm.

• These are some excellent areas where a collaborative learning environment would be useful and helpful to the membership.

### K-12 Potential Partner Responses (includes public, non-public and ESUs)

**<u>Question</u>**: If you were to become a partner in Network Nebraska-Education, please rate the following attributes based on their relative importance to your institution:

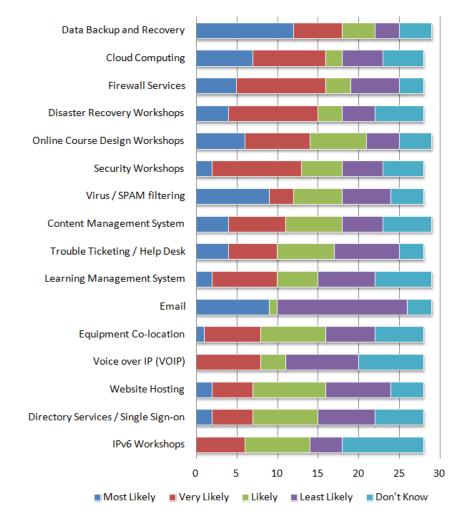


#### Comments:

• Network reliability and redundancy

• For us to consider becoming a Network Nebraska partner the benefit we would need to see would be lower cost for our connection to the Internet.

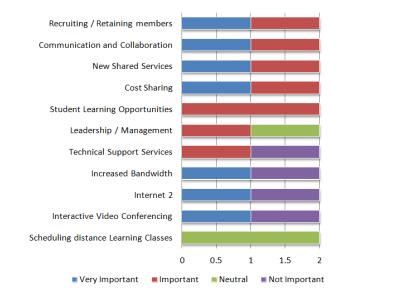
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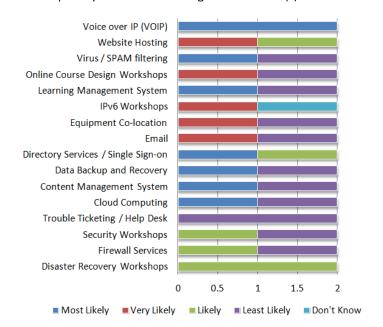
Comments: None

### Higher Education Potential Partner Responses (includes public and private institutions)

<u>Question</u>: If you were to become a partner in Network Nebraska-Education, please rate the following attributes based on their relative importance to your institution:



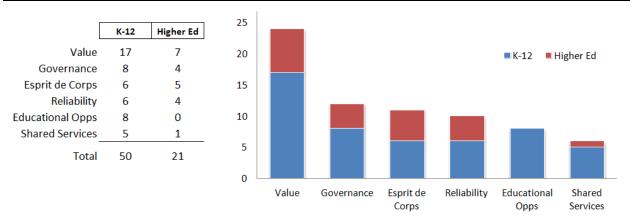
Question: Past survey responses have indicated that sharing services is a significant benefit to Network Nebraska members by reducing costs locally and increasing statewide collaboration. For example, by aggregating demand, members of Network Nebraska have enjoyed a reduction of Internet costs of more than 90% over the past five years. If Network Nebraska -- through partnering with members or through hosted services -- were to offer any of the following, please rate from 1 to 4 (with 4 being the most likely) the likelihood that your institution would purchase or participate in the following shared service(s):



#### Comments: None

Comments: None

#### Pareto Charts: PARTNER Responses to Qualitative Survey Questions



#### What are the strengths of Network Nebraska-Education?

Value: reduced cost, increased bandwidth, Internet2.

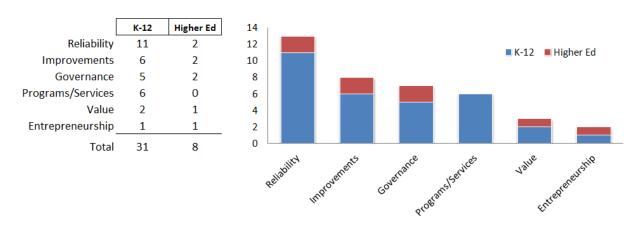
Governance: administration, technical support, and communication.

Esprit de Corps: a sense of unity and of common interests and responsibilities of a shared enterprise.

Reliability: there when needed.

Educational Opportunities: access to instructional resources, especially in rural areas.

Shared services: the ability to add value by adding services and sharing resources.



#### What are the weaknesses of Network Nebraska-Education?

Reliability: not always there when needed.

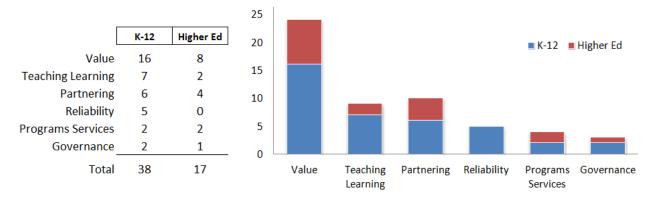
Improvements: reduce risk, better communication.

Governance: too few technical and administrative supports for the size of this network.

Programs/Services: need more information about those that are available, training.

Value: loss of K-12 incentives; transport costs.

Entrepreneurship: provide opportunities for better utilization and collaboration.

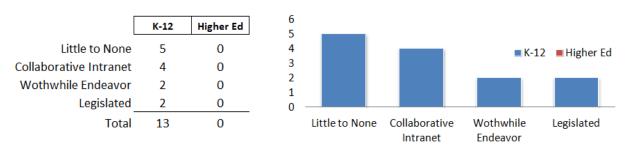


What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities to partner with Network Nebraska?

Value: reduced cost, increased bandwidth, Internet2.
Teaching Learning: statewide access to instructional resources.
Partnering: collaboration, shared investment in modernization, and bargaining power.
Reliability: there when needed.
Programs / Services: potential for sharing new programs and technologies.
Governance: leadership in continual improvements and enhancements.

### Pareto Charts: POTENTIAL Partner Responses to Qualitative Survey Questions

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



#### What would be the single most compelling competitive advantage to makes Network Nebraska-Education's services distinctive and motivate you to partner with Network Nebraska?



# \* APPENDIX: A - Survey Instrument \*

### Survey Introduction and first demographic determined

In the Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and associated ice offerings and support. It is comprised of several subnetworks that include Government, the University of Nebraska, and Deducation. It offers interregional transport, network management, Internet access and Intranet routing for distance cation, and provides access to the nationwide Internet-2 research and education network. Network Nebraska-Education is a aborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office of the CIO, University of Nebraska, and Nebraska Educational to the State Office Of
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communications, and is made possible by the public and private education entities of Nebraska. esponses to this short survey will be kept confidential. Comments will be compiled and synthesized by members of the cation Council Marketing Task Group. Information will help improve both the quality and types of services provided by vork Nebraska-Education. Results will be posted on the NITC website.
e information can be found at: C Education Council (www.nitc.nebraska.gov/ec) vork Nebraska (www.networknebraska.net)
* Choose one:
Current NN Partner
Potential NN Partner
Next

>>> Demographics by institution, job role

2011 NITC Education Council S	urvey
* Is your institution public or pri	vate?
Private Entity	
Public Entity	
	David
	Prev Next
2011 NITC Education Council S	urvey
* Which of the following best de	escribes your institution?
Educational Service Unit	
K-12 School or District	
Higher Education	
	Prev Next
2011 NITC Education Council S	survey
* Which of the following best de	escribes your job role.
Administrative	
Instructional or Staff Developm	nent
<ul> <li>Technical</li> </ul>	
0	
	Dray
	Prev Next

#### Seach demographic was asked these questions:

Partner verbiage:

011 NITC Education Council Su Reflecting on your experience as a Netw	ork Nebraska-Educ		please rate the	following
attributes based on their relative importa	nce to your institut Very Important	ion: Important	Neutral	Not Important
Student Learning Opportunities	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Interactive Video Conferencing	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Scheduling Distance Learning Classes	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Cost Sharing	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
New Shared Services	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Internet 2	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Increased Bandwidth	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Technical Support Services	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Communication and Collaboration	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Leadership/Management	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Recruiting/Retaining Members	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Other / Comments:				
			<u> </u>	
			-	

#### Potential partner verbiage:

#### 2011 NITC Education Council Survey

The name, Network Nebraska-Education, represents 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. Partner-driven, it provides shared resources and services, network management and technical support, interregional transport, Internet access and Intranet routing for distance education, as well as 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.

			×	
If you were to become a partner in Ne based on their relative importance to y		ation, please ra	te the followi	ng attributes
		ation, please ra	ite the followi	ng attributes Not Important
	your institution:			
based on their relative importance to	your institution:			

Partner and Potential partner verbiage:

Past survey responses have indicated that sharing services is a significant benefit to Network Nebraska members by reducing costs locally and increasing statewide collaboration. For example, by aggregating demand, members of Network Nebraska have enjoyed a reduction of Internet costs of more than 90% over the past five years. If Network Nebraska – through partnering with members or through hosted services – were to offer any of the following, please rate from 1 to 4 (with 4 being the most likely) the likelihood that your institution would purchase or participate in the following shared service(s):

	4 (Most likely)	3	2	1 (Least likely)	Don't Know
E-mail	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Voice over IP (VOIP)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Learning Management System	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Content Management System	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Online Course Design Workshops	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
IPv6 Workshops	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Security Workshops	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Disaster Recovey Workshops	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Directory Services/Single Sign-on	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Website Hosting	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Trouble Ticketing/Help Desk	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Firewall Services	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Equipment Co-Location	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Cloud Computing	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Virus/SPAM Filtering	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Data Backup and Recovery	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Other / Comments:					
			<u>~</u>		

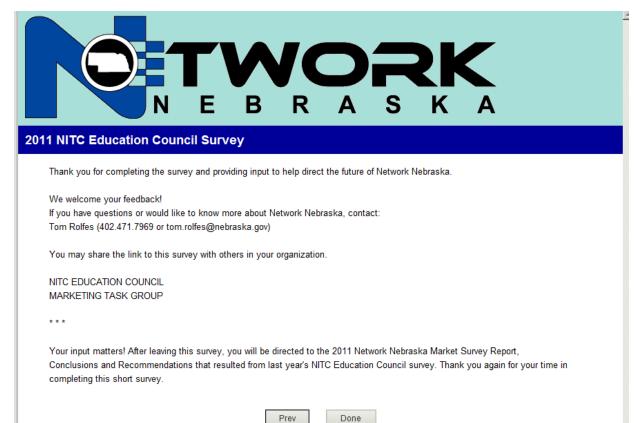
Partner verbiage:

			-		
What are the we	aknesses of Network Nebras	ka-Education?			
			*		
			<b>*</b>		
			Y		
What is the sing	e most compelling competit	ive advantage that m	akes Network Nebras	ska.Education services	distinctive and
-	e most compelling competit tional entities (Educational S	-			
notivates educa	e most compelling competit tional entities (Educational S artner with Network Nebrask	Service Units, public a			
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notivates educa	tional entities (Educational S	Service Units, public a			
notivates educa	tional entities (Educational S	Service Units, public a			

Potential partner verbiage:

	 7	

Thank you page with redirect to last year's survey report:



### \* APPENDIX: B - Invitation to Participate \*

From: Arnold J Bateman [mailto:abateman@nebraska.edu]
Sent: Tuesday, November 23, 2010 9:35 AM
To: Rolfes, Tom
Cc: Chuck Lenosky (clenosky@creighton.edu); Hoffman, Ed; Kozak, Mike; Golden, Rick; Steven Stortz (sstortz@clnorfolk.org); Witt, SuAnn

Subject: Re: FW: Network Nebraska Market Survey 2010

EC Marketing Task Group Members:

Below is the distribution protocol and updated timeline for the Network Nebraska market survey collection:

Also appended below is the updated DRAFT of last year's survey invitation that is set for DISTRIBUTION on Tuesday, November 30, 2010.

**Distribution Agents:** 

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/Dan Ernst --- 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) Steven Stortz --- Lutheran Schools of Nebraska Jeremy Murphy --- Catholic Schools of Nebraska

Schedule:

Survey will be finalized and posted to Survey Monkey, Monday, November 29, 2010

♦First e-mail invitations will be sent Tuesday, November 30, 2010

♦Reminder e-mail should be sent on or about Friday, December 10, 2010

Last day to complete the survey is Friday, December 17, 2010

◆Data analysis to be performed December 20-31, 2010

•Marketing group conference call the week of January 10 to discuss survey data and make assignments for conclusions, recommendations, SWOT analysis

♦Preliminary survey data will be presented at the Education Council meeting, January X, 2011

◆Follow up meeting late January 2011 to complete the report and prepare presentation for the CAP, Technical Panel, Education Council, and Network Nebraska Advisory Group meetings in February 2011

Would you please consider forwarding the introductory message below to your \_\_\_\_\_\_ lists to take this brief survey? We would appreciate the participation of the administrator(s) and technology and distance learning coordinator(s) most closely associated with Network Nebraska services. The survey branches to include questions for members and potential members of Network Nebraska.

You may want to strip off these instructional lines and then add your own signature to the bottom of the message.

Thank you. -- Tom Rolfes, Nebraska Information Technology Commission

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:

- The Network Nebraska Advisory Group met nine times, providing a direct voice from partners to Network Nebraska operations.
- New services were introduced or expanded (e.g. traffic shaping, network management software, automatic notification system, and a 24/7 helpdesk).
- While increasing bandwidth, Network Nebraska participation fees and interregional transport costs remained level.
- Membership increased by five higher education entities due to increased outreach and communication.
- The CIO's Office competitively bid a 60% reduction in the unit price of Internet (from 2009-10 to 2010-11) for all E-rate eligible entities.

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 Friday, December 17, 2010.

Upon completion of the survey, you will be taken to 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/KCDVSV7

Sincerely, Marketing Task Group Members

NITC Education Council <a href="http://www.nitc.nebraska.gov/ec">http://www.nitc.nebraska.gov/ec</a>

Network Nebraska http://www.networknebraska.net

### **APPENDIX C: Qualitative Survey Responses**

#### PARTNER Survey Responses - grouped by demographic

#### Survey Question: What are the strengths of Network Nebraska-Education?

#### K-12 Administrative Job Role:

- Shared cost and bandwidth
- MEET THE NEEDS OF STUDENTS BY PROVIDING EDUCATIONAL OPPORTUNITIES
- Excellent value on network bandwidth
- Excellent communication
- Excellent network reliability
- Excellent governance
- the various connections ad courses available
- Strength in numbers and strength in knowledge base.
- Statewide access to educational entities.
- ESU connection
- Cost effectiveness and the support
- Providing service to K-12 schools
- It is extremely beneficial to our small rural school. It allows a more quality education for all students.
- Classes students in rural Nebraska can access, that they otherwise would not be able to take
- \*reduced consortium costs
- \*statewide approach
- Increase student offerings
- economy of scale
- Providing more opportunities for our students.
- Not Sure
- By sharing NNE is able to help school districts by keeping costs down.
- Technical Expertise.
- Shared resources
- just the ability to provide the network for students to have classes that are not offered at their school
- The size of our group is an asset.
- Access that would otherwise be unavailable or too costly.
- The opportunity for reducing costs through shared services

#### K-12 Instructional Job Role:

• Being able to leverage buying power of a large group to make better use of available resources.

#### K-12 Technical Job Role:

- Having student assessment on local network
- Great staff and support. listen to the concerns and needs of members. Advocates. team players
- bandwidth, distance learning
- Increased bandwidth at affordable prices. Knowledgeable support staff.
- Cost reduction
- Great service
- Largely reliability of service, handles the bulk of E-rate.
- The cost is attractive, and overall service is good.
- The cost and uptime of the internet connection. You are add more and more services that schools, especially small school, that they can take advantage of.
- I really don't know yet. I'm relatively new to the term and new to the school system.

- High bandwidth opportunities
- Solid network (including design and administration staff) with good economies of scale to reduce costs for all involved.
- Reliability
- Low cost bandwidth.
- Provides low cost internet access
- Internet access and group purchasing power.

#### H.E. Administrative Job Role:

- This is a great collaborative effort to drive down the cost of internet
- Reliable, cost effective. Provides tremendous opportunity to connect and collaborate
- Collaboration and sharing to reduce costs
- Reduced cost of bandwidth. Network technical assistance (device configuration). Network monitoring.
- Focus on participation.
- Primarily cost containment and collaboration.
- Reliability, cost effective, shared resources and knowledge
- We are a new member, so haven't had the opportunity to explore the strengths and weaknesses as of yet.
- Cost effectiveness
- Strong Service Orientation, Visibility and Accessibility of Senior Leadership, Culture of Entrepreneurship and Community.

#### H.E. Instructional Job Role:

(No responses)

#### H.E. Technical Job Role:

- Excellent pricing for internet bandwidth. Highly reliable, excellent redundancy.
- Collaborative sharing of services

#### Survey Question: What are the weaknesses of Network Nebraska-Education?

#### K-12 Administrative Job Role:

- Inconsistent performance this year
- FLEXABILITY
- Service offerings
- locked out courses and scheduling time frames
- Size of network and variety of entity sizes.
- N/A
- Quality of delivery
- It uses UNL a lot and I know ESU 13 would like to provide more assistance in developing a virtual high school
- \*loss of service/bandwidth with no advance warning
- lack of bandwidth as service increase.
- State design decisions will not serve the needs of rural areas, but respond to larger institutions including post secondary.
- Access to current distance learning courses that is updated. We need access and training on using Renovo.
- Not Sure
- With certain services being provided at the state level rather than the local level, perhaps some of those services will be less reliable.
- Limited interaction with network Nebraska personnel.

- The size of our group IF companies we contract with can't follow through with the services we have purchased.
- Possible loss of incentives for K-12 and no more funding for replacing equipment that will be under-utilized as technology changes for learners.

#### K-12 Instructional Job Role:

• I'm not sure at this time.

#### K-12 Technical Job Role:

- Procuring ISPs based on lowest bidder! Don't go with the cheapest go with the Best! You can see in the last few weeks, you truly get what you pay for.
- Not far reaching or inclusive enough. Need to expand services.
- stable network connection
- unreliable connection speeds that are not necessarily the result of NN rather the providers
- connection speed in western part of state is lacking
- when equipment isn't working
- Distance learning / Internet bandwidth traffic shaping needs tweaked.
- An outage or accident far from our area can cause us to lose service.
- The only thing that I've noticed that I've heard the term Network Nebraska used with is the slow bandwidth problem we've had since the beginning of the school year.
- Poor understanding--or communication thereof--of the customer perspective and migration path from
   "what is" to "what might be" when it comes to services outside of bandwidth and distance learning. I'm
   not looking for someone to solve my problems; I'm looking for someone to provide an economical way to
   cooperate with others on solving my own problems. For instance, the directory services feature above
   would imply an NN-E administered system. I'd rather be able to feed my existing directory authentication
   and usernames via automation to the NN-E services for synchronized authentication systems rather than
   SSO.
- None
- No redundant links.
- We don't utilize online courses a great deal
- Lack of publicity and understanding of by us of the role of network nebraska, and how NN could help individual schools.

#### H.E. Administrative Job Role:

- Offerings for some of the larger institutions and communication of those offerings.
- Time to implement bandwidth increases.
- It is amazing what Nebraska can accomplish given the budgets.
- Still experiencing some down time as recently as a few days ago. Our college was down about five days a couple of years ago due to staffing shortages to directly address the issue at our institution.
- technical support services
- Instead of weakness... I would restate question and ask; what areas should we continue to focus on for continued improvement?
- In that spirit, I suggest we should continue to focus our efforts on Service Management including SLA performance and Communication. Although much improved we have had some service interruptions as a result of communication and coordination issues with vendors and UNL

#### H.E. Instructional Job Role:

(No responses)

#### H.E. Technical Job Role:

None

Survey Question: 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?

#### K-12 Administrative Job Role:

- Cost
- DOING WHAT IS BEST FOR STUDENTS
- Bandwidth value and DL
- Financial benefits for cost effective course offerings
- Having that network to provide the technical expertise needed as it is too complicated to decide/design on a local basis.
- Statewide access
- Providing service and driving costs down.
- It exists in Nebraska and gives our students advantages they might not otherwise have.
- Cost sharing of the expenses
- Too early to claim a competitive advantage! Right now the incentive is the hook?
- Opportunities for kids!
- Not Sure
- Cost savings to a school district.
- We can do more together than by ourselves.
- Advantages that it gives rural school students.
- Hopefully, that all the education partners will work for the Achievement of Students, and leave their own personal ego's out of the mix.
- We need leadership in the area of technology and help us implement technology enhancements in our schools.
- Our collective power

#### K-12 Instructional Job Role:

Cost savings

#### K-12 Technical Job Role:

- State assessments and links to Dept of Ed work better on Network Nebraska, basically because it is one large local network. Otherwise, we wouldn't ever consider being on it.
- Well, it was a stable fast internet circuit. Over the past few weeks that has blown up and we are currently not able to run our distance learning classes. We have become accustomed to using the bandwidth we have. When this break and is down for extended periods of time it really hurts us. It seems like the panhandle gets a beating more often than not when it comes to this type of stuff.
- the most "bang for the buck"
- A larger group makes for better bargaining, and more pulling power.
- Cost and services.
- Cost savings on bandwidth
- Bandwidth availability.
- Price.
- Cost and speed of the internet, also the security.
- Again, I don't know. Our ESU uses it and that's who I go to for help.
- Statewide course exchange
- Cost reduction
- Reliability
- Downtime has been very minimal.
- Cost
- Cost

• We only really receive any ideas or news of NN through our ESU. We need to collaborate and share from district to district, and districts need more direct involvement in NN to help plan and express the needs we have.

#### H.E. Administrative Job Role:

- It is the value of the service and access to Internet2.
- Provides network bandwidth and connectivity that would otherwise be unattainable for individual institutions. Network Nebraska is a leader among state wide networks.
- Controlling costs
- Reduced bandwidth costs.
- Cost of bandwidth up the now. Shared services could eclipse this savings in the future.
- It is the ultimate form of collaboration among all educational sectors in the state. It provides a platform for uniting education to dictate lower and manageable costs and to maximum the opportunity for continuous modernization of the technologies for the membership.
- Cost benefits to participants
- Cost effective services and ability to perform non-value added services on our behalf.
- Offering high impact technology to improve learning outcomes for Nebraska students at an affordable rate

#### H.E. Instructional Job Role:

(No responses)

#### H.E. Technical Job Role:

- Collaboration, cost savings, extension statewide coverage. Economy of scale.
- The low cost of bandwidth.

#### POTENTIAL Partner Survey Responses - grouped by demographic

#### Survey Question: What do you know or have you heard about Network Nebraska-Education?

#### K-12 Administrative Job Role:

- Basically that it is a collaborative internet provider.
- Utilized it at a previous district
- I'm aware that it's a collaborative effort to efficiently provide high quality connectivity throughout the state.
- Some great DL opportunities for specific courses or for scheduling conflicts. Replacing SE NEb Consortium. Very exciting.
- must send and receive a DL course each semester
- I am familiar with Network Nebraska and have been following its development in the state.
- Not much
- I have experienced Network Nebraska first hand as a building administrator and I applaud your efforts and the quality of your service.
- This is the first time that I have heard about NITC
- Nothing.

#### K-12 Instructional Job Role:

- Only what this survey has told me
- I haven't heard about Network Nebraska Ed

#### K-12 Technical Job Role:

(No responses)

#### H.E. Administrative Job Role: (No responses)

(No responses)

H.E. Instructional Job Role: (No responses)

### H.E. Technical Job Role:

(No responses)

# Survey Question: What would be the single most compelling competitive advantage to make Network Nebraska's services distinctive and motivate you to partner with Network Nebraska?

#### K-12 Administrative Job Role:

- Cost savings below our current rate
- More speed, bandwidth, costs, sharing of classes.
- Course offerings for our students.
- increase curriculum offerings
- Cost savings.
- Saving money
- Placing the entire state on one network and access to a course repository for both online and distance learning courses.
- Cost

#### K-12 Instructional Job Role:

- I have no knowledge of it.
- reduced expense for quality services
- Reaching the outlying areas our service unit serves in rural Nebraska

#### K-12 Technical Job Role:

- They provide internet capabilities to Nebraska Educational affiliations.
- Very little
- I know it is a direct link as a pipeline to Higher Ed for internet traffic.
- It provides infrastructure for schools to access the Internet.
- State Wide network of educational resources

#### H.E. Administrative Job Role:

(No responses)

#### H.E. Instructional Job Role:

(No responses)

H.E. Technical Job Role:

(No responses)

# \* APPENDIX: D - Work Group Action Plans \*

### ACTION PLAN(s)

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