

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Friday, January 27, 2006, 9:30 a.m.

Videoconference Sites:

Executive Building-Videoconference Room 103, 521 South 14th Street, Lincoln, Nebraska
Chadron State College, Student Center-Scottsbluff Room, 10th & Main, Chadron, Nebraska

PROPOSED AGENDA

Meeting Documents:

Click the links in the agenda

or [click here](#) for all documents (256 KB, 76 Pages)

(Excluding LB 689 Report and the full text of LB 1208.)

- 9:30 a.m. Call to Order
Notice of Meeting and Roll Call
Lt. Governor Rick Sheehy
- Nebraska Statewide Telehealth Network Demonstration and [Recognition](#)
- 9:45 a.m. **Approval of [November 8, 2005 NITC Minutes](#)*** – Lt. Governor Sheehy
- 9:50 a.m. Public Comment
- 9:55 a.m. **Statewide Technology Plan – [Action Items](#) ***
- 10:30 a.m. Informational Updates
- NITC - Directive for restoration timeline and priority
 - Legislation: Information Technology Services
 - LB 689 Distance Education Enhancement Task Force Report ([Full Text](#) - Large file - 20 MB)
 - LB 1208 Distance Education Enhancement ([Full Text](#) | [Summary](#))
- 11:00 a.m. Reports and Action Items from the Councils and Technical Panel
- A. Community Council Report
 - B. Education Council Report
 1. **Membership***
 2. **Charter***
 - C. State Government Council Report
 - D. Technical Panel Report
 1. **Standards & Guidelines: [Land Record Information & Mapping Standards](#)***
- 11:30 a.m. New Business
- 11:45 a.m. Adjournment and Next Meeting Date
- Next NITC Meeting Date will be held on Tuesday, April 18, 2006, 1:30 p.m.
The location will be determined at a later date.

(Bolded * indicates action items.)

(The Nebraska Information Technology Commission will attempt to adhere to the sequence of the published agenda, but reserves the right to adjust the order of items if necessary and may elect to take action on any of the items listed.)

Meeting notice was posted to the NITC and Public Meeting Calendar Web sites on Wednesday, January 18, 2006. The meeting agenda was posted to the NITC Web site on Friday, January 20, 2006.

Nebraska Statewide Telehealth Network Recognition

The Nebraska Statewide Telehealth Network is an interactive video and data network that provides integration among the hospitals, public health departments, public health laboratories and other entities across the entire State of Nebraska. As the Nebraska Statewide Telehealth Network celebrates the completion of the network backbone, the Nebraska Information Technology Commission would like to thank the entities and individuals who have worked so hard to make the network a reality.

The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association. Partners include:

- Nebraska Hospital Association
- Nebraska hospitals
- Nebraska Public Health Departments
- University of Nebraska Medical Center
- Universal Service Administrative Company
- University of Nebraska System
- Nebraska Information Network
- Nebraska telecommunications companies
- Central Nebraska Area Health Education Center
- Northern Nebraska Area Health Education Center
- Nebraska Panhandle Area Health Education Center
- Nebraska Medical Association
- Nebraska State Government
 - Lieutenant Governor's Office
 - Nebraska Public Service Commission
 - Nebraska Division of Communications
 - Nebraska Health and Human Services System
 - Bioterrorism Preparedness and Response Section
 - Office of Rural Health
 - Nebraska Information Technology Commission
 - Nebraska Office of the Chief Information Officer
 - Nebraska Department of Education
- Nebraska Educational Telecommunications Commission

The NITC would also like to express its appreciation to the following individuals:

- Carol Brandl, BryanLGH Medical Center
- Jaine Graham, BryanLGH Medical Center
- Sarah Cunningham, Central Nebraska Area Health Education Center
- Stan Sojka, Central Nebraska Area Health Education Center
- Dave Glover, DKG Consultants
- Don Cope, Faith Regional Health Services
- Lesley Bollwitt, Good Samaritan Hospital
- Wanda Kjar, Good Samaritan Hospital
- Brandon Kelliher, Great Plains Regional Medical Center
- David Lawton, Nebraska Health and Human Services System
- Roger Keetle, Nebraska Hospital Association
- Laura Redoutey, Nebraska Hospital Association
- Roger Hahn, Nebraska Information Network
- Sandy Johnson, Nebraska Medical Association
- Tony Sambol, Nebraska Public Health Laboratory
- Commissioner Anne Boyle, Nebraska Public Service Commission
- Commisisoner Lowell Johnson, Nebraska Public Service Commission
- Commisisoner Rod Johnson, Nebraska Public Service Commission
- Commissioner Frank Landis, Nebraska Public Service Commission
- Commissioner Jerry Vap, Nebraska Public Service Commission
- Gene Hand, Nebraska Public Service Commission
- Jeff Pursley, Nebraska Public Service Commission
- Camelia Rogers, Nebraska Public Service Commission
- Rita Parris, Public Health Association of Nebraska
- Perry Delzer, Regional West Medical Center
- Tad Hunt, St. Elizabeth Regional Medical Center
- Donna Hammack, St. Elizabeth Foundation
- Warren Pennell, St. Francis Medical Center
- Rick Golden, University of Nebraska
- Christopher Boilesen, University of Nebraska
- Walter Weir, University of Nebraska
- Max Thacker, University of Nebraska Medical Center

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Tuesday, November 8, 2005, 1:30 p.m.

Videoconference Sites:

Executive Building-Videoconference Room 103, 521 South 14th Street, Lincoln, Nebraska
Kearney Public Library-Information Center, 2nd Floor, 2020 1st Avenue, Kearney, Nebraska
Regional West Medical Center, Monument Room, 4021 Avenue B, Scottsbluff, Nebraska

PROPOSED MINUTES

MEMBERS PRESENT:

Lieutenant Governor Rick Sheehy, Chair (Lincoln Site)
Linda Aerni, Chief Executive Officer, Community Internet Systems (Lincoln Site)
Dr. Eric Brown, Manager, KRVN Radio (Kearney Site)
Dr. Doug Christensen, Nebraska Department of Education (Lincoln Site)
Senator Phil Erdman, Ex-officio (Scottsbluff Site)
Dr. Doug Kristensen, Chancellor, University of Nebraska-Kearney (Kearney Site)
Dr. Janie Park, President, Chadron State College (Lincoln Site)
Trev Peterson, Attorney, Knudsen, Berkheimer, Richardson, and Endacott, LLP (Lincoln Site)

MEMBERS ABSENT: Greg Adams, Mayor, City of York; and L. Merrill Bryan, Senior Vice President & Chief Information Officer, Union Pacific (Retired)

CALL TO ORDER, ROLL CALL AND MEETING NOTICE

Lieutenant Governor Sheehy called the meeting to order at 1:30 p.m. There were seven voting members present at the time of roll call. A quorum existed to conduct official business. The meeting notice and agenda were posted to the NITC and the Public Calendar Web sites on Wednesday, November 2, 2005.

Dr. Janie Park was introduced and welcomed as a new NITC Commissioner.

APPROVAL OF SEPTEMBER 23, 2005 NITC MINUTES

Commissioner Christensen moved to approve the September 23, 2005 minutes as presented. Commissioner Peterson seconded the motion. Roll call vote: Aerni-Yes, Brown-Yes, Christensen-Yes, Kristensen-Yes, Park-Abstain, Sheehy-Yes, and Peterson-Yes. Results: 6-Yes, 1-Abstain, 0-No. The motion was carried.

PUBLIC COMMENT

There was no public comment.

INFORMATIONAL UPDATES

Statewide Technology Plan 2005-06. The approved Statewide Technology Plan Version 1.0 has been posted to the NITC Web site. The advisory groups will be developing action plan items pertaining to the eight initiatives approved by the NITC. Review and approval of action items will take place at the next NITC meeting.

NITC Briefing. A briefing on the NITC's activities and future direction will be provided to the Transportation & Telecommunications and the Appropriations Legislative Committees on Friday, November 18, 2:30 p.m. in the State Capitol. Commissioners were invited to attend.

LR 105 - Interim study. The purpose of this interim study is to examine rural economic development programs available to Nebraska residents and to recommend the most effective way to deliver these programs across the state. The NITC has been contacted about possibly providing information for this study.

NITC - Directive for restoration timeline and priority. At the September meeting, the NITC directed the State Government Council to evaluate and consider what IT systems should be restored and in what order, what level of outage, and what would be acceptable. The meeting has been scheduled for Monday, November 21st, 3:30 p.m. The group will forward a recommendation to the NITC. In turn, the NITC will make a recommendation to the Homeland Security group.

Nebraska Fusion '05 E-government Conference, November 15, 2005. Commissioners were invited to the

upcoming seventh annual e-government conference to be held at the Embassy Suites. Various levels of government will share ideas and best practices. There will be three tracks available with various breakout sessions: Enterprise Network, Business Continuity and Security, and Business Technology Showcase.

LB 645 Broadband Task Force. The Task Force has met twice. At the first meeting, Lieutenant Governor Sheehy was elected to serve as Chair. At the second meeting, discussions focused on the facilitator job description and the hiring process. Commissioner Kristensen also assisted with the job description. The state's RFP process will be utilized.

Legislation: Information Technology Services. When Governor Heineman appointed Brenda Decker as new CIO, his charge to her was to bring the operational and policy IT divisions together as one cohesive organization. These divisions included Information Management Services, the Communications and the Office of the Chief Information Officer. This will take legislation for the change to be recognized in law. Currently, legislation is being developed to be introduced for this legislative session.

LB689 Distance Education Enhancement Task Force. The Task Force has met five times with one more meeting left in December. For the balance of November, staff will be drafting a report of the task force's recommendations. Some of the suggestions include: the CIO to oversee the purchasing process; matching funds for equipment upgrades; incentive payments for school to receive synchronous and asynchronous classes; state aid provisions to offset costs; establishing a distance education council; and possible purchase of statewide scheduling system. Commissioner Brown has served on the task force and stated that the biggest question he had was been funding and timelines. He stated that he hoped a draft of the recommendations document would be available before the December 7th meeting. Tammy Barry, from Senator Raikes Office, confirmed that the document will go out to task force members one week prior to the meeting.

Commissioners commented on the similarities between LR105, LB 645 and LB 689, and the need for coordination and collaboration.

Center for Health Transformation-Connectivity Conference: Accelerating Transformation through Health, October 18, 2005. Lieutenant Governor Sheehy informed the commission that he served on a panel along with other Nebraska representatives to discuss and share Nebraska's success stories in telehealth and electronic medical health records.

REPORTS AND ACTION ITEMS - COMMUNITY COUNCIL

Anne Byers, Community Information Technology Manager

Membership. At the October 24th meeting, the Community Council approved the nomination of Linda Fettig, Executive Director of Rural Development Commission, to serve as a new council member representing Rural and IT Development.

Commissioner Peterson moved to approve the Community Council's nomination of Linda Fettig as a new member. Commissioner Aerni seconded the motion. Roll call vote: Aerni-Yes, Brown-Yes, Christensen-Yes, Kristensen-Yes, Park-Yes, Sheehy-Yes, and Peterson-Yes. Results: 7-Yes, 0-No. The motion was carried.

Recommendation and Approval: Technology Innovation Grants for Economic Revitalization (TIGER)*. A total of eleven applications were received. The projects have gone through a technical and project review. At the October 24th meeting, the Community Council recommended fully funding the top five applicants: Expanding Technology Horizons, Hartington Public Library; Hometown Competitiveness: Entrepreneurial Training, Atkinson Public Library; Computer Course Development, Wayne Public Library; IT Businesses: Assessment, Marketing, Recruitment, City of Aurora; and Oakland Business Portal, UNL Extension in Burt County. In addition, the council recommended partially funding the Kearney Visitors Bureau project Implementation of InfoTrac Software, if the Kearney Visitor's Bureau was able to proceed with only partial funding. If they were not willing to negotiate, the council recommended funding the next project which was IT Training Modules for EDGE Program from the Nemaha County Development Alliance. The Kearney Visitor's Bureau was unable to complete the project with partial funding. Discussion followed.

Commissioner Peterson moved to fund the top five projects for the TIGER (Technology Innovation Grants for Economic Development) grants. Commissioner Aerni seconded the motion. Roll call vote: Peterson-Yes, Sheehy-Yes, Park-Yes, Kristensen-Yes, Christensen-Yes, Brown-Yes, and Aerni-Yes. Results: 7-Yes,

0-No. The motion was carried.

I.T. Planning and Mini Grant Program Update. A written document was distributed to commissioner prior to the meeting. Projects have included a community wide eBay project, business incubators, local government web site development, wireless broadband, and computer training. Lessons learned include:

- Local technology development is hard work.
- Most households have computers and Internet access. Relatively few households subscribe to broadband, however.
- There is demand for basic computer training.
- There is growing demand for online community and local government information and services.
- Most businesses have computers and have broadband access.
- Many businesses have a Web presence and are experiencing benefits from the Internet.

REPORTS AND ACTION ITEMS - EDUCATION COUNCIL

Tom Rolfes, Education Information Technology Manager

The Education Council has not met since the August 9 Joint Meeting of the NITC Advisory Groups. The next meeting will be held on November 18th to develop action items. Mr. Rolfes gave a special recognition to Alan Wibbels for his service on the Education Council since its inception. Mr. Wibbels has announced his retirement from ESU 10 and will be moving to Florida. A written statement of Mr. Wibbels contributions and service was shared.

REPORTS AND ACTION ITEMS – STATE GOVERNMENT COUNCIL

Rick Becker, Government Information Technology Manager

The council will meet on Thursday, November 10th, to develop action items. The State of Nebraska recently unveiled a new site. Nebraska received the Best of the Web award from the Center for Digital Government.

REPORTS AND ACTION ITEMS – TECHNICAL PANEL

Walter Weir, Chair

Mr. Weir acknowledged and thanked Mr. Wibbels for his involvement and commitment to Network Nebraska. The following two deficit requests were reviewed by the Technical Panel.

Egrant System Re-Write, Nebraska Arts Council: Members discussed the project and reviewer comments.

Discussion followed regarding the NITC's role in reviewing deficit requests and prioritizing projects. According to statute, the deficit cycle does not require that the NITC prioritize funding requests. Only a technical review is required by the NITC for deficit request.

Commissioner Christensen moved to forward the project but to indicate that no program review has been conducted. Commissioner Christensen made a second motion that the minutes reflect that if the project had to be rated, it would not have been ranked in either Tier I or Tier II. There was no second to either motion.

Mr. Henderson suggested two options:

- Append comments from the NITC to the project technical review
 - Include the NITC comments in a cover letter attached to the project technical review
- It was decided by group consensus to include a cover letter with the NITC's comments with the deficit project request.

Statewide K-12 Technology Infrastructure Upgrade to Flexible Use IP-based Network, Department of Education: Contracts for many of the schools are expiring in 2006. The project scored 90 out of 100 in the technical review. The Technical Panel found that the project was technically feasible; the proposed technology was appropriate; and that the technical elements can be accomplished within the proposed time frame and budget. Discussion followed regarding the LB 689 task force recommendations. Dr. Christensen stated that it will defer the request pending the outcome of LB 689. It was by group consensus to include a cover letter with the NITC's comments with the deficit project request.

NEW BUSINESS

Upcoming Terms of NITC Commissioners: The following commissioner's terms will be expiring in April 2006 –

Greg Adams, Eric Brown, Doug Christensen, and Merrill Bryan. Commissioners were asked to forward recommendations to the Lieutenant Governor or Brenda Decker.

NEXT MEETING AND ADJOURNMENT

The next meeting of the Nebraska Information Technology Commission will be scheduled in late January.

Commissioner Brown moved to adjourn. Commissioner Park seconded. All were in favor. Motion was carried.

The meeting was adjourned at 2:50 p.m.

Proposed Action Plans

for

Digital Nebraska:

Envisioning our Future

Nebraska Information Technology Commission

- Nebraska Telehealth Network
 - Network Nebraska
- Statewide Synchronous Video Network
- Community IT Planning and Development
 - Digital Education
 - State Government Efficiency
 - E-Government
- Security and Business Resumption

Nebraska Statewide Telehealth Network

Objective

The Nebraska Statewide Telehealth Network will improve access to health care, continuing medical education, and bioterrorism training and alerts by connecting all rural and critical access hospitals with regional hospitals, public health departments, state public health laboratories, and the State of Nebraska.

Description

The Nebraska Statewide Telehealth Network is an interactive video and data network that provides integration among the hospitals, public health departments, public health laboratories and other entities across the entire State of Nebraska. The major functions of the Network are to improve quality and access to care, particularly in rural Nebraska, to provide patient, provider and community education and to provide another communication source in the event of a natural, man-made or terrorist emergency.

The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association. Partners include:

- Nebraska Hospital Association
- Nebraska hospitals
- Nebraska Public Health Departments
- University of Nebraska Medical Center
- Universal Service Administrative Company
- University of Nebraska System
- Nebraska Information Network
- Nebraska telecommunications companies
- Central Nebraska Area Health Education Center
- Northern Nebraska Area Health Education Center
- Nebraska Panhandle Area Health Education Center
- Nebraska Medical Association
- Nebraska State Government

- Lieutenant Governor's Office
- Nebraska Public Service Commission
- Nebraska Division of Communications
- Nebraska Health and Human Services System
 - Bioterrorism Preparedness and Response Section
 - Office of Rural Health
- Nebraska Information Technology Commission
- Nebraska Office of the Chief Information Officer
- Nebraska Department of Education
- Nebraska Educational Telecommunications Commission

By the end of 2005, most of the telecommunications lines will be installed, completing phase one of network development. Phase two will address issues such as training, maintenance, scheduling, operations, and governance. A partnership with the Nebraska Medical Association has been formed to promote use of the network among physicians. The Telehealth Network Education Subcommittee is working to create a listing of educational offerings provided over the network.

The successful implementation of the Nebraska Statewide Telehealth Network may also help lay the foundation for the development of a statewide electronic health record system and the adoption of health information technology. President Bush has made the adoption of health information technology including electronic health records a national priority.

Benefits

A telehealth network which connects all hospitals, providing access to consultations with medical specialists, continuing medical education, and bioterrorism training and alerts is critical to the provision of health care in rural areas of the state. There is a lack of specialist services in rural areas, particularly mental health services. Telemedicine has proven to be an effective way to provide consultations with specialists. Currently mental health consultations and teleradiology are the two most common types of specialist services provided via telemedicine. Rural health care providers also have fewer opportunities for continuing medical education in their community and must often drive several hours to attend training. Continuing medical education is currently being

provided via telehealth in Nebraska and has proven to be an effective and efficient method of delivery. It is also critical that all hospitals are connected to a telehealth network in order to prepare health care providers to respond quickly to bioterrorism threats and other public health risks.

The widespread adoption of health information technology (including electronic health records) is expected to reduce health care costs for employers, reduce costs and increase efficiencies for third party payers, and to improve the quality of health care.

Action Plan

Current Action Items

1. Explore the relationship between the Nebraska Health Information Initiative and the Nebraska Statewide Telehealth Network.

Action: Schedule meetings between the Nebraska Health Information Initiative and the Nebraska Statewide Telehealth Network as needed.

Lead Entity: NITC Telehealth Subcommittee

Participating Entities: NITC Telehealth Subcommittee, Nebraska Health Information Initiative, Nebraska Statewide Telehealth Network

Timeframe: Ongoing

Funding: No funding required

Status: New

2. Encourage the expanded use of the Nebraska Statewide Telehealth Network to provide mental health consultations and behavioral medicine.

Action: Facilitate a meeting of stakeholders including the Nebraska Medical Association, physicians, hospitals, and HHSS including Medicaid and the Office of Rural Health.

Lead Entities: Nebraska Statewide Telehealth Network and the NITC Telehealth Subcommittee

Participating Entities: Nebraska Statewide Telehealth Network, NITC Telehealth Subcommittee, Nebraska Medical Association, physicians, hospitals, and HHSS including Medicaid and the Office of Rural Health

Timeframe: Initial meeting will be held in early 2006

Funding: No funding required

Status: New

3. Encourage collaborative efforts with education and state government.

Action: Explore the development of a scheduling system compatible with that used by education and state government.

Lead Agencies: Nebraska Statewide Telehealth Network Scheduling Committee and the Synchronous Video Work Group

Participating Entities: Nebraska Statewide Telehealth Network Scheduling Committee and the Synchronous Video Work Group

Timeframe: 2006

Funding: No funding is required for exploration of a scheduling system. Purchasing a system will require funding from an as yet to be identified source.

Status: New

4. Facilitate the continued testing of the Nebraska Statewide Telehealth Network for homeland security and public health alerts and training.

Action: Conduct regular tests of the Nebraska Statewide Telehealth Network for bioterrorism alerts and develop policies regarding the use of the network for bioterrorism alerts and training.

Lead Agency: Nebraska Statewide Telehealth Network and HHSS Bioterrorism

Participating Entities: Nebraska Statewide Telehealth Network, HHSS Bioterrorism, Nebraska hospitals, Nebraska Division of Communications

Timeframe: Ongoing

Status: New

5. Encourage the delivery of health education through the telehealth network.

Action: Develop a listing of available educational programs to be posted on the Nebraska Statewide Telehealth Network Web site.

Lead Entity: NSTN Education Committee

Participating Entities: Nebraska Statewide Telehealth Network, Nebraska hospitals, educational providers

Timeframe: Ongoing

Funding: No funding required

Status: New

6. Assist the Nebraska Statewide Telehealth Network in identifying and obtaining additional sources of funding.

Action: Set up a meeting with USDA Rural Development Telecommunications.

Lead Entity: Nebraska Statewide Telehealth Network and NITC Telehealth Subcommittee

Participating Entities: Nebraska Statewide Telehealth Network, NITC Telehealth Subcommittee, and USDA Rural Development Telecommunications

Funding: No funding required

Time Frame: First quarter 2006

Status: New

Completed Action Items (2004-2005)

1. The NITC and the Telehealth Subcommittee facilitated communication and coordination among telehealth networks.
2. The Telehealth Subcommittee and NITC staff provided continuing assistance to the Nebraska Hospital Association in developing a telehealth plan for the Nebraska Public Service Commission.
3. The NITC Technical Panel addressed the need for interoperability.

Network Nebraska

Objective

The primary objective of this initiative is to develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the State of Nebraska. Network Nebraska aggregates disparate networks into a multipurpose core backbone extending from Norfolk, Omaha, Lincoln, Grand Island, Kearney, and North Platte to the Panhandle. The State of Nebraska, Division of Communications, the University of Nebraska, Nebraska Educational Telecommunications Commission, Department of Education, Public Service Commission, and the Nebraska Information Technology Commission have formed the Collaborative Aggregation Partnership (CAP) to guide and implement Network Nebraska. The next phase of this initiative is to formalize business relationships and agreements and to enhance rural bandwidth through local aggregation.

Description

The major components of this initiative include:

- Development of a scalable, reliable, and secure telecommunications infrastructure that enables any type of eligible entity (i.e., local and state government, K-12 and higher education, health care institutions) to purchase the amount of service that the entities need, when they need it, on an annual basis;
- Establishment of a catalog of value-added applications that enables eligible entities to pick and choose services that are pertinent to them (e.g., Internet1, Internet2, and videoconferencing);
- Implementation of a network operations center that offers a helpdesk, network diagnostics, and engineering assistance in order to ensure acceptable qualities of service;
- Establishment of a billing or accounting center to accept service orders, extend service agreements, provide consolidated billing, and to maintain customer accounts.

Benefits

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

- Lower network costs;
- Greater efficiency for participating entities;
- Interoperability of systems providing video courses and conferencing;
- Increased collaboration among all K-20 educational entities;
- New educational opportunities;
- Competitiveness with surrounding states; and
- Better use of public investments.

Action Plan

Current Action Items

1. Identify Tier II communities that offer opportunities for aggregation for services onto the network.

Action: The CAP will identify and work with communities that express an interest in aggregating their public sector transport.

Lead: Network Nebraska (CAP)

Participating Entities: Specific communities, NITC Community Council, Nebraska League of Municipalities, Nebraska Association of County Officials, public libraries, NITC Education Council

Timeframe: February 2006-December 2006

Funding: No funding required for this action item.

Status: New

Action: The CAP will write and release a brief that explains the technical feasibility of sharing public sector transport over high bandwidth, IP-based circuits in order to incentivize Tier II aggregation.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council, NITC Community Council, ESU-NOC, Nebraska League of Municipalities, Nebraska Association of County Officials, public libraries

Timeframe: February 2006-December 2006

Funding: No funding required for this action item.

Status: New

2. The Chief Information Officer will arrange for all eligible network participants to have the opportunity to access Network Nebraska at the earliest available opportunity.

Action: The Chief Information Officer will establish criteria for “access to” Network Nebraska in order to satisfy the requirements of LB 1208.

Lead: Chief Information Officer

Participating Entities: Network Nebraska (CAP)

Timeframe: February 2006

Funding: No funding required for this action item.

Status: New

Action: The Chief Information Officer will determine the specifications of any regional aggregation centers that must be established in order to serve the statewide data traffic of K-12 and postsecondary education institutions.

Lead: Chief Information Officer

Participating Entities: Network Nebraska (CAP)

Timeframe: February 2006-April 2006

Funding: No funding required for this action item.

Status: New

3. Offer Internet I services to eligible network participants.

Action: The CAP will accept new orders for Internet service and continue to aggregate purchasing demand to secure a more economical price for statewide Internet service.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council, NITC Community Council

Timeframe: February 2006-December 2006

Funding: No funding required for this action item.

Status: Continuation

4. Meet with the Technical Subcommittee of the Nebraska Statewide Telehealth Network to discuss issues related to network administration, scheduling and management.

Action: The Collaborative Aggregation Partnership will conduct ongoing discussions with the Technical Committee of the Nebraska Statewide Telehealth Network.

Lead: Network Nebraska (CAP)

Participating Entities: Nebraska Telehealth Network Technical Subcommittee, NITC Technical Panel

Timeframe: February 2006-December 2006

Funding: No funding required for this action item.

Status: Continuation

5. Implement a cost and funding model to allow shared use of the statewide backbone for data transport.

Action: Develop an equitable cost and funding model that takes into account the number of participating entities, student populations, and the cost for transport and ongoing aggregation services.

Lead: Network Nebraska (CAP)

Participating Entities: Network customers

Timeframe: March 2006-June 2006

Funding: Funding determined by LB 1208

Status: New

6. Convene a work group to use high bandwidth flexible use circuits as community aggregation points and create a statewide, high bandwidth digital content delivery system using satellite, terrestrial and wireless technology.

Lead: Office of the NITC

Participating Entities: Technical Panel, Community Council, Education Council, State Government Council

Timeframe: March 2006-June 2006

Funding: No funding is required for this collaborative action item.

Status: New

Future Action Items

1. Develop a three-phase (2007-09) upgrade plan for statewide backbone transport that includes the demand created by the upgrade of K-12 districts and colleges converting to IP networking.
2. Investigate the feasibility of offering advanced network services to Network Nebraska customers.

Completed Action Items (2004-2005)

1. Created a Service Level Agreement for use by CAP and the eligible network participants.
2. Created a Network Nebraska Level 1 Helpdesk at 888-NET-NEBR (888-638-6327).
3. Created a Network Nebraska Web site (www.networknebraska.net).

Statewide Synchronous Video Network

Objective

The primary objective of this initiative is to establish an Internet Protocol-based network that will interconnect all existing and future distance learning and videoconferencing facilities in the State of Nebraska. Nebraska currently has approximately 300 high school distance learning classrooms, 30 higher education distance learning classrooms, over 50 state agency videoconferencing rooms, and (soon-to-be) over 60 videoconferencing facilities for telehealth in local and regional hospitals. More growth and proliferation of distance learning and videoconferencing equipment and sites is expected in the near future. These 400+ interactive video facilities currently utilize a variety of video standards and bandwidth speeds that prevent interconnection between sub-networks. The Statewide Synchronous Video Network, as envisioned, would use compatible audio and video standards to enable any classroom or facility to connect with any other classroom or facility or to connect with multiple sites simultaneously.

Description

The major components of this initiative include:

- A single, interconnected synchronous video network with various levels of authorization and traffic prioritization;
- An event clearinghouse and scheduling system that would allow registration for interactive video events;
- Development of a network bandwidth management system or network operations center that assures pre-determined qualities of service, depending upon the type of video traffic.

Benefits

Interactive videoconferencing and distance learning developed rapidly across Nebraska in the 1990's. Prior to recognized video standards or a coordinating body, entities were free to adopt any equipment, standard, or system that met their needs. Little thought was paid to interconnectivity or compatibility. Consequently, Nebraska became a state of disparate, redundant systems that prevented multi-jurisdictional collaboration or maximization of educational opportunities outside of a particular geographic boundary or system.

The enterprise benefits of an interconnected video system include:

- Greater sharing of educational courses, events, and training across sub-network boundaries, irrespective of geography;
- More efficient use of available resources—more classrooms and sites are available within less distance of the user at more convenient times;
- One-to-many videoconferencing capabilities for news alerts, bioterrorism alerts, or other emergency uses;
- Collaborative development across various service agencies (i.e., medical services to schools, and adult and continuing education opportunities).

Action Plan

Completed Action Items

1. Acquisition of upgrade or replacement equipment and/or software that ensures compliance with the audio and video standard.

Action: The Chief Information Officer will determine the list of biddable hardware and software items related to distance education for purposes of enhancing distance education according to LB 1208.

Lead: Chief Information Officer

Participating Entities: NITC Technical Panel, DAS-DOC, ESU-NOC

Timeframe: March 2006-April 2006

Funding: No funding required for this action item

Status: New

Action: The Chief Information Officer will bid for equipment (hardware and software) related to distance education, which meets at least minimum standards as set by the Nebraska Information Technology Commission for all eligible network participants who want to participate in statewide leasing and/or purchasing contracts.

Lead: Chief Information Officer

Participating Entities: DAS-DOC, DAS Purchasing

Timeframe: March 2006-May 2006

Funding: Determined by the Legislature through LB 1208

Status: New

Action: The Chief Information Officer will designate a fiscal entity or entities to oversee ordering, delivery and installation of distance learning equipment.

Lead: Chief Information Officer

Participating Entities: To be named.

Timeframe: March 2006-August 2006

Funding: Determined by the Legislature through LB 1208

Status: Continuation

2. Development or purchase of a scheduling system or enterprise resource management program that allows potential users to know the location and availability of resources, and/or set up or reserve ad hoc or regularly scheduled events with other entities.

Action: Research scheduling systems and enterprise resource management programs.

Lead: NITC Technical Panel's Statewide Synchronous Video Work Group

Participating Entities: NET, NDE, NITC staff

Timeframe: February 2006

Funding: No funding required for this task.

Status: Continuation

Action: The Nebraska Information Technology Commission shall establish standards or bid specifications related to synchronous video scheduling software or scheduling services.

Lead: NITC Technical Panel

Participating Entities: NITC Technical Panel's Statewide Synchronous Video Work Group

Timeframe: February 2006-April 2006

Funding: No funding required for this task.

Status: New

Action: Purchase or develop a scheduling system and/or enterprise resource management program.

Lead: Distance Education Council for K-12; each agency for their respective purchases.

Participating Entities: Network Nebraska (CAP)

Timeframe: Summer, 2006

Funding: To be determined by LB 1208.

Status: Continuation

3. Implement a network bandwidth management system or network operations center that assures pre-determined qualities of service, depending upon the type of data traffic.

Action: Implement a network operations center that assures particular qualities of service.

Lead: Network Nebraska (CAP)

Participating Entities: Network Nebraska customers

Timeframe: April 2006 –July 2006

Funding: To be determined.

Status: Continuation

4. Develop an event clearinghouse that allows promotion, marketing, and registration for interactive video events.

Action: Develop a web-based clearinghouse that allows originators to post events and users to register for or view the date, time and frequency of individual events.

Lead: ESU Distance Education Council

Participating Entities: NITC Technical Panel's Statewide Synchronous Video Network Work Group, NITC Education Council

Timeframe: April – July, 2006

Funding: To be determined by LB 1208.

Status: Continuation

5. Develop a cost and funding algorithm to allow shared use of the statewide backbone for interstate distance learning and videoconferencing.

Action: Research models from other States' education networks.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Technical Panel's Statewide Synchronous Video Work Group

Timeframe: Ongoing

Funding: No funding required for this task.

Status: Continuation

6. Examine policy implications of the use of shared network assets.

Action: Convene a workgroup to examine policy implications of the use of shared network assets.

Lead: Office of the NITC

Participating Entities: NITC Technical Panel, State Government Council, Education Council, Community Council

Timeframe: Ongoing

Funding: No funding is required for this collaborative action item

Status: New

Future Action Items

1. Develop a three-phase (2007-09) equipment and transport upgrade plan for synchronous video distance learning that affects a majority of the network users.

Completed Action Items

1. Identified a single audio and video standard for low-bandwidth distance learning and videoconferencing.

IT Planning and Development

Objective

The primary objective of this initiative is to foster community and economic development in Nebraska communities through the effective use of information technology.

Description

The NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership. Technologies Across Nebraska is a partnership of over 40 organizations working to help communities utilize information technology to enhance development opportunities. Technologies Across Nebraska facilitates technology-related development by building partnerships, leveraging resources, and strengthening community capacity.

For the past three years, Technologies Across Nebraska has helped 21 communities develop local plans to utilize technology to enhance development opportunities through the IT Planning and Mini Grant program. Through the program, participating communities and regional groups receive a \$2,500 mini grant and assistance from the Nebraska Rural Initiative's Communities of the Future Team and the Nebraska Information Technology Commission. The *Community IT Assessment and Planning Workbook* helps simplify the assessment and planning process for communities. The impact of the program has been significant. Edgar received a \$250,000 Community Development Block Grant to build a community center which will include a technology center. Crawford now has a community technology learning center and wireless broadband service thanks to a \$154,000 grant from the USDA Rural Utilities Service. In Keya Paha, Brown, and Rock Counties, the region now has more class offerings, two community Web sites, and a new technology retail store. In West Point a videoconferencing system has been installed for use by area businesses.

Technologies Across Nebraska's quarterly newsletter, *TANgents*, reaches over 1,000 individuals with an interest in technology-related development. Articles from *TANgents* have been reprinted by several organizations including *Government Technology*. Readers find *TANgents* a valuable source of information. One reader commented, "*TANgents* plays an important role in keeping Nebraskans aware of development and new opportunities to improve IT options for rural citizens in the State. I hope you will continue to provide this service." A recent survey of readers found that 89% felt reading *TANgents* has helped them learn about available resources; and 79% indicated that

reading *TANgents* has helped them better understand the importance of IT-related community and economic development.

Technologies Across Nebraska, in partnership with the Rural Development Commission, has also examined e-commerce use by Nebraska businesses and e-commerce training in the state. Nebraska firms appear to be adopting e-commerce at a slower rate than firms nationwide. A 2004 survey of Nebraska businesses found that only 31% of small businesses had a Web site. In comparison, 45% of small businesses nationwide had a Web site in 2001.

Benefits

The potential benefits of information technology to communities, businesses, health care, local government, education, and citizens are numerous:

- Communities can use the Internet to publicize community events, communicate with former residents, and advertise available commercial sites.
- Businesses can use information technology to decrease costs, increase sales, and provide better customer service.
- Local governments can use information technology to more efficiently deliver services and provide information to citizens.
- Students can take advanced placement courses or study a foreign language through distance learning.
- Through telemedicine, patients can receive medical care from specialists and doctors can participate in continuing medical education without leaving their rural communities.
- Citizens can easily access the minutes and agendas of local governments, update their skills through continuing education, and share photos with distant family members.
- The effective use of information technology can improve a community's quality of life and can enhance economic development efforts.

Action Plan

Current Action Items

1. Support local efforts to effectively use e-commerce through the Technology Innovation Grants for Economic Revitalization (TIGER) program. The NITC announced grantees for the 2005 TIGER program on November 8, 2005. The grant award period is January 16, 2006- January 15, 2007

Lead: Community Council

Participating Entities: Community Council

Timeframe: January 2006 – January 2007

Funding: Approximately \$20,000

Status: New

2. Support community IT development by working with the University of Nebraska and other Technologies Across Nebraska Partners, including the following action steps:

- Work with the Nebraska Rural Initiative on an e-commerce booklet to promote and coordinate e-commerce training across the state.
- Continue partnering with Technologies Across Nebraska and the University of Nebraska to promote technology-related development through the quarterly newsletter, *TANgents*.
- Continue to maintain and update the TAN and Community IT Toolkit Web sites, including adding funding information.
- Explore the use of video and audio casting (often called vodcasting and podcasting) to promote tourism and industrial development sites in the state.
- Provide and/or promote training opportunities on effectively using technology to enhance development opportunities and the delivery of services, especially in the area of IT-related economic development.

Lead: Community Council

Participating Entities: Community Council, University of Nebraska Cooperative Extension, University of Nebraska, University of Nebraska Rural Initiative, and other interested entities.

Timeframe: January 2006 – January 2007

Funding: No additional funding required.

Status: New and continuing

3. Identify and convene a workgroup which will examine issues related to job creation and economic development and the development of a skilled technical workforce.

Lead: Office of the NITC

Participating Entities: Community Council, Education Council, State Government Council, and other interested entities

Timeframe: January 2006 – January 2007

Funding: No funding is required for this collaborative action item

Status: New

Completed Action Items

1. Worked with 6 community or regional technology committees to develop community or regional IT plans through the 2004-2005 Community IT Planning and Mini Grant program.
2. Provided continuing support for the 17 community and regional technology committees which have participated the 2002-2003 and 2003-2004 IT Planning and Mini Grant programs.
3. Continued partnering with Technologies Across Nebraska and the University of Nebraska to promote technology-related development through the quarterly newsletter, *TANgents*.
4. Continued to maintain and update the TAN and Community IT Toolkit Web sites, including adding funding information.

Digital Education

Objective

The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

This initiative will involve the coordination and promotion of several major systems and applications that heretofore have either been developed mostly at the local level or have not been replicated statewide.

The initiative will be dependent upon adequate Internet connectivity and transport bandwidth for learners, instructors, administrators, and for educational attendance sites. A minimum acceptable level of classroom technology will have to be established for the initiative to be successful.

Description

The Digital Education Initiative will recognize that many standalone and disparate software applications are needing to undergo integration and convergence so that an instructor can: 1) research digital content, 2) construct a lesson or unit on a computer in a series of virtual or face-to-face or videoconferencing activities using rich multimedia, 3) assess the learners electronically, and then 4) move the student data to a database or data warehouse, 5) export relevant achievement and attendance data to a web-based student information system so parents, or the students themselves, can view it from home; 6) export data to a statewide student information system; and then finally 7) make "real-time" instructional decisions based upon the recently documented progress of the learners.

The primary components of the Digital Education Initiative would include:

- A statewide telecommunications network capable of transporting voice, video, and data between and among all education entities [see Network Nebraska];
- Ample bandwidth for local and regional transport to accommodate present and future education technology applications [see Statewide Synchronous Video Network];
- Distance insensitive Internet pricing for all Nebraska education entities;

- Development of a statewide eLearning environment so that every teacher and every learner has access to a web-based, digital curriculum;
- Development of a statewide digital resource library so that any teacher or learner will be able to retrieve digital media for use in instructional and student projects;
- Synchronous videoconferencing interconnections between all schools and colleges (See Statewide Synchronous Video Network.);
- The means to coordinate and facilitate essential education opportunities for all students through a statewide student information system; and
- Regional PreK-20 education cooperatives that vertically articulate educational programs and opportunities.

Benefits

Establishing a Digital Education Initiative is critical to Nebraska's future. Internet has gone from a "nice to have" educational application of the 1990's to the "must have" mission critical application of the 2000's. So much of what teachers, students, and administrators do today is tied to Internet-based information and communication. Nebraska's ranking of 6.5 students per Internet-connected computer in the classroom seems to compare favorably with the U.S. average of 8.0 students per Internet-connected computer. (Technology Counts 2005 Report) However, it still makes it challenging for students to complete their digital assignments when they are expected to share six or seven students to a computer.

The benefits of the Digital Education Initiative would include:

- Greater technical capacity for schools and colleges to meet the increasing demands of a more diverse customer base;
- More equitable Internet access for Nebraska schools and colleges that is not dependent upon distance-sensitive pricing;
- A comprehensive Web-based approach to curriculum mapping and organization and automation of student assessment data gathering and depiction;
- The availability of rich, digital media to the desktop that is indexed to Nebraska standards, catalogued, and searchable by the educator or student;
- A more systematic approach to synchronous video distance learning that enables Nebraska schools and colleges to exchange more courses, staff development and training, and ad hoc learning opportunities.

Each of the components of the Digital Education Initiative are vital to future student success in Nebraska. The components are especially pertinent in that these applications and services provide the foundation for capacity building in our schools and colleges.

Action Plan

Current Action Items

1. Establish standards related to the procurement and use of learning management systems by K-12 schools.

Lead: NITC Technical Panel

Participating Entities: NITC Education Council, myeLearning.org, ESU Distance Education Council, UNL Independent Study High School

Timeframe: March 2006 – May 2006

Funding: No funding is required for this action item.

Status: New. Required by LB 1208.

2. Promote the availability, distribution, and use of digital media throughout the Nebraska educational community.

Lead: NITC Education Council

Participating Entities: NITC Education Council

Timeframe: March 2006 – December 2006

Funding: No funding is required for this action item.

Status: New

Completed Action Items (2004-2005)

1. Organized a series of October 2004 Planning Workshops to bring together participants who have a stake in improving educational and training opportunities for Nebraska citizens through eLearning.

State Government Efficiency

Objective

The State Government Council will address multiple items improving efficiency in state government, including shared services; standards and guidelines; and the project review process. The council has identified and is working to implement seven shared services for state government agencies. Also, the council will continue to develop standards and guidelines to better coordinate state agency technology efforts. Finally, the council will review and recommend improvements to the IT project review process.

Description

The primary components of this initiative are:

Shared Services. The State Government Council has identified a number of potential shared services. The council chose seven shared services for further study and implementation at this time. Interested agencies are meeting to further develop these services:

- Blackberry
- Business Continuity / Disaster Recovery
- Directory Services
- E-mail
- Enterprise Maintenance / Purchase Agreements
- Field Support Services
- SAN (Storage Area Network)

Standards and Guidelines. The State Government Council, working with the Technical Panel, will continue to develop standards and guidelines to better coordinate state agency technology efforts.

IT Project Review Process. The State Government Council and Technical Panel will review and recommend improvement to the IT project review process. This process is primarily used in the review of IT projects as part of the state budget process.

Benefits

Benefits of this initiative include lower costs, easier interoperability among systems, greater data sharing, higher reliability, and improved services.

Action Plan

Current Action Items

Shared Services

1. Implement Business Continuity / Disaster Recovery as a shared service.

(Action items are included in the Security and Business Resumption initiative.)

2. Implement Directory Services as a shared service.

(Action items are included in the Security and Business Resumption initiative.)

3. Implement E-mail as a shared service.

Lead: Beverlee Bornemeier

Participating Entities: State Government Council, E-mail Work Group

Timeframe: RFP for acquisition of anti-spam, anti-virus appliance to be released in February 2006.

Funding: Service rates

Status: RFP to be released.

4. Implement Enterprise Maintenance / Purchase Agreements as a shared service.

Lead: Steve Schafer

Participating Entities: State Government Council, EM/PA Work Group

Timeframe: Antivirus agreement will be completed by March 2006.

Funding: No funding required.

Status: Review of antivirus options is underway. Other agreements to be determined.

5. Implement Field Support Services as a shared service. The Field Support Services work group is looking for avenues to provide better desktop, server, network, and other Information Technology support to staff outside of the Lincoln area.

Lead: Dale Fangmeier

Participating Entities: State Government Council, Field Support Services Work Group

Timeframe: Define shared field support by March 31, 2006.

Identify potential areas to do a pilot project by June 30, 2006.

Choose and implement a project by December 31, 2006.

Funding: To be determined at time of project selection.

Status: Ongoing

6. Implement Geographic Information System (GIS) as a shared service.

Action: Document existing state agency GIS/geospatial data with formal metadata and encourage the listing of available geospatial data in Nebraska Geospatial Data Center Clearinghouse Catalog.

Lead: Larry Zink, Coordinator, Nebraska GIS Steering Committee

Participating Entities: State Government Council; GIS Steering Committee

Timeframe: By December 31, 2006

Funding: \$25,000 grant is likely to be solicited. If grant award is not forthcoming, efforts will still be undertaken as resources allow.

Status: The NITC has adopted a Geospatial Metadata Standard (http://www.nitc.state.ne.us/standards/data/metadata_standard_20050923.pdf), which calls for the progressive documentation of state agency geospatial data, within a one-year timeframe. The Nebraska Department of Natural Resources, in partnership with the Nebraska GIS Steering Committee, has developed a Nebraska Geospatial Data Center (<http://www.dnr.state.ne.us/databank/geospatial.html>). This Data Center includes a geospatial data clearinghouse and metadata development tools.

Action: Develop a plan (including responsibilities and resource requirements) for the coordinated development, data integration, on-going maintenance and online distribution/Internet mapping service of a composite, "best available", statewide street centerline/address database.

Lead: Larry Zink, Coordinator, Nebraska GIS Steering Committee

Participating Entities: State Government Council; GIS Steering Committee

Timeframe: By December 31, 2006

Funding: Investments are planned or currently being made in this data by the Public Service Commission, the State Patrol, and the Dept. of Roads. It is hoped that within these agencies the needed funds can be found to underwrite any interagency planning costs.

Status: The Public Service Commission (Enhanced E911), the State Patrol (statewide computer-aided dispatch), the Dept. of Roads (highway planning and maintenance and accident reporting), and the Dept. of Revenue (Internet and catalog sales tax collection) all have current initiatives that require current statewide street centerline/address databases. In addition, there are numerous other state agency applications that require this data: homeland security, bioterrorism, health and social services delivery, economic development, etc. Under the auspices of the GIS Steering Committee and the CIO, initial meetings have been held with some parties to encourage and facilitate coordination of investments in data development. Further work is needed to develop a plan to insure statewide development, data integration, on-going maintenance, and arrangements for online distribution.

Action: Develop a plan for the coordinated delivery of Internet mapping services by state agencies, with the objectives of making GIS services and existing GIS/geospatial data readily available to a broader array of agencies, improving data access and services to the public, minimizing unnecessary duplication of

effort, providing data and system backup, and where appropriate, provide for a coordinated security system, including the possibility for limited data access and password protection.

Lead: Larry Zink, Coordinator, Nebraska GIS Steering Committee

Participating Entities: State Government Council; GIS Steering Committee

Timeframe: By December 31, 2006

Funding: Initial planning should be possible with existing resources available for agencies currently providing or developing Internet mapping services. More detailed planning and implement may require additional resources, which would become clearly as a result of the initial planning.

Status: A number of state agencies already have or are investing in the development of Internet mapping services: Dept. of Natural Resources, Dept of Roads, Game and Parks Commission, CALMIT-UNL, Dept. of Environmental Quality, Health and Human Services System, Emergency Management Agency and others. In addition to some agency-specific geospatial databases, most of these agency Internet mapping services rely in several geospatial databases that are common to each other (aerial imagery, street centerlines/addresses, political subdivision maps, elevation data, surface water features, etc.). If properly configured, the technology allows for the live, interactive access and sharing of data from multiple Internet map servers. The technology also allows others to leverage these existing state investments in Internet map services by building new applications, which incorporate the existence of these Internet map servers into their application design. If properly configured, the technology also enables the interactive access of data from existing Internet map servers provided by local and federal agencies and the private sector.

7. Implement Storage Area Network (SAN) as a shared service. This service provides a storage area network (SAN) for server-based systems. A SAN consists of storage devices and servers connected by high speed networks, usually fiber optic channels. Connectivity, reliability and switching capabilities are key characteristics of a SAN. The purpose of a SAN is to provide network-attached data storage that is scalable and serves multiple applications. The server-based SAN includes four service options: storage, access via iSCSI connection, access via Host Bus Adapter (HBA) connection, and Virtual Server (a partition within the SAN storage unit).

In combination, these four service options will support many potential configurations. An agency can connect its server to the SAN storage unit through the state's network using the common iSCSI network interface card. Data transfer is at local area network speeds for servers on the state's campus network. Faster transfer rates are possible by installing a HBA adapter in the agency's server and connecting it to the SAN storage unit via fiber optic cable. This option requires an initial investment in the HBA adapter and purchase or lease of fiber. The server with the HBA adapter must be located within 2 kilometers of the SAN storage unit. An agency can avoid the cost of fiber by locating its server in the server farm located in the 501 Building. Yet another option is to pay for a virtual server within the SAN unit, instead of maintaining a physically separate server.

Lead: Jeff Dean

Participating Entities: State Government Council

Timeframe: SAN for server-based systems will be deployed by April 27, 2006.

Funding: Funding is through DOC revolving funds and rates will be established.

Status: Receipt of SAN is expected by January 2006. Essential MOU's are in place. Tentative Rates have been set. IT Services will begin moving customers to new SAN Fabric by February 2006.

Standards and Guidelines

8. The State Government Council ("SGC"), working with the Technical Panel, will continue to develop standards and guidelines to better coordinate state agency technology efforts.

Lead: Rick Becker

Participating Entities: Technical Panel, State Government Council

Timeframe: Ongoing

Funding: None

Status: Continuation

IT Project Review Process

9. Review and revise the “Agency Information Technology Plan” form, which is completed by agencies prior to each biennial budget cycle.

Lead: Rick Becker

Participating Entities: Technical Panel, State Government Council

Timeframe: State Government Council and Technical Panel will review existing form and recommend changes by February 2006.

State Government Council and Technical Panel will approve revisions by March 2006.

Funding: None

Status: New action item

10. Review and revise IT project review process for agency budget requests.

Lead: Rick Becker

Participating Entities: Technical Panel; State Government Council

Timeframe: State Government Council and Technical Panel review IT project review process, including the project proposal form, and recommend changes by April 2006.

Funding: None

Status: New action item

11. Review and revise procurement review process for IT related purchases by state agencies.

Lead: Steve Schafer

Participating Entities: State Government Council

Timeframe: Work beginning in Summer 2006

Funding: None

Status: New action item

Future Action Items

1. Services identified as potential shared services by the State Government Council include:

- Active Directory
- Automated Building Systems (HVAC, access, etc.)
- Backup Management
- Data Network Design
- Data Security
- Database Management
- Desktop Support
- Document Management
- Electronic Filing
- Electronic Records Management
- Encryption
- Enterprise Knowledge Management Databases
- General Platform Management
- Help Desk
- Instant Messaging
- Interactive VRU Applications
- Lotus Domino Design and Development
- Payment Portal
- Project Management
- R&D
- Remote Access
- Secure eFax
- Security
- Server Consolidation / Virtual Servers
- Software Deployment and Management
- SQL Database Design and Development
- Videoconferencing
- Voice Network Design
- VoIP
- Wireless
- Wiring Services
- Workflow

Completed Action Items

Shared Services

1. Blackberry service has been deployed.
2. An Authentication standard for Directory Services has been adopted.
3. The e-mail standard for state government has been revised.
4. Basic E-mail service has been deployed.
5. Enterprise Maintenance / Purchase Agreements with IBM (software license; software maintenance; hardware maintenance) and Microsoft (software license) have been made. The State of Nebraska is also taking an enterprise approach to filing for the Microsoft settlement.

Standards and Guidelines

6. The following standards and guidelines have been adopted: Lotus Notes Standard; Lotus Notes Guideline; Identity and Access Management Standard; Web Branding and Policy Consistency Standard; Revised E-mail Standard for State Government Agencies; and GIS Metadata Standard.

E-Government

Objective

The State Government Council will continue to implement action items that further the use of e-government to improve services and increase the efficiency and effectiveness of agencies. The e-government principles guiding the council are:

- E-government should be considered a continuous process of using technology to serve citizens and improve agency operations;
- Internet technologies create new opportunities for major change, including self-service, integration of information and services, and elimination of time, distance and availability of staff as constraints to providing information and services;
- Agencies have responsibility for performing statutory functions, which means that agency directors must retain ownership of data, responsibility over the use of information technology, and prioritization of projects within the agency to achieve the greatest benefit;
- Cooperation is critical to achieving the goals of e-government, in order to integrate information and services and allow the easy exchange of information;
- An enterprise approach is essential to e-government, including the topics of accessibility for disabled persons, architecture, directories, funding, portal, privacy, security, and other issues; and
- E-government is defined as the use of technology to enhance information sharing, service delivery, constituency and client participation, and governance by transforming internal and external relationships.

Description

The three goals for e-government are:

- **Government-to-Citizen and Government-to-Business.** Anyone needing to do business with state government will be able to go to the state's Web site, easily find the information or service they need, and if they desire, complete all appropriate transactions electronically. Areas to be addressed include citizen portal enhancement; business portal enhancements; education portal; and forms automation.

- **Government-to-Government.** State agencies will improve services and increase the efficiency and effectiveness of government operations through collaboration, communication, and data sharing between government agencies at all levels.
- **Government-to-Employee and Internal Operations.** Agencies will examine internal operations to determine cost-effective e-government applications and solutions. The purpose of these efforts is to improve efficiency and effectiveness by replacing manual operations with automated techniques.

Benefits

The primary benefits from the use of e-government are:

- Improved services for citizens and businesses.
- Increased efficiency and effectiveness for agencies.

Action Plan

Current Action Items

1. Work with the Department of Motor Vehicles to provide online vehicle registration, online license reinstatement and online specialty plate ordering.

Lead: Department of Motor Vehicles

Participating Entities: Department of Motor Vehicles, State Government Council

Timeframe: Specialty Plate Ordering - March 2006

License Reinstatement - June 2006

Online Vehicle Registration - December 2006

Funding: Department of Motor Vehicles

Status: In progress

2. Work with the various agencies involved in business registration -- including the Secretary of State, Department of Revenue, and Department of Labor – to create an online system for business registration.

Lead: Nebraska.gov

Participating Entities: State Government Council, Nebraska.gov, agencies

Timeframe: Review and revise scope of project by March 2006.

Funding: To be determined after review of scope

Status: The scope of the “One Stop Business Registration” process has changed due to the requirements and limitations of the involved parties. This project will be reviewed and possibly reintroduced with redesigned scope.

3. Improve the business forms database maintained by Nebraska.gov and enhance the search capabilities.

Lead: Nebraska.gov

Participating Entities: State Government Council, Nebraska.gov

Timeframe: By July 2006

Funding: State Records Board Grant

Status: Ongoing

4. Convene a work group to examine opportunities to improve access to information resources through a knowledge management system.

Lead: Office of the NITC

Participating Entities: Community Council, Education Council, State Government Council, Technical Panel, and Nebraska.gov

Timeframe: December 2006

Funding: No funding is required for this collaborative action item

Status: New

Future Action Items

1. Work with the Nebraska.gov Manager and county officials to provide the means for online payment of property taxes and other local fees. Status: On hold. This system is currently being provided by NACO/MIPS. Nebraska.gov will consider the cost benefit of moving forward with this project.
2. Work with the Nebraska State Patrol to review options for providing online access to certain, limited, criminal history information.
3. Develop an online application for use by businesses attempting to find a suitable site for business development.
4. Develop strategies to address the following government-to-government activities:
 - Intergovernmental Cooperation Groups. Expand upon current intergovernmental cooperative efforts like the CJIS Advisory Committee and GIS Steering Committee; and develop new cooperative groups for those agencies that have specific, shared interests.
 - Integration of Government Information and Services. Develop strategies for using Internet technologies to provide integrated access to information and services to citizens, businesses, employees, and other governmental entities.
 - Forms Automation. Work with state agencies and political subdivisions to identify and prioritize opportunities for automating forms that local government uses to interact with state government.
5. State Employee Portal Enhancements. The State Government Council will identify specific improvements and value-added services to be incorporated into the state employee portal.
6. Develop method of providing authentication for “first time” users.

Completed Action Items

1. Worked with the Secretary of State's Office to provide enhancements to election related information and services.
2. Worked with the Accountability and Disclosure Commission to provide for secure online filings and improved access to information. Improvements posted. Nebraska.gov is researching the progress of the online filing component.
3. Worked with the Legislature to provide additional tools to track legislative information, including the ability to track multiple bills from one location and the use of e-mail “push” technology.
4. The Department of Education developed online teacher/administrator certification.

5. Nebraska.gov redesign included a "Local" portal.
6. Marketing strategy was developed to increase public awareness and the use of e-government services.
7. Standard was adopted for agency Web sites to include and privacy and security statements and common branding.

Security and Business Resumption

Objective

This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the state's information technology resources. Information security will serve statutory goals pertaining to government operations and public records. These include:

- Insure continuity of government operations (Article III, Section 29 of the Nebraska Constitution; Nebraska Revised Statutes Sections 28-901 and 84-1201);
- Protect safety and integrity of public records (Nebraska Revised Sections 28-911, 29-2391, and 84-1201);
- Prevent unauthorized access to public records (Nebraska Revised Statutes Sections 29-319, 81-1117.02, and 84-712.02);
- Insure proper use of communications facilities (Nebraska Revised Statutes Section 81-1117.02); and
- Protect privacy of citizens (Nebraska Revised Statutes Section 84, Article 7).

Description

Major activities include:

- Developing an overall security strategy, including policies, security awareness, and security infrastructure improvements;
- Network security standards and guidelines;
- Education and training;
- Authentication (directory services project);
- Disaster recovery for information technology systems (as part of a broader business continuity planning);
- Compliance with federal privacy and security mandates;
- Security assessments.

Benefits

Benefits will include lower costs by addressing security from an enterprise perspective, cost avoidance, and protecting the public trust.

Action Plan

Current Action Items

Security

1. Conduct annual independent security audits. Multiple federal programs require periodic computer security audits, including HIPAA, HAVA, and Bioterrorism grants from the Center for Disease Control. Computer security audits are a widely accepted best practice across the public and private sector.

Lead: State Security Officer

Participating Entities: State Government Council, Security Work Group

Timeframe: Investigate opportunities for aggregating efforts of several state agencies that face federal requirements for security audits – Ongoing. Security audit - Completed by April 2006.

Funding: Funding identified

Status: RFP is ready, release date to be determined.

2. Action: Pilot Federated Identity Proof of Concept utilizing Centralized Directory Services. (Provide a Citizen Portal that would allow citizen to self-provision application themselves.)

Lead: Nebraska Directory Services

Participating Entities: State Government Council, DAS-IMServices

Timeframe: June 2006

Funding: Funding identified.

Status: Design phase started.

3. Implement incident reporting requirements.

Lead: State Security Officer

Participating Entities: State Government Council, Security Work Group

Timeframe: Develop incident reporting process - May 2006

Communicate reporting requirements to agencies - May 2006

Funding: No funding required for this task.

Status: In progress

4. Enhance Network Security and Network Management.

Action: Investigate and recommend an enterprise solution to ensure that encrypted traffic adheres to State security requirements.

Lead: Division of Communications

Participating Entities: State Government Council

Timeframe: To be determined

Funding: No funding required for this task.

Status: Continuation

Action: Evaluate and recommend options for providing encryption to clients across the state's Wide Area Network.

Lead: Division of Communications

Participating Entities: State Government Council

Timeframe: To be determined

Funding: No funding required for this task.

Status: Continuation

Business Resumption

5. Implement shared disaster recovery facilities. Mission critical systems have three common requirements. Recovery times must be measured in hours, not days or weeks. Recovery facilities should be physically separated so that they will not be affected by a single disaster. There must be staff available to assist with the recovery efforts. Achieving these requirements is very expensive. Sharing disaster recovery facilities and establishing a collaborative approach to disaster recovery is one strategy for managing costs. DAS IMServices and the University of Nebraska are jointly developing a fast recovery capability using mutual assistance of physically separated data centers.

Lead: DAS IMServices and Univ. of Nebraska

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: The cost and source of funding have not been determined.

Status: Initial hardware and communications capabilities in place. Additional implementation work is ongoing.

6. Promote disaster planning for information technology systems, in conjunction with agency business continuity plans.

Lead: Steve Henderson / Dave Berkland

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: No funding required.

Status: Director-level meetings, chaired by Lieutenant Governor Sheehy, to discuss restoration of services began in November 2005.

The Business Continuity and Disaster Recovery work group is developing elements of a common planning document and an approach for implementation of ICS (Incident Command System).

7. Encourage testing and updating of disaster plans.

Lead: Steve Henderson / Dave Berkland

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: No funding required.

Status: Continuation

8. Convene a work group to improve disaster recovery and business continuity procedures, including homeland security preparedness, for all public entities.

Lead: Office of the NITC

Participating Entities: Community Council; Education Council; State Government Council; and Technical Panel

Timeframe: By December 2006

Funding: No funding is required for this collaborative action item

Status: New

Completed Action Items

1. **Directory Services:** Established an authentication standard.
2. **Directory Services:** Piloted single sign-on.
3. **Network Security and Network Management:** Configured all public IP addresses (164.119) behind the state's firewall complex.
4. **Network Security and Network Management:** Implemented an intrusion detection and prevention system on the state's Internet connection as part of a layered defense.
5. **Disaster Planning:** Conducted an "executive overview" briefing to state agencies (using either the State Government Council or the Security Work Group as a forum) explaining the progress and current and future activities in the development of disaster recovery plans.

Action Items by Strategic Initiatives

Strategic Initiative	Action Items		
	Current	Future	Completed
Nebraska Statewide Telehealth Network	6		3
Network Nebraska	6	2	3
Statewide Synchronous Video Network	6	1	1
IT Planning and Development	3		4
Digital Education	2		1
State Government Efficiency	11	1	6
E-Government	4	6	7
Security and Business Resumption	8		5
TOTAL	46	10	30

LB 1208; one of many important bills before the Legislature

LB 1208 was co-introduced on January 18 by Senators Raikes, Pederson, Baker, and Stuhr. This bill http://www.unicam.state.ne.us/pdf/INTRO_LB1208.pdf embodies many of the recommendations contained in the final report of the Distance Education Enhancement Task Force, which began meeting on July 6, 2005. http://www.unicam.state.ne.us/reports/committees/distancedeed_1205.pdf (20MB, 103 pgs)

The 16-member Task Force met six times between July and December to deliberate the 10 provisions of LB 689. [See http://www.unicam.state.ne.us/legal/SLIP_LB689.pdf] The issues ranged from infrastructure to funding to coordination of synchronous video distance learning courses.

These particular distance education issues first came to the attention of Senators Raikes and Stuhr in Fall 2004 as a Department of Education technology proposal with a \$20-\$30 million request, intended to assist the school districts that would be reaching the end of their JPEG telecommunications contracts. The Senators introduced LB 689, asking for \$8 million to be reserved in the second year of the biennium, pending the recommendations of the Task Force. The bill was amended and passed as a six-month study that included \$10,000 to provide for the expenses of the Task Force, and a final report due out by December 31, 2005.

An overview of the basic principles and significant provisions of the distance education improvement plan follows, with language lifted from LB 1208. You are encouraged to read the actual bill for more detail.

The distance education improvement plan is centered on three general principles. First, the plan recognizes school districts', ESUs', and public postsecondary education institutions' responsibility for making decisions related to participation in distance education. Second, the plan encourages the exchange of distance education courses using a statewide network, currently known as Network Nebraska. Third, the plan provides for statewide coordination through a new entity, to be called the Distance Education Council.

Policy

- The Chief Information Officer (CIO) shall provide access to each school district, each ESU, each community college, each state college, and the University of Nebraska at the earliest feasible date and no later than July 1, 2012. [p. 68, lines 9-13] The network shall...meet the demand of state agencies, local governments, and educational entities, as defined in section 17-3 of this act. [p. 68, lines 3-6]
- The CIO shall bid for such equipment and software and shall allow school districts, ESUs, community colleges, state colleges, and the University of Nebraska to participate in such statewide leasing or purchasing contracts. [p. 43, lines 13-17]
- Interlocal agreements forming distance education consortia shall terminate on June 30, 2007. On July 1, 2007, educational service units shall assume responsibility for distance education services that are, on the effective date of this act, being provided to member school districts through a distance education consortium. [p. 50, lines 14-19]
- The (Distance Education) council shall not approve purchases of the council in excess of \$10,000 without approval of the technical panel of the NITC that the purchases are in compliance with any applicable commission standards. [p. 54, lines 17-23]
- (Equipment and software) in compliance with technical standards, as set forth by the NITC [p. 53, lines 11-12].
- The Nebraska Department of Education shall promulgate rules related to section 21 (equipment) and section 22 (incentives) [p. 57, lines 9-10 & p. 60, line 25]

Funding

- School districts and ESUs will be eligible to receive one-time equipment reimbursements of up to \$20,000 from the Education Innovation Fund beginning the first year of access to Network Nebraska and ending in 2014. School districts would be required to send or receive at least two synchronous video courses each year for four years or risk forfeiture of funds. [p. 55, lines 3-25]
- For fiscal years 2007-08 through 2015-16, NDE shall provide distance education incentives from the Education Innovation Fund to school districts and ESUs for qualified distance education courses. Each unit of distance learning would be worth up to \$1,000 and be paid one year in arrears.
 - The formula for incentives will be based on ONE unit for SENDING a synchronous video or an internet-based distance education course;
 - ONE unit for RECEIVING a synchronous video course; and
 - ONE extra unit for SENDING a synchronous video course that reaches a sparse or very sparse school district. [p. 57, lines 11-15; p. 59, lines 1-22]
- A technology allowance will be added to the Tax Equity and Educational Opportunities Support Act for school district access and transport charges equal to 85% of the local system costs less any federal reimbursements from the E-rate program. [p. 17, lines 1-12]
- A technology allowance will be added to the minimum allocation in the ESU infrastructure funding formula for access and transport charges equal to 85% of the ESU costs less any federal reimbursements from the E-rate program. [p. 45, lines 19-25 & p. 46, lines 1-7]
- Receipts for courses shared with other school districts will be excluded from accountable receipts in the local budget limitation but not from the state aid formula. [p. 38, lines 8-19 & p. 31, lines 18-24]

Coordination

- The (Distance Education) council shall be composed of one administrator or his or her designee from each ESU. Coordination will include brokering of courses, scheduling and prioritization of courses, assessment of distance education needs, and evaluation of distance education services. [pp 52, Sec. 18]
- The Distance Education Council will be required to have representation on either the NITC working group that establishes, coordinates, or prioritizes needs for education (Education Council), the Technical Panel, or the NITC, or the governor shall appoint one member to the NITC. [p. 63, lines 8-14]

How might this plan affect your school district or college?

First, it provides funding for equipment to more than 200 high school districts affected by aging networking and video compression technology and enables them to upgrade and join the 100 other districts that have already migrated to IP-based, high bandwidth networking. The plan also incentivizes K-12 participation in Network Nebraska, the statewide education network, where each entity will assume a fair share of the statewide transport. Secondly, the plan establishes a Distance Education Council, whose responsibility will be to coordinate K-12 distance education statewide, rather than having distance education course exchange isolated within separate distance learning consortia. Thirdly, the bill tasks the CIO with establishing a cost structure for the network based on actual costs plus administrative expenses and charging participants according to that cost structure.

What happens next?

LB 1208 will soon be scheduled for a public hearing in the Education committee where interested persons may testify for or against the bill. The bill may be amended in the committee and voted onto the floor,

where it could receive two rounds of debate. As with all legislation, prioritization of the bill by a senator or a committee increases its chances for debate on the floor.

How can I follow the Legislative activity during this 60-day session?

The BillTracker **eBill Book** (a free service from Nebraska.gov) allows you to track up to 15 bills simultaneously and (if you choose) receive e-mail notifications of activity on your bills of interest. To register for the eBill Book, simply point your browser to the login link below, then click the sign-up link. <http://www.nebraska.gov/billtracker/login.html>

Tom Rolfes is the Education I.T. Manager for the State CIO and the Nebraska Information Technology Commission (NITC). He staffs the Education Council, a K-20 advisory group to the NITC and works with infrastructure development, policy, and funding for educational technology. <http://www.nitc.state.ne.us>

**Nebraska Information Technology Commission
EDUCATION COUNCIL**

Membership Replacement pro tem 2004-06 term

<u>Name</u>	<u>Representing</u>	<u>Status</u>
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K-12 EDUCATION

Ron Cone	Educational Service Units	Nominated by ESUAA (1-5-06) to fill the term vacated by Alan Wibbels, 2004-06
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Ron Cone

Ron Cone has been employed by ESU 10 in Kearney as a network engineer since 1997. Most recently, he was hired by ESU 10 as the Director of Networking and Information Services to succeed Alan Wibbels. Mr. Cone is being nominated by the ESU Administrators Association to fill the 2004-06 term of Mr. Wibbels, due to his retirement. Mr. Cone graduated from UNK in 1994 with a degree in computer science and information management. Ron has also served as alternate to the K-12 representative on the NITC Technical Panel. He has earned certification as a Cisco Certified Network Associate (CCNA) and Cisco Certified Network Instructor (CCNI). Mr. Cone assisted with previous NETCOM phases I and II as well as Network Nebraska infrastructure issues.

On Friday, January 20, the Education Council voted unanimously to recommend Ron Cone to the NITC for approval as the second ESU representative.

In other membership news, Terry Haack, Superintendent of Bennington Public Schools, was elected by the Education Council as K-12 Co-Chair to complete the term until June 30, 2006.

Nebraska Information Technology Commission

--Education Council Charter--

1. Introduction

The Education Council (hereafter referred to as "Council") of the Nebraska Information Technology Commission (hereafter referred to as "Commission") is a 16-member advisory committee of the Commission composed of representatives from K-12, postsecondary education, and four state agencies. The Council was originally formed by Executive Order 97-7 in November 1997 to identify, prioritize, and coordinate user needs with respect to educational information technology. The Council first met on March 12, 1998 and has conducted monthly or bimonthly meetings since.

2. Purpose of Charter

The purpose of this charter is to provide operational guidance to the Council members, clarify its relationship to the Commission, and to provide general information to all who read the proceedings and recommendations of the Council.

3. Authority

The Commission shall: "Establish ad hoc technical advisory groups to study and make recommendations on specific topics, including work groups to establish, coordinate, and prioritize needs for education, local communities, and state agencies[.]" NEB. REV. STAT. § 86-516 (7).

4. Commission Responsibilities and Mission

4.1 Commission Mission

"The mission of the Nebraska Information Technology Commission is to make the State of Nebraska's investment in information technology infrastructure more accessible and responsive to the needs of its citizens regardless of location while making government, education, health care and other services more efficient and cost effective."

<http://www.nitc.state.ne.us/>

4.2 Commission Responsibilities:

4.2.1 Adopt policies and procedures used to develop, review, and annually update a statewide technology plan;

4.2.2 Create a technology information clearinghouse to identify and share best practices and new developments, as well as identify existing problems and deficiencies;

4.2.3 Review and adopt policies to provide incentives for investments in information technology infrastructure services;

4.2.4 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;

4.2.5 Adopt guidelines regarding project planning and management, information-sharing, and administrative and technical review procedures involving state-owned or state-supported technology and infrastructure. Governmental entities, state agencies, and political subdivisions shall submit projects that directly utilize state-appropriated funds for information technology purposes to the process established by NEB. REV. STAT. §§86-~~512~~ to 86-~~524~~. Governmental entities and political subdivisions may submit other projects involving information technology to the Commission for comment, review, and recommendations;

4.2.6 Adopt minimum technical standards, guidelines, and architectures upon recommendation by the technical panel created in NEB. REV. STAT. §86-~~521~~;

4.2.7 Establish ad hoc technical advisory groups to study and make recommendations on specific topics, including work groups to establish, coordinate, and prioritize needs for education, local communities, and state agencies;

4.2.8 Make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested;

4.2.9 Approve grants from the Community Technology Fund and Government Technology Collaboration Fund; and

4.2.10 Adopt schedules and procedures for reporting needs, priorities, and recommended projects.

5. Education Council Mission and Responsibilities

5.1 Council Mission

The mission of the Council is to advise the Commission concerning education information technology needs, goals, and policy. The Council will identify, coordinate, and prioritize matters pertaining to information technology for a more strategic and cost-effective approach to developing the State's education information technology infrastructure.

5.2 Council Responsibilities:

5.2.1 Identify and prioritize education needs that could be met in a more cost-effective manner through the use of information technology;

5.2.2 Report needs, priorities, and recommended projects to the Commission in the manner determined by the Commission;

5.2.3 Assist the Commission in developing, reviewing and updating the statewide technology plan;

5.2.4 Recommend policies and guidelines for acceptable and cost-effective use of information technology in education;

5.2.5 Establish such subcommittees, task forces, or working groups as necessary and appropriate to advise the council on matters including coordination of technology initiatives, information technology operations, information management, data administration, and technology planning and training;

5.2.6 Encourage research on the effects of technology on learning and learner cognition;

5.2.7 Promote equitable use and access to technology throughout the education community;

5.2.8 Communicate information developed under Section 5.2 of this charter to education constituents through methods such as the technology information clearinghouse; and

5.2.9 Such other responsibilities as directed by the Commission.

6. Membership

6.1 Number of Members

The Council has 16 members, eight representing the K-12 sector, eight representing the postsecondary sector, and four non-voting ex officio representatives of the Department of Education, the Coordinating Commission for Postsecondary Education, the Department of Administrative Services, and the Nebraska Educational Telecommunications Commission.

6.2 Sector Representation

6.2.1 K-12 Representation

6.2.1.1 Teachers--private schools (1), as **recommended by the Board of the Nebraska Council of American Private Education**; and public schools (2), **as recommended by the Executive Officer of the Nebraska State Education Association**

6.2.1.2 Administrators (2), **as recommended by the Executive Officer of the Nebraska Council of School Administrators**

6.2.1.3 Educational Service Units (2), **as recommended by the Executive Officer of the Educational Service Unit Administrators Association**

6.2.1.4 Boards of Education (1), **as recommended by the Executive Officer of the Nebraska Association of School Boards**

6.2.2 Postsecondary Representation

6.2.2.1 State Colleges (2), **as recommended by the Chancellor of the State College System**

6.2.2.2 Independent Colleges and Universities (2), **as recommended by the Executive Officer of the Association of Independent Colleges and Universities of Nebraska**

6.2.2.3 Community Colleges (2), **as recommended by the Executive Officer of the Nebraska Community College System**

6.2.2.4 University of Nebraska System (2), **as recommended by the President of the University of Nebraska System**

6.2.3 Non-voting Ex Officio Representation

6.2.3.1 Department of Education (1)

6.2.3.2 Coordinating Commission for Postsecondary Education (1)

6.2.3.3 Department of Administrative Services (1)

6.2.3.4 Nebraska Educational Telecommunications Commission (1)

6.3 Member Responsibilities

Each member is responsible for maintaining two-way communication with their sector constituents concerning issues brought before the Council. **Each member is responsible for attending the meetings of the Education Council or alerting his/her voting alternate to attend in their absence.**

6.4 Change in Membership

If a change in membership becomes necessary due to resignation, removal, or change of job status, the sub-sector or agency represented is responsible for nominating or recommending the replacement member to the Council. The nomination will then be recommended by a simple majority of the Council members present and forwarded to the Commission for approval.

6.5 Length of Service

The current members will serve until June 30, 2001, with subsequent two-year staggered terms expiring on June 30 of each year. There is no limit to the number of consecutive terms that can be served.

One-half of the K-12 and one-half of the postsecondary members' terms shall expire on even numbered years and one-half of the K-12 and one-half of the postsecondary members' terms shall expire on odd numbered years.

7. Meeting Procedures

7.1 Chair(s)

7.1.1 The elected Co-Chairs will conduct the meetings of the Council, oversee the establishment, operation and dissolution of committees, propose meeting agendas, and maintain the general operations of the Council. The Council will follow an informal protocol as defined by Robert's Rules of Order.

7.1.2 The Co-Chairs of the Council will serve until June 30, 2001; with subsequent **two-year elected terms** expiring on June 30 of each year.

7.1.3 One Co-Chair shall be representative of K-12 education and one Co-Chair shall be representative of postsecondary education.

7.2 Quorum and Action Items

An official quorum consists of 8 (50%) of the 16 official members or their alternates. No official voting business may be conducted without an official quorum. Issues shall

be decided by a majority vote of the voting members present.

7.3 Designated Alternates and Non-voting Alternates

7.3.1 Each member of the Council shall designate one (1) official alternate. This official voting alternate shall be registered with the Office of the Chief Information Officer and NITC and, in the absence of the official member, have all the privileges as the official member on items of discussion and voting.

7.3.2 If the official member and the member's official alternate are unable to attend a Council meeting either in person or electronically, then the sub-sector affected may send a non-voting alternate to gather or share information.

7.4 Meeting Frequency

The Council shall meet not fewer than four times per year (quarterly). As a general rule, the Council shall attempt to meet **bimonthly (every other month)**, except in conditions of extreme circumstances.

7.5 Subcommittees

The Council may, as it deems necessary, form task forces, teams, work groups, and special, ad hoc, and standing subcommittees to carry out its mission and responsibilities. Each time a new subcommittee is formed under the Council, the following seven sections must be decided and assigned within 30 days of formation.

7.5.1 Authority

The authority of any subcommittee of the Council is obtained and assigned through an official motion of the Commission and/or Council.

7.5.2 Goals

The Co-Chairs of the Council assign the goals of any subcommittee of the Council.

7.5.3 Charge

The Council delivers the charge to the subcommittee, which includes a monthly progress report back to the Council at its regular meeting.

7.5.4 Membership

The membership of each subcommittee of the Council shall be determined by appointment, election, or volunteerism, whichever means is most suitable to the Council. The subcommittees may include members from outside the Council as resource persons, as determined by the Council. The number of members on any subcommittee shall be fewer than a quorum of the members of the Council (<8).

7.5.5 Leadership

Each subcommittee of the Council shall have a single chair to provide leadership. The Co-Chairs of the Council may appoint this person, if the Co-Chairs desire, or the majority of the subcommittee may elect this person.

7.5.6 Duration

The Council shall assign each subcommittee a specific duration to complete its charge. At the conclusion of the duration and delivery of its charge, the subcommittee shall be dissolved. If the subcommittee requires a longer duration than has been assigned, the chair of the subcommittee shall request an extension or renewed duration.

7.5.7 Process

The subcommittees charged by the Council may conduct their own meetings and forums away from the Council's regular monthly meetings. The chair of the subcommittee must inform the Office of the CIO-NITC of the date, time, and location of additional meetings.

7.5.8 Open Meetings

"Sections 84-1408 to 84-1414 of the Open Meetings Law shall not apply to subcommittees of such bodies unless a quorum of the public body attends a subcommittee meeting or unless such subcommittees are holding hearings, making

policy, or taking formal action on behalf of their parent body..."

7.6 Expense Reimbursement

81-1182.01 "Any department, agency, Commission, council, committee, or board of the state may pay for the reasonable and necessary expenses for the recruitment, training, utilization, and recognition of volunteers providing services to the state and certain providers of services as established by the Director of Administrative Services."

7.6.1 NAS Policy CONC-005 "Volunteers shall mean those persons providing services to the State who are not being compensated for their time."

7.6.2 Council members needing reimbursement must submit a signed request to the Office of the CIO-NITC using the official state accounting forms.

7.7 Open Meeting Laws and Public Notice

It is the policy of the State of Nebraska that the formation of public policy is public business and may not be conducted in secret. Every meeting of a public body shall be open to the public in order that citizens may exercise their democratic privilege of attending and speaking at meetings of public bodies.

7.7.1 Advance Notice

The Council shall give reasonable advance publicized notice of the time, place, and agenda of each meeting through the use of its web page, <http://www.nitc.state.ne.us/>. The agenda will also be available for public inspection during normal business hours at the Office of the CIO-NITC, 521 S. 14th, Suite **301**, Lincoln, Nebraska. The Council will attempt to adhere to the sequence of the published agenda, but reserves the right to adjust the order of items if necessary and may elect to take action on any of the items listed.

7.7.2 Videoconferencing

Meetings of the Council may be held by means of videoconferencing if: reasonable advance publicized notice is given; reasonable arrangements are made to accommodate the public's right to attend, hear, and speak; at least one copy of all documents being considered is available at each site; one member of the council is present at each site of the videoconference; and no more than one-half of the Council's meetings in a calendar year are held by videoconference.

7.7.3 Rights of the Public

It is not a violation for the Council to make and enforce reasonable rules and regulations regarding the conduct of persons attending, speaking, reporting, videotaping, photographing or recording its meetings. The Council may not forbid public participation at all meetings but may not be required to allow citizens to speak at each meeting. The Council shall not require members of the public to identify themselves as a condition for admission to the meeting but may do so as a condition for addressing the Council.

7.7.4 Minutes and Voting

The Council shall keep minutes of all meetings showing the time, place, members present and absent and the substance of all matters discussed. Any action taken on any question or motion duly moved and seconded shall be by roll call vote of the Council in open session, and the record shall state how each member voted or if the member was absent or not voting. The roll call shall be called on a rotational basis. Minutes shall be written and available for inspection within 10 working days or prior to the next convened meeting, whichever occurs earlier.

Approved by the Nebraska Information Technology Commission on June 29, 1999.

Amendments approved by the NITC on June 22, 2000 and January 27, 2006.



Nebraska Information Technology Commission

STANDARDS AND GUIDELINES

Land Record Information and Mapping Standards

Category	Data and Information Architecture
Title	Land Record Information and Mapping Standards
Number	

Applicability	<input checked="" type="checkbox"/> State Government Agencies <input checked="" type="checkbox"/> All See each section <input checked="" type="checkbox"/> Excluding See Section 4.1 <input checked="" type="checkbox"/> State Funded Entities - All entities receiving state funding for matters covered by this document See each section <input checked="" type="checkbox"/> Other: Public Entities - Other public entities developing or acquiring geospatial data not supported by state funding See each section Definitions: Standard - Adherence is required. Certain exceptions and conditions may appear in this document, all other deviations from the standard require prior approval of <u>NITC Technical Panel</u> . Guideline - Adherence is voluntary.
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Status	<input type="checkbox"/> Adopted <input checked="" type="checkbox"/> Draft <input type="checkbox"/> Other: _____
Dates	Date: 1-18-06 Draft Date Adopted by NITC: Other:

Prepared by: The Nebraska GIS Steering Committee and endorsed and referred to the Technical Panel of the Nebraska Information Technology Commission.
Authority: Neb. Rev. Stat. § 86-572(2c), 86-516(6)
<http://www.nitc.state.ne.us/standards/>

1.0 Standard

These standards/guidelines are primarily focused on those public entities responsible for maintaining property parcel maps for their particular jurisdiction. The last line following each standard or guideline refers to the type(s) of agency or entity to which that standard/guideline applies and whether it is a standard (adherence required) or guideline (adherence voluntary) for each type of entity.

- 1.1 Datum.** Local government multipurpose GIS/LIS (Geographic Information System/Land Information System) and their associated geospatial data layers should be based on the North American Datum (NAD) 83 and the North American Vertical Datum (NAVD) 88. Any existing systems developed based on other datums should consider conversion to these datum.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

- 1.2 Projection.** The Nebraska Plane Coordinate System, NAD 83, should be used as the primary map projection system for the recording of positions in local land-data systems in Nebraska. Selection of any other projection should be done reluctantly and only after most careful consideration. The plane coordinate values for a point on the earth's surface may be expressed in either meters or feet.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

- 1.3 Geodetic Control.** GIS/LIS systems developed with the goal of providing a multipurpose cadastre for local government use should be referenced to a local geodetic reference framework that is properly connected to the National Spatial Reference System (NSRS).

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

1.4 Public Land Survey System Control.

- 1.4.1 PLSS Geodetic Framework.** For all land in Nebraska that is subdivided according to the Public Land Survey System (PLSS), the geodetic reference framework for the cadastre should be the section corners of the PLSS for each section.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

- 1.4.2 Locate, Monument, and GPS Primary Corners.** At a minimum, local government entities developing a geospatial land information system should initially invest in a precision Global Positioning System (GPS) survey to locate, re-monument as necessary, and obtain the geographic coordinates of the major boundary defining corners that legally define the boundaries of their county jurisdiction(s). These precision GPS survey coordinates for the boundary defining corners should be collected and integrated as framework data into the land information system. This effort should be coordinated with officials from the adjacent county(ies) to ensure agreement on the location of the shared corners.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Guideline**

- 1.4.3 Progressive Monumentation.** In addition, each county (or municipality) that is planning to develop a GIS/LIS-based cadastre program should also consider

initiating a progressive program to locate and/or re-monument, as necessary, and collect geographic coordinates on other PLSS corners according to the legally established procedures and properly connect them to the National Spatial Reference System to obtain geodetic coordinates.

State Agencies: **Guideline** State Funded Entities: **Guideline** Other: **Guideline**

1.5 PLSS Base Map. Local governments considering the development of a multipurpose GIS, should consult with the Nebraska State Surveyor’s Office to locate and access the best available data on the Public Land Survey System (PLSS) for their geographic area. To assist the State Surveyors Office in maintaining a repository of the best available PLSS data, local governments participating in the Nebraska Land Information System Program should share any enhanced PLSS data, for their geographic area, with the State Surveyors Office so that it might be integrated into the PLSS repository database.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

1.6 Ortho-base (Aerial Layer) or Base Maps. Both a Public Land Survey System base map and an orthophoto (surface features) base map should be used to provide the geospatial reference framework upon which a local government multipurpose land information system is developed. Both base maps should be tied to the National Spatial Reference System and have a level of spatial accuracy appropriate to the range of applications planned for a given area.

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

1.7 Map Scale and Spatial Accuracy.

1.7.1 Minimum Horizontal Accuracy Standard. Public entities developing a GIS/LIS program should conduct data collection and development in a manner to achieve at least the minimum level of horizontal spatial accuracy consistent with the National Horizontal Map Accuracy Standards corresponding to a 1:12,000 (1"= 1,000') scale map (90% of the “well defined” horizontal locations must be within ±33.3 ft. of their real world location).

State Agencies: **Standard** State Funded Entities: **Standard** Other: **Standard**

1.7.2 Additional Accuracy Considerations. Beyond this minimum horizontal map accuracy, public entities are encouraged to consider the following recommended map scales and their corresponding National Horizontal Map Accuracy Standards in determining the positional accuracy needed for base maps in the development of a local government GIS/LIS:

<u>Relative Size of Property Parcels</u>	<u>Map Scale</u>	<u>Nat'l Horizontal Map Accuracy Std.</u>	<u>Equivalent Metric Scale</u>
Urban areas	1:600 (1" = 50')	±1.7 ft.	1:500
	1:1,200 (1" = 100')	±3.3 ft.	1:1,000
Large urban & suburban	1:2,400 (1" = 200')	±6.7 ft.	1:2,500
Rural areas	1:4,800 (1" = 400')	±13.3 ft.	1:5,000
	1:9,600 (1" = 800')	±26.7 ft.	1:10,000
	1:12,000 (1" = 1,000')	±33.3 ft.	1:10,000

State Agencies: **Guideline** State Funded Entities: **Guideline** Other: **Guideline**

1.8 Legal Lot and Parcel Layers. Two graphic data layers are necessary to provide the foundation for a wide variety of local government GIS/LIS applications that involve land subdivision and/or ownership.

a). The legal lot layer consisting of legal land subdivisions. These are aliquot portions of the PLSS, filed subdivision plats and irregular tracts defined by filed deeds.

b). The parcel layer that defines ownership tracts of land. These tracts may group multiple legal lots into one taxable account and that typically represents the boundaries of a landowner's property. These data layers include locational coordinates for points representing property corners, lines between property corners representing property boundaries and closed polygons representing the property area.

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Standard**

1.9 Parcel Identifiers.

a). Each county/region should adopt a system of unique, permanent feature identifiers (PID) that provide the link between each graphic land ownership parcel polygon and the attribute information (ownership, size, situs address, value, etc.) related to that specific land ownership property parcel.

b). A county/region PID system must be designed in a manner such that a unique, statewide PID can be defined and maintained for each property parcel by using the county FIPS code (Federal Information Processing Standards Publications) as a prefix to the county/region's PID system.

c). To maintain this unique one-to-one association between a specific property parcel and its related attribution information, new PIDs should be assigned whenever a property parcel is altered by either splitting it into two or more parcels or by combining two or more parcels to form a new parcel. The previous PIDs should not be used for these new modified parcels, but the historical PID associations should be maintained through a parent/child PID reference table.

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Standard**

1.10 Spatial Data Format. A broad range of state and regional applications require property parcel information. Many of these applications require the combining of data across jurisdictional boundaries. To facilitate these applications, the property parcel spatial (graphic) data should be either maintained in a manner that allows it to be readily integrated in a common geographic data format (i.e., shapefile) or be capable of being exported into a common geographic data format (i.e., shapefile), while including the parcel identifiers.

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Guideline**

1.11 Metadata. All geospatial land record databases, and their associated attribute databases should be documented with Federal Geographic Data Committee (FGDC)

compliant metadata outlining how the data was derived, attribute field definitions and values, map projections, appropriate map scale, contact information, access and use restrictions, etc.

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Standard**

1.12 Attribute Data. To provide the foundation necessary for a wide variety of local government applications, non-graphic, attribute data should be organized within the GIS/LIS, which describes individual property parcels relative to their basic parcel characteristics, tenure, value, history, buildings and units within the parcel, and tax status. In most cases, much of this attribute data will already exist in separate databases within a variety of local agencies and should be tied to the graphic property parcel via the unique PID. To meet a range of state and regional applications that require property parcel information, the following types of property parcel data should be maintained and be available in a manner that allows it to be harvested, translated, and integrated into a statewide property parcel attribute dataset.

PID#..... Parcel identifier (county FIPS code plus local government PID)
 Situs Address..... Address of parcel (may be multiple fields)
 Owner Address..... Address of property owner (may be multiple fields)
 Township Township #
 Section..... Section #
 Range Range #
 Range Direction East or West
 Legal Description Narrative legal description of parcel
 Assessed Value..... Total assessed value of property (land and improvements)
 Land Value..... Assessed value of land
 Area (Deeded) Area of parcel according to the deed
 Property Class (Res, Ag, Com, Rec., Ind.)
 Property Sub-class i.e., Ag (Dryland, Irrigated, Grassland/Pasture, Waste)
 Ownership type..... Federal, State, County, Private, Tribal, Exempt, Other and Unknown
 Tax District..... County ID plus Tax Dist. #
 School District State number definition
 Landuse Actual landuse with NPAT defined general categories
 Property Parcel Type... NPAT defined categories
 Status (Vacant, Improved or Improved only) (NPAT defined)
 Location (Urban, Sub-urban, Rural)(NPAT defined)
 City Size..... 1st class, 2nd class, primary, metro, or village
 Source Document..... Sales/transfer reference or document (book & page)
 Sales Date..... Most recent sales/transfer date
 Sales Value..... Most recent sales value

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Standard**

2.0 Purpose and Objectives

The purpose of these standards and guidelines is to help realize the maximum long-term return on and overall utility of the public's investment in the modernization of how Nebraska's land records are maintained and distributed.

2.1 Background

Land records and land ownership records are public records that are used by wide cross-section of our society and its institutions. Ready access to current and accurate land

records is critical to our state's overall economy and the efficient functioning of many of its public and private institutions.

Historically land records have been maintained on paper records and paper maps. This made it very difficult and costly to update and keep current records and maps in areas where there was significant turnover in property ownership. Paper records and maps also made it difficult to share land record information outside of the physical office where they were maintained. Paper records and maps also made it difficult to conduct analyses of broader land ownership and land valuation patterns. Computerization in general, and GIS/geospatial technologies in particular, have revolutionized how land and land ownership records can be maintained, analyzed, shared, and distributed.

Modern computerized land records and maps make it relatively easy to update and keep current land records and maps. Computerization and GIS/geospatial technologies now routinely enable easy, reliable access to land records and maps via the Internet to a wide variety of users. Land records in computerized relational databases and GIS parcel maps have provided a wide array of new information management tools that can be used to integrate land records with other data and analyze and display land ownership, land valuation and other broader land-related patterns. Among other uses, these tools help ensure that all property is on the tax rolls and that the property is taxed equally.

Modern computerized land records and maps can provide a wide array of potential benefits to a wide array of users. However, to realize many of these benefits, it is important that when these databases and maps are originally developed they follow a minimal set of standards and guidelines that support this potential broad array of applications and benefits. In many instances, it is not this broader array of potential uses that is the immediate stimulus, which causes a local or state agency to undertake a modernization of its land records and maps. Therefore, these standards and guidelines serve the function of raising the awareness of these potential future applications and the related need to incorporate minimal standards beyond those needed for immediate applications.

These standards and guidelines are intended to help ensure that modernized land records are developed on a solid technical foundation. A foundation, which will enable both the original developing agency, and other interested entities, to build on this initial investment and maintain and enhance the data and enable it to be utilized for multi-purposes by multiple users. These standards and guidelines are also intended to facilitate partnerships between local, state, and federal entities to support the development and maintenance of modernized land records

2.2 Objectives

These standards and guidelines to guide the modernization of land records in Nebraska have the following objectives:

- 2.2.1. Provide guidance to state and local officials as they work, either in-house or with private contractors, to develop and/or acquire computerized, geospatial data related to land records and maps and thereby increase the likelihood that the data acquired and/or developed will be suitable for the range of intended applications and likely future applications.

- 2.2.2. Improve public policy development and implementation by helping to make land records more current and readily accessible and by making available to land record management applications the wide range of analytical tools available through GIS/geospatial technology.
- 2.2.3. Enhance coordination and program management across jurisdictional boundaries by insuring that modernized land records and maps can be readily integrated across jurisdictional boundaries for regional applications (e.g., school districts, NRDs, emergency response, etc.) or statewide applications.
- 2.2.4. Save public resources by facilitating the sharing of computerized land records among public agencies or sub-divisions of agencies by incorporating data standards and following guidelines which will make it more likely that the computerized land records developed by one entity will also be suitable to serve the multiple needs of other entities and thereby avoid the costly duplication of developing and maintaining similar land records.
- 2.2.5. Make land records and land ownership maps more readily accessible to the wide range of potential users
- 2.2.6. Facilitate harmonious, trans-agency public policy decision-making and implementation by enabling multiple agencies and levels of government to access and appropriately use common geospatial datasets and thereby make it more likely that intersecting public policy decisions, across levels of government, will be based on the same information.
- 2.2.7. Lay the foundation for facilitating intergovernmental partnership to the modernization of land records by defining standards and guidelines that increase the likelihood that computerized land records will meet the needs of multiple users.

3.0 Definitions

3.1 Attribute Data

Properties and characteristics of property parcel or other spatial data entities.

3.2 Datum

A Geodetic Reference System is the true technical name for a datum. A datum is a combination of an ellipsoid, which specifies the size and shape of the earth, and a base point from which the latitude and longitude of all other points are referenced.

3.3 Entity

Any object about which an organization chooses to collect data.

3.4 Geodetic Control

A set of surveyed monuments used to define a spatial reference system and used to register map sheets and transform coordinates for a particular project.

3.5 Geographic Information System (GIS)

A system of computer hardware, software, and procedures designed to support the compiling, storing, retrieving, analyzing, and display of spatially referenced data for addressing planning and management problems. In addition to these technical components, a complete GIS must also include a focus on people, organizations, and standards.

3.6 Geospatial Data

A term used to describe a class of data that has a geographic or spatial nature. The data will usually include locational information (latitude/longitude or other mapping coordinates) for at least some of the features within the database/dataset.

3.7 Global Positioning System (GPS)

GPS is a method for identifying locations on earth using triangulation calculations of satellite positions. Originally created by the United States Military, it has since found numerous commercial applications.

3.8 Land Information System (LIS)

A special type of GIS that manages and analyzes data related to land ownership (e.g., tax parcels, urban infrastructure, property assessment). A GIS used for municipal or county level applications is typically structured as an LIS.

3.9 Map Scale

The scale of a map is the ratio between a distance on the map and the corresponding distance on the earth, with the distance on the map typically expressed as 1. Thus, a scale of 1:100,000 means 1 inch on the map equals 100,000 inches (approximately 1.6 miles) on the earth. Large scale maps depict a small area and show more detail. Small scale maps depict a large area and show less detail.

3.10 Metadata

Data describing a GIS database or data set including, but not limited to, a description of a data transfer medium-, format, and contents, source lineage data, and any other applicable data processing algorithms or procedures.

3.11 Monumentation of PLSS Corners

Monumentation in surveying refers to the practice of marking known horizontal and vertical control points with permanent structures such as concrete pedestals and metal plaques. Once surveyed and marked, these monuments can be used for further surveying and for the alignment of land-parcel boundaries and infrastructure.

3.12 National Spatial Reference System (NSRS)

A consistent national coordinate system that defines latitude, longitude, height, scale, gravity, and orientation throughout the Nation, and how these values change with time. Consequently, it ties spatial data to geo-referenced positions.

3.13 Nebraska Plane Coordinate System

Nebraska Plane Coordinate System means the system of plane coordinates for designating the geographic position of points on the surface of the earth, within the State of Nebraska, which have been established by the National Ocean Service/National Geodetic Survey, or its successors. The Nebraska Plane Coordinate System is a Lambert conformal conic projection of the North American Datum of 1983, having standard parallels at north latitudes 40 degrees 00 minutes and 43 degrees 00 minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 100 degrees 00 minutes west of Greenwich and the parallel 39 degrees 50 minutes north latitude. This origin is given the coordinates. N = 0 meters and E = 500,000 meters. (State of Nebraska Statutes, Section 76-2502)

3.14 Orthophoto

An aerial photo that has been corrected to eliminate the effects of camera tilt and relief displacement. The ground geometry is recreated as it would appear from directly above each and every point. Digital orthophotos can be created by scanning the original

photograph and applying a process called differential rectification to each pixel in the image. In creating digital orthophotos, it is also possible to remove the effects of tangential displacement.

3.15 Parcel Identifier (PID)

A unique number identifying a specific property on the assessment and tax rolls and used as a cross reference between graphic/mapping data and tabular attribute data.

3.16 Projection

A system to portray all or part of the earth, which is an irregular sphere, on a planar, or flat surface.

3.17 Public Land Survey System (PLSS)

The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. All lands in the public domain are subject to subdivision by this rectangular system of surveys (townships, ranges, sections, quarter-sections, etc.), which is regulated by the U.S. Department of the Interior, Bureau of Land Management.

3.18 Shapefile

A Shapefile is an ESRI digital vector (non-topological) storage format for storing geometric location and associated attribute information that can be generated by a wide variety of GIS software packages.

3.19 Spatial Accuracy

The accuracy of a map in representing the geographic location of an object relative to its true location on the surface of the Earth based on geographic coordinates.

4.0 Applicability

4.1 State Government Agencies

State agencies that have the primary responsibility for maintaining land ownership records and property parcel maps for a particular jurisdiction(s) or geographic area (e.g. Nebraska Dept. of Property Assessment and Taxation for counties for which it has assumed the primary assessment role) are required to comply with those sub-sections identified as a “Standard” for “State Agencies” in section 1. Those state agencies with oversight responsibilities in this area are required to ensure that their oversight guidelines, rules, and regulations are consistent with these standards.

4.2 State Funded Entities

Entities that are not State agencies but receive State funding, directly or indirectly, for property parcel mapping and/or property tax assessment and have the primary responsibility for maintaining property parcel maps for a particular jurisdiction or geographic area are required to comply with those sub-sections identified as a “Standard” for “State Funded Entities” in section 1.

4.3 Other

Other entities, such as local government agencies (e.g. County Assessor, County Register of Deeds, municipalities) that have the primary responsibility for developing and maintaining land ownership records and property parcel maps are required to comply with those sub-sections identified as a “Standard” for “Other” in Section 1.

4.4 Exemption

Exemptions may be granted by the NITC Technical Panel upon request by an agency.

4.4.1 Exemption Process

Any agency may request an exemption from these standards by submitting a “Request for Exemption” to the NITC Technical Panel. Requests should state the reason for the exemption. Reasons for an exemption include, but are not limited to: statutory exclusion; federal government requirements; or financial hardship. Requests may be submitted to the Office of the CIO via e-mail or letter (Office of the CIO, 521 S 14th Street, Suite 301, Lincoln, NE 68508). The NITC Technical Panel will consider the request and grant or deny the exemption. A denial of an exemption by the NITC Technical Panel may be appealed to the NITC.

5.0 Responsibility

5.1 NITC

The NITC shall be responsible for adopting minimum technical standards, guidelines, and architectures upon recommendation by the technical panel. (N.R.S. 86-516 §6)

5.2 State Agencies

The Nebraska Department of Property Assessment and Taxation will be responsible for ensuring that its rules and regulations relative to land ownership records and property parcel (tax) mapping include those subsections in Section 1 that are identified as a “Standard” for “Other” and are consistent overall with those standards.

5.3. Granting Agencies and Entities

State granting or fund disbursement entities or agencies will be responsible for ensuring that these standards are included in requirements and regulations related to fund disbursements as they relate to land (property parcel) records or property parcel mapping.

5.4 Other

Local government agencies that have the primary responsibility for land ownership records and property parcel mapping will be responsible for ensuring that those sub-sections defined for “Other” as a “Standard” in Section 1 will be incorporated in land record modernization and geospatial data development efforts and contracts.

6.0 Related Documents

6.1 Federal Geographic Data Committee (FGDC) Cadastral Data Content Standards

http://www.fgdc.gov/standards/status/sub3_5.html

6.2 Nebraska Guidebook for Local Government Multipurpose Land Information Systems.

http://www.calmit.unl.edu/gis/LIS_Stds_Intro.html

6.3 Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata Workbook (For use with FGDC-STD-001-1998) Version 2.0

http://www.fgdc.gov/publications/documents/metadata/workbook_0501_bmk.pdf