

2008 Statewide Technology Plan Proposed Action Items

Network Nebraska. Network Nebraska, as a statewide network, will begin to shift its focus from technical upgrades and implementation to utilization and application development. To facilitate this shift, five continued and eight new action items are being recommended by the Education Council and the Collaborative Aggregation Partnership (CAP). E-rate eligibility issues and network input and governance are featured among the new action items.

New Action Items: 8
Continued Action Items: 5
Completed Action Items: 0

Community IT Planning and Development. This year's action plan will focus on helping communities develop content-rich Web sites in order to better promote the community and to recruit people to the area. The council will also focus on identifying best practices and conducting an assessment of the technology-related needs of communities.

New Action Items: 3
Continued Action Items: 0
Completed Action Items: 2

eHealth. The eHealth Council has developed seven action items which focus on assessing and prioritizing health IT activities, addressing health information security and privacy issues, addressing policy and regulatory issues related to universal service funding for telehealth, and exploring the development of a pilot project demonstrating the value of a statewide client identification number.

New Action Items: 7
Continued Action Items: 0
Completed Action Items: 3

Public Safety Communications System. The objective of this initiative is to develop the Nebraska Wireless Integrated Network of Systems (N-WINS) to consolidate state law enforcement agencies, and integrate statewide communications interoperability for public safety.

New Action Items: 1
Continued Action Items: 0
Completed Action Items: 3

Digital Education. The Education Council is recommending one new action item for higher education entities to list all dual enrollment and concurrent enrollment course listings on the statewide clearinghouse and scheduling software system. This initiative also includes three previous action items for continuation. The Distance Education Council is recognized as a lead entity to assist in moving these actions forward.

New Action Items: 1
Continued Action Items: 3
Completed Action Items: 0

State Government Efficiency. The objective of this initiative is to address multiple items improving efficiency in state government, including implementing enterprise shared services and adopting standards and guidelines. The new action item is entitled Statewide Geospatial Infrastructure Strategic Planning.

New Action Items: 1
Continued Action Items: 9
Completed Action Items: 3

E-Government. The online business registration project is a continuation item for this initiative. Phase 1 of this action item was completed in November 2007 with the creation of the Nebraska One-Stop Business Registration Information System website (<https://www.nebraska.gov/osbr/>).

New Action Items: 0
Continued Action Items: 1
Completed Action Items: 2

Security and Business Resumption. The objective of this initiative is to define and clarify policies, standards and guidelines, and responsibilities related to the security of the state's information technology resources. The new action item involves evaluating and recommending options for a Network Operations Center that will provide real-time monitoring of all critical assets.

New Action Items: 1
Continued Action Items: 3
Completed Action Items: 5

Network Nebraska

Objective

- To develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the State of Nebraska.

Description

Network Nebraska aggregates disparate networks into a multipurpose core backbone extending from Omaha to Lincoln to Grand Island, with Ethernet clouds extending out to the furthest corners of the state. The State of Nebraska Office of the CIO, 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.

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 services that enables eligible entities to pick and choose applications 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 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, and public libraries

Timeframe: 2008

Funding: No funding required for this action item.

Status: Continuation

Action: The CAP will use the Network Nebraska website to showcase examples of successful public sector network and/or Internet service cooperation. CAP will encourage interaction and sharing between public entities.

Lead: Network Nebraska (CAP)

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

Timeframe: 2008

Funding: No funding required for this action item.

Status: Continuation

2. The Chief Information Officer will continue the LB 1208 implementation by annually bidding infrastructure and connectivity for new regions of participants and developing the most cost-effective and efficient support structure possible for the statewide network.

Action: The Network Nebraska network design/support team will develop a memorandum of agreement with local and regional education entities in order to develop a cooperative support system for the statewide network that will mitigate data transport and synchronous video problems.

Lead: Network Nebraska (CAP)

Participating Entities: Network Nebraska (CAP), ESU-NOC, Higher education entities, NITC Education Council

Timeframe: 2008

Funding: No funding required for this action item.

Status: Continuation – Revised

Action: The Chief Information Officer will annually update the State master purchase contracts for edge devices and codec equipment and monitor the local site purchases of such equipment in order to promote and encourage network equipment and codec equipment standardization.

Lead: Chief Information Officer

Participating Entities: Network Nebraska (CAP)

Timeframe: 2008-2009

Funding: No funding required for this action item.

Status: Continuation

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

Timeframe: 2008-2009

Funding: No funding required for this action item.

Status: Continuation

4. Prepare for the future of Network Nebraska as a statewide, multipurpose network.

Action: Develop an appropriate catalog of services and bandwidth thresholds for Network Nebraska to serve nonpublic K-12 and nonpublic higher education entities.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council, Association of Independent Colleges and Universities of Nebraska, Nonpublic Schools of Nebraska

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Charter a work group to research advanced network services for Network Nebraska customers.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Implement a statewide on-line presentation and meeting software solution.

Lead: Network Nebraska (CAP), Technical Panel for needs assessment

Participating Entities: All NITC groups and sub groups

Timeframe: 2008-09

Funding: No funding required for this action item to initiate needs assessment phase, funding and cost recovery schedule needed for future implementation and service support

Status: New

Action: Develop a formula for E-rate cost allocation that allows affordable fees for adult education and other ineligible population services to take place in K-12 settings.

Lead: Distance Education Council

Participating Entities: DEC Advisory Committee, NITC Education Council

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Work to amend Nebraska Department of Education policies to include PreK as an eligible population for Universal Service Fund (Erate) purposes.

Lead: Nebraska Erate Coordinator

Participating Entities: Educational Service Units, State Board of Education, Nebraska Legislature

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Work to change the federal E-rate policies that create impediments and financial disincentives for collaborative usage of networks and videoconferencing by ineligible populations (preK, adults, telehealth, etc...).

Lead: Nebraska Erate Coordinator

Participating Entities: Educational Service Units, NITC Education Council

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Create a Network Advisory Group and meeting structure for education entities to provide input to Network Nebraska (CAP).

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council, Educational Service Units, Public and nonpublic higher education entities

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

Action: Review the Network Nebraska governance and leadership structure.

Lead: Network Nebraska (CAP)

Participating Entities: NITC Education Council, Educational Service Units, Public and nonpublic higher education entities.

Timeframe: 2008-09

Funding: No funding required for this action item.

Status: New

IT Planning and Development

Objective

- To foster community and economic development in Nebraska communities through the effective use of information technology.

Description

Technology is an important economic development tool for communities. Telecommunications infrastructure is often compared to roads and water in its importance to communities. As important as infrastructure is the ability of community leaders to utilize technology effectively to enhance economic development opportunities. The Community Council has been addressing technology-related development in Nebraska's communities since its formation in 1998. As technologies and the needs of communities have changed, programming and areas of emphasis have shifted.

The Community Council recognizes the importance of building partnerships, leveraging resources, and building community capacity in addressing technology-related development. In 2001, the NITC Community Council 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. Other partnerships have been forged to address specific projects.

Current efforts will focus on helping communities develop content-rich Web sites in order to better promote the community and to recruit people to the area. The council will also focus on identifying best practices and conducting an assessment of the technology-related needs of communities.

Past projects include the Podcasting Across Nebraska program (2006-2007) and the IT Planning and Mini Grant Program (2002-2005). Through the Podcasting Across Nebraska program, the City of South Sioux City and South Sioux City Public Schools, the Highway 14 Association, the North Platte/Lincoln County Convention and Visitors Bureau, and Panhandle Public Health District and Panhandle Podcasting Partners received hardware and software as well as training on how to create and produce podcasts. Participants produced 25 podcast episodes in year one of the program. The

podcasts are having a positive effect on the promotional and information dissemination efforts of participating communities.

Project partners included Technologies Across Nebraska, the Nebraska Information Technology Commission; University of Nebraska (including the New Media Center, Computer Services Network, Communications and Information Technology, and UNL Extension); Nebraska Department of Economic Development; Division of Travel and Tourism; Network Nebraska; Nebraska Lied Main Street; and Apple Computer. Over 30 communities and regional groups applied to participate in the program.

Technologies Across Nebraska worked with 21 communities or regional groups from 2002 to 2005 to develop technology plans. The impact of the program was significant. Two communities received grants totaling over \$400,000 to implement their plans. A new business has started in a third community. Several communities now have broadband services available. Other communities are focusing on the technology needs of small businesses, offering e-commerce and technology training. Two communities developed a video conferencing center available to local businesses and residents. One Community created an online mall. Another focused on making the county Web site more accessible and user-friendly.

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*.

Benefits

The potential benefits of information technology to communities, businesses, local government, and residents are numerous:

- Communities can use their Web sites to publicize community events, communicate with former residents and prospective newcomers, and advertise available commercial sites.
- Communities can enhance promotional and informational activities through the use of newer technologies such as social networking or video content delivered through youTube or podcasts.
- 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.

- Residents can update their skills through continuing education, search for employment, network with others who share their interests, and share photos or videos with distant family members or Internet users worldwide.

Action Plan

Current Action Items

1. Identify and address technology-related needs in communities.

Action: Conduct a statewide assessment of technology-related needs in communities through a Web-based survey and by using existing sources of information (i.e., the Department of Economic Development's Business Expansion and Retention surveys).

Action: Compile an inventory of existing programs and resources which address technology-related needs in communities.

Action: Develop recommendations and lists of resources for communities to address the needs identified through the needs assessment.

Lead: Nebraska Department of Economic Development & Community Council

Participating Entities: Community Council, Nebraska Department of Economic Development, Nebraska Department of Education, and others

Timeframe: 2008

Funding: Existing funding and staff

Status: New

2. Monitor technology trends that affect Nebraska communities and play a leadership role in presenting these new technologies in a timely manner.

Action: Identify one or two technology-related issues on which to focus.

Action: Develop presentations and resources which highlight best practices and give step by step directions for addressing these issues.

Lead: Community Council

Participating Entities: Community Council and other partners

Timeframe: 2008

Funding: Existing funding and staff

Status: New

3. Help Nebraska communities improve their Web sites.

Action: Work with the Nebraska Department of Economic Development, University of Nebraska Extension, and NPPD to develop a plan to help communities improve their Web sites.

Lead: Nebraska Department of Economic Development

Participating Entities: Community Council, Nebraska Department of Economic Development, University of Nebraska Extension, and NPPD and other public power districts, and educational entities

Timeframe: Beginning in spring, 2008

Funding: Existing funding and staff

Status: New

Completed Action Items (2007)

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

- 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 NITC Web sites, including adding information on podcasting.
- 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.

- 2. Promote the use of podcasting by communities and regional groups through the Podcasting Across Nebraska program.**

eHealth

Objective

- To foster the collaborative and innovative use of eHealth technologies through partnerships between public and private sectors, and to encourage communication and coordination among eHealth initiatives in Nebraska.

Description

Health information technology (Health IT), often referred to as eHealth, promises to improve individual patient care and public health while reducing costs and improving efficiencies. eHealth technologies include electronic health records, electronic prescribing, clinical decision support, computerized provider order entry, health information exchange, and telehealth.

- ◆ **An Electronic Health Record (EHR)** is a real-time patient health record with access to evidence-based decision support tools that can be used to aid clinicians in decision-making.
- ◆ **Electronic Prescribing (eRx)** is a type of computer technology whereby physicians use handheld or personal computer devices to review drug and formulary coverage and to transmit prescriptions to a printer or to a local pharmacy.
- ◆ **A Decision-Support System (DSS)** consists of computer tools or applications to assist physicians in clinical decisions by providing evidence-based knowledge in the context of patient-specific data.
- ◆ **Computerized Provider Order Entry (CPOE)** is a computer application that allows a physician's orders for diagnostic and treatment services (such as medications, laboratory, and other tests) to be entered electronically instead of being recorded on order sheets or prescription pads.
- ◆ **Health Information Exchange (HIE)** facilitates access to and retrieval of clinical data from multiple providers to provide safer, more timely, efficient, effective, equitable, patient-centered care.
- ◆ **Telehealth** is the use of telecommunications and information technologies to provide healthcare services over distance and/or time, to include diagnosis, treatment, public health, consumer health information, and health professions education.

Electronic medical records provide the foundation for interoperable health information exchange. President Bush has called for most Americans to have electronic medical records by 2014. A survey conducted by researchers at Creighton Health Services Research Program in the summer of 2007 found that 30% of physicians in Nebraska and South Dakota used electronic medical records. The survey results are similar to national surveys, indicating that much progress still needs to be made.

The biggest barrier to the widespread adoption of eHealth technologies is the misalignment of benefits and costs. Providers bear the brunt of the costs for implementing eHealth technologies into their practices, but payers reap most of the benefits. Other barriers to eHealth adoption include implementation costs, impact on workflow processes, concerns about privacy and security, and a lack of a quantifiable return on investment.

Current Initiatives

Several eHealth initiatives are currently underway in Nebraska, including the Nebraska Statewide Telehealth Network, NeHII, Western Nebraska Health Information Exchange, Hebron Area Health Information Exchange, and Southeast Nebraska Behavioral Health Information Network.

Nebraska Statewide Telehealth Network. One of the nation's most extensive telehealth networks, the Nebraska Statewide Telehealth Network (NSTN) connects nearly all of the state's hospitals and public health departments. 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 governed by the NSTN Governing Board.

The network is a collaborative effort of many entities including:

- ◆ 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 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 Educational Telecommunications Commission

Western Nebraska Health Information Exchange. Partners in Western Nebraska have completed a plan and are beginning to implement a regional health information exchange. Partial funding has been provided through a planning grant from the U.S.

Department of Health and Human Services Agency for Healthcare Research and Quality (AHRQ), an AHRQ implementation grant, and a Rural Network Development grant from the U.S. Department of Health and Human Services Health Resources and Service Administration. Partners in the project received a three-year grant from the FCC Rural Health Care Pilot Program for \$19,256,942 to upgrade a patchwork of T-1 lines with an advanced fiber network connecting with National LambdaRail.

Nebraska Health Information Initiative (NeHII). The Nebraska Health Information Initiative (NeHII) is a collaboration of Nebraska health care organizations, hospitals, physicians, and Blue Cross and Blue Shield of Nebraska. The vision of NeHII is to be a leader in the secure exchange of health information enabling a healthier Nebraska. NeHII initially plans to pilot a clinical messaging service.

Southeast Nebraska Behavioral Health Information Network (SNBHIN). A \$200,000 one-year planning grant from the U.S. Department of Health and Human Services Agency for Healthcare Research and Quality (AHRQ) in 2004 enabled Region V Behavioral Health Care Providers to develop a plan to develop a health information technology infrastructure that will result in standards-based data sharing and lead to measurable and sustainable improvements in patient safety and quality of care in the region. Since the completion of the planning grant, SNBHIN partners have continued to meet and are making progress toward establishing a regional health information organization (RHIO).

Thayer County (Hebron) Health Information Exchange. This regional health information organization (RHIO) was supported by the Nebraska Office of Rural Health through a grant for the *Accelerating Performance Improvement through Enhanced Connectivity* project. The RHIO will focus on developing and implementing a sustainable interoperable system which will improve the flow of clinical information along the continuum of care in order to provide a seamless process of health care delivery for patients and providers.

Benefits

Benefits of eHealth include:

- **Reducing medication errors.** More than 2 million adverse drug events could be prevented through e-prescribing, saving 4.5 billion annually and 190,000 hospitalizations per year.
- **Reducing health care waste.** Health IT adoption is estimated to save an average of 42 billion annually during a 15-year adoption period.
- **Facilitating medical research.** Health IT can facilitate research on the effectiveness of new therapies and can accelerate the diffusion of health care knowledge.
- **Reducing variability in healthcare delivery and access.** Disparities exist in access to care and quality of care. Telehealth can provide access to specialists in rural areas. Clinical decision support systems can improve quality of care by providing treatment reminders at the point of care. Adults in the U.S. receive only about 55 percent of recommended care for a variety of common conditions.

Clinical decision support systems have been shown to increase adherence to recommended care guidelines.

- **Empowering consumer involvement in health management.** Having access to medical histories as well as customized health education and guidance could increase consumer participation in their health maintenance and care.
- **Improving the identification and reporting of disease outbreaks and other public health threats.** One study found that the use of a county-wide electronic system for public health reporting led to a 29% increase in cases of shigellosis identified and a 2.5 day decrease in reporting time.

Action Plan

Current Action Items

1. Work with Lt. Governor Sheehy and other policymakers to develop a process to assess, evaluate and prioritize health IT activities (including statewide initiatives, proposed eHealth projects of the eHealth Council or other state entities, and eHealth components such as e-prescribing) in order to make funding recommendations. Criteria used to evaluate eHealth activities, will include return on investment (ROI) as well as additional evaluation criteria determined by the eHealth Council with input from policy makers.

Lead: eHealth Council

Participating Entities: eHealth Council, Lt. Governor Sheehy, interested policymakers, state agencies with health IT projects, and health IT initiatives in the state wishing to participate

Timeframe: Ongoing with consideration for the state budget cycle.

Funding: To be determined.

Status: New

2. Develop a sustainable action plan to facilitate progress (present and future) in assuring privacy and security protections in the exchange of health information for and by each of our citizens.

Lead: Health Information Security and Privacy Committee (HISPC)

Participating Entities: eHealth Council, Nebraska HISPC, the DHHS legal department, the Attorney General's Office, the Office of the CIO, other state agencies that would become involved with PHI, and other stakeholders

Timeframe: Recommendations for the issues and model design should be ready by summer, 2008.

Funding: Funding or in-kind contributions may be required for implementation.

Status: New

3. Develop a plan and resources to inform citizens, health care providers, and other stakeholders about issues related to health information security and privacy and involve them in policy discussions.

Lead: HISPC Education Work Group

Participating Entities: HISPC Education Work Group, eHealth Council, Department of Health and Human Services, health professional associations, DHHS health/licensure/certification board managers, and other stakeholders—possibly including University of Nebraska Extension, AARP, the League of Municipalities, the Nebraska Association of County Governments, and service organizations

Timeframe: The eHealth Council should start this dialog immediately and then establish a tight time frame for completion of this work in 2008.

Funding: Funding or in-kind contributions may be required for implementation of the educational plan.

Status: New

4. The eHealth Council should ensure that an in-depth short-term study of existing laws and regulations, with guidance from representatives from the health professions, health educators and health organizations, be done in order to identify health information security and privacy and make recommendations.

Lead: HISPC Legal Work Group.

Participating Entities: eHealth Council, HISPC Legal Work Group, DHHS legal staff, professions and facility managers, health care associations and citizens.

Timeframe: This needs to start immediately and be finished by August, 2008 in order to assist with other deadlines in HIT/grants/legislation/etc.

Funding: It will probably be necessary to contract with a law firm or legal expert to address these issues (Est. \$50,000).

Status: New

5. Support efforts of the Nebraska Statewide Telehealth Network Governing Board to advocate for ongoing support for line charges for telehealth.

Activities supporting this action item could include writing letters of support to policy makers as well as sharing information on this issue with policymakers.

Lead: eHealth Council

Participating Entities: eHealth Council, Nebraska Statewide Telehealth Network Governing Board, NITC, Lt. Governor Sheehy

Timeframe: 2008

Funding: No new funding is required

Status: New

6. Support efforts of the Nebraska Statewide Telehealth Network Governing Board to advocate for the reduction of barriers to connectivity posed by federal Universal Service Fund rules, regulations, and policies.

Activities supporting this action item could include writing letters of support to policy makers as well as sharing information on this issue with policymakers. The eHealth Council will also explore the development of a position paper no longer than four pages in length which clarifies the issue, identifies barriers, specifies what action needs to be taken, and identifies opportunities that can be leveraged.

Lead: eHealth Council

Participating Entities: eHealth Council, Nebraska Statewide Telehealth Network Governing Board, NITC, Lt. Governor Sheehy

Timeframe: 2008

Funding: No new funding is required

Status: New

7. Explore the development of a pilot project demonstrating the value of a client identification number.

Lead: UNMC Center for Biosecurity, Biopreparedness and Emerging Infectious Diseases, College of Public Health

Participating Entities: UNMC Center for Biosecurity, Biopreparedness and Emerging Infectious Diseases, College of Public Health; eHealth Council; Department of Health and Human Services; and other interested stakeholders.

Timeframe: Complete the exploration of a development project by 12/31/2008.

Funding: Exploratory project can be funded using existing resources.
Scope of project should include identification of funding sources for the next stage.

Status: New

Completed Action Items (2007)

1. Facilitate discussions to address interoperability between the Nebraska Statewide Telehealth Network with other state networks.
2. Address operational and technical support issues, including defining the level of support that will be provided by Network Nebraska and CAP.
3. Facilitate the continued testing of the Nebraska Statewide Telehealth Network for homeland security and public health alerts and training.

Public Safety Communications System

Objective

- Develop the Nebraska Wireless Integrated Network of Systems (N-WINS) to consolidate state law enforcement agencies, and integrate statewide communications interoperability for public safety.

Description

The OCIO-Network Services coordinates with the Nebraska Emergency Management Agency (NEMA) and the Governor's Homeland Security Policy Group to prioritize federal Homeland Security grants for developing interoperable communications. Much of the interoperability progress has occurred at the regional and county levels across the state. In 2007 Governor Heineman and the Nebraska Legislature supported funding for the state communications system. The state communications system will enable the State Patrol, Game and Parks Commission and Fire Marshal's Office to consolidate onto the same communications system. This will create a standard technology platform for state agencies achieve statewide coverage and interoperability with regional systems.

The Regional Interoperability Advisory Board (RIAB) was created in LB 343 (2005) to advise the OCIO in developing standards and statewide interoperability for first responder agencies. The RIAB primary goals have focused the state's strategic planning to improve state and local interoperable communications capabilities. The vision, as stated in the LB 343 language is to develop a "network of regional systems" approach to solving statewide interoperable communications. The statewide communications strategy integrates the regional communications network, the state communications system. The state is now in the process of planning the implementing the integration phase of the strategy. Next steps involve these major milestones:

- Formalize an interoperability governance body
- Establish the integrated regional communications network
- Procure and establish the state communications system

Benefits

The state plan standardizes the communication infrastructure to improve compatibilities across different legacy systems and provide the means to share critical information as needed. The interoperable communications network consolidates state law enforcement and investigative agencies on a single technology platform. The system improves radio coverage, technology and capacity. The infrastructure and is able to grow as additional agencies migrate to the system.

- Reduces multiple agency systems to a consolidated shared infrastructure.
- Provides the ability for the State Patrol and other agencies to be interoperable, where old state systems lack the necessary capacity and technology.
- Leverages existing local communications systems.
- Technology platform is expandable and upgradeable as needed, reducing the cost of the initial system.
- Enables additional sharing opportunities on a shared statewide infrastructure.

Action Plan

Current Action Items

1. CIO-Network Services anticipates issuing a competitive bid in March 2008.

- Conduct competitive bid process for the system.
- Establish interoperability governance structure.
- Plan and implement the regional network.

Lead: CIO-Network Services

Participating Entities: State Patrol, Game and Parks Commission, State Fire Marshal's Office, Department of Correctional Services, Department of Agriculture, Nebraska Emergency Management Agency, Department of Roads, and additional agencies as needed.

Timeframe: February 2008 – January 2010

Funding: State funding and DHS grant funding allocated for infrastructure and agency equipment.

Status: New

Completed Action Items (2007)

1. RFP requirements and procurement process complete (March 2008).
2. Contracts in place to develop tower infrastructure, license frequencies and consulting assistance for RFP technical evaluations and implementation.
3. Initiated regional leadership meeting to coordinate state and local interoperability planning in all regions of the state.

Digital Education

Objective

- 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.

Description

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.

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 with ample bandwidth capable of transporting voice, video, and data between and among all education entities [see Network Nebraska];
- 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;
- 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 2.8 students per high speed, Internet-connected computer in the classroom seems to compare favorably with the U.S. average of 3.7 students per high speed, Internet-connected computer. (Technology Counts 2007 Report) However, it still makes it challenging for students to complete their digital assignments when they are expected to share two or three students to a computer, or to wait their turn to be able to use a computer. Educators and administrators everywhere should continue to make technology investments until 1:1 computer use is attained.

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 and affordable Internet access for Nebraska schools and colleges;
- 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 is 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. Set a deadline, and establish standard(s) related to the administration and maintenance of learning management systems and content management systems by K-12 schools.

Lead: NITC Technical Panel

Participating Entities: Learning Management Systems Work Group, NITC Education Council, myeLearning.org, ESU Distance Education Council, UNL Independent Study High School

Timeframe: 2008-2009

Funding: No funding is required for this action item.

Status: Continuation. Required by LB 1208.

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

Action: Negotiate a statewide purchase of the National Repository for Online Courses

Lead: Distance Education Council

Participating Entities: NITC Education Council

Timeframe: 2008-2009

Funding: No funding is required for this action item.

Status: Continuation

3. Develop an affordable plan to provide access to learning management system software for every teacher and learner who uses synchronous video distance learning and to also train teachers in effective instructional design to integrate synchronous and asynchronous technologies.

Lead: Distance Education Council

Participating Entities: Technical Panel's Learning Management System Work Group, NITC Education Council, ESU Technology Affiliate Group

Timeframe: 2008-2009

Funding: No funding is required for this action item.

Status: Continuation

4. Encourage higher education entities to list all dual enrollment and concurrent enrollment course opportunities on the statewide clearinghouse and scheduling software system.

Lead: Distance Education Council

Participating Entities: NITC Education Council, Higher education entities

Timeframe: 2008-2009

Funding: No funding required for this action item

Status: New

State Government Efficiency

Objective

- To address multiple items improving efficiency in state government, including implementing enterprise shared services and adopting standards and guidelines.

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 the following shared services for further study and implementation at this time.

- Business Continuity / Disaster Recovery
- Directory Services
- E-mail
- Enterprise Maintenance / Purchase Agreements
- Geographic Information System (GIS)

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.

Benefits

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

Action Plan

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: E-mail conversion continues in 2008.

Funding: Service rates

Status: Continuation. As of January 2008, approximately 1,800 state government e-mail accounts have been converted to the Exchange system. Conversion of accounts will continue throughout 2008. Additional actions will include activities relating to records retention for e-mail.

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

Lead: Steve Schafer

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

Timeframe: Continuation: Software Reseller Contract Rebid during 2008
New: Others as identified during 2008.

Funding: No funding required.

Status: Ongoing. Master agreements have been established with McAfee, CA, and Symantec for anti-virus and related product suites. Various IBM and Microsoft licenses and maintenance agreements completed for 2008.

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

Action: NEBRASKA GEOSPATIAL DATA SHARING AND WEB SERVICES

NETWORK. Develop a Nebraska enterprise-level geospatial web portal, with Internet mapping and data services, to serve the users of Nebraska related GIS/geospatial data and enable those users to efficiently and reliably find, access, display, and build public information applications utilizing the geospatial data maintained by a wide variety of state, local and federal agencies 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: December 31, 2010 (continuation of earlier action item on Internet Mapping Services)

Funding: A total of \$215,000 in grant funding has been secured from the NITC Collaborative Fund, the State Record Board, and the US Geological Survey to underwrite a two-year start up period for this project. An additional \$25,000 will be sought from the State Records Board and \$60,000 from contributing state agency partners for a total of \$300,000. This funding to be supplemented by in-kind technical services provided from state and local agencies.

Status: Continuation. Twelve state and local government agencies have endorsed a Project Charter to indicate their support for, and partnership in, developing this online, enterprise-level GIS/geospatial data mapping and services portal. The bulk of the start up funding is targeted to the hiring of a technical lead for this project. A technical lead recruitment process is currently underway. The project will involve significant technical implementation challenges; including establishing the network, data sharing protocols, and web mapping and data services applications. The technology and system will allow for the live, interactive access and sharing of data from multiple Internet map servers operated by different agencies. The technology will allow agencies to leverage existing state and local investments in data and Internet map services, by other agencies, to build new applications incorporating these Internet map services into their application design. While there is a broad conceptual agreement on the outlines of the desired online network and services, additional planning will be required to define data sharing protocols, data sharing agreements, desired web services, and data access policies.

Action: STREET CENTERLINE-ADDRESS DATABASE. 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: December 31, 2009.

Funding: No enterprise level funding available at this time. However, a grant has been submitted that if successful would provide funding to assist with the development of a business case for the enterprise-level development and maintenance of this database. Major data development funding is on-going through Public Service Commission, Dept. of Roads, and local governments.

Status: Continuation. The Public Service Commission, through the Wireless E911 fund, has worked with counties to contract for the development and maintenance this data for 80 Nebraska counties. The initial data development is complete for least 56 of those 80 counties. For another 27 counties, the initial data development is in process. In addition, Douglas, Lancaster, and Sarpy counties have developed an maintain this data in-house. There are 10 rural counties for which there are currently no active plans for the development of this data. Currently these datasets are maintained in separate county files. The Dept. of Roads maintains geospatial data for all state highways and major local collector roads, but this data does not include street address information. While there are significant public resources being invested in the development of pieces this much needed data, there is currently no plan, or one agency responsible for the on-going collection, integration and distribution of this data in an integrated statewide database format. In 2007, the Office of the CIO and the State Patrol (NSP) cooperated to develop an integrated, "statewide", street centerline-address files for the 45 counties that were available at that time. This data was needed for the NSP's new statewide computer-aided dispatch system. The GIS Str. Cmte. has authorized the formation of an Advisory Committee on Street Centerline-Address Databases. That Advisory Committee has begun its work to develop recommendations for an on-going enterprise approach to developing, maintaining, and distributing a statewide, "best available" street centerline-address database from the multiple sources of this data.

Action: METADATA AND STATE GEOSPATIAL DATA CATALOGUE. 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: December 31, 2008.

Funding: Primarily supported through in-kind support of state and local agency personnel

Status: Continuation. 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 (by Sept. 2006). The 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. A two-day metadata training session was held in Lincoln in 2007 and another training session is scheduled for Omaha in 2008. There remains a large body of state agency GIS/geospatial data that has not been documented with metadata and has not been listed on the Data Center Clearinghouse Catalog. The planning Geospatial Data Sharing and Web Services Network will also require metadata document.

Action: STATEWIDE GEOSPATIAL INFRASTRUCTURE STRATEGIC PLANNING. Develop an enterprise-level, statewide, GIS/geospatial infrastructure strategic plan for the geographic area of Nebraska. The planning process should involve the broader GIS user community (state, local, and federal agencies, tribes and the private sector) and seek to identify parallel needs and plans for geospatial data, standards, online distribution networks and services, coordination, funding, and policies.

Lead: Larry Zink, Coordinator, Nebraska GIS Steering Committee

Participating Entities: State Government Council; GIS Steering Committee

Timeframe: June 30, 2009.

Funding: A \$50,000 strategic planning grant proposal has been submitted to the Federal Geographic Data Committee (FGDC) by the Office of the CIO on behalf of the Nebraska GIS Steering Committee. If funded, the majority of these grant

funds will be used to hire a consultant to assist with this planning process. If not funded, the strategic planning process will still move forward, but on a reduced scale and pace.

Status: New. Over the last 5-6 years, the activities of the Nebraska GIS Steering Committee have been guided by an existing Strategic Plan, the goals of which were originally developed in 2001. The Steering Committee has endorsed a major outreach and planning effort to develop a new GIS/Geospatial Strategic Plan with the goal of facilitating the coordination and collaboration of the broader GIS user community in Nebraska. A grant application has been submitted. A Strategic Planning Advisory Committee has been established to oversee the process and has developed a conceptual outline of the planning process. The GIS Steering Committee, through its Planning Advisory Committee, will lead this process but the active support of the NITC, the State Government Council and its member agencies would be very helpful.

6. Explore requirements for issuing an RFP to contract vendors that provide temporary IT personnel. Meet with participating state agencies to gain input on how to structure and manage a new contract. The current contract originally expired on June 30, 2006 with an option to renew for an additional two years.

Lead: Office of the CIO

Participating Entities: Office of CIO, DAS Materiel Division and state agencies

Timeframe: To be completed by August 2008

Funding: No funding required.

Status: Continuation.

Standards and Guidelines

7. The State Government Council 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: Ongoing. New and revised standards and guidelines adopted in 2007:

Remote Access Standard, Emergency Information Page, Remote Administration of Internal Devices, Minimum Server Configuration, SMTP Routing Standard, DNS Forwarding Standard, Information Security Policy, Data Security Standard, Password Standard, and Email Policy for State Government Agencies.

Other

8. Review issues and determine process for maintaining an inventory of noneducation state government technology assets, including hardware, applications, and data bases.

Lead: Office of the CIO

Participating Entities: State Government Council

Timeframe: 2008

Funding: None

Status: Continuation.

9. Review issues and determine process for project status reporting.

Lead: Office of the CIO

Participating Entities: State Government Council

Timeframe: 2008

Funding: None

Status: Continuation.

Future Action Items

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

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

Completed Action Items (2007-2008)

Standards and Guidelines

1. New and revised standards and guidelines adopted in 2007: Remote Access Standard, Emergency Information Page, Remote Administration of Internal Devices, Minimum Server Configuration, SMTP Routing Standard, DNS Forwarding Standard, Information Security Policy, Data Security Standard, Password Standard, and Email Policy for State Government Agencies.

Other

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

Lead: Steve Schafer

Participating Entities: State Government Council

Status: Completed. Policy developed for NITC approval.

3. Review options for integrating agency IT plans and IT project proposal forms into new budget system.

Lead: Budget Division and Office of the CIO

Participating Entities: State Government Council, Budget Division

Status: Completed. The IT project proposal form has been integrated into the new budget system.

E-Government

Objective

- To further the use of e-government to improve services and increase the efficiency and effectiveness of agencies.

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.

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.

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

Action Items

1. 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: 2008

Funding: To be determined.

Status: Continuation. Phase 1 of this action item was completed in November 2007 with the creation of the Nebraska One-Stop Business Registration Information System website (<https://www.nebraska.gov/osbr/>).

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. 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. 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.
7. Work with the Department of Motor Vehicles to provide for online vehicle registration.

Completed Action Items (2007-2008)

1. Phase 1 of the online business registration project was completed in November 2007 with the creation of the Nebraska One-Stop Business Registration Information System website (<https://www.nebraska.gov/osbr/>).
2. Department of Motor Vehicles to provide for online specialty plate ordering, to be completed in March 2008.

Security and Business Resumption

Objective

- To define and clarify policies, standards and guidelines, and responsibilities related to the security of the state's information technology resources.

Description

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; Neb. Rev. Stat. § 28-901 and 84-1201);
- Protect safety and integrity of public records (Neb. Rev. Stat. § 28-911, 29-2391, and 84-1201);
- Prevent unauthorized access to public records (Neb. Rev. Stat. § 29-319, 81-1117.02, and 84-712.02);
- Insure proper use of communications facilities (Neb. Rev. Stat. § Section 81-1117.02); and
- Protect privacy of citizens (Neb. Rev. Stat. § 84, Article 7).

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);
- 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

Action Items

Security

1. Implement security incident response team.

Lead: State Security Officer and State Patrol

Participating Entities: State Government Council, Security Work Group

Timeframe: Spring / summer 2008

Funding: No funding required for this task.

Status: Continuation

2. Enhance Network Security and Network Management.

Action: Evaluate and recommend options for a Network Operation Center that will provide real-time monitoring of all critical assets within the State of Nebraska.

Lead: Office of the CIO - Wide Area Network

Participating Entities: State Government Council

Timeframe: 2008

Funding: Homeland Security Grant funding / Additional funding has yet to be determined.

Status: New

Business Resumption

3. 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. The Office of the CIO and the University of Nebraska are jointly developing a fast recovery capability using mutual assistance of physically separated data centers.

Lead: Office of the CIO and University of Nebraska

Participating Entities: State Government Council

Timeframe: Ongoing

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

Status: Continuation. An alternate site providing greater geographical separation has been selected. In the pursuit of establishing that alternate site, the University of Nebraska and the Office of the CIO are reviewing vendor RFP responses and are preparing to act on two important items:

- Establishing the fiber optic communications link between the University and State enterprise server primary sites located in Lincoln and an alternate site that provides greater geographic separation.
- Acquiring and implementing an enterprise server that can provide backup and execute assigned processing loads

The intent is to complete the acquisition/implementation of both items in the next year. When completed, the University and the State will not only have their critical data mirrored at a geographically separated site, but will have the capability at the alternate site to continue the most critical enterprise server production processing with less than 10 hours interruption.

4. Promote disaster planning for information technology systems, including developing elements of a common planning document and developing an approach for common governance during an event.

Lead: Steve Henderson / Dave Berkland

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: No funding required.

Status: Continuation. The Director-level meetings, chaired by Lt. Governor Sheehy, identified critical business functions and categorized them into one of three categories: public safety, public health and institutional care. Progress has

been made with public safety (lead by Nebraska State Patrol) in identifying:

- the agencies that work together in the public safety domain
- the data the partners use to complete their work
- the IT infrastructure used to support the data

Initial kick-off meetings have been held with public health (lead by Department of Health and Human Services) to identify the same items. Work continues with Nebraska Emergency Management Agency to understand and refine the implementation of the incident command system and its interactions with the State EOC. Work to integrate continuity of operations, disaster recovery, emergency operations and emergency action plans has begun.

Future Action Items

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

Completed Action Items (2007-2008)

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: Implementation timeframe is March/April 2008.

Funding: Government Technology Collaboration Fund.

Status: Completed. An RFP was awarded Feb. 7, 2008 to IBM to implement the Qualys solution on 2600 devices.

2. **Enhance Network Security and Network Management.** (New action items listed above, completed action items listed here.)

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

Lead: Office of the CIO - Network Support

Participating Entities: State Government Council

Timeframe: Feb. 2008

Funding: No funding required for this task.

Status: Completed with the migration of all Avaya firewalls to the Fortinet infrastructure.

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

Lead: Office of the CIO - Wide Area Network

Participating Entities: State Government Council

Timeframe: March 2008

Funding: No funding required for this task.

Status: Completed. The State of Nebraska has entered into a Contract with PGP for whole disk encryption.

Action: Evaluate and recommend options for providing compliance auditing across the state's Wide Area Network.

Lead: State Security Officer and Office of the CIO - Wide Area Network

Participating Entities: State Government Council

Timeframe: 1st Qtr 2008

Funding: No funding required for this task.

Status: Completed. The State of Nebraska has purchased Cisco's Compliance Manager and has been attending training classes for staff.

Business Resumption

3. Encourage testing and updating of disaster plans.

Lead: Steve Henderson / Dave Berkland

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: No funding required.

Status: Completed. The Continuity of Operations Planning/Disaster Recovery Planning Shared Services Group worked to develop and act on ways to better coordinate disaster recovery planning and to provide for more consistent disaster recovery plans. An NITC standard ("Information Technology Disaster Recovery Plan Standard") has been put in place. Work has been completed to better understand disaster recovery plan assumptions and dependencies.