
Strategic Initiatives

The NITC has identified eight strategic initiatives, which address the NITC's goals of supporting the development of a robust telecommunications infrastructure; supporting community and economic development; promoting the efficient delivery of government and educational services; and ensuring the security of data and network resources and the continuity of business operations. These initiatives would materially advance the vision and statewide goals as identified by the NITC. By emphasizing selected strategic initiatives, the NITC hopes to encourage funding of these initiatives and to encourage state agencies to work together to advance these initiatives. The eight strategic initiatives, listed as supporting the NITC goals, are:

Supporting the Development of a Robust Telecommunications Infrastructure

Nebraska Statewide Telehealth Network. 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. As of July 1, 2005, most of the telecommunications lines have been installed, completing phase one of network development. Phase two will address issues such as training, maintenance, scheduling, operations, and governance. The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association.

Network Nebraska. The primary objective of Network Nebraska is to develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the state of Nebraska. The Division of Communications and the University of Nebraska engaged in a collaborative partnership that used existing resources to aggregate disparate networks into a multipurpose core backbone extending from Norfolk, Omaha, Lincoln, Grand Island, Kearney and North Platte to the Panhandle. Potential benefits of Network Nebraska include lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new educational opportunities, and better use of public investments.

Statewide Synchronous Video Network. 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. The 400+ interactive video facilities in Nebraska 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. Benefits include greater sharing of educational courses and resources; more efficient use of available resources; one-to-many videoconferencing capabilities for alerts and emergency situations; and collaborative development across various service agencies.

The NITC has identified eight strategic initiatives, which address the NITC's goals.



Supporting Community and Economic Development

Community IT Planning and Development. The primary objective of this initiative is to foster community and economic development in Nebraska communities through the effective use of information technology. 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 has helped 21 communities develop local plans to utilize technology to enhance development opportunities. Technologies Across Nebraska's quarterly newsletter, *TANgents*, reaches over 1,000 individuals with an interest in technology-related development.

Promoting the Efficient Delivery of Government and Educational Services

Digital Education. 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.

State Government Efficiency. 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. Benefits of these activities include lower costs, easier interoperability among systems, greater data sharing, and improved services.

E-Government. Through the use of technology, state agencies can enhance information sharing, service delivery, and constituency and client participation. Benefits include improved services for citizens and businesses, and increased efficiency and effectiveness for agencies.

Ensuring the Security of Data and Network Resources and the Continuity of Business Operations

Security and Business Resumption. This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the State's information technology resources. Benefits include lower costs by addressing security from an enterprise perspective, cost avoidance, and protecting the public trust.

Each strategic initiative is discussed in greater detail in the following section.

**NITC Strategic Initiatives
Action Items**

E-Government

Action Items - Completed (from 2004-2005 Plan)

- C1. Worked with the Secretary of State's Office to provide enhancements to election related information and services.
- C2. 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.
- C3. 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.
- C4. The Department of Education developed online teacher/administrator certification.
- C5. Local Government Portal: Nebraska.gov redesign included a "Local" portal.
- C6. Marketing strategy developed to increase public awareness and the use of e-government services.
- C7. Standard adopted for agency websites to include and privacy and security statements and common branding.

Action Items - Discontinued (from 2004-2005 Plan)

- D1. Under sponsorship of the Education Council of the NTIC, the Nebraska.gov Manager will work with the Education Council educational institutions to provide enhancements to the Education Portal, including but not limited to:
 - Information Technology Training Calendar;
 - Searchable database of educational courses, degrees, and programs;
 - Statewide application for admission to higher education institutions.

Action Items - Proposed for 2006

- P1. 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
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Timeframe	Specialty Plate Ordering - March 2006 License Reinstatement - June 2006 Online Vehicle Registration - December 2006
Funding	Department of Motor Vehicles
Status	In progress.

- P2. Working with the various agencies involved in business registration -- including the Secretary of State, Department of Revenue, and Department of Labor -- create an online system for business registration.

Lead	Nebraska.gov (working with agencies)
Timeframe	TBD
Funding	TBD
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.

- P3. Improve the business forms database maintained by Nebraska.gov and enhance the search capabilities.

Lead	Nebraska.gov
Timeframe	TBD
Funding	State Records Board Grant
Status	Work ongoing.

Action Items - Future

- F1. 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 MIPS. Nebraska.gov will consider the cost benefit of moving forward with this project.
- F2. Work with the Nebraska State Patrol to review options for providing online access to certain, limited, criminal history information.
- F3. Develop an online application for use by businesses attempting to find a suitable site for business development.

- F4. 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.
- F5. State Employee Portal Enhancements. The State Government Council will identify specific improvements and value-added services to be incorporated into the state employee portal.
- F6. Develop method of providing authentication for "first time" users.

**NITC Strategic Initiatives
Action Items**

State Government Efficiency

Action Items - Proposed for 2006

Shared Services

The State Government Council has identified seven services for further study and potential implementation as a "shared service" for state agencies. Interested agencies are meeting to further develop these services.

P1. Business Continuity / Disaster Recovery

(Action items for this shared service are included in the "Security and Business Resumption" initiative.)

P2. Directory Services

(Action items for this shared service are included in the "Security and Business Resumption" initiative.)

P3. E-mail

(Action items are under development by work group.)

P4. Enterprise Maintenance / Purchase Agreements

(Action items are under development by work group.)

P5. Field Support Services

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
Timeframe	March 31, 2006 - Define shared field support June 30, 2006 - Identify potential areas to do a pilot project December 31, 2006 - Choose and implement a project
Funding	To be determined at time of project selection.
Status	Ongoing

P6. Geographic Information System ("GIS")

P6.1. METADATA. 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
Timeframe	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.

P6.2. 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
Timeframe	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.

P6.3. INTERNET MAPPING SERVICES. 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
Timeframe	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.

P7. Storage Area Network (“SAN”)

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:

1. Storage
2. Access via iSCSI Connection
3. Access via Host Bus Adapter (HBA) Connection
4. 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
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	<ul style="list-style-type: none"> - Receipt of SAN is expected by January 2006 - Essential MOU's are in place - Tentative Rates have been set - Begin moving customers to new SAN Fabric by February 2006

Standards and Guidelines

- P8. 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
Timeframe	Ongoing
Funding	None
Status	<p>Generally, the following process is followed for each proposed standard or guideline affecting state government agencies:</p> <ol style="list-style-type: none"> 1. The SGC, or another entity, identifies a technology or practice for which a standard or guideline would be beneficial 2. Draft document created 3. SGC reviews and makes recommendation 4. Technical Panel reviews and posts the draft document for a 30-day comment period 5. Technical Panel reviews comments received and makes a recommendation to the NITC 6. NITC reviews proposed standard or guideline and takes action

IT Project Review Process

The State Government Council ("SGC") and Technical Panel will review and recommend improvements to the IT project review process.

- P9. Review and revise the "Agency Information Technology Plan" form, which is completed by agencies prior to each biennial budget cycle.

Lead	Rick Becker
Timeframe	February 2006: SGC and Technical Panel review existing form and recommend changes March 2006: SGC and Technical Panel approve revisions
Funding	None

- P10. Review and revise IT project review process for agency budget requests.

Lead	Rick Becker
Timeframe	April 2006: SGC and Technical Panel review IT project review process, including the project proposal form, and recommend changes May 2006: SGC and Technical Panel approve revised form and review process
Funding	None

- P11. Review and revise procurement review process for IT related purchases by state agencies.

Lead	Steve Schafer
Timeframe	Work beginning in Summer 2006
Funding	None

Action Items - Future

**NITC Strategic Initiatives
Action Items**

Security and Business Resumption

Action Items - Completed (from 2004-2005 Plan)

- C1. Directory Services: Established an authentication standard
- C2. Directory Services: Piloted single sign-on
- C3. Network Security and Network Management: Configured all public IP addresses (164.119) behind the state's firewall complex
- C4. Network Security and Network Management: Implemented an intrusion detection and prevention system on the state's Internet connection as part of a layered defense.
- C5. 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 - Discontinued (from 2004-2005 Plan)

- D1. Directory Services: Implement a content management structure for all agencies.
- D2. Directory Services: Establish a two-factor authentication standard.

Action Items - Proposed for 2006

SECURITY

- P1. 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
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

P2. Centralized Directory Services

P2.1. Pilot Federated Identity Proof of Concept
(Provide a Citizen Portal that would allow citizen to self-provision application themselves.)

Lead	Nebraska Directory Services
Timeframe	June 2006
Funding	Funding identified
Status	Design phase started

P3. Implement incident reporting requirements

Lead	State Security Officer
Timeframe	- Develop incident reporting process - May 2006 - Communicate reporting requirements to agencies - May 2006
Funding	No funding required for this task.
Status	In progress

P4. Network Security and Network Management

P4.1. Investigate and recommend an enterprise solution to ensure that encrypted traffic adheres to State security requirements.

Lead	Division of Communications
Timeframe	To be determined
Funding	No funding required for this task.

P4.2. Evaluate and recommend options for providing encryption to clients across the state's Wide Area Network

Lead	Division of Communications
Timeframe	To be determined
Funding	No funding required for this task.

BUSINESS RESUMPTION

P5. 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
Timeframe	Ongoing
Funding	The cost and source of funding have not been determined.
Status	Initial hardware and communications capabilities in place. Additional implementation work ongoing.

P6. Promote disaster planning for information technology systems, in conjunction with agency business continuity plans

Lead	Steve Henderson / Dave Berkland
Timeframe	Ongoing
Funding	No funding required
Status	- Director-level meetings, chaired by Lieutenant Governor Sheehy, to discuss restoration of services began in November 2005 - Business Continuity and Disaster Recovery work group developing: (a) elements of a common planning document and (b) approach for implementation of ICS (Incident Command System)

P7. Encourage testing and updating of disaster plans

Lead	Steve Henderson / Dave Berkland
Timeframe	Ongoing
Funding	No funding required