State Government Council of the Nebraska Information Technology Commission

## **E-Government Strategic Plan**

November 6, 2000

"Rather than thinking of IT projects, the public sector must think in terms of projects to change the way government works, of which IT is an important part."

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### **Section 1 Introduction and Summary**

### **Background**

The Nebraska Information Technology Commission (NITC) adopted the first statewide technology plan in January 2000. In the plan, the State Government Council established four priorities to guide its work:

- 1. Implement electronic government (e-government) to provide for a cost-effective, efficient delivery of services, while maintaining necessary security and confidentiality of non-public information;
- 2. Improve collaboration, both between agencies and with other stakeholders, in all areas of information technology;
- 3. Provide a planning and implementation process for information technology projects which avoids unnecessary delay and bureaucracy, and
- 4. Support improved training, education, and change management.

The Statewide Technology Plan also called for developing a strategy that would document the steps that are necessary to make optimum use of e-government within Nebraska. That action item presented six topics for consideration. These were the state's portal (a single point of entry to information and services), applications, payments, privacy and legal issues, security, and technical infrastructure and standards.

At its meeting on May 11, 2000, the State Government Council recommended moving forward with developing a strategy for e-government. Members suggested a series of work sessions focused on preparing a document that could guide the efforts of state agencies and communicate recommended actions to the NITC, Governor and Legislature.

This E-Government Strategic Plan is the result of several work sessions of the State Government Council. Information and draft materials from those work sessions are available on the State Government Council web site (http://www.nitc.state.ne.us/sgc/).

### **Purpose and Principles**

The purpose of this strategic plan has three facets. First, it is intended to achieve the vision and goals of the State Government Council pertaining to e-government. Second, this document strives to communicate those goals, related activities, and opportunities to policy makers. Third, it will guide the efforts of state agencies as they plan and implement e-government solutions.

The following principles guided development of this plan and will guide its implementation:

- 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.

#### **Overview**

E-government is a continual process of applying information technology to support agency functions. Although part of an on-going process of innovation and improvement, digital information, web-based technologies and private and public networks like the Internet create radical changes and new opportunities. Using these technologies makes it possible to deliver information and services without constraints due to time, place, or availability of staff. The convenience and economy of self-service becomes the model for transacting business. Integration of information and services across organizational, geographic and political boundaries becomes feasible, without having to incur the cost of organizational changes. Easier and faster access to information avoids potentially important consequences stemming from the lack of timely data.

These changes affect both internal operations of agencies and external relationships. The result can be streamlined business processes, customer-centric operations, more efficient service delivery, and fewer silos. Businesses and citizens expect the same level of service from government agencies that the private sector is now achieving through the use of these technologies.

Significant barriers stand in the way of rapid, widespread implementation of e-government solutions. The most important challenges identified in this report include:

- The need for a well-defined architecture for e-government;
- Effective measures to assure security and privacy;
- New funding models;
- Planning and funding decisions that maintain a focus on those projects that deliver the greatest benefit.

This report sets forth a vision, goals and measurable objectives for planning and implementing e-government projects. It also recommends strategic steps, which the State Government Council has prioritized. Much is underway already. For example, the Technical Panel of the NITC has work groups on security policies, network architecture, and e-government architecture. All are essential components of an overall strategy for e-government. Other issues that must be addressed include privacy policies and funding sources for e-government applications and shared projects. Projects to integrate the delivery of information and services are also a priority.

State agencies play a pivotal role in planning and deploying e-government solutions. According to the 1999/2000 Digital State Survey of the Center for Digital Government, Nebraska ranks thirteenth overall for the six categories relating to state government. Nebraska has been a leader in making use of Internet technologies. Much of this progress is due to the innovation and initiative of agencies. An example is the Game and Parks Commission. The Commission deployed its web site in 1994, when there were fewer than 500 web sites on the entire World Wide Web. The Commission was the first Nebraska State agency to integrate e-Commerce solutions into their online services and has transacted more than \$1.1 million in sales over the Internet.

Future success in deploying e-government applications depends on continuation of an environment in which agencies retain ownership of data, exercise responsibility over the use of information technology, and maintain focus on projects that provide the greatest benefits. The State Government Council's strategic plan for e-government is intended to assist, not supplant the efforts of individual agencies.

The role of the State Government Council is to identify and address issues that cross agency boundaries. This plan and the list of strategic issues in Section 4 provide a start. The State Government Council has the further tasks of monitoring progress, periodically updating this plan, and sponsoring work groups to address specific issues.

### Section 2 Vision / Goals / Objectives

Definition: **E-government** is the use of technology to enhance information sharing, service delivery, constituency and client participation, and governance by transforming internal and external relationships.

#### **VISION**

The State of Nebraska will be open for business from any place and at any time through the use of e-government.

# Goal #1: G2C (Government to Citizen) and G2B (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.

#### **Objectives**

- 1-A. By the end of calendar year 2000, all agencies will have a Web site, which at a minimum will provide the public with information about the agency and include an email address and phone number which can be used to get additional information. All state government Web sites should be designed with accessibility issues taken into consideration.
- 1-B. Agencies will explore ways of using the Internet to allow easier and greater involvement of the public in government processes, such as:
  - By January 2001, all agencies will utilize the state's public notice calendar to announce events and activities of importance to the public;
  - By January 2002, access to all government rules and regulations;
- 1-C. By the end of calendar year 2001, all agency forms for the public will be available for downloading and printing from the Web and mailing back. (Forms which can be completed electronically are preferred but at a minimum forms will be available for downloading.)
- 1-D. Agencies will make all forms and reports that are filed with state government, including license applications and renewals, available for completion electronically:
  - at least 25% by the end of calendar year 2001
  - at least 50% by the end of calendar year 2002
  - at least 75% by the end of calendar year 2003
  - By the end of calendar year 2004, all forms which can be, will be available for completion electronically.
  - Agencies will review any form which cannot be delivered electronically to determine that the impediments (e.g. notarization required) are necessary and appropriate.
  - Agencies will re-examine the necessity for information on forms to be automated and the processes in which the information is used.

- Agencies should give highest priority to those transactions that affect the most people, involve high volume activities, or offer the most opportunity for saving costs through greater efficiencies.
- 1-E. Agencies will develop strategies for using electronic transactions for purchasing, procurement, and payment activities.
- 1-F. By March 2001, document the requirements for electronic purchasing and procurement functionality for the Nebraska Information System.

#### **Goal #2: G2G (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.

#### **Objectives**

- 2-A. Continue and 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.
- 2-B. Working with the Technical Panel of the Nebraska Information Technology Commission, develop standards, guidelines and best practices to aid in the exchange of information between agencies, including XML, Legal XML, and other emerging standards.
- 2-C. Promote a communications infrastructure, based on the Telecommunications Infrastructure Needs Assessment Study (TINA), to enable the easy exchange of information among governmental entities.
  - Request the Network Architecture work group to define a protocol communications infrastructure to achieve this objective;
  - The communications infrastructure must address security issues associated with greater integration of systems and accessibility by external parties;
  - All agencies will prepare an assessment and plan for connecting to the state's communications backbone.

#### Goal #3: G2E (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.

#### **Objectives**

- 3-A. Utilize enterprise projects, such as NIS, to implement e-government solutions, including the procurement process and employee access to information and forms.
  - Explore feasibility of participating in purchasing consortiums using electronic access
- 3-B. By the end of calendar year 2002, all agencies should utilize electronic capabilities to improve internal communications with employees, such as:
  - Bulletin board for employees
  - "Ask the Director" feature
  - Central location for agency policies and shared information
  - Discussion groups on internal issues

- Access to employee forms
- 3-C. By the end of calendar year 2004, all agencies should provide employees with access to the state's communications infrastructure.
- 3-D. By the end of calendar year 2004, all forms that state employees use will be available electronically for on-line submission, including time sheets, leave requests, travel requests, expense reimbursements, tuition requests, choice of health insurance plans, and all other activities relating to the person's employment with state government.
- 3-E. Agencies will utilize major system improvements such as the NIS and Retirement System improvement projects to implement e-government solutions that impact state employees' access to information and services.

#### **Goal #4: (Integration of Government Information and Services)**

Agencies will work with other state agencies and local governments to develop strategies for using Internet technologies to provide integrated access to information and services to citizens, businesses, employees, and other governmental entities.

#### **Objectives**

- 4-A. Agencies will organize their electronic access to information and services around "life events" from the perspective of citizens, businesses, employees and other governmental entities. By the end of calendar year 2001, agencies will identify the major "life events" that will serve as the organizing themes for access to information and services.
- 4-B. Agencies will solicit input from citizens, businesses, employees and other government entities when planning and implementing e-governmental projects. By the end of calendar year 2001, agencies will identify methods for receiving input from external sources.
  - Agencies will use cooperate efforts with other entities in communities of interest to develop methods for receiving input from external sources.
- 4-C. Agencies will undertake collaborative projects to integrate electronic access to information and services. By the end of calendar year 2001, agencies will identify and prioritize projects to integrate access to information and services.

### **Section 3 Agency Plans**

In January 2000, the Nebraska Information Technology Commission adopted the first Statewide Technology Plan for the State of Nebraska. Section 4 of the Statewide Technology Plan established planning and project management requirements, which included instructions for preparing agency-level comprehensive information technology plans. Those instructions apply to all state agencies and public higher education institutions requesting state appropriations for information technology. The agency-level plans provide summary data on the existing information technology environment, value and benefits of the agency's investment in information technology, training needs and plans, security and disaster recovery planning, and future uses of information technology.

The section on future uses of information technology gave agencies the opportunity to chart their strategies on a range of information technology issues, including e-government. A compilation of section 4 from all of the agency comprehensive information plans is available on the NITC web site (http://www.nitc.state.ne.us). Some examples of specific projects that agencies may undertake include:

- The Supreme Court expects to develop interfaces between JUSTICE (the automated court system) and local systems for law enforcement and prosecutors that the Crime Commission's CJIS Advisory Committee has sponsored. This will allow these agencies to update their files automatically as Lancaster and Douglas Counties are now doing. This will provide immediate access without sorting, matching, retyping and re-filing information.
- Eliminate paper traffic tickets. Implementing a system in which traffic tickets are a computer-generated receipt would save time for law enforcement, reduce data entry time for prosecutors and county courts, eliminate errors, and provide immediate availability to information. An automated system for traffic tickets would create new opportunities for allowing motorists to use the Internet to pay the fine or choose a court date. Implementing these changes would require bar codes on the operator's license and vehicle registration and statutory changes.
- Electronic court filings. Maintaining an electronic court file, conducting filings electronically, and making filings available via the Internet will increase efficiency for attorneys, court staff, probation officers, prosecutors and others. Courts in other states that have experimented with electronic filings have found it to be extremely productive. It would eliminate bottlenecks in high volume courts, because several people must refer to the court file at the same time immediately after an entry is made. Judges would be able to take action and provide electronic notification to attorneys.
- The Nebraska Department of Education is responsible for many state and federal education programs. A critical goal is the development of a unified data collection and reporting system. This would provide web-based data collection, an electronic data warehouse divided into seven functional areas (student, staff, financial, transportation, instructional, programs, and data about organizations NDE serves), and web access to data.
- HHSS is committed to expanding the implementation of electronic government services throughout the system. HHSS continues to work toward the federally mandated

conversion of food stamp client transactions from paper coupons to magnetic striped cards. Other possibilities include requests and payment for death, marriage and divorce certificates over the Internet. There are plans in Credentialing to allow medical professionals to pay license application and renewal fees vial the Internet.

- The Department of Insurance collects licensing fees from both agents and companies. The Department plans to implement a system that will allow companies to appoint agents and for agents to be licensed electronically by the end of fiscal year 2002.
- The Department of Labor plans several direct access initiatives, including Internet Unemployment Insurance Claims, Internet based licensing and certification processes, web based appeals processes, and others. In addition to the current electronic transactions, future opportunities for transactions include on line sales of labor market information publications, electronic payments of tax liabilities, electronic repayment of overpayment liabilities, direct deposit of unemployment insurance benefits, electronic delivery of permits and certificates, and web based youth employment certificate process.
- The Department of Motor Vehicles will redevelop or modify applications and processes to allow use of the Internet as a viable access to DMV services. We expect that 90% of all Motor Carrier transaction types will be available over the Internet by December 2001. DMV plans to develop an application for Internet based driver license renewal and vehicle registration renewal by the end of fiscal year 2003.
- A major emphasis of the Department of Roads is implementing the Intelligent Transportation System (ITS). This will include providing traveler/drive information (such as changeable message signs), incident management (use of video cameras to allow faster reaction to traffic events), and congestion management. DOR will complete the web-enabled Automated Permit Issuance System during Fiscal Year 2002. It will include overweight, oversize and other permits.
- The Game and Parks Commission is considering the possibility of developing a centralized online reservation system. A centralized online reservation system would allow our customers to check availability and optionally make reservations online. We are working on a pilot project for sending and processing NEBRASKAland Magazine renewal notices and payments electronically. Upon the completion of the pilot project, we anticipate exploring the possibility of renewal notice processing of hunting and fishing licenses as well as some big game permits.
- The Library Commission's plans for the next biennium includes installation of a gateway service to provide a simplified and unified interface for the large number of commercial databases provided by the Commission. Use of these databases is hindered by the different user interface and search mechanism used by each, as well as the numerous user id / password combinations that users must manage.
- The Workers Compensation Court plans to provide Internet access to court data by the end of fiscal year 2003. The Court will mandate EDI filing of subsequent reporting by the end of fiscal year 2003. By the end of fiscal year 2001, the Court will be receiving employer insurance policy information on a daily basis. The Court will develop computer software to compare this information with Employer information currently obtained from the Nebraska Department of Labor and other sources to identify employers that are not carrying Workers' Compensation Insurance.

- The Real Estate Commission plans to allow forms and fees to be submitted electronically, and provide access to selected information from the Commission's database.
- The Board of Engineers and Architects is working on automating the license renewal process. We will also work toward electronic payment of fees and, as continuing education becomes mandatory for renewals in 2002, methods of web-based dissemination of information and sign-up for learning opportunities.
- Several other agencies identified the need to implement Internet-based licenses and permits.
- The Department of Natural Resources will implement an electronic filing process for new ground water well registrations. The process will assist the well drilling industry and hopefully help the Department overcome a backlog of registration information updates for the statewide database. Once the new well registration process is complete and working, the Department will explore expanding it to include registrations of existing wells.

## **Section 4 Enterprise Initiatives and Strategic Issues**

## **Enterprise Applications**

Title	Internet Licensing application
Description	Analyze licensing requirements, develop templates, and implement pilot
	projects
Purpose and	Assist state agencies with licensing applications via the Internet; improve
Benefits	citizen services; save time and cost by preparing generic licensing templates.
Sponsor	DAS - Information Management Services Division
Budget	\$151,440
Status	NITC grant awarded; initial project planning is underway.
Cross Reference	This project Objective 1-D by making license applications and renewals
	available for completion electronically.

Title	Nebraska Information System
Description	Modernize state government administrative business processes. These
	streamlined processes will be supported by a comprehensive packaged
	system that integrates information for decision making, analysis, and action.
	The new system will replace existing accounting, budgeting, payroll,
	procurement and other systems with an integrated application.
Purpose and	Implement an enterprise resource planning system to serve the
Benefits	comprehensive financial, human resource, procurement and other
	administrative functions of state government. The project will improve
	administrative procedures and management reports.
Sponsor	Department of Administrative Services
Budget	\$24.1 million (plus interest), with a total cap of \$29.7 million
Status	The Legislature approved funding; the NITC has approved spending to
	prepare an RFP and implementation plan.
Cross Reference	This project will improve agency operations (Goal 3), automate the
	procurement process and employee access to information and forms
	(Objective 3-D).

## **Architecture and Infrastructure**

Title	E-Government Architecture
Description	Recommend policies, guidelines and best practices for an efficient and robust
	foundation that will support e-government applications.
Purpose and	A well-defined architecture will provide the support structure for e-
Benefits	
	avoid costs due to incompatible systems or duplicative investments.
Sponsor	CIO and the NITC Technical Panel E-Government Architecture Work Group
Budget	Undetermined.
Status	The Technical Panel has established a work group to define an architecture

	for e-government and to develop recommendations.
Cross Reference	An efficient and robust infrastructure is essential to all four goals. This
	project serves the specific objective (Objective 2-B) regarding developing
	standards, guidelines, and best practices to aid in the exchange of information
	between agencies.

Title	Security Architecture
Description	Recommend security policies and implementation plan to the NITC.
Purpose and	Security standards are essential to protection of information and computer
Benefits	systems. Good security protects the public's investment in data and computer
	systems and provides the basis for privacy policies. Wider access to data
	increases the importance of security.
Sponsor	CIO and the NITC Technical Panel Security Architecture Work Group
Budget	Undetermined.
Status	The Technical Panel has established a work group on security. The
	anticipated timeline is to:
	Recommend draft policies to the Technical Panel by October 2000
	Solicit comments from affected agencies by November 2000
	Present draft policies to the NITC by December 2000
Cross Reference	Proper security is essential to all four goals, especially as state government
	provides greater access to information and services over public networks such
	as the Internet.

Title	Telecommunications Infrastructure Needs Assessment (TINA)
Description	Aggregate expenditures for telecommunications services (i.e.; voice, data,
	video distribution, video conferencing, distance learning and Internet access)
	across all levels of state and local government, including K-12, post-secondary
	and higher education.
Purpose and	The TINA study hopes to provide broadband services to state agencies and
Benefits	educational institutions at lower costs than otherwise. By serving as an
	anchor tenant, the TINA approach will stimulate expansion of broadband
	capacity statewide for the benefit of citizens and business.
Sponsor	Department of Administrative Services, Division of Communications
Budget	Undetermined.
Status	The Division of Communications is preparing an RFP, with the assistance of
	an advisory group.
Cross Reference	This project will serve Objective 2-C, by promoting a communications
	infrastructure for all governmental entities.

Title	Wireless
Description	Provide a statewide, integrated wireless communications system for public
	safety officials. The proposed system will provide a central device that will
	allow existing incompatible systems to communicate. Standards will provide
	a migration path to compatible systems in the future.
Purpose and	Eliminate potentially life-threatening problems that occur because of the
Benefits	inability of public safety agencies to communicate.
Sponsor	Department of Administrative Services, Division of Communications

Budget	Undetermined
Status	The Division of Communications and the Public Safety Wireless Advisory
	Board are preparing an implementation plan and budget.
Cross Reference	This project will serve Objective 2-C, by promoting a communications
	infrastructure among public safety agencies.

## **Funding Issues**

Title	Funding Sources for E-Government Applications
Description	Identify options and recommendations for funding different categories of e-
	government applications
Purpose and	A funding strategy for e-government applications will remove confusion
Benefits	about the source of funds for developing applications. A successful strategy
	will resolve problems stemming from limited agency budgets and the
	constraints of the biennial budget cycle.
Sponsor	State Government Council
Budget	Undetermined.
Status	Some research on funding strategies was done in conjunction with the
	Statewide Technology Plan. No further activity has occurred on this issue.
Cross Reference	This project will serve all four goals.

Title	Incentives and Mechanisms for Collaborative Projects and Shared
	Infrastructure
Description	Identify options and recommendations for funding infrastructure projects for
	e-government.
Purpose and	A funding strategy for infrastructure projects will address problems caused
Benefits	by the current dependence on agency-based funding decisions. It is difficult
	for agencies to invest in shared infrastructure projects, since these are usually
	beyond their statutory responsibility. A funding strategy for infrastructure
	projects will avoid duplicative and incompatible systems.
Sponsor	State Government Council
Budget	Undetermined.
Status	Some research on funding strategies was done in conjunction with the
	Statewide Technology Plan. No further activity has occurred on this issue.
Cross Reference	This project will serve all four goals.

## **Integration of Information and Services**

Title	Client Perspectives
Description	Solicit input from citizens, businesses, employees and customers regarding
_	access and presentation of information and services, using e-government
	tools.
Purpose and	Improve delivery of information and services and avoid wasted cost of
Benefits	providing e-government projects that have little utilization or utility to the
	end user.

Sponsor	State Government Council
Budget	Undetermined
Status	Not started.
Cross Reference	This project will serve Objective 4-B.

Title	Communication and Awareness
Description	Provide information about potential benefits and opportunities of e-
	government.
Purpose and	Stimulate interest in e-government options.
Benefits	
Sponsor	State Government Council
Budget	Undetermined
Status	The 1999 e-government conference was the initial effort in this area. The
	second annual e-government conference will be held on October 19-20, 2000.
Cross Reference	This project will serve all four goals.

Title	Customer Relationship Management
Description	Define CRM as it applies to government and prepare recommendations.
Purpose and	CRM is intended to provide better coordination of agency interactions with
Benefits	citizens and business, while protecting privacy concerns.
Sponsor	State Government Council
Budget	Undetermined.
Status	Not started.
Cross Reference	This project would serve Goals 1 and 4.

Title	Personalized State Portal
Description	Prepare recommendations for future generations of the state portal.
Purpose and	Improve access to information and services.
Benefits	
Sponsor	State Government Council
Budget	Undetermined
Status	
	areas of interest to both businesses and individuals.
Cross Reference	This project will primarily serve Objective 4-A,

Title	Promote Collaborative Efforts for Implementing E-Government
Description	Investigate opportunities for joint efforts in data sharing, research, testing,
	training, and other topics.
Purpose and	Improve efficiency and effectiveness of state government.
Benefits	
Sponsor	State Government Council
Budget	Undetermined
Status	Some collaborative activities are underway
Cross Reference	Aspects of this project would serve all four goals.

Title	Promote Integration of Government Information and Services
Description	Identify e-government projects that will provide electronic integration of
	government information and services to the benefit of users. Electronic
	integration may cross agency as well as state and local government
	boundaries. Electronic integration may include governmental functions and
	third party content.
Purpose and	The primary purpose of this project is to improve the delivery of information
Benefits	and services. It may lead to more efficient operations.
Sponsor	State Government Council
Budget	Undetermined.
Status	The Criminal Justice Information System Advisory Committee represents a
	major effort to integrate government information and services in the criminal
	justice area. Other projects are underway within agencies, such as combining
	boat registration function with vehicle registration.
Cross Reference	This project will serve Objectives 4-A and 4-C.

## **Policy Issues**

Title	Privacy
Description	Prepare a privacy policy to guide e-government projects in state government.
Purpose and	Protect the privacy of individuals and preserve public confidence and trust in
Benefits	state government.
Sponsor	State Government Council
Budget	Undetermined.
Status	Not started.
Cross Reference	This project serves Goals 1 and 4.

Title	Statutory Barriers / Legal Issues
Description	Identify statutes or legal issues that impair implementation of e-government
	and prepare recommendations.
Purpose and	The purpose of this project is to give policy makers information about legal
Benefits	barriers to e-government.
Sponsor	State Government Council
Budget	Undetermined.
Status	Several agencies identified legal barriers in their information technology
	plans, but a coordinated effort to analyze legal barriers and prepare options is
	not underway.
Cross Reference	This project will serve Goals 1, 2, and 4.