

Looking Forward

Office of the CIO
2008 Annual Report



Technology for the Citizens of Nebraska

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CIO UPDATE



Brenda Decker
Chief Information Officer
State of Nebraska

This is our fourth version of this document and each time we start to gather the information related to the past year and look forward to the next, we somewhat stand in awe of what the State has accomplished and where we are headed. As you will see in the following pages, our organization has had the privilege of leading several initiatives over the past year and participating in many projects led by agencies. We have launched a truly enterprise version of email for the State and by the end of December 2008 plan to have between 75% and 80% of State government converted. A joint project between the University of Nebraska system and the State Colleges for a new Student Information System has been started and the Office of the CIO continues to play a role in working with these entities to assure that a joint solution will be selected and implemented.

We were able to assist several key agencies (such as the Nebraska Game and Parks Commission and the State Budget Office) in launching mission critical applications as well as continue our work with the State Retirement System and the DHHS Medicaid Management Information System. An RFP has been issued for the Statewide Public Safety Communications System, and our work with the K-20 educational institutions on a distance education network has seen many successes. These are just a few of the highlights over the past year.

As we move forward, we see additional changes coming in the area of Information Technology that will make the State of Nebraska stronger and more efficient. The new data center in the Office of the CIO building will open this year and provide clients with state of the art security as well as redundancy for services and power. The building is undergoing a revamp in the areas of back up power, cooling and physical access control. We continue to look for additional collaboration opportunities and methods to strengthen our buying power. The legislative changes to the Nebraska Information Technology Commission statutes this year will provide additional opportunities to assure that the decisions being made in the area of information technology are in the best interests of the State, while continuing to serve the needs of the agency.



Office of the Chief Information Officer Leadership Team
Back Row (L/R): Tim Cao, Steve Schafer, Tom Conroy, and
Steve Henderson. Front Row (L/R): Jayne Scofield,
Brenda Decker, and Beverlee Bornemeier

I encourage you to take a few moments and review this latest installment of our Annual Report. I would also challenge you to get involved with our efforts to find opportunities to make the State of Nebraska a leader in the area of service to our constituents. Our State is making a concerted effort to make the most efficient and economical choices possible in order to serve the public and information technology is a tool to get that accomplished. Working together we can make this happen.

Brenda L. Decker
Chief Information Officer

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Vision Statement:

"Promote the use of information technology in education, health care, economic development, and all levels of government services to improve the quality of life of all Nebraskans."

Mission Statement:

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

CURRENT NITC MEMBERSHIP:

LIEUTENANT GOVERNOR RICK SHEEHY, Chair, State of Nebraska
LINDA AERNI, Chief Executive Officer, Community Internet Systems
PAT FLANAGAN, Information Services Manager, Mutual of Omaha
LANCE HEDQUIST, City Administrator, City of South Sioux City
DR. DANIEL J. HOESING, Superintendent, Laurel-Concord, Coleridge, Newcastle, & Wynot Public Schools
MIKE HUGGENBERGER, Director-Netlink, Great Plains Communications
DR. DOUG KRISTENSEN, Chancellor, University of Nebraska at Kearney
DR. JANIE PARK, President, Chadron State College
TREV E. PETERSON, Attorney, Knudsen, Berkheimer, Richardson, & Endacott, LLP
SENATOR ANNETTE M. DUBAS, State Legislature, Ex-officio Member



**Lieutenant Governor
Rick Sheehy**
Chair, Nebraska Information
Technology Commission

The Nebraska Information Technology Commission (NITC) is an independent nine-member commission established by the Legislature and appointed by the Governor to provide advice, strategic direction, and accountability on information technology investments in the state, and to adopt technical standards, guidelines, and architectures.

LB 823, introduced by the Legislative Performance Audit Committee and enacted in 2008, amended the NITC's statutory responsibilities and related statutes. In part, LB 823 provides the following:

- The NITC may adopt policies that establish the format and minimum requirements for the submission of projects to be reviewed as part of the budget review process;
- The NITC may monitor the progress of projects and may require progress reports;
- Requires all agencies to submit an information technology plan – in a format determined by the commission – by September 15 of each even-numbered year;
- Gives the NITC the authority to designate which projects are “enterprise projects” and
- Incorporates two existing coordinating bodies – GIS and Intergovernmental Data Communications – into the NITC statutes.

To achieve its mandate, the NITC relies on coordination and collaboration to influence a wide range of information technology issues. The NITC is assisted by six advisory groups:

- The Technical Panel provides analysis and recommendations to the NITC on technical issues.
- The Community Council is composed of representatives from business and economic development, work force development, public libraries and local government. It was formed to identify, prioritize, and coordinate user needs with respect to community information technology.
- The Education Council is a 16-member advisory committee composed of representatives from K-12 and postsecondary education that was formed to identify, prioritize, and coordinate user needs with respect to educational information technology.
- The State Government Council is a 25-member advisory committee composed of agency directors, state IT professionals, and two representatives of the private sector that was formed to provide direction and oversight for state government information technology vision, goals and policy.
- The eHealth Council is a 25-member advisory committee composed of representatives from public health, consumers, state and federal government, employers, other eHealth initiative groups, health care providers, and other resource providers that was formed to identify, prioritize and coordinate issues within the realm of healthcare and technology.
- The Geospatial Information Systems (GIS) Council is a 19-member advisory committee composed of representatives from state and local government that was formed to provide statewide coordination

of GIS initiatives and enhanced collaboration between municipal, county, state, and federal government entities.

Each of the NITC advisory groups establish work groups to address specific tasks related to accomplishing the goals and action plans identified in the Statewide Technology Plan. In February of 2008, the NITC approved an updated version of the Statewide Technology Plan "Digital Nebraska: Envisioning Our Future". The NITC has identified eight strategic initiatives to achieve their vision and mission. By emphasizing selected strategic initiatives, the NITC exerts its influence to encourage funding of these initiatives and to encourage state agencies to work together to advance these initiatives. A brief description of each initiative follows:

- **Network Nebraska.** The State of Nebraska and the University of Nebraska have engaged in a collaborative partnership that uses existing resources to aggregate disparate networks into a multipurpose core backbone. 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, more affordable Internet access, and better use of public investments.
- **Community IT Planning and Development.** The NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership. Through the Podcasting Across Nebraska program, four communities and regional groups created over 25 podcasts to promote local attractions and events and to provide information to citizens. A quarterly newsletter reaches over 1,000 individuals with an interest in technology-related development.
- **eHealth.** In 2007, the NITC formed an eHealth Council to address issues related to the adoption of electronic health records and health information exchange. The widespread adoption of electronic health records, health information exchange, and other eHealth applications is expected to reduce medical errors, improve quality of care, and reduce health care costs for payers.
- **Public Safety Communications System.** The statewide telecommunications strategy integrates regional communications systems, the mutual aid frequency plan, and the state communications infrastructure. The Office of the CIO has developed a plan for a statewide interoperable communications network that consolidates a core of state agencies on a single system platform. When completed in 2010, the system will position Nebraska as a leader in public safety wireless.
- **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 addresses multiple items improving efficiency in state government, including implementing shared services and adopting standards and guidelines. 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 constituent and client participation. Benefits include improved services for citizens and businesses, and increased efficiency and effectiveness for agencies.
- **Security and Business Resumption.** This initiative defines and clarifies 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.



Commissioner Pat Flanagan (front) and Commissioner Trev Peterson (back) tour the Data Center at Wayne State College.

During the past year, the NITC has adopted several new or amended standards and guidelines, all of which can be found at <http://www.nitc.ne.gov> – the Commission's website. By statute – primarily §86-516 – the NITC conducts project reviews and makes recommendations to the Governor and Legislature about those projects. The NITC uses portfolio management techniques to evaluate and depict the relative value of the projects. The NITC has also been active in general project oversight, including projects underway for implementing distance education technology and for the new solutions to be implemented by the Nebraska Retirement System.

ENTERPRISE COMPUTING SERVICES



Tom Conroy
I.T. Administrator
Enterprise Computing Services

Enterprise Computing Services (ECS) supports the large-scale development and processing requirements of State agencies. We build information systems, operate mainframe computers and maintain the high capacity data stores required to conduct State business. Each ECS group has staff on-call twenty-four hours per day to support State agency business operations.

CICS System Resources Support provides large scale interactive transaction processing environments for business applications. We support over 50,000,000 transactions per month in a highly available, resilient system with sub-second system response times. Our capabilities include support for both HTML (web browser) and 3270 presentation of CICS application data in a stable, well developed environment.

Database Management Services for the Mainframe provides installation and support for DB2 and IMS database structures. The service provides a database 'engine' that can be used by all front-end software tools (i.e. Web, TSO, CICS, AS400, Windows) to access the data our customers have entrusted to us for safe and secure keeping. This service safeguards the information from loss, misuse, and corruption by unknown and unauthorized entities.

Mainframe Data Storage supports two storage media: magnetic tape and disk. Tape is used for high volume storage and for backup. Application tape data is stored in a virtual tape subsystem to improve responsiveness, media utilization and disaster recovery capabilities. Backup tapes are encrypted to maintain the security of client information. Disk is used for data that has on-line requirements, where responsiveness is a prerequisite. Disk data is automatically stored offsite within seconds of being written to primary storage.

Processing Support Services provides scheduling, report archiving and automation. Scheduling support involves setting up and maintaining processing schedules for the z/OS and distributed server platforms in addition to developing AFP forms overlays. This group also manages report archiving and bundling for distribution. Automation support develops the programmatic routines that enable complex manual operations to be performed in a reliable automated manner.

Production Application Support Services provides 24X7 support for business applications designed and implemented by the Office of the CIO. Our application portfolio includes about 800 applications and 10,000 programs developed for 35 State agencies. Applications Analysts are available during normal business hours and are on call after hours.

Software Application Design involves gathering and analyzing the customer business functions, then designing an application solution to meet the prioritized business requirements. Applications Solutions personnel also provide RFP preparation services, assist with the evaluation of RFPs, provide technology planning support, and supply project management services to State Agencies.

Software Application Development includes programming, testing and/or implementation of the business requirements as defined in the Software Application Design phase. We also establish standard best practices for application coding and support

z/OS (MVS) Computing Resources supports the zSeries (mainframe) hosting platform which provides computing resources for CICS, TSO, batch workload processing, high volume printing, remote print routing and web applications.



z/OS Systems Programming Team: (Back row L/R) Fred Lupher, Carl Plants, Steve Leech, Randy Madison; (Middle row L/R) Carol Billesbach, Ann Ramsey; (Center) Kathy Jensvold

During the past fiscal year, Enterprise Computing Services completed a series of infrastructure upgrades for the services that we provide to State government. Our July processor upgrade introduced both additional capacity to satisfy client demand and also specialty database processor engines that allow us to run remote transactions at lower cost. Our mainframe DB2 databases offer unmatched reliability, responsiveness and security for the State's critical data. The new zIIP engines allow us to provide DB2 at reduced cost for distributed applications that run on web servers. As a result, we established a new, lower charge rate for these transactions that allow web applications to exploit the security, reliability and recovery capabilities of mainframe data services. The full implementation of our modernized tape storage system saved over 50,000 manual tape mounts per month. In addition, we eliminated the weekly process of packing up and transporting over 8,000 tape cartridges offsite each week. Offsite backups are now contained in one small case and are encrypted to keep client data private.

For the fourth consecutive year we have been able to reduce the rates charged for CICS for mainframe work effective July 1, 2008. We have also reduced the zIIP engine processor rate and job set-up charges for fiscal year 2009 and have maintained processor and storage rates that are lower than those originally published for the new fiscal year. These cost reductions, which result in direct savings to the State agencies that employ our services, have been accomplished while we have improved service levels.



Linda Leland (center) and Vivian Feess (right) monitor agency applications from the Operations Control Center.

We have also completed a significant upgrade to our monitoring capabilities in the Operations control center. New displays and computers provide us with the ability to monitor multiple systems from anywhere in the center. We have also established backup capabilities in our Capitol Computing Center that allow us to monitor the systems when we are required to evacuate the 501 building.



DBM Team (L/R): Dan Mortensen, Steve Schmit, Arlan Walvoord and Ed Hively

During the past year we have continued to work with our suppliers to reduce the cost of several utilities that help us manage our data and applications, reducing our annual software expense by over \$250,000. The ECS DBM group completed a major upgrade to the State's high volume transaction database, DB2, to provide additional functionality for agency applications.

Finally, a team of ECS and DHHS staff issued and evaluated a RFP for the new MMIS system. The new system will replace one of the oldest production applications we support with a modern web-based alternative. We have assembled a top-notch project team to assist the vendor with design, programming and implementation. We expect the implementation to be a significant part of our work for the next three years. We will support the new application after it is installed in 2011.



MMIS Team: (Back row L/R) Michaele Kujath, Estelle DeJonge, Dick Hawley, John Talken, Shawn Zimmerman, Troy Hodge, Curtis David, and Don Bishop; (Middle row L/R) Cindy Cameron, Cindy Kelley, Jen Wolf, Ron Clutter, Ruth Mattson, Kathy Link, Steve Lamb, John Canfield, Rob Lyons, and Lois Hanson; (Front row L/R) Sherry Hoffart, Melissa Kolm, Steve Lovell, Viji Pushkaran, Rod Wiles, and Joseph George. Not pictured: Irene May and Carmen Cochrane.

FINANCIAL AND CUSTOMER MANAGEMENT



Steve Schafer
I.T. Administrator
Financial and Customer Management

The purpose of the Financial and Customer Management area is to align fiscal resources to achieve the strategies of the Office of the CIO. Activities include cost recovery planning, rate setting, asset management, contracts, enterprise licensing, and reviews of agency purchases of information technology goods and services. Assisting with customer service and business development are other vital responsibilities.

Procurement (IT Procurement Reviews and Approval and Telecommunications Equipment and Services) – Section 81-1117 requires that "No state agency shall hire, purchase, lease, or rent any information management item listed in subsection (a) of this section without the written approval of the information management services administrator." This and similar statutes are the legal mandate for the IT procurement reviews. Legislative objectives include finding economies, avoiding unnecessary duplication of information management operations and applications, and complying with technical standards. Sections 81-1120.01 through 81-1120.39 require that the Division of Communications coordinate the purchase, lease and use of all telecommunications equipment and services. Requirements identification, procurement, ownership, and day-to-day operational aspects of telecommunications equipment and services will be closely coordinated with your organization.

On March 4, 2008, the Nebraska Information Technology Commission approved a new policy that allows the Office of the CIO to publish a list of pre-approved items that can be purchased without the IT review process. The list identifies communications equipment and information management items that by their nature are low cost and pose little risk of violating the review criteria established in the policy. The list also designates certain items as not requiring a review because the primary purpose of the items is other than information management. Agencies have prior approval to purchase items on this list. A copy of the policy (NITC #1-204) is available at: <http://www.nitc.ne.gov/standards/1-204.html>.

Enterprise Contracts and Vendor Agreements – The State Government Council has designated enterprise purchasing and maintenance agreements as a shared service that would benefit all agencies. The Office of the CIO will facilitate master agreements and will aggregate purchases with major vendors in order to provide access to better pricing.

Customer Accounts – The Financial and Customer Management area, in cooperation with DAS – Central Finance, will help agencies with setting up and managing their accounts, understanding invoices, getting detailed billing data, and resolving problems.

Rates and Fees – The Office of the CIO depends on revenues from services to pay more than 99% of its total budget. Only the cost of staff and expenses to support the Nebraska Information Technology Commission and its councils is covered by direct funding from the Legislature.

It is essential to set rates that recover all costs and are fair and equitable to the customer. The Office of the CIO must comply with federal accounting and audit standards governing cost recovery (OMB Circular A-87). Basically, this means that cost recovery plans (and rates) must not discriminate against federal programs. The rate structure cannot allow one service to subsidize another service, and any excess revenue must be returned to the rate payers through a reduction of rates in the future.

The Office of the CIO conducts a thorough review of cost recovery methods (budgets and rates) prior to the start of each fiscal year. Most rate changes are done in conjunction with the state's biennial budget process, but the Office of the CIO carefully monitors expenses and revenues throughout the year.

Service Catalog and Service Level Agreements – The Financial and Customer Management area is responsible for developing and maintaining the service catalog and service level agreements. These documents describe our services, define expectations, and provide metrics wherever feasible. All rates

are now published with the service catalog on the website for the Office of the CIO (<http://cio.ne.gov/sla/>). The Office of the CIO has started to define and gather data to measure availability of key systems.

Shared Services Business Case – Documenting the costs and benefits of shared services is part of the process of deciding whether to provide a shared service. It is also an integral part of the rate setting process.

The Financial and Customer Management team continues to focus on enterprise agreements with major providers as a key cost saving strategy. This year we again coordinated purchases of IBM licenses and maintenance agreements, including the Enterprise License Agreement (ELA -- for new purchases of software and annual license renewals), Contract Handling International Solution (CHIS – for hardware maintenance), and Software Maintenance Agreement (SWMA). The total discount to all participating entities for FY2006 was over \$500,000. The total discount to all participating entities for FY2007 was over \$500,000. The total savings for FY2007 was \$610,000 and for FY2008 was \$458,000. Projected savings in FY2009 will be \$214,037 because the volume of new products being purchased dropped considerably from previous years.



Rene' Botts
Administrative Assistant II



Gigi Boyd
Administrative Assistant I



Donna Haberstich
Administrative Assistant I



Karen Sarnecki
Technical Assistant



Gloria Esquivel
Technical Assistant

The Office of the CIO reviews budgets and rates annually. Rates are published as part of the biennial budget instructions and also on the website for the Office of the CIO. During the past year, the Office of the CIO developed new rates or conducted detailed rate reviews for the following services:

- Analytics Reporting
- Automated Notification Service
- Desktop Leasing Package
- Citrix Remote Access Service
- Computer Based Training
- Directory Services
- Distance Education – Network Nebraska Participation Fee and Interregional Transport Fee
- E-Fax Service
- Kronos Time Reporting Service
- Load Balancer
- Managed Domain Service (SON Server)
- Rack Mounted Device Hosting Service
- Spam Protection
- SQL Server Hosting Service
- Storage Area Network
- Tape Backup Service
- Web Application Housing
- Website Hosting

Other accomplishments during FY2008 include preparing a financial plan and cost accounting structure for the statewide distance education network and a set of rates for the Nebraska Unified Collaboration Project (Exchange Email and related services).

The Financial and Customer Management Section is currently leading an evaluation of options for replacing the existing three billing systems of the Office of the CIO with a unified billing system.

During the next year we will continue many of these efforts. Opportunities for cost savings can be realized by reviewing the various software and hardware products that the State continues to use that are purchased one at a time. There appear to be more opportunities to save money through statewide contracts.

INTERGOVERNMENTAL DATA SERVICES (IDS)



Tim Cao
I.T. Administrator
Intergovernmental Data Services

Intergovernmental Data Services (IDS) continues its mission of improving the service and efficiency of data exchange between State and local government. IDS provides and manages a statewide, shared network that links county governments and state agencies. The IDS integrated network is present in all 93 counties, providing the critical networking solutions for the daily operations of many state agencies and county offices.

IBM System i™ Resources – The IBM System i (a.k.a. AS/400) delivers the power and capacity to run multiple business applications on a single system. Currently, the IDS network consists of over 100 IBM

System i servers, located in counties across the State. The System i servers deliver the every day critical computing needs for county offices and state agencies. The Nebraska Department of Motor Vehicles' Vehicle Titles and Registration (VTR) and Nebraska Trial Courts System (JUSTICE) are two of many applications supported by the IBM System i.

Equipment Lease program – IDS offers an extensive equipment leasing program, consisting of personal computers (desktops, laptops), personal and network printers (check, matrix, and laser), server terminals and the new thin client solutions. All equipment is backed by our onsite field support and Help Desk. Repairs and maintenance are done by our own field technician or in some cases by our authorized agents. Our technology refresh program replaces equipment at no additional charge to customers at the end of the equipment's useful life.

Field and Support Services – IDS field technicians routinely make service trips to state agencies and county offices throughout the State. A typical trip might involve equipment repair, equipment placement, installation of new wires, and network access ports. Our field technicians have been an enabling factor to DMV for their One-stops initiative and to the Nebraska Supreme Court for its major PC deployments. The CIO Help Desk continues to play a critical role in supporting IDS products and services. IDS customers can call the CIO Help Desk to report equipment and service issues. Our Midrange Support Team also provides the ongoing support and performance monitoring for the System i network. In addition to our internal resources, we have authorized business partners who also make service trips on behalf of IDS.

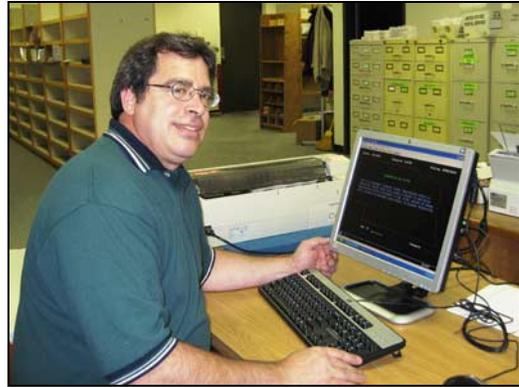
Network Infrastructure Services – IDS operates and maintains an advanced network infrastructure that covers the entire State of Nebraska, from providing the wide area network (WAN) connectivity to office computing equipment such as personal computers, printers and terminals.

Asset Management and Billing – Asset management is tracked and maintained in the Fixed Asset module of the Nebraska Information System (NIS). NIS continues to play a key role in our fixed asset inventory and billing process. Accurate and up to date NIS records mean accurate billings to customers. Agencies and county offices are billed based on various resource utilization and the type of equipment and/or services being used. Billing validation processes have been established to assure accuracy and reconciliation of customer services on a monthly basis.

Key Activities and Accomplishments – 2007 was a very active and productive year for Intergovernmental Data Services (IDS). Strategic activities ranged from upgrading infrastructure, developing and deploying new technologies to improve our service and to strengthen our customer relationship. Partnering with our key customers continues to be a critical part of our success. Below are some key activities and accomplishments we have achieved in 2007.

We invested nearly half of a million dollars to replace a total of 36 old System i servers with the latest technology from IBM. State agency staff, county personnel and county officials in these 36 counties now can continue to rely on an efficient and reliable infrastructure offered by IDS to support the business-critical applications.

IDS developed and deployed a new low cost terminal replacement solution called Thin Client. In a joint effort with our key customers and partners, we were able to develop and deploy this technology in a very short time. Thin Client technology offers up to a combined 50% cost savings compared to a regular full blown desktop computer. Thin client is an alternative low cost computing solution that provides reduced maintenance costs, minimal application updates and a higher level of security compared to the traditional desktop computers. Thus, a lower overall total cost of ownership (TCO). It is expected that these thin clients would continue to replace the outdated green terminals in the coming fiscal year. Thin client technology can also be a very viable PC alternative solution, where all processing and storage takes place on a central server. The Nebraska Supreme Court and Department of Motor Vehicles are the key users and drivers of this new lower cost technology.



Mike Bittinger deploys a new thin client in the Scotts Bluff County Treasurer's.

IDS continues to work with DMV in providing the necessary field support and IT equipment for its One-stop initiative. One-stop combines the work functions of the county clerk and the treasurer into a single seamless process for customers. In 2007 we helped convert 7 counties to the new One-stop environment.

In partnership with Nebraska Supreme Court, IDS has completed two major PC conversion projects for Lancaster and Douglas counties. A total of 73 new desktop computers were deployed, replacing the old green terminals. In addition, the Supreme Court's digital recording project and new personal computers for judges accounted for another 30 new laptops in 2007.

By the numbers:

- 36 System i replaced with the latest models (IBM System i Model 515)
- 7 One-stop conversions for the Department of Motor Vehicles
- 130 PCs deployed
- Over 80 new printers deployed
- Over 30 thin clients deployed
- Introduced 3 new PC models and 5 new printers
- Wired/rewired 25 county courthouses and over 10 courtrooms
- Processed over 2,400 GWI tickets, both service calls and new service requests
- Completed an annual fixed asset inventory of over 2,000 pieces of equipment
- Restructured software/hardware maintenance program; over \$75,000 cost savings per year

Looking Forward - For 2008, IDS will continue to focus on making improvements in the areas of customer service, executing cost reduction initiatives, as well as investing in new and more cost-efficient technologies. Specifically, we will be exploring ways to accomplish:

- Hire an additional field technician to be located in North Platte
- Thin client deployment (ongoing)
- DMV One-stops conversion (ongoing)
- AS/400 upgrades to support Douglas District Court JUSTICE conversion
- Technology refresh for older PCs and printers WAN switch/router replacement
- AS/400 server new consolidation architecture, i.e., regionalization
- Repair call volume reduction
- Repair interval reduction

NETWORK SERVICES



Jayne Scofield
I.T. Administrator
Network Services

It is the mission of the Network Services Team to provide efficient, economical and reliable telecommunications services to our clients. The Network Services Team is responsible for end to end support from your desktop through the wide area network. This includes voice and wireless services, desktop, server, cabling, VPN's, firewalls, video conferencing, shipping & receiving, email and wide area network services. These services include the design, planning, coordination of installation, and support of those services.

During this past year, the MAN and WAN Teams spent a considerable amount of time focusing on standardization and consolidation of equipment and certification for our employees. In our MAN and WAN areas, we continue to deploy Extreme switches for the enterprise and began deploying Cisco routers during the past year for all of our customers. Both of these technology refreshes are built into the network device fee charge. We also have replaced approximately 95% of the firewalls with Fortinet appliances and are approximately 45% finished with our statewide router refresh program. As we continue to refine and improve our network, we continually explore options for redundancy and resiliency. Our internal emphasis has been on training our staff. Our staff have received certifications in the area of Microsoft, Extreme, Fortinet, Cisco and BICSI, to name a few.



Shipping/Receiving/Surplus Team
(L/R): Larry Kosch, Howard Johnson, Ray Essink, and Jim Pritchard

Our staff participated in the bidding and award of Phase II of the distance education network bid. The second phase was for schools in central Nebraska. Over the next few months, we will begin the final phase of this project which will include schools in Western Nebraska and Southeast Nebraska. We also continue to enhance and build upon Network Nebraska, the transport backbone across the State.

Another area we standardized on was in the delivery of voice services. A contract was awarded to Windstream for Nortel PBX's. Over the next 12 to 18 months we will be replacing approximately 12 PBX's throughout the State with Nortel equipment. Once this is completed, these PBX's will be networked together and have the ability to provide redundancy in the event of an emergency. We also bid out and did a multiple award for wireless voice and data services this past year. This allowed us to continue to give our customers a range of providers with excellent rates. We continue to explore opportunities in the area of unified messaging. At the present time, we have several solutions we are piloting with a goal of having unified messaging deployed in conjunction with our deployment of PBX's.

During the summer of 2007, a decision was made to move State of Nebraska employees to one consolidated email system. Beginning in October, a team of OCIO staff began the deployment of Exchange Outlook email to state employees. As of this writing, we have converted approximately 7,600 mailboxes. All employees will have a standard email address (firstname.lastname@nebraska.gov) when the project is completed. This will create efficiencies for anyone trying to email a Nebraska state employee and the State will obtain financial efficiencies in this consolidation in the areas of staffing and hardware costs. We are also moving employees from Blackberry's to smart phones in conjunction with their email move.



Exchange Conversion Team (L/R): Stan Schmidt, Rose Splittgerber, Jason Meyer, David Wiens, Kevin Waechter, Nancy Taylor, Dean Jeffrey, Rohit Patel, and Karthik Chitti

Our Field Services Team continues to be involved in the remodeling of the OCIO building (501 S 14th street, Lincoln). In addition to the daily cabling requests, this team also finished up the recabling of the entire building and are working with a variety of agencies to upgrade cabling in other state owned buildings.

In the Fall of 2007, we began the build out of a new data center in the OCIO building. We currently have 50 cabinets in the new data center. We have been able to build a majority of this center with internal staff due to the knowledge and certification of our employees. Our new data center will provide added security, as well as redundancy, for any agency locating their servers in the data center. We are currently looking at possible expansion of this area due to demand.



Governor Heineman with Brenda Decker at the ribbon cutting of the new OCIO Data Center. Also present in the background L/R: Jayne Scofield, Don Phares, Brad Weakly and Annie King.

We continue to expand our customer base in the desktop, server and virtual server area. The desktop/laptop leasing program has grown from 37 to 145 over the past two years, the leasing of virtual machines has grown to 24 to 79 in the past 18 months and we are currently leasing 28 laptops and 83 servers. We continue to work on domain migrations and enterprise backup solutions.



Mobile Disaster Recovery Communications System Team (L/R): Don Phares, Bob Howard, Gavin Bingman, and Jeff Cadwallader.

A trailer was purchased with Homeland Security grants and we moved our emergency portable phone system from our 1990 van to this trailer as well as upgraded the equipment to make it more compatible with services the State is either currently using or will be deploying in the near future. This trailer was demonstrated at the national NASTD conference in Minneapolis, MN this past Fall. We remotely connected to the trailer, in a field outside of Lincoln, from the hotel in Minneapolis for the conference. We received many positive comments not only about the ability of the trailer but



Mobile Disaster Recovery Communications System

also of the use of Homeland Security grants to build it. In May 2008, we were asked to deploy the trailer to assist with the tornados that went through Kearney and were able to assist the public safety entities with their voice, wireless and data services.

In March 2008, an RFP was released for a statewide public safety communications system for State agencies. Our initial focus is on the State's law enforcement entities – Nebraska State Patrol, State Fire Marshal's Office and Game and Parks. The system will allow for expansion, and integration with regional systems. We are working closely with partners such as the Nebraska Public Power District, U.S Department of Interior, and other federal and local entities in Nebraska, as well as with our neighboring States. We were able to issue this RFP after completing a tower assessment and conducting an RFI process. We are implementing the statewide mutual aid frequency plan, including 700/800 MHz frequencies.



Brenda Decker, State Chief Information Officer; Michael J. Howell, Jr., Department of the Interior CIO; Christopher Lewis, DOI; and Mike Jeffres, Office of the CIO.

PLANNING AND PROJECT MANAGEMENT



Steve Henderson
I.T. Administrator
Planning and Project Management

Planning and Project Management staff members contribute to the mission of the Office of the CIO by virtue of their work in a wide variety of assignments. Those assignments include strategic planning, supporting the Nebraska Information Technology Commission (NITC) and its supporting councils and workgroups – including the newly-formed Geographic Information Systems (GIS) Council, the Nebraska Intergovernmental Data Communications Advisory Council (NIDCAC), project management, enterprise solutions planning, disaster recovery, business continuity and security policy.

NITC Staff - Staff support to the Nebraska Information Technology Commission and the subordinate councils, panels and workgroups. LB 823, passed during the 2008 legislative session, more closely aligns the coordination of GIS issues and the NIDCAC organization with the NITC.

For additional, more detailed information about the NITC and its mission, please read the NITC article elsewhere in this document.

Geographic Information System Steering Committee – LB 823, passed during the 2008 legislative session, repositions the GIS Steering Committee as the Geographic Information Systems Council supporting the NITC. Staff members also support the Shared Services effort on GIS.

Project Management - Consultation about appropriate tools to use when conducting project management and general advice about defining and managing a project. On an "as available" basis, "real time" detailed project management services can be purchased on a billable basis.

Enterprise Solutions Planning – Staff work with other elements of the organization as well as state agencies to identify opportunities for shared services and products.

Disaster Recovery and Business Continuity – Leadership to continually improve the disaster recovery capabilities for the entire organization. We also lead the Shared Service effort to offer appropriate business continuity and disaster recovery services for all agencies, boards and commissions. We assist in the statewide effort to determine business priorities for recovery.

Security - Efforts related to an enterprise view of security, including the development of appropriate policies, better integration of operations and policy, and relationship-building with the University for more joint security efforts.

Executive I.T. Management Services - The Planning and Project Management area within the Office of the CIO continues to operate in a very successful collaborative partnership both with the Department of Health and Human Services and the Nebraska Public Employees Retirement System to provide information technology management services to both organizations. By providing this expertise to these agencies, the organizations are able to focus limited resources on crafting solutions to the business challenges faced by the two entities while allowing the Office of the CIO to play a role in providing appropriate technology services to support the overall mission of the two agencies.

Staff members from the Project Management Office helped implement a number of technological improvements to Clarity (the state's primary project management software tool), with improvements in reporting capabilities and better database support being among the highlights. Efforts continue to establish better connections between Kronos, a timekeeping system used in a number of agencies, and NIS. Work to improve and expand the use of portfolio management techniques to evaluate technology projects will be a focal point in the coming months. The Project Management Office continues to offer a



Jerry Brown, OCIO Project Manager, has been assigned to work the Retirement Systems to implement the new NPRIS system.

variety of project management services and support to highly complex and visible projects within the state.

Disaster Recovery and Business Continuity once again experienced significant activity during this past year. The partnership efforts with the University to improve resiliency continue, with an interest in greater physical dispersion, networking improvements, and increased computing flexibility being among the current subjects of interest. Through the Lt. Governor's leadership, several agency directors have continued a dialogue to identify business priorities for restoration in the event of a disruptive incident. The three priorities that have been identified at this point are public safety, public health and institutional care.



Dr. Greg Garcia, Assistant Secretary of the Department of Homeland Security, gives keynote address.

Efforts to improve security remained a high priority this year. A major security policy was adopted by the NITC that addresses the responsibilities each state government entity has to evaluate its information assets and ensure that appropriate security safeguards are in place to protect the information. A number of software tools have been acquired to help provide more frequent evaluation of application and network security, and to provide appropriate data encryption on higher risk devices like laptop computers. Finally, the third annual Nebraska Cyber Security Conference was held this year on April 22nd at the downtown Holiday Inn. Southeast Community College remained a vital partner in organizing the event, but the venue was changed to accommodate more attendees. Approximately 125 IT workers from state and local government, education, law enforcement and the private sector gathered to hear a variety of sessions, with a highlight being the keynote address by Greg Garcia, the Assistant Secretary of the Department of Homeland Security.

In the realm of GIS, three collaborative, enterprise efforts are underway. An intergovernmental advisory committee is establishing the foundation for the ongoing development, maintenance and distribution of a statewide street centerline address database. Another group is working to develop a collection of online geospatial data sharing and mapping services. This group has successfully secured a variety of grant funds to assist with this project. Last, a project is underway to develop a 3-5 year statewide strategic plan for state, local and federal agencies as it relates to the geographic area of Nebraska. This project also has secured grant funds to help in the overall effort.



Planning and Project Management Team: (Front Row L/R) Rick Becker, Anne Byers, Steve Hartman, Jim Ohmberger, Dave Berkland; (Back Row L/R) Tom Rolfes, Beth Boal, Steve Henderson, Larry Zink, Steve Schock, and Ryan Christensen.

TECHNOLOGY SUPPORT SERVICES



Beverlee Bornemeier
I.T. Administrator
Technology Support Services

The Technology Support Services functional area consists of several service groups and is led by Beverlee Bornemeier. An update of the major services is provided in this report.

HELP Desk - The Help Desk experienced several staff changes during the past year. Jason Meyer moved to the Nebraska Unified Collaboration Project. You may still see his name or have the opportunity to work with him during the State's migration of email to Exchange. Mark Weatherwax left state government and is now working for the Federal Aviation Administration as an engineer specialist. Adam Cederlind is still with the Office of the CIO but has moved to the CICS team. We wish them all great success in their new ventures.

We were fortunate to acquire Randy Sowards a skilled console team member from Operations and Randy Prine

from the private sector with Microsoft skill sets. On a part time basis, JoDee Steele has stepped up to assist during busy times and has done a great job. We also lost the Help Desk Supervisor, Pat Cruz to the Department of Roads at the end of the year. Marcia Stewart is currently handling most of the Help Desk Supervisor responsibilities. She is also setting up the new service request system for the Help Desk. The Office of the CIO is converting from GWI Software's Lotus Notes-based system to their MS SQL-based system.



Help Desk Team: Back row (L/R) JoDee Steele, Randy Sowards, and Marcia Stewart. Front Row (L/R) Randy Prine and Dave Rasmussen.

NDS - Nebraska Directory Services continues to reliably perform its mission of providing identity management protection for an ever-growing array of web applications. The other security features NDS provides like graded authentication, reverse proxy, Active Directory synchronization, SSL encryption and wildcard or self-signed digital certificate support round out the enterprise safeguards state agencies have come to depend on.



Web Team: (Back row L/R) Kevin Cueto, Doug Hahn, Ambica Pasham, Ram Rotte, Sam Fifer, Himanshu Amin, Kay Reznicek, Rose Linnertz, Wes Majerus, Vishwa Patel, Galina Mitchell, Mike Welch, Rich Burns, Bishal Shrestha, Pat Engelhard; (Middle row L/R) Lavern Goens, Matt Kuta, Juli Jurgens, Jim Buehler, Tod Wyrick; (Front row L/R) Bhuvanawari Muthukumaran, Keo Smith, Vicky Sindelar, Khaleel Thotti, Sridhar Teegala, and Ashruf Hussain

Web Development - The Office of the CIO Web Design and Development Team designed, developed, and implemented the new online Permitting System for the Nebraska Game and Parks Commission in November. The new system allows citizens to purchase fishing, hunting, fur harvest, big game, and park entry permits (among others) online from anywhere an Internet connection and web browser are available. The team also developed a new Budget Request and Reporting System for the Administrative Services Budget Office. In addition to the design and development of web applications and database driven web-based systems for many Nebraska State Agencies, Boards, and Commissions, the team also designs, develops, and hosts numerous State websites including sites for

Governor Heineman and Lt. Governor Sheehy. The team developed a site celebrating and commemorating the 50th anniversary of the Governor's Residence. This site, located at <http://www.governorsresidence.ne.gov/> includes information about the Residence, photo and virtual tours, and one of the most noteworthy features of the site simply called "Reminiscence".

Change Management & ITA - For the past six months a team of Change Management participants have been focused on identifying a Change Management process that will be useful and effective for the entire Office of the CIO. Since the Change Management System was initially implemented, much has changed in the services we support. The team focused on reaching agreement on concept, definitions, specifications and utilizing the existing change management process and application to incorporate appropriate changes throughout the organization. The Change Management Review team will remain intact and periodically meet to assess progress and continue to refine the overall process.

MidRange - The Midrange group replaced 36 of the oldest iSeries (AS/400s) systems located in counties throughout the State. The group also developed an automatic notification to alert Office of the CIO and agency help desk personnel when an iSeries system IPLs during normal business hours. The Midrange group provides a level of support on the NIS system. During the past year, training was received to support Idera high availability software. The software has been loaded and configured on the NIS Production and back-up systems. In an effort to support enhanced security requirements while transferring sensitive data, Secure FTP was set up on the iSeries over the past year.



Midrange Team (iSeries) L/R: Kevin Smith, Donna Ruhl, and Mike Whisler

The Information Technology Assistance application (ITA) continues to see growth in the number of new teams, batch jobs and trans ID's that display for on-call support information. For 2007, additional emphasis was placed on having each team be responsible for updating on-call support and schedules. ITA is an application that is available 24 x 7 and used internally by the Office of the CIO.

Training - During 2007, Training coordinated both the technical staff and agency end user (train the trainer) training for the Exchange migration project. The Outlook related training offerings were actively communicated and marketed to migrating agencies. User guides for both Outlook 2003 and 2007 were also created and offered to migrating agencies. Training is currently working with the SharePoint development team to phase in the new annual review application that replaces the Lotus Notes version. The RFP process for a new vendor-hosted computer based training application was completed and will be implemented in February 2008. The new application offers over 3,000 courses, certification guides and mentoring.

OFFICE OF THE CIO COMMUNITY PARTICIPATION

The Office of the CIO recognizes that in addition to the work that we do on behalf of the citizens of Nebraska, we have a responsibility to be conscientious citizens for those in need. As part of that effort, we have initiated projects to live that responsibility. A few are highlighted here:

ADOPT A FAMILY PROJECT

For the past few Decembers, the Office of the CIO has worked with the Center for People in Need to help several families have a brighter holiday. Staff is asked to make cash donations, choose a gift card from various displays to purchase requested gifts for families, and in some cases make donations of slightly used furniture to assist families that may need those types of items. This year the staff was able to adopt two families for the holidays through the Center for People in Need here in Lincoln. One family has four children and one is a special needs child. The other family was a single mom with three girls. Their wish lists included critical items such as coats, shoes, detergent, and toothpaste.

Through the generosity of the OCIO staff, the holidays were a little brighter for 10 people. We collected many gifts and approximately \$300 in monetary donations which allowed those families to purchase extras such as Super Saver grocery coupons, Lincoln Electric Systems gift certificates and bus passes.

ANNUAL FOOD DRIVE



Food Drive Volunteers with Brenda Decker (L/R): Gloria Esquivel, Michael Kujath, Linda McKinney-Leonard, John Nelsen, Vicki McElroy, and Judy Davison-Whitehead. Not pictured: Lori Lopez Urdiales

The Office of the CIO participates annually in the State Campaign Against Hunger. In conjunction with DAS, the OCIO “competes” in a challenge of DAS Divisions to provide money and other essential items to the Food Bank. We had numerous opportunities for staff to participate in this campaign including; the purchase of stickers that would allow the employee to wear jeans to work, a raffle for a donated \$50 gift card to the Venue Restaurant, donation barrels with theme days designated, and our traditional Food Drive Breakfast where for a small donation you have the opportunity to choose from a plethora of donated breakfast treats. The Leadership Team got into the act again this year by having their own “jeans day” but the cost of their

stickers was \$15 each. Dollars and donated items were converted into points for competition purposes and the overall points winner was the Office of the CIO with 84,108.05 points! If you convert those points to dollars using the 40 points per dollar metric, the OCIO would have contributed over \$2,100 to the Food Bank. Of course the real winners were the clients of the Food Bank and the people that will be able to have nourishment thanks to the generosity of all State employees.



Office of the CIO staff participating in the annual Food Drive Breakfast fundraiser for the State Campaign Against Hunger.

PEOPLE, PEOPLE, PEOPLE



159 - Total number of members who serve on the NITC Advisory Groups: Technical Panel (10), Education Council (40), Community Council (18), State Government Council (45), eHealth Council (27), and the GIS Council (19).

161 - Total number of people involved in workgroups (includes some Council members): State Government Council (25), Technical Panel (80), GIS Council (30), Community Council (6), and Education Council (20).

On-going projects reviews were conducted by volunteers with I.T. experience and backgrounds for projects totaling approximately **\$80 million** and reviewed grant requests totaling about **\$500,000**.

240 people use Clarity to do time entry

THINGS, THINGS, THINGS



1,487 Active Projects are managed in Clarity

- Within these 1,487 projects there are approximately **73,221** Tasks.
- Projects are valued at more than **\$589 million**

NUMBER OF HELP DESK CALLS

OCIO Service Request Tickets Opened*		OCIO Service Desk Call Source			
Year	Tickets Opened	Tickets Closed	2007	Total Tickets**	ACD Tickets***
2000	17,092	14,467	January	3,780	2,088
2001	14,265	10,365	February	2,836	1,519
2002	14,524	8,874	March	3,025	1,949
2003	21,384	6,398	April	3,160	1,640
2004	21,728	10,861	May	3,050	1,635
2005	38,060	34,561	June	3,459	1,961
2006	45,317	42,632	July	3,840	2,554
2007	47,985	46,166	August	4,045	2,216
*This represents all tickets opened in the GWI Help Desk system including participating agency help desks. **Total Tickets represents all tickets in the GWI Help Desk database including participating agency help desks. ***ACD is the Automated Call Distribution system; so ACD tickets are those requests coming in through the Help Desk's 471-4636 (800-982-2468) line. Other ticket sources are e-mails, auto-generated tickets, user-generated tickets, and walk-ins.			September	4,592	1,930
			October	6,141	2,206
			November	6,771	2,853
			December	3,286	1,916
				47,985	24,467

If the 2007 Help Desk tickets were large Val's pizzas, they'd cover most of the playing field of Memorial Stadium 2 pizzas deep. Just the tickets originating from ACD calls would cover the playing field with a single layer of pizzas.

DAILY:

- **80,000** email messages are delivered to Enterprise Exchange mailboxes
- **11.4 million** messages dropped as they are identified as SPAM
- **1.6 million** email message attempts to us
- **1.5 million** email messages not accepted due to the sender reputation
- **550 virus** attacks stopped through perimeter firewall
- **100 denial** of service attacks stopped through perimeter firewall

MONTHLY:

- **1.2 million** wireless minutes of usage
- **1.4 million** toll minutes of usage
- **1.0 million** toll free minutes of usage

ANNUALLY:

- Back up **303 TB** of information. This equates to **133,143,986,160** page book (based on an average of 2,500 characters per page). The book would be **8,406** miles long!
- CICS Transactions - **805,533,870** (over 1500 per minute or more than 25 for every second of the entire fiscal year)
- Scheduled Projection Batch Jobs - **511,669** (almost one per minute the entire year)
- Production Reports - **163,014** (These reports stacked end to end would reach from the State Capitol to Mahoney State Park.)
- Developer Hours Billed - **247,879** (enough to assemble over 18,000 Jeep Wranglers at North America's most productive auto plant)

OTHER STATS:

- **950** circuits throughout the state
- **2,000** switches throughout the state
- **\$4.6M** in Homeland Security grants for public safety purchases for 58 local different local entities

SAVINGS, SAVINGS, SAVINGS

Distance Education: The negotiated contract with MSI of Omaha on edge devices @ **41.5%** off of list price represents a savings of **\$748,739** off of list price and a savings of approximately **\$277,310** off of the previously negotiated discount of **30%** off of list prices.



GIS: The Nebraska GIS Steering Committee (now the NITC GIS Council) coordinated efforts with several state and local agencies to acquire updated statewide aerial orthoimagery for the bargain price of **\$8,500**, for which the original full acquisition costs were over **\$1,000,000**. On-going communication and coordination between state, federal, and local agencies enabled the GIS Council to be aware of these types of unique opportunities and to take advantage of them.

Security: The State of Nebraska spent approx **\$34,000** on the PGP purchase and saved nearly **\$200,000** in the first year and will save **\$45,000+** each year hereafter.

IBM: Aggregating purchases of software, software maintenance, and hardware maintenance provided a total savings of **\$214,037** for fiscal year 2009.