

AGENDA

**State Government Council
of the
Nebraska Information Technology Commission**

Thursday, November 10, 2011
1:30 p.m. - 2:30 p.m.
Executive Building - Lower Level Conference Room
521 S 14th Street
Lincoln, Nebraska

AGENDA

Meeting Documents: Click the links in the agenda
or [click here](#) for all documents (38 pages).

1. Roll Call, Meeting Notice & Open Meetings Act Information
2. Public Comment
3. Approval of Minutes* - [September 8, 2011](#)
4. Statewide Technology Plan - [Draft Action Items](#)*
5. Project Proposals - FY2012 Deficit Budget Requests - [Recommendation to the NITC](#)*
 - Public Employees Retirement System - ([Full Text](#) | [Summary Sheet](#))
6. Standards and Guidelines
 - Discussion: [External Hosting of State Data](#) - Brad Weakly
7. Other Business
8. Agency Reports
9. Adjourn

* Denotes Action Item

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

Meeting notice was posted to the [NITC website](#) and the [Nebraska Public Meeting Calendar](#) on September 21, 2011. The agenda was posted to the NITC website on November 8, 2011.

STATE GOVERNMENT COUNCIL
of the
Nebraska Information Technology Commission
Thursday, September 8, 2011, 1:30-2:30 p.m.
Executive Building - Lower Level Conference Room
521 S 14th Street
Lincoln, Nebraska
PROPOSED MINUTES

MEMBERS PRESENT:

Brenda Decker, Chief Information Officer, Chair
Dennis Burling, Dept. of Environmental Quality
Josh Daws, Secretary of State's Office
Keith Dey, Department of Motor Vehicles
Rex Gittins Department of Natural Resources
Lori Henkenius, Nebraska Department of Education
Eric Henrichsen, Department of Health and Human Services
Kelly Lammers, Department of Banking
Mike McCrory, Administrative Services
Bill Miller, State Court Administrator's Office
Glen Morton, Workers' Compensation Court
Gerry Oligmueller, Budget Office
Col. Dave Sankey, Nebraska State Patrol
Jayne Scofield, OCIO-Network Services
Bob Shanahan, Department of Correctional Services
Terri Slone, Department of Labor
Len Sloup, Department of Revenue
Rod Wagner, Library Commission
Bill Wehling, Department of Roads

MEMBERS ABSENT: Beverlee Bornemeier, OCIO-Enterprise Computing Services; Dick Clark, Policy Research Office; Mike Calvert, Legislative Fiscal Office; Pat Flanagan, Private Sector; Dorest Harvey, Private Sector; and Mike Overton, Crime Commission

ROLL CALL, MEETING NOTICE & OPEN MEETINGS ACT INFORMATION

Brenda Decker called the meeting to order at 1:30 p.m. There were 19 members present. A quorum existed to conduct official business. Meeting notice was posted to the NITC website and the Nebraska Public Meeting Calendar on August 9, 2011. The agenda was posted to the NITC website on August 9, 2011 and updated on September 6, 2011. The Open Meetings Act was located on the podium at the front of the room.

PUBLIC COMMENT

There was no public comment.

APPROVAL OF JUNE 23, 2011 MINUTES

Mr. Oligmueller noted a mistake in title on page 3.

Mr. McCrory moved to approve the [June 23, 2011 minutes](#) with the change discussed. Mr. Sloup seconded. Roll call vote: Decker-Yes; Burling-Yes, Daws-Yes, Dey-Abstain, Gittins-Yes, Henkenius-Yes, Henrichsen-Yes, Lammers-Abstain, McCrory-Yes, Miller-Abstain, Morton-Yes, Oligmueller-Yes, Sankey-Yes, Scofield-Yes, Shanahan-Yes, Slone-Yes, Sloup-Yes, Wagner-Abstain, and Wehling-Yes. Results: Yes-15, No-0, Abstain-4. Motion carried. (Note: There was also

a clerical error in the starting time listed for the June 23 meeting which was corrected by staff prior to final publication of the minutes.)

SGC CHARTER [REVISION](#)

At the last meeting, the council approved a number of changes to the charter. After the meeting, Mr. Becker discussed the new conflicts of interest provision with staff of the Accountability and Disclosure Commission. It was recommended that the conflicts of interest section be revised. A revised section 6.4 was attached to the agenda.

Mr. Wagner moved to recommend approval of the revised version of section 6.4 of the State Government Council Charter. Mr. Shanahan seconded. Roll call vote: Decker-Yes; Burling-Yes, Daws-Yes, Dey-Yes, Gittins-Yes, Henkenius-Yes, Henrichsen-Yes, Lammers-Yes, McCrory-Yes, Miller-Yes, Morton-Yes, Oligmueller-Yes, Sankey-Yes, Scofield-Yes, Shanahan-Yes, Slone-Yes, Sloup-Yes, Wagner-Yes, and Wehling-Yes. Results: Yes-19, No-0, Abstain-0. Motion carried.

STATEWIDE TECHNOLOGY PLAN ACTION ITEMS ([2010 ACTION ITEMS](#))

The NITC is preparing the annual update to the Statewide Technology Plan action items. The 2010 version was linked to the agenda. Ms. Decker asked members to review the action items and provide any suggested changes or recommendations for new action items to Mr. Becker by email.

STANDARDS AND GUIDELINES - [NITC 5-102](#): MICROSOFT ENTERPRISE AGREEMENT – HOME USE PROGRAM POLICY

One of the benefits of the Microsoft Enterprise Agreement is the Home Use Program. The purpose of the Home Use Program is to encourage consistency in the office productivity software that employees use at home and at work. Skills learned at home will translate better to the work place, which leads to higher productivity at work. The Home Use Program is not intended to require or encourage telework or taking work home.

Members discussed the draft policy. There was consideration of using the “We Save” program; however, that program requires the benefit be made available to all state employees. In this case, the Microsoft program is a benefit to the agency and requires the employee to use the Office suite at work before they can participate in the Home Use Program.

It was noted that the State is not responsible for individual employee’s compliance with the Home Use Program end user license. A question was raised about arguably conflicting language in first and fourth bullets under section 1.1. This section is based directly on language from Microsoft documentation. Staff will work to clarify this language.

Mr. Henrichsen moved to recommend approval of [NITC 5-102](#): Microsoft Enterprise Agreement – Home Use Program Policy with the discussed possible revisions. Mr. Lammers seconded. Roll call vote: Decker-Yes; Burling-Yes, Daws-Yes, Dey-Yes, Gittins-Yes, Henkenius-Yes, Henrichsen-Yes, Lammers-Yes, McCrory-Abstain, Miller-Yes, Morton-Yes, Oligmueller-Yes, Sankey-Yes, Scofield-Yes, Shanahan-Yes, Slone-Yes, Sloup-Yes, Wagner-Yes, and Wehling-Yes. Results: Yes-18, No-0, Abstain-1. Motion carried.

Item #7 on the agenda was moved to the end of the meeting.

OTHER BUSINESS

There was no Other Business.

AGENCY REPORTS

There were no Agency Reports.

REVIEW OF DEPARTMENT OF ENVIRONMENTAL QUALITY'S USE OF THE ENTERPRISE CONTENT MANAGEMENT (ECM) SYSTEM

Dennis Burling provided a presentation on the Department of Environmental Quality's use of the Enterprise Content Management (ECM) System.

ADJOURNMENT

With no further business, Mr. Dey moved to adjourn. Mr. Miller seconded. All were in favor. Motion carried.

The meeting was adjourned at 2:35 p.m.

Meeting minutes were taken by Rick Becker of the Office of the CIO/NITC.

Security and Business Resumption

2012-2014

Objective

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

Description

Information security serves statutory goals pertaining to government operations and public records. These include:

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

Major activities include:

- Development of an overall security strategy, including policies, security awareness, and security infrastructure improvements;
- Network security standards and guidelines;
- Education and training;
- Authentication (directory services);
- Disaster recovery for information technology systems (as part of a broader business continuity planning);

- Compliance with federal privacy and security mandates;
- Security assessments.

Benefits

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

Action Plan

Action Items

Security

1. Review and revise policies and procedures relating to identity management and directory services.

Lead: State Information Security Officer

Participating Entities: State Government Council, Security Work Group

Timeframe: 2011-2012

Funding: No funding required.

Status: Continuation

2. Develop policies and standards relating to the hosting of State data by vendors.

Lead: State Information Security Officer

Participating Entities: State Government Council, Security Work Group

Timeframe: 2011-2012

Funding: No funding required.

Status: New

Business Resumption

3. Implement shared disaster recovery facilities. Mission critical systems have three common requirements: 1) Recovery times must be measured in hours, not days or weeks. 2) Recovery facilities should be physically separated so that they will not be affected by a single disaster. 3) There must be staff available to assist with the recovery efforts. Achieving these requirements is very expensive. Sharing disaster recovery facilities and establishing a collaborative approach to disaster recovery is one strategy for managing costs. The Office of the CIO and the University of Nebraska are jointly developing a fast recovery capability using mutual assistance of physically separated data centers.

Lead: Office of the CIO and University of Nebraska

Participating Entities: State Government Council

Timeframe: Ongoing

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

Status: Continuation. An alternate site providing greater geographical separation has been established. The University of Nebraska and the Office of the CIO have acted on two important items:

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

The acquisition and implementation of both items are complete. The University and the State not only have their critical data mirrored at a geographically separated site, but are working toward the capability, at the alternate site, to continue the most critical enterprise server production processing with less than 10 hours interruption.

The University of Nebraska and the Office of the CIO will continue to:

- Develop plans and procedures for fast recovery capability using the mutual assistance of physically separated data centers.
- Develop a capabilities-based all-hazards approach to a multi-year exercise program to evaluate plans, procedures and infrastructure associated with the alternate site. The purpose of this exercise program will be to measure and validate performance of capabilities and critical tasks.

- Maintain and exercise the operating system on the enterprise server to insure compatibility between locations.
- Identify business applications to be tested and operated from the alternate location.

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

Lead: Jim Ohmberger / Mark Robertson

Participating Entities: State Government Council

Timeframe: Ongoing

Funding: No funding required.

Status: Continuation. The Director-level meetings, chaired by Lt. Governor Sheehy, identified critical business functions and categorized them into one of three categories: public safety, public health and institutional care. Progress has been made with public safety (lead by Nebraska State Patrol) in identifying:

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

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

Completed Action Items (2007-2011)

Security

1. **Conduct annual independent security audits.** (2008)

2. Enhance Network Security and Network Management.

Action: Investigate and recommend an enterprise solution to ensure that encrypted traffic adheres to State security requirements. **Status:** Completed. Migration of all Avaya firewalls to the Fortinet infrastructure. (2008)

Action: Evaluate and recommend options for providing encryption to clients across the state's Wide Area Network. **Status:** Completed. The State of Nebraska has entered into a contract with PGP for whole disk encryption. (2008)

Action: Evaluate and recommend options for providing compliance auditing across the state's Wide Area Network. **Status:** Completed. The State of Nebraska has purchased Cisco's Compliance Manager and has been attending training classes for staff. (2008)

3. Implement security incident response team. NSP has lead with State IT resources as needed. (2010)

4. Develop policies and procedures governing the use of mobile devices on the state network and review and make recommendations on the use of personal devices on the state network. (2011)

Business Resumption

5. Encourage testing and updating of disaster plans. The Continuity of Operations Planning/Disaster Recovery Planning Shared Services Group worked to develop and act on ways to better coordinate disaster recovery planning and to provide for more consistent disaster recovery plans. **Status:** Completed. An NITC standard ("Information Technology Disaster Recovery Plan Standard") has been put in place. Work has been completed to better understand disaster recovery plan assumptions and dependencies. (2008)

State Government Efficiency

2012-2014

Objective

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

Description

The primary components of this initiative are the implementation of shared services and the development of standards and guidelines.

Shared Services. The State Government Council has identified a number of potential shared services for state government. Action items are included for those services that are actively being reviewed and implemented.

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

Benefits

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

Action Plan

Action Items

Shared Services

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

Lead: Steve Schafer

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

Timeframe: Ongoing

Funding: No funding required.

Status: Continuation. The Office of the CIO implemented several enterprise agreements during FY2011. An enterprise agreement with Adobe qualifies state agencies for a discount on Adobe products. On some products the savings are as much as 21%. Access to this discount will become easier after a new software reseller contract is in place, sometime in FY2012. On behalf of seven state agencies needing assistance with implementation of the state's enterprise content management system, the Office of the CIO entered into a "block time" services agreement with eDocument Resources that reduces the hourly cost of solution analysts by 32% (from \$180 per hour to \$123 per hour), by guaranteeing a minimum of 9,825 hours of work through February 2012. The annual agreement with IBM provided savings of \$213,749 in FY2011. The Microsoft Enterprise Agreement for Office and Windows licenses will save the Department of Health and Human Services \$317,530 per year and the Department of Roads \$42,336 per year, while giving all agencies access to software assurance and other benefits at a deeply discounted price. The Office of the CIO and the Materiel Division also began participating in the Premium Savings Package of the Western States Contracting Alliance (WSCA). This gives state agencies discounts on standard configurations of PCs and laptops of as much as 46% compared to normal pricing.

Several initiatives started in FY2011 will take effect in FY2012. These include new contracts for long distance service that will save agencies 14% on long distance calls and toll free calls with Windstream and 12% on use of Language Line interpretation services. The State of Nebraska has also become a participant in a recent WSCA contract for Software Value Added Reseller (VAR) Services. The new software reseller contract will be available sometime in the first half of FY2012. It will provide better pricing and streamlined purchases on an extensive list of software manufacturers and products.

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

Action: NebraskaMAP - a Geospatial Data Sharing and Web Services Network. Continue the development of the NebraskaMAP – an enterprise-level geospatial web portal, with Internet mapping and data services. A collaborative pilot project developed a NebraskaMAP working prototype designed to enable the users of Nebraska-related GIS/geospatial data to efficiently and reliably find, access, display, and build public information applications utilizing the geospatial

data maintained by a wide variety of state, local and federal agencies and where appropriate, provide for a coordinated security system, including the possibility for limited data access and password protection. To sustain and enhance this successful collaborative endeavor, the development of a plan for providing on-going administrative and technical support is critical.

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: State Government Council; GIS Council

Timeframe: December 31, 2013

Funding: The original two-year pilot project was funded with a mix of state and federal funding sources, with one-half coming from the NITC Government Technology Collaborative Fund. Unfortunately the end of the two-year pilot occurred in the midst of a significant state budget crunch. This has made it especially challenging to arrange for the funding required to provide on-going technical support for this collaborative effort. A second \$25,000 grant has been secured from the State Records Board to help pay software maintenance costs and some interim technical support costs. For the project to survive and prosper it will be necessary to identify sustainable funding for the dedicated technical support required.

Status: Continuation. Twelve state and local government agencies endorsed a Project Charter to indicate their support for, and partnership in, developing this online, enterprise-level GIS/geospatial data mapping and services portal. The OCIO was asked to be the lead agency for this collaborative project. Funding was secured for a two-year pilot project and through a contract between the OCIO and UNL a Project Manager was hired. A working prototype of this data sharing and web services portal was developed. The specialized online GIS server software was purchased and installed on OCIO servers along with the customized NebraskaMAP application. In addition to facilitating the location and access of GIS data, two initial applications/services were developed: serving statewide street centerline-address data (with a geocoding service) and serving statewide aerial imagery. With the end of the initial two-year pilot project funding, the Project Manager position was terminated. The prototype continues to function from its current home on the OCIO servers. However, with no dedicated technical support staff, the further development of the program is severely limited. The interagency NebraskaMAP Partners Committee is working with the OCIO and the GIS Council to explore avenues for sustainable funding for the necessary technical support. In the interim, some Partner agencies are lending technical personnel to help maintain the system.

Action: Street Centerline-Address Database. Update an existing statewide street centerline-address database with more recent data and develop a plan (including responsibilities and resource requirements) for the on-going maintenance of a composite, “best available”, statewide street centerline/address database.

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: State Government Council; GIS Council

Timeframe: December 31, 2012

Funding: Limited development funding is potentially available through the State Patrol and its Fusion Center Project. Data development funding is on-going through Public Service Commission, Dept. of Roads, and several local governments.

Status: Continuation. An interagency working group of the GIS Council developed draft guidelines for the integration of street centerline-address data from multiple sources into a composite statewide dataset. The staff of the NebraskaMAP project, with limited funding available from NEMA and the State Patrol, developed an initial composite statewide dataset following these draft guidelines. This initial composite dataset was completed in early 2010 and it involved the integration of data from the Public Service Commission’s E911 efforts, Douglas, Sarpy and Lancaster Counties, and the Department of Roads. This dataset is now at least 1-½ years old and more current data has been developed from all of the original data providers. All of the original data providers are willing to share their more recent street centerline-address data. The challenges are to finalize a broadly accepted data model, identify a lead agency, find the funding required, and the development of the interagency agreements necessary to support the ongoing maintenance of this critical dataset.

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

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: State Government Council; GIS Council

Timeframe: December 31, 2013

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

Status: Continuation. The NITC has adopted a Geospatial Metadata Standard (http://www.nitc.state.ne.us/standards/data/metadata_standard_20050923.pdf), which calls for the progressive documentation of state agency geospatial data, within a one-year timeframe (originally by Sept. 2006). The Department of Natural Resources, in partnership with the Nebraska GIS Council, originally developed a Nebraska Geospatial Data Center, which included metadata development tools. More recently new online metadata develop tools have been integrated into the NebraskaMAP. Metadata training sessions have been held in Lincoln and Omaha. Despite the existence of the NITC standard requiring metadata, the availability of metadata development tools and training, there remains a large body of state agency GIS/geospatial data that has not been documented with metadata and has not been listed either on the Data Center Clearinghouse Catalog or the more recent NebraskaMAP portal. It is hoped that that development of the NebraskaMAP will help to further the development of metadata documentation, as metadata is a requirement for the functioning of the NebraskaMAP online data sharing tools.

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

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: State Government Council; GIS Council

Timeframe: December 2012

Funding: A \$50,000 strategic planning grant proposal has been awarded by the Federal Geographic Data Committee (FGDC) to the Office of the CIO on behalf of the Nebraska GIS Council. The majority of these grant funds are to be used to hire a planning consultant.

Status: Continuation. The GIS Council has endorsed a major outreach and planning effort to develop a new GIS/Geospatial Strategic Plan with the goal of

facilitating the coordination and collaboration of the broader GIS user community in Nebraska. Due to a prioritization of other efforts, this strategic planning process has been delayed but will proceed in 2011-12. A Strategic Planning Advisory Committee has been established to oversee the process. An RFP for GIS Strategic Planning has been released and a contract has been signed with Applied Geographics, Inc, a national consulting firm, to assist the GIS Council with this strategic planning effort. The GIS Council, through its Planning Advisory Committee, will lead this process but the active support of the NITC, the State Government Council and its member agencies will be very helpful.

Action: Planning for Periodic, Collaborative Orthoimagery Acquisition.

Research and develop recommendations for standards, policies, infrastructure, and funding to support collaborative efforts by state, local and federal agencies to periodically acquire updated orthoimagery. Most GIS applications require or benefit from the availability of current aerial imagery. The acquisition of updated, orthorectified (corrected for camera tilt and the slope of the earth's surface) imagery requires a significant public investment, but if done collaboratively, on a regular periodic basis, these costs can be minimized and shared across a broad user community.

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: GIS Council, state, local and federal government agencies

Timeframe: December 2012

Funding: It is believed that existing staff and resources will be sufficient to complete this planning process.

Status: Continuation. It is expected that this effort will largely integrated into the larger Nebraska GIS Strategic Planning process. Efforts will be made to learn from, and build on, existing collaborative imagery acquisition efforts such as the Nebraska-Iowa Regional Orthoimagery Consortium (NIROC) and the USDA Farm Services Agency – National Aerial Imagery Program (NAIP).

Action: Statewide Land Record Information System. Work with local governments, state agencies, and the private sector to develop a collaborative plan, standards/guidelines, and the infrastructure necessary to encourage and facilitate the ongoing integration of separately-maintained state, city, and county land records into an integrated statewide land records system capable of

providing reliable online access to this critical data, maintaining restricted privacy access as necessary, and supporting a variety of applications by multiple agencies.

Lead: NITC GIS Administrative Manager, Nebraska GIS Council

Participating Entities: GIS Council; Nebraska Association of County Officials; Department of Revenue, Property Assessment Division

Timeframe: December 31, 2012

Funding: Staffing resources are currently available to support the collaborative planning and standards/guidelines development. The initial hardware and software are available through the NebraskaMAP data sharing and web services network. As more detailed plans are developed related to the specifics of the architecture and protocols for an integrated land record system, additional resources may be necessary to provide the technical support required to design and implement this system.

Status: New. NITC Land Record Information and Mapping Standards have been adopted with the goal of enabling the integration of local government land records into a statewide dataset. Current intergovernmental working group efforts are focused on developing guidelines for a common geodatabase model that would be freely available to local governments to adopt. The foundation for a decentralized data sharing and web services system has been established by the NebraskaMAP project. Local governments, state agencies, and the private sector need to be engaged in a collaborative planning process to define a shared vision of such a collaborative data sharing and integration system.

3. Explore opportunities and options relating to desktop and server virtualization in state government.

Lead: State Government Council

Participating Entities: State Government Council and Technical Panel

Timeframe: 2012

Funding: None

Status: New.

Standards and Guidelines

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

Lead: Rick Becker

Participating Entities: Technical Panel, State Government Council

Timeframe: Ongoing

Funding: None

Status: Ongoing. New and revised standards and guidelines adopted in 2010-2011: NITC 4-201: Web Branding and Policy Consistency; NITC 1-201: Agency Information Technology Plan Form; NITC 4-205: Social Media Guidelines; NITC 3-202: Land Record Information and Mapping Standard; NITC 5-204: Linking a Personal Portable Computing Device to the State Email System; NITC 5-102: Microsoft Enterprise Agreement – Home Use Program Policy; NITC 7-201: Network Edge Device Standard for Entities Choosing to Connect to Network Nebraska

Other

5. Review issues and determine process for maintaining an inventory of non-education state government technology assets, including hardware, applications, and databases.

Lead: Office of the CIO

Participating Entities: State Government Council

Timeframe: 2012

Funding: None

Status: Continuation

6. Provide access to OCIO electronic billing information for state agencies.

Lead: Steve Schafer

Participating Entities: Office of the CIO and State Government Council

Timeframe: 2012

Funding: None

Status: Continuation. Billing detail for all Office of the CIO services is now available electronically. This gives customers access to much more information in a more flexible format than previously available. Several agencies have allowed the Office of the CIO to end sending paper copies of the billing detail with the monthly invoice. The Office of the CIO will continue improving electronic access and eventually plans to eliminate paper copies for most state agencies.

7. Moving State email to the cloud.

Lead: Office of the CIO

Participating Entities: Office of the CIO and State Government Council

Timeframe: 2012

Funding: None

Status: New

Future Action Items

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

- Active Directory
- Automated Building Systems (HVAC, access, etc.)
- Backup Management
- Database Management
- Desktop Support
- Electronic Filing
- Encryption
- Enterprise Knowledge Management Databases
- General Platform Management
- Help Desk
- Payment Portal
- Project Management
- R&D
- Remote Access
- Software Deployment and Management
- SQL Database Design and Development
- Voice Network Design

- VoIP
- Wireless
- Wiring Services

Completed Action Items (2007-2011)

- 1. New and revised standards and guidelines adopted:** [2007] NITC 8-303: Remote Access Standard; NITC 4-204: Emergency Information Page; NITC 8-304: Remote Administration of Internal Devices; NITC 8-103: Minimum Server Configuration; NITC 7-103: SMTP Routing Standard; NITC 7-102: DNS Forwarding Standard; NITC 8-101: Information Security Policy; NITC 8-102: Data Security Standard; NITC 8-301 Password Standard; and NITC 5-201: Email Policy for State Government Agencies. [2008-2009] NITC 1-101: Definitions; NITC 1-103: Waiver Policy; NITC 1-201: Agency Information Technology Plan; NITC 1-202: Project Review Process; NITC 1-203: Project Status Reporting; NITC 1-204: IT Procurement Review Policy; NITC 1-205: Enterprise Projects; NITC 5-202: Blocking Email Attachments; NITC 5-301: Use of Computer-based Fax Services by State Government Agencies; NITC 7-101: Acceptable Use Policy; NITC 7-403: Scheduling Standard for Synchronous Distance Learning and Videoconferencing; NITC 8-301: Password Standard; NITC 8-401: Incident Response and Reporting Standard. [2010-2011] NITC 4-201: Web Branding and Policy Consistency; NITC 1-201: Agency Information Technology Plan Form; NITC 4-205: Social Media Guidelines; NITC 3-202: Land Record Information and Mapping Standard; NITC 5-204: Linking a Personal Portable Computing Device to the State Email System; NITC 5-102: Microsoft Enterprise Agreement – Home Use Program Policy; NITC 7-201: Network Edge Device Standard for Entities Choosing to Connect to Network Nebraska
- 2. Review and revise procurement review process for IT related purchases by state agencies.** (2007)
- 3. Review options for integrating agency IT plans and IT project proposal forms into new budget system.** (2007)
- 4. Email shared service implementation.** (2009)
- 5. Video conferencing shared service implementation.** (2009)
- 6. Instant messaging shared service implementation.** (2009)
- 7. Review secure file transfer shared service options.** (2009)
- 8. RFP for contract vendors that provide temporary IT personnel.** (2009)
- 9. Review issues and determine process for project status reporting.** (2009)
- 10 GIS - Statewide LiDAR Acquisition.** (2010)
- 11. Implement enterprise content management (ECM) as a shared service.** (2011)
- 12. Implement interactive VRU applications as a shared service.** (2011)

E-Government

2012-2014

Objective

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

Description

The three goals for e-government are:

- **Government-to-Citizen and Government-to-Business.** Anyone needing to do business with state government will be able to go to the state's Web site, easily find the information or service they need, and if they desire, complete all appropriate transactions electronically. Areas to be addressed include citizen portal enhancement; business portal enhancements; education portal; and forms automation.
- **Government-to-Government.** State agencies will improve services and increase the efficiency and effectiveness of government operations through collaboration, communication, and data sharing between government agencies at all levels.
- **Government-to-Employee and Internal Operations.** Agencies will examine internal operations to determine cost-effective e-government applications and solutions. The purpose of these efforts is to improve efficiency and effectiveness by replacing manual operations with automated techniques.

The e-government principles guiding the council are:

- E-government should be considered a continuous process of using technology to serve citizens and improve agency operations;
- Internet technologies create new opportunities for major change, including self-service, integration of information and services, and elimination of time, distance and availability of staff as constraints to providing information and services;
- Agencies have responsibility for performing statutory functions, which means that agency directors must retain ownership of data, responsibility over the use of information technology, and prioritization of projects within the agency to achieve

the greatest benefit;

- Cooperation is critical to achieving the goals of e-government, in order to integrate information and services and allow the easy exchange of information;
- An enterprise approach is essential to e-government, including the topics of accessibility for disabled persons, architecture, directories, funding, portal, privacy, security, and other issues; and
- E-government is defined as the use of technology to enhance information sharing, service delivery, constituency and client participation, and governance by transforming internal and external relationships.

Benefits

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

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

Action Plan

Action Items

1. Provide better mobile browsing access and functionality for state government websites, including offering mobile apps when suitable.

Lead: State Government Council

Participating Entities: Office of the CIO, Webmasters Workgroup

Timeframe: Ongoing

Funding: None

Status: Revised.

2. Provide for better access to information and services from the OCIO by providing services through an online Apps Catalog and Store.

Lead: Steve Schafer

Participating Entities: Office of the CIO, State Government Council

Timeframe: 2012

Funding: To be determined.

Status: Continuation.

3. Maintain the Education Portal on the State of Nebraska website.

Lead: Nebraska.gov (Nebraska Interactive LLC)

Participating Entities: Education Council

Timeframe: Ongoing

Funding: No funding requested for this action item at this time

Status: Continuation.

Future Action Items

1. Work with the Nebraska.gov Manager and county officials to provide the means for online payment of property taxes and other local fees. This system is currently being provided by NACO/MIPS. Nebraska.gov will consider the cost benefit of moving forward with this project.
2. Work with the Nebraska State Patrol to review options for providing online access to certain, limited, criminal history information.
3. Develop an online application for use by businesses attempting to find a suitable site for business development.
4. Develop strategies to address the following government-to-government activities:
 - Intergovernmental Cooperation Groups. Expand upon current intergovernmental cooperative efforts like the CJIS Advisory Committee and the GIS Council; and develop new cooperative groups for those agencies that have specific, shared interests.
 - Integration of Government Information and Services. Develop strategies for using Internet technologies to provide integrated access to information and services to

citizens, businesses, employees, and other governmental entities.

- Forms Automation. Work with state agencies and political subdivisions to identify and prioritize opportunities for automating forms that local government uses to interact with state government.

5. The State Government Council will identify specific improvements and value-added services to be incorporated into the state employee portal.

6. Develop method of providing authentication for “first time” users.

Completed Action Items (2007-2011)

1. Phase 1 of the online business registration project was completed in November 2007 with the creation of the Nebraska One-Stop Business Registration Information System website (<https://www.nebraska.gov/osbr/>).

2. Department of Motor Vehicles provided for online specialty plate ordering in March 2008.

3. Phase 2 of the online business registration project was completed in January 2009. In December of 2008, new code was launched, giving One Stop users the option to create a basic account allowing them to save their business start up checklist, and to file online. In January of 2009 the first online filings were integrated. The Office of the Secretary of State’s Business Division accepted its first corporate filings online through the system, LLC Biennial Reports and LLP Annual reports.

4. Department of Motor Vehicles provided for online vehicle registration renewals in December 2008.

5. Department of Motor Vehicles provided for online driver license renewals in April 2010.

6. Nebraska Judicial System developed mobile apps for the Nebraska Court Calendar in December 2010.

7. Nebraska Internship website launched by the Department of Economic Development in August 2011.

IT Project Proposal Report - Detail
Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM
Budget Cycle: 2012 Deficit **Version: AF - AGENCY FINAL REQUEST**

IT Project : Transfer NPERS Infrastructure to OCIO

General Section

| | | |
|---|--|--------------------------|
| Contact Name : Fred Turner | E-mail : Fred.Turner@Nebraska.Gov | Agency Priority : |
| Address : 1221 N. Street, Suite 325 P.O. Box | Telephone : 402 471 7076 | NITC Priority : |
| City : Lincoln | | NITC Score : |
| State : Nebraska | Zip : 68509- | |

Expenditures

| IT Project Costs | Total | Prior Exp | FY10 Appr/Reappr | FY12 Request | FY13 Request | Future Add |
|--------------------------------------|----------|-----------|------------------|--------------|--------------|------------|
| Contractual Services | | | | | | |
| Design | 0 | 0 | 0 | 0 | 0 | 0 |
| Programming | 0 | 0 | 0 | 0 | 0 | 0 |
| Project Management | 0 | 0 | 0 | 0 | 0 | 0 |
| Data Conversion | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Contractual Services | 0 | 0 | 0 | 0 | 0 | 0 |
| Telecommunications | | | | | | |
| Data | 0 | 0 | 0 | 0 | 0 | 0 |
| Video | 0 | 0 | 0 | 0 | 0 | 0 |
| Voice | 0 | 0 | 0 | 0 | 0 | 0 |
| Wireless | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Telecommunications | 0 | 0 | 0 | 0 | 0 | 0 |
| Training | | | | | | |
| Technical Staff | 0 | 0 | 0 | 0 | 0 | 0 |
| End-user Staff | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Training | 0 | 0 | 0 | 0 | 0 | 0 |

IT Project Proposal Report - Detail
Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM
Budget Cycle: 2012 Deficit **Version: AF - AGENCY FINAL REQUEST**

Expenditures

| IT Project Costs | Total | Prior Exp | FY10 Appr/Reappr | FY12 Request | FY13 Request | Future Add |
|---------------------------------------|--------------|------------------|-------------------------|---------------------|---------------------|-------------------|
| Other Operating Costs | | | | | | |
| Personnel Cost | 0 | 0 | 0 | 0 | 0 | 0 |
| Supplies & Materials | 0 | 0 | 0 | 0 | 0 | 0 |
| Travel | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Other Operating Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Capital Expenditures | | | | | | |
| Hardware | 0 | 0 | 0 | 0 | 0 | 0 |
| Software | 0 | 0 | 0 | 0 | 0 | 0 |
| Network | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Capital Expenditures | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL PROJECT COST | 0 | 0 | 0 | 0 | 0 | 0 |

Funding

| Fund Type | Total | Prior Exp | FY10 Appr/Reappr | FY12 Request | FY13 Request | Future Add |
|----------------------|--------------|------------------|-------------------------|---------------------|---------------------|-------------------|
| General Fund | 0 | 0 | 0 | 0 | 0 | 0 |
| Cash Fund | 0 | 0 | 0 | 0 | 0 | 0 |
| Federal Fund | 0 | 0 | 0 | 0 | 0 | 0 |
| Revolving Fund | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Fund | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL FUNDING | 0 | 0 | 0 | 0 | 0 | 0 |
| VARIANCE | 0 | 0 | 0 | 0 | 0 | 0 |

IT Project Proposal Report - Detail
Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM
Budget Cycle: 2012 Deficit **Version: AF - AGENCY FINAL REQUEST**

IT Project: Transfer NPERS Infrastructure to OCIO

EXECUTIVE SUMMARY:

The transfer of the Nebraska Public Employees Retirement Systems (NPERS) infrastructure to the Office of the OCIO is driven by economies and efficiencies gained in moving to a virtual environment, increased capability for disaster recovery and relocating NPERS offices from Great Western to the Assurity Building (formerly Woodmen building) in the fall 2012 or spring 2013.

GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):

Project description : Existing servers will be virtualized and traditional equipment replacement costs, maintenance and upgrade costs, will be eliminated. Existing cooling, monitoring and fire suppression equipment costs will also be eliminated. Relocation and virtualization of this equipment at the OCIO will allow NPERS IT Infrastructure and Support personnel to focus on software management and reduce their time focused on hardware management. Relocate the existing NPERS infrastructure to the OCIO. NPERS has no option to build a new server room in their targeted new location, the Assurity Building, now owned by the State.

This move will eliminate an existing server room at NPERS along with costs associated with cooling, fire suppression, servers and equipment. The move will require that all NPERS backup tapes be converted to a backup format used by the OCIO.

PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):

4. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers). The project will accommodate the physical move of the Retirement Agency from its current location to the Assurity/Woodmen building. Analyzing a cost comparison between NPERS vs. OCIO hosting, an approximate \$4000 savings in operating costs is projected by the 2018-2019 budget period.

5. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

Moving NPERS from Great Western to the Assurity/Woodmen Building requires a change in the location of our infrastructure. Doing nothing is not an option. Additionally, NPERS will not be permitted to create a server room in the Woodmen building thus relocating the infrastructure to the OCIO makes good business sense for now and any future moves the agency might face..

IT Project Proposal Report - Detail
Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM
Budget Cycle: 2012 Deficit **Version: AF - AGENCY FINAL REQUEST**

6. If the project is the result of a state or federal mandate, please specify the mandate being addressed.

NPERS is working with the State Building Division to move the agency from the Great Western Building to the Assurity/Woodmen building.

TECHNICAL IMPACT (20 PTS):

Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

This project moves NPERS infrastructure from its existing location at 1221 N Street, Suite 325, to the OCIO 501 building first floor server room. Additionally, this will involve the virtualization of 20 NPERS servers, 3 of which will be retired due to OCIO hosting services going forward. Tape media backup will be eliminated and backup data will be converted to a format compatible with OCIO data backup requirements. Communication between the OCIO and the NPERS agency located in the Assurity Building will occur across the State's backbone. Disaster recovery communication will occur through an internet connection between the OCIO and a disaster recovery offsite location.

8. Address the following issues with respect to the proposed technology:

- Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.

This hardware migration and conversion will provide NPERS a reliable, secure and scalable platform that will replace and improve the existing infrastructure as well as provide the required flexibility should additional agency physical moves take place.

- Address conformity with applicable NITC technical standards and guidelines (available at <http://nitc.ne.gov/standards/>) and generally accepted industry standards.

The existing NPERS infrastructure was built in conformity with NITC technical standards and guidelines and the transition of this environment to the OCIO will conform to those standards and guidelines.

- Address the compatibility with existing institutional and/or statewide infrastructure.

This migration, working in conjunction with the OCIO, will meet existing institutional and statewide infrastructure guidelines.

PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):

9. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

IT Project Proposal Report - Detail

Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM

Budget Cycle: 2012 Deficit Version: AF - AGENCY FINAL REQUEST

The project is segmented by physical-to-virtual migration, backup migration and file store migration. Planning for all three phases begins by mid September 2011 and continues until January 2012. Testing commences in February 2012 with OCIO hosting officially beginning in March of 2012. A migration schedule begins in April 2012 for the physical-to-virtual migration, backup and tape conversion as well as file store migration. Cutover to the OCIO is to be completed by mid July, 2012.

The project team is headed by Chad Schlotfeld, IT Infrastructure and Support Lead and is supported by Dean Gress, IT Infrastructure and Support Analyst. Both are NPERS IT resources. OCIO resources will also participate in the project as required.

- 10. List the major milestones and/or deliverables and provide a timeline for completing each.
See attached.
- 11. Describe the training and staff development requirements.
None at this time.
- 12. Describe the ongoing support requirements.
NPERS Infrastructure and Support personnel will continue to be responsible for NPERS software and the identification and resolution of any known hardware/connection issues with NPERS infrastructure hosted by the OCIO.

Attachments:

MigrationTimeline Milestones.xlsx

RISK ASSESSMENT (10 PTS):

- 13. Describe possible barriers and risks related to the project and the relative importance of each.

| Risk | Risk Level | Risk Plan |
|--|------------|--|
| Delay in obtaining hardware/software resources from the OCIO Assurity Building availability delayed as promised. | H | Possibly delay agency physical move |
| | L | Project can be implemented as planned with connection from OCIO to Great Western building. |
| Unforeseen connections issues | M | Call upon OCIO infrastructure resources (and Saber resources) as needed |

- 14. Identify strategies which have been developed to minimize risks.

NPERS is working closely with the OCIO well in advance of our target date communicating our needs clearly through meetings (as required) and emails.

IT Project Proposal Report - Detail
Agency: 085 - PUBLIC EMPLOYEES RETIREMENT SYSTEM
Budget Cycle: 2012 Deficit **Version: AF - AGENCY FINAL REQUEST**

NPERS is meeting regularly with State Building Division personnel coordinating space requirements and availability date of the new facility (Assurity Building).

FINANCIAL ANALYSIS AND BUDGET (20 PTS):

15. Financial Information

See "Server Hosting Comparison Spreadsheet" below for OCIO hosting costs projected to FY 2018-2019. Additionally, see Deficit Spending Request Summary noting that item number 1, Migration of NPERS Servers, contains the OCIO hosting costs for FY 2012-2013.

Attachments:

ServerHostingComparison (2).xlsx

Deficit Spending Request Summary Budget Request.docx

2011-12 Major Migration Schedule

| | <u>Physical-to-Virtual Migration</u> | <u>Backup Migration</u> | <u>File Store Migration</u> |
|--------|--------------------------------------|-------------------------|-----------------------------|
| Jun-11 | | | |
| Jul-11 | | | |
| Aug-11 | | | |
| Sep-11 | Planning | Planning | Planning |
| Oct-11 | Planning | Planning | Planning |
| Nov-11 | Planning | Planning | Planning |
| Dec-11 | Planning | Planning | Planning |
| Jan-12 | Planning | Testing | Planning |
| Feb-12 | Testing | Testing | Planning |
| Mar-12 | Testing | OCIO Protection Begins | Planning |
| Apr-12 | Utility Server Migration | NPERS Backup Offline | Planning |
| May-12 | ST/Dev Migration | Tape Conversion | Testing |
| Jun-12 | UAT Migration | Tape Conversion | Testing |
| Jul-12 | PRD Migration | Tape Conversion | NAS Cutover |
| Aug-12 | | | |
| Sep-12 | | | |

NPERS Hosting Cost Comparison

| Item | 2012-2013 | | 2013-2014 | | 2014-2015 | | 2015-2016 | | 2016-2017 | | 2017-2018 | | 2018-2019 | |
|----------------------------------|------------------|-----------------|-----------------|-----------------|------------------|-----------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted | NPERS Hosted | OCIO Hosted |
| Cooling ¹ | \$1,280 | \$0 | \$1,325 | \$0 | \$1,370 | \$0 | \$1,415 | \$0 | \$1,465 | \$0 | \$1,515 | \$0 | \$1,565 | \$0 |
| Fire Suppression ² | \$130 | \$0 | \$135 | \$0 | \$140 | \$0 | \$145 | \$0 | \$150 | \$0 | \$155 | \$0 | \$160 | \$0 |
| Servers & Equipment ³ | \$35,765 | \$0 | \$36,975 | \$0 | \$200,370 | \$0 | \$0 | \$0 | \$0 | \$0 | \$42,230 | \$0 | \$43,660 | \$0 |
| Virtual Servers ⁴ | \$0 | \$28,450 | \$0 | \$29,525 | \$0 | \$30,654 | \$0 | \$31,810 | \$0 | \$33,020 | \$0 | \$34,275 | \$0 | \$35,580 |
| SAN Storage ⁵ | \$0 | \$4,100 | \$0 | \$4,665 | \$0 | \$5,085 | \$0 | \$5,305 | \$0 | \$6,035 | \$0 | \$6,865 | \$0 | \$7,805 |
| NAS Storage ⁶ | \$0 | \$1,025 | \$0 | \$1,165 | \$0 | \$1,325 | \$0 | \$1,510 | \$0 | \$1,715 | \$0 | \$1,950 | \$0 | \$2,220 |
| Backups ⁷ | \$4,810 | \$18,630 | \$4,915 | \$18,630 | \$5,020 | \$18,630 | \$5,125 | \$18,630 | \$5,235 | \$18,630 | \$5,345 | \$18,630 | \$5,460 | \$18,630 |
| Antivirus ⁸ | \$1,770 | \$1,440 | \$1,830 | \$1,490 | \$1,895 | \$1,540 | \$1,960 | \$1,590 | \$2,025 | \$1,645 | \$2,095 | \$1,700 | \$2,165 | \$1,755 |
| Totals: | \$43,755 | \$53,645 | \$45,180 | \$55,475 | \$208,795 | \$57,234 | \$8,645 | \$58,845 | \$8,875 | \$61,045 | \$51,340 | \$63,420 | \$53,010 | \$65,990 |
| Total NPERS Hosted: | \$419,600 | | | | | | | | | | | | | |
| Total OCIO Hosted: | \$415,654 | | | | | | | | | | | | | |

¹NPERS cooling costs at Great Western include routine maintenance charges. The OCIO cooling cost is included in the rack space and virtual machine charge.

²NPERS fire suppression costs at Great Western include ongoing system maintenance and monitoring fees. The OCIO fire suppression cost is included in the rack space and virtual machine charge.

³NPERS servers/data center costs at Great Western for 2012-2014 include the maintenance renewals of all of the equipment. In 2014-2015 all of the equipment will need to be retired and replaced. In 2017-2019 the new equipment will have maintenance renewals each year. The OCIO servers/data center equipment costs are \$0, because all NPERS software and data will reside on OCIO-owned equipment.

⁴NPERS virtual server costs at Great Western are \$0, because all of NPERS servers are existing physical servers. OCIO virtual server costs will include the virtualization of 20 of the existing NPERS servers. 3 of the existing NPERS servers will be retired at this point, because they host services that will be provided by OCIO going forward.

⁵NPERS SAN storage costs at Great Western are \$0, because all of NPERS' data is stored on existing physical servers and attached storage. OCIO SAN storage costs include the storage of all major NPERS SQL databases, as well as all imaging data, on the OCIO SAN. The current size of this data as of 4/2011 is approximately 1100GB. The future SAN costs take into account the 25% average annual growth rate of the NPERS SAN data and the 9% average annual cost decline of magnetic storage as reported by the US Bureau of Labor Statistics.

⁶NPERS NAS storage costs at Great West are \$0, because all of NPERS' data is stored on existing physical servers and attached storage. OCIO NAS storage costs include the storage of the file server data and the software distribution data. The current size of this data as of 4/2011 is approximately 550Gb. The future NAS costs take into account the 25% average annual growth rate of the NPERS NAS data and the 9% average annual cost decline of magnetic storage as reported by the US Bureau of Labor Statistics.

⁷NPERS backup costs at Great Western include tape media and renewal of Symantec Backup Exec. The backup hardware costs are included in the servers price line. The OCIO backups cost includes backup of all of NPERS data. The current size of the NPERS data is 2250GB and an average growth rate of 25% annually is estimated. Also accounted for is the 20% annual decline in tape media costs per Gb.

⁸NPERS antivirus costs at Great Western include renewal of Symantec Endpoint Protection. The antivirus software is installed on an existing multipurpose server that is included in the servers price line. The OCIO antivirus cost includes the OCIO managed antivirus solution.

Note: The cost estimates originate from both readily attainable price rates or, when price rates were not readily attainable, were extrapolated from earlier purchases. An inflation rate of 3.38% was used in several line items to estimate future costs of the items. Exceptions accounting for known divergences from the 3.38% inflation rate are noted in the spreadsheet footnotes. OCIO costs were based on the OCIO shared services rates for FY2010.

NPERS IT Deficit Spending Request Summary

This deficit spending request covers the approximate IT expenses for four items:

- 1.) **Migration of the NPERS servers** from NPERS to the OCIO Virtual Machine (VM) environment. This migration will provide economies in the elimination of hardware maintenance and replacement, backup tapes and management, and disaster recovery capability.

1.) Migration of servers from NPERS to OCIO (1-Time Costs)

Physical-to-Virtual Migration

| | | |
|------------------|-------------------|--|
| Virtual Machines | \$9,000.00 | Includes virtualization of 20 NPERS servers. 3 of the existing NPERS servers will be retired because hosting services are provided by OCIO going forward. |
| Storage | \$750.00 | Includes the storage of all major NPERS SQL databases plus imaging data. Current size is approximately 1100GB. |
| Sub-total | \$9,750.00 | |

Backup Migration (Tapes)

| | | |
|------------------|-------------------|---|
| Backups | \$7,000.00 | Includes backup all NPERS data. Current size is approximately 2250GB. |
| Sub-total | \$7,000.00 | |

File Store Migration

| | | |
|------------------|-----------------|---|
| Storage | \$500.00 | Includes the storage of file server data and software distribution data. Current size is approximately 550GB. |
| Sub-total | \$500.00 | |

| | | |
|-----------------------------|--------------------|--|
| Total Migration Cost | \$17,250.00 | |
|-----------------------------|--------------------|--|

| Project # | Agency | Project Title |
|-----------|------------------------------------|---------------------------------------|
| 85-01 | Public Employees Retirement System | Transfer NPERS Infrastructure to OCIO |

SUMMARY OF REQUEST (Executive Summary from the Proposal)

[Full text of all proposals are posted here: http://nitc.ne.gov/nitc/documents/2012_deficit/index.html]

The transfer of the Nebraska Public Employees Retirement Systems (NPERS) infrastructure to the Office of the OCIO is driven by economies and efficiencies gained in moving to a virtual environment, increased capability for disaster recovery and relocating NPERS offices from Great Western to the Assurity Building (formerly Woodmen building) in the fall 2012 or spring 2013.

FUNDING SUMMARY

| NPERS IT Deficit Spending Request Summary | | |
|---|--------------------|---|
| This deficit spending request covers the approximate IT expenses for four items: | | |
| 1.) Migration of the NPERS servers from NPERS to the OCIO Virtual Machine (VM) environment. This migration will provide economies in the elimination of hardware maintenance and replacement, backup tapes and management, and disaster recovery capability. | | |
| 1.) Migration of servers from NPERS to OCIO (1-Time Costs) | | |
| Physical-to-Virtual Migration | | |
| Virtual Machines | \$9,000.00 | Includes virtualization of 20 NPERS servers. 3 of the existing NPERS servers will be retired because hosting services are provided by OCIO going forward. |
| Storage | \$750.00 | Includes the storage of all major NPERS SQL databases plus imaging data. Current size is approximately 1100GB. |
| Sub-total | \$9,750.00 | |
| Backup Migration (Tapes) | | |
| Backups | \$7,000.00 | Includes backup all NPERS data. Current size is approximately 2250GB. |
| Sub-total | \$7,000.00 | |
| File Store Migration | | |
| Storage | \$500.00 | Includes the storage of file server data and software distribution data. Current size is approximately 550GB. |
| Sub-total | \$500.00 | |
| Total Migration Cost | \$17,250.00 | |

PROJECT SCORE

| Section | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum Possible |
|---|------------|------------|--------------|-----------|------------------|
| Goals, Objectives, and Projected Outcomes | 15 | 15 | 10 | 13 | 15 |
| Project Justification / Business Case | 25 | 25 | 15 | 22 | 25 |
| Technical Impact | 20 | 20 | 10 | 17 | 20 |
| Preliminary Plan for Implementation | 8 | 10 | 6 | 8 | 10 |
| Risk Assessment | 10 | 8 | 5 | 8 | 10 |
| Financial Analysis and Budget | 20 | 20 | 18 | 19 | 20 |
| | | | TOTAL | 87 | 100 |

REVIEWER COMMENTS

| Section | Strengths | Weaknesses |
|---|--|---|
| Goals, Objectives, and Projected Outcomes | <ul style="list-style-type: none"> - Goal makes absolute sense for all the reasons stated in the proposal - Promotes efficiencies, results in cost savings, takes advantage of agencies' strengths and potentials. - Project intent is consistent with industry best practice and modest cost reduction is achieved. | <ul style="list-style-type: none"> - This is a multi-modal migration project including server, primary storage, backup storage and backup system. The intent is clear and in keeping with industry best practice, however, there is not enough detail to determine whether desirable outcomes will be achieved. For example, how will the scalability of the database environment be achieved in a virtualized environment. |
| Project Justification / Business Case | <ul style="list-style-type: none"> - Move to the OCIO appears to be the appropriate move. Cost savings should be realized - The responses suggest that this project will consolidate servers from both a facilities and quantitative perspective. The limited detail in the proposal outlines a course of action consistent with industry best practice. | <ul style="list-style-type: none"> - It is clear that a change in facilities has provided an opportunity to consolidate IT infrastructure. There is no mention that other options were explored and the overall reduction in cost relative to the total cost is less than anticipated. |
| Technical Impact | <ul style="list-style-type: none"> - All indications in the proposal appear to be both technically appropriate and doable. - On the face of it, the move to a virtualized environment is desirable from a manageability, scalability, and ecological perspective. Based on the limited information, the course of action is a reasonable response to the opportunity provided by a change in facilities. | <ul style="list-style-type: none"> - There is, simply, insufficient detail to assess the technical impact. What is good, "in theory" requires a great deal of preparation to be successful "in practice." One hopes the level of detail being considered is much greater than the scant outline provided. |
| Preliminary Plan for Implementation | <ul style="list-style-type: none"> - Phased in three stage plan. Sound project team identified. - It appears there is a reasonable amount of time to properly plan, test, and validate project deliverables. | <ul style="list-style-type: none"> - There could be a need for some limited training in the area of communication between NPERS and OCIO in the area of help desk or outage conditions. - Responses lack sufficient detail and it is unclear how a move of this magnitude will be achieved without the need for any professional development. It may well be that the OCIO will be responsible for the migration to and maintenance of the virtualized environment, SAN environment and backup environment. Such detail is not provided and it is implausible that the expertise in each of the critical infrastructure areas already exists. |
| Risk Assessment | <ul style="list-style-type: none"> - Appropriate risks have been addressed | <ul style="list-style-type: none"> - Physical relocation brings many factors - some that are not in direct control of project managers - into play. - A great deal of resources in the form of time, money and work were expended to implement the update to the NPERS environment. Given the documented complexity of that implementation, a move of this magnitude requires far more in the way of a risk assessment and mitigation plan than |

| Section | Strengths | Weaknesses |
|-------------------------------|---|--|
| Financial Analysis and Budget | <ul style="list-style-type: none"> - Cost avoidance of \$ 200,000 is a good financial reason to move to OCIO. All the costs on the data sheet appear reasonable - Cost savings in 2014/15 clearly demonstrate the strategic and financial benefits of the project. - Costs are broken out and an explanation of some of those costs is provided. | is documented.... <ul style="list-style-type: none"> - The cost of backups remains constant despite an estimated annual growth of 25%. There is not sufficient documentation to explain how cost will remain constant despite growth of 150% over the documented project timeline. |

TECHNICAL PANEL COMMENTS

| Technical Panel Checklist | | | | Technical Panel Comment |
|---|-----|----|---------|-------------------------|
| | Yes | No | Unknown | |
| 1. The project is technically feasible? | ✓ | | | |
| 2. The proposed technology is appropriate for the project? | ✓ | | | |
| 3. The technical elements can be accomplished within the proposed timeframe and budget? | ✓ | | | |

STATE GOVERNMENT COUNCIL COMMENTS

| Category | Description |
|-----------------|---|
| Mandate | Required by law, regulation, or other authority. |
| Tier 1 | Highly Recommended. Mission critical project for the agency and/or the state. |
| Tier 2 | Recommended. High strategic importance to the agency and/or the state. |
| Tier 3 | Other. Significant strategic importance to the agency and/or the state; but, in general, has an overall lower priority than the Tier 1 and Tier 2 projects. |
| Tier 4 | Insufficient information to proceed with a recommendation for funding. |

External Data hosting Standard Statement

Purpose:

Externally hosted data needs to be protected according to the sensitivity of the information that is transmitted and stored. There are specific controls that are required by law (or required under other circumstances) that must be met to a high degree of certainty in order to consider that the data is properly protected.

Policy:

To require the review of the data classification and protections needed for any data that may be “hosted” at a site that is not fully and directly controlled by the State of Nebraska. To identify potential risks to that information so that the Agency can properly evaluate the risk of the potential hosting of that data. To acknowledge the residual “hosting” risk by formally submitting a classification/risk acceptance evaluation.

Exclusions to this policy:

All data that is considered public information.

All data that is hosted by a State entity and under direct State control.

All data that is hosted with a Federal government entity.

Procedure:

Identify what data elements will be involved with the potential hosting arrangement

Classify the data involved

Determine how the data will be utilized and transmitted during the hosting life-cycle

Review of Standards needed to conform to data protection requirements

Review best practices on the protection of the data

Review the contract language for appropriate data protection language requirements

Identify the residual risk to the data

Submit an evaluation of the risk to the hosted data with acknowledgement of the residual risk

External Data Hosting Guidelines

Best-Practices:

NIST Standards
Data Classification Toolkit: [Link](#)
Cloud Security Alliance Matrix/Info: [Link](#)
Confidential Data Handling Blueprint: [Link](#)

Policy requirements:

[8-102](#) Data Security Standard - Requirement to classify data and to designate a data owner.
Identify risk to information based on classification and use.
Document and acknowledge risk acceptance.

Recommended controls:

SAS70 (T1 or T2)/SSAE16
ISO 27000 Series
FISMA: [Link](#)
HIPAA: [Link](#)

Related NITC policy requirements:

[8-101](#) Information Security Policy
Page 7 sharing non-public data
[8-201](#) Information Technology Disaster Recovery Plan Standard
Business Impact Analysis required, Resumption plans required
BIA requires Identifying risk and classifying data
[8-301](#) Password Standard
State systems are required to follow – is it a State system?
[8-302](#) Identity and Access Management Standard for State Government Agencies
All new web apps that utilize logins need to conform.
[8-303](#) Remote Access Standard
Agency is required to ensure secure remote access
Resource Document:
[8-RD-01](#) Security Officer Instruction Guide [[Word](#) Version]
Chapter 3 – Business Impact Analysis walk-through
Nebraska Statutes:
[87-801](#) Financial Data Protection and Consumer Notification of Data Security Breach Act of 2006

RFP issues to be addressed:

Application security, remediation requirements and audits
Data Protection contractual language
Breach/Incident notification circumstances and requirements
Indemnification language
Use of data
Investigative issues
Termination of contract
After contract issues