Nebraska Information Technology Commission

Project Proposal Form

**New or Additional State Funding Requests
for Information Technology Projects**

FY2006-07 Biennium

Project Title	**Network Technology Renewal Plan**
Agency/Entity	**Health and Human Services System**

About this form…

The Nebraska Information Technology Commission ("NITC") is required by statute to "make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested." In order to perform this review, the NITC and DAS-Budget Division require agencies/entities to complete this form when requesting new or additional funding for technology projects. For more information, see the document entitled "Guidance on Information Technology Related Budget Requests" available at http://www.nitc.state.ne.us/forms/.

Electronic versions of this form are available at http://www.nitc.state.ne.us/forms/.

For questions or comments about this form, contact the Office of the CIO/NITC at:

    Mail: Office of the CIO/NITC
                521 S 14th Street, Suite 200
                Lincoln, NE 68508
    Phone: (402) 471-3560
    Fax: (402) 471-4608
    E-mail: info@cio.state.ne.us

Submission of Form

Completed forms must be submitted by the same date biennial budget requests are required to be submitted to the DAS Budget Division. Completed project proposal forms must be submitted via e-mail to info@cio.state.ne.us. The project proposal form should be submitted as an attachment in one of these formats: Microsoft Word; WordPerfect; Adobe PDF; or Rich Text Format. Receipt of the form by the Office of the CIO will be confirmed by e-mail. If an agency is unable to submit the application as described, contact the Office of the CIO prior to the deadline, to make other arrangements for submitting a project proposal form.

Section I: General Information

Project Title	Network Technology Renewal Plan
Agency (or entity)	Health and Human Services System

Contact Information for this Project:

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Section II: Executive Summary

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

This project addresses the Health and Human Services Systems (HHSS) IT Technology Plan goal of maintaining a stable, responsive, dependable and secure Wide Area and Local Area Network Infrastructure. The project includes the acquisition and installation of Routers, Switches and un-interuptable Power Supplies to replace obsolete equipment currently in operation or equipment reaching the end of it's useful life.

This project supports the Agency's staff and ultimate mission of helping people live better lives through effective health and human services. The replacement of the network equipment across the HHSS supports intra-agency collaboration, communication, cooperation and security. The data network is the common information technology platform upon which staff can depend and one that enables them to securely connect to HHSS information technology resources across the state and with other public and private networks.

This project also supports the NITC (Nebraska Information Technology Commission) goal of aggregating demand, reducing acquisition and operational costs and creating support networks.

Section III: Goals, Objectives, and Projected Outcomes (15 Points)

1. Describe the project, including:
    *   Specific goals and objectives;
    *   Expected beneficiaries of the project; and
    *   Expected outcomes.

Replace Aging HHSS Netwwork production equipment.

We are currently operating and maintaining 643 Local Area Network Switches, 143 Wide Area Network Routers and 254 un-interuptable power supplies in support of the HHSS wide area and local area networks. 119 of the Switches, 98 of the Routers, and 151 of the un-interuptable power supplies are currently operating past the manufacturer's original mean time between failure (MTBF) estimates and have exceeded their useful life expectancy. Additionally, 175 HHSS sites do not currently have managed power supply protection.

We need to replace 25% of these devices each year over the next two years (July 2005-June 2007). Continuing to meet our technology infrastructure goal of operating and maintaining stable, responsive, dependable and secure networks depends on our ability to operate equipment that does not unreasonably exceed the manufacturer's projected operational life.

The beneficiaries of the project are all HHSS staff requiring computer access to any or all of the HHSS computer resources needed to accomplish their jobs. The installation of newer technology enables greater flexibility and more robust safeguards to meet business demands. As demand for bandwidth continues to increase, more advanced hardware is required to meet business goals.

Network operations support staff will benefit from the new equipment as a result of reduced time required to perform maintenance, respond to failures and analyze resource utilization.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

    All HHSS Network devices targeted for replacement have been replaced.

3. Describe the project's relationship to your agency comprehensive information technology plan.

    This project is included in the HHSS Comprehensive IT Plan in the Technology renewal section.

Section IV: Project Justification / Business Case (25 Points)

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).

    All HHSS staff are dependent on the HHSS Network to accomplish their jobs. The HHSS Network is critical to the HHSS mission and has an extremely high reliability expectation. Any one of the networks that is not functional for one day could cost the HHSS $800 to $32,000 in lost productivity. We operate in 190 locations across the State including ten 24-hour facilities. Network connectivity is critical to providing services. Newer technology would enable better tracking and utilization of resources. Some of the older devices currently in use are incapable of supporting newer security standards.

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.

    There really are no alternatives to upgrading network infrastructure components. Existing equipment is not capable of meeting requirements in terms of security, throughput and reliability. Considerable research has been done to identify equipment that offers the features, functionality and reliability needed at reasonable cost.

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

Section V: Technical Impact (20 Points)

7. 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.

    The Project replaces aging network devices that are depended upon to support the critical daily business functions of the Health and Human Services System. Replacement will allow

us to continue the operation of a reliable, stable and responsive network required to stay in business. Additionally, the acquisition of the new Routers and Switches will significantly enhance the HHSS network security capabilities.

8. Address the following issues with respect to the proposed technology:
    - Describe the reliability, security and scalability (future needs fro growth or adaptation) of the technology.

    This effort will result in a continuation of the secure, reliable and stable performance of our local area and wide area networks.

    - Address conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards.

    Manufacturers Mean Time Between Failure (MTBF) projections are commonly relied upon to project depreciation and replacement schedules.

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

    This effort will enable the operational IT technology supporting the Health and Human Services System to maintain the desired network compatibility with other state or external entities.

Section VI: Preliminary Plan for Implementation (10 Points)

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.

    All tasks will be managed under the scope of a single project parsed into three distinct, parallel areas: routers, switches and UPS systems at large sites and 24-hour facilities and switches and UPS systems at other remote sites. Project will consist of several major phases. Phase I will consist of documenting existing infrastructures so priorities and schedules can be established. Remaining phases will be divided into six-month time frames and involve upgrading network infrastructure in remote locations. The project is being managed and supported top down with the direction and approval of the HHSS policy cabinet, Information System and Technology Administrator, managers and staff. The project team principally consists of staff of the division of information systems and technology.

10. List the major milestones and/or deliverables and provide a timeline for completing each.

    Verify and document existing infrastructure which may require site surveys – 2 months
    Prioritize and establish schedules – 2 months
    Upgrade approximately 25% of the sites – 6 months
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Follow up to ensure technology renewal occurs at regular intervals

11. Describe the training and staff development requirements.

The project will be done with existing staff. No special training required.

12. Describe the ongoing support requirements.

Normal on-going network operation and maintenance support.

Section VII: Risk Assessment (10 Points)

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

Barriers would include: Insufficient funding
                                        Lack of staff resources

Risks would include: Loss of critical project staff
                                          Loss of Funding
                                          Delays in equipment acquisition

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

Project planning, tracking and control
Project timelines in 6-month increments.
Technically qualified project staffing
Top down buy-in
Excellent metrics available for decision making and proper planning

Section VIII: Financial Analysis and Budget (20 Points)

15. Financial Information

Financial and budget information can be provided in either of the following ways:

One-time cost to purchase hardware $576,500
Annual cost to lease routers $ 79,200
No staffing in addition to permanent HHSS technical staff will be required.

16. Provide a detailed description of the budget items listed above. Include:
    - An itemized list of hardware and software.
    - If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.
    - Provide any on-going operation and replacement costs not included above, including funding source if known.
    - Provide a breakdown of all non-state funding sources and funds provided per source.

One-time cost to purchase 414 switches $414,000
Cost to purchase 325 UPS systems $162,500
Annual cost to lease routers $ 79,200
                                           $655,700

                                    $327,850 State funds
                                    $327,850 Federal funds

17. Please indicate where the funding requested for this project can be found in the agency budget request, including program numbers.

Funding request for this project can be found in Agencies budget request under BU 26630xxx. No new funding is being requested.