# Technical Panel of the

# **Nebraska Information Technology Commission**

Friday, November 8, 2002 - 8:00 a.m. University of Nebraska Nebraska Union - Room will be Posted Lincoln, Nebraska

### **AGENDA**

# **Meeting Documents:**

Click the links in the agenda or click here for all documents

- 1. Roll Call and Meeting Notice
- 2. Public Comment
- 3. Approval of Minutes\* October 9, 2002
- 4. Project Reviews

FY2003-05 BIENNIAL BUDGET REQUESTS\*

- Summary Sheets with Scores and Comments
- <u>Full text</u> of the requests (for your information)

VOLUNTARY REVIEW
<u>Last Mile Wireless Effort</u> - Wayne State College

- 5. Standards and Guidelines
  - Recommendation to the NITC\*

| Groupware Architecture | Secure E-mail for State Government Agencies |
|------------------------|---|
| Security Architecture  | Disaster Recovery Planning Procedures       |

• Set For Public Comment\*

| Groupware Architecture | Use of Computer-based Fax Services by State Government Agencies |
|------------------------|---|
|------------------------|---|

- 6. Work Group Charters
  - Statewide Synchronous Video Network Work Group Draft Work Group <u>Charter</u>
  - Network Architecture Work Group Current Charter
- 7. Regular Informational Items and Work Group Updates (as needed)
  - Wireless Project
  - Network Architecture Work Group / NETCOM
  - Nebraska Network Work Group
  - Security Architecture Work Group

- Accessibility Architecture Work Group
- Application Implementation Work Group
- NIS
- Technical Panel Action Plan
- 8. Other Business
- 9. Next Meeting Date

Regular Meeting - Wednesday, November 13, 2002 Regular Meeting - Wednesday, December 11, 2002

10. Adjourn

\* Denotes Action Items

NITC and Technical Panel Websites: <a href="http://www.nitc.state.ne.us/">http://www.nitc.state.ne.us/</a>

Meeting notice posted to the NITC Website: 10 OCT 2002

Meeting notice posted to the Nebraska Public Meeting Calendar: 10 OCT 2002

Agenda posted to the NITC Website: 31 OCT 2002

### **TECHNICAL PANEL**

Nebraska Information Technology Commission Wednesday, October 9, 2002, 9:00 a.m. Varner Hall-Regents Board Room 3835 Holdrege, Lincoln, Nebraska PROPOSED MINUTES

### MEMBERS PRESENT:

Walter Weir, University of Nebraska
Steve Henderson, IMServices, State of Nebraska (alternate for Brenda Decker)
Christy Horn, University of Nebraska, Compliance Officer
Steve Schafer, Chief Information Officer, State of Nebraska
Kirk Langer, Lincoln Public Schools, K-12 Representative
Mike Beach, Nebraska Educational Telecommunications Commission

# CALL TO ORDER, ROLL CALL, AND MEETING NOTICE

Mr. Weir called the meeting to order at 9:10 a.m. Six members were present at the time of roll call. A quorum existed to conduct official business. Mr. Weir stated that the meeting notice was posted to the NITC and Nebraska Public Meeting Calendar web sites on September 13, 2002 and that the meeting agenda was posted to the NITC Website on October 3, 2002.

### **PUBLIC COMMENT**

None.

### **APPROVAL OF SEPTEMBER 11. 2002 MINUTES**

Steve Schafer noted a grammatical error in the minutes.

Mr. Henderson moved to approve the September 11, 2002 meeting minutes as changed. Mr. Schafer seconded the motion. Roll call vote: Beach- Yes, Henderson-Yes, Horn-Yes, Langer-Yes, Schafer-Yes, and Weir-Yes. All were in favor and motioned carried.

### LB 833 UPDATE - Wavne Fisher

Wayne Fisher gave a report detailing the Distance Education Network Completion (DENC) Grant Install Status in Year 1. Mr. Fisher reported that all equipment is in place at all schools and referred to a document that included information about the installs, including school district, consortium name, equipment, installation cost, and connectivity cost.

# **PROJECT REVIEWS**

STATE RECORDS BOARD GRANT APPLICATIONS - Board of Public Accountancy

Mr. Schafer provided background information about e-licensing stating that the ultimate goal is an enterprise approach. Members agreed that the proposal for an on-line process was a good idea; however a judgment on the technical aspects cannot be passed because of the lack of narrative information on the these aspects of the project.

### Mr. Schafer moved to have the Technical Panel make the following findings:

- The project is technically feasible.
- The application does not provide sufficient information to determine if the proposed technology is appropriate for the project. Any technical solution should conform to the on-line licensing approach being coordinated by the Office of the CIO.
- The technical elements can be accomplished within the proposed time frame. There is insufficient information to determine if the budget is appropriate.

Mr. Beach seconded the motion. Roll call vote: Beach- Yes, Henderson-Yes, Horn-Yes, Langer-Yes, Schafer-Yes, and Weir-Yes. All were in favor and motioned carried.

# FY2003-05 BIENNIAL BUDGET REQUESTS - Approval of project reviewers

Mr. Weir reported that Donna Liss is no longer with the University of Nebraska, therefore will not be among the potential project reviews for FY2003-05 Biennial Budget. It was suggested that Rick Haugerud be added to the list of reviewers. Mr. Becker stated that the individuals listed have done reviews in the past and would be willing to do them again this year. Mr. Wier suggested drafting a letter stating that the individual has been nominated as a potential grant reviewer. Mr. Becker will draft the letter and send to all reviewers.

Dr. Horn moved to accept the list of reviewers as changed. Mr. Weir seconded the motion. Roll call vote: Beach-Yes, Henderson-Yes, Horn-Yes, Langer-Yes, Schafer-Yes, and Weir-Yes. All were in favor and motioned carried.

# STANDARDS AND GUIDELINES - SET FOR PUBLIC COMMENT

Mr. Schafer reported that the Disaster Recovery Planning Procedures document has been a working draft for almost three

months. Please note that currently, this is a guideline, not a standard, therefore adherence is voluntary. Mr. Schafer stated that with the Tech Panel's approval, he could take to NITC in November for a formal review after a 30-day public comment period. This document could be given to State Government Agencies as they form their disaster recovery plan.

Mr. Becker stated that each agency who submitted a 2002 Agency IT Plan were asked to indicate if they had a disaster recovery plan, however they were not asked to submit the plan.

Mr. Schafer moved that the document be set for a 30-day public comment period. Mr. Henderson seconded the motion. Roll call vote: Beach- Yes, Henderson-Yes, Horn-Yes, Langer-Yes, Schafer-Yes, and Weir-Yes. All were in favor and motioned carried.

### **WORK GROUP CHARTERS**

DISCUSSION: STATEWIDE SYNCHRONOUS VIDEO NETWORK WORKGROUP - <u>Draft Work Group Charter</u>
Mr. Beach reported that the next step is to deal with issues of inoperability. Mr. Beach agreed to take on this task. Mr. Becker will send the Word version of the charter to Mr. Beach. The charter will be on the agenda for the next meeting.

# DISCUSSION: NETWORK ARCHITECTURE WORK GROUP - Current Charter

Ms. Decker was not present at the meeting; therefore this item will be on the next meeting agenda.

### REPEAL: VIDEO STANDARDS WORK GROUP - Charter

Mr. Beach moved to repeal the charter. Mr. Schafer seconded the motion. Roll call vote: Beach- Yes, Henderson-Yes, Horn-Yes, Langer-Yes, Schafer-Yes, and Weir-Yes. All were in favor and motioned carried.

### REGULAR INFORMATION ITEMS AND WORK GROUP UPDATES

WIRELESS PROJECT – STEVE SCHAFER/BRENDA DECKER

Mr. Schafer reported that the Alliance met again and viewed presentations by vendors who bid on the wireless project.

### NETWORK ARCHITECTURE WORK GROUP / NETCOM

Ms. Decker was not at the meeting to give an update. Mr. Weir made the suggestion to invite key stakeholders and have a brain storming session to work on a strategy for this project. He asked Rick Golden to invite the contacts from MOREnet to a meeting to occur after the next Technical Panel meeting.

### SECURITY ARCHITECTURE WORK GROUP

Mr. Schafer reported that the external extrusion test RFP has been issued. Responses are due November 8, 2002. Mr. Weir showed interest in the work group and would be interested in being on the vendor selection team. Currently, the work group is working on security awareness aimed at the general user. Security Awareness Training is being offered online to agencies. Jerry Hielen of IMServices is the person to contact with questions about the Web-based training.

### ACCESSIBILITY ARCHITECTURE WORK GROUP

Dr. Horn was happy to report that the state was awarded a \$1,000,000 grant. Dr. Horn distributed a document describing the goals of the project.

### NIS

Mr. Schafer reported that the NIS project is running readiness assessments. October 15 was the implementation date for some Human Resource functions. November 4 is the date for financial elements, however this date will probably be moved back slightly. The payroll aspect will be examined on January 1, 2003.

### **TECHNICAL PANEL ACTION PLAN**

Mr. Beach suggested changing the wording on TP 2.1 from "to be determined" to "varies" or "multiple" for the lead.

# **OTHER BUSINESS**

Dennis Linster from Wayne State briefed the members about recent developments in Wayne, Nebraska. Currently, Wayne State College is talking with the mayor and the City Administrator about connectivity with the community. Wayne has nine separate buildings used for government and city business that are not connected to the Internet. Wayne State College is trying to show some leadership and develop a model that would allow the college to serve as an access point for city government. The college would provide access using wireless capabilities from a high-rise dormitory on campus.

The local public library has voiced its support for the model. In theory, the college would be the backbone for city buildings,

county court house and others. The college could absorb them into their network without complications. In short, Wayne would be helping out the community for a minimal cost with a secure solution.

Members suggested that Mr. Linster organize the concept into a document that outlines the participating parties, key stakeholders, goals, technical issues and other information. Mr. Linster agreed to prepare a document to be shared at the next panel meeting.

# **NEXT MEETING AND ADJOURNMENT**

The next meeting is Friday November 8, 2002. The meeting will begin at 8:00 a.m. in the City Campus Union. A meeting with representatives from MOREnet will be scheduled immediately after the regular meeting.

Mr. Schafer moved to adjourn the meeting. Dr. Horn seconded the motion. All were in favor. Meeting adjourned.

Minutes were taken by Jen Soucie Kitt of the CIO's and reviewed by Rick Becker, Government IT Manager.

# Agency Information Technology Projects FY2003-05 Biennial Budget

November 2002

NEBRASKA
INFORMATION
TECHNOLOGY
COMMISSION

# Nebraska Information Technology Commission State Government Council FY2003-05 Information Technology Project Proposals

|    | Project # | Agency                     | Project Title                                      | FY2003-04       | FY2004-05       | Score |
|----|-----------|----------------------------|--|-----------------|-----------------|-------|
| 1  | 21-01     | State Fire Marshal         | FLST Web-Based Application - Phase II              | \$ 20,000.00    |                 | 84    |
| 2  | 25-01     | HHSS                       | Convert Lincoln NSOB to Ethernet Topology          | \$ 517,750.00   | \$ 517,750.00   | 81    |
| 3  | 25-02     | HHSS                       | Server Operating System Replacement                | \$ 130,375.00   | \$ 130,375.00   | 75    |
| 4  | 25-03     | HHSS                       | Desktop Operating System Replacement               | \$ 589,500.00   | \$ 783,300.00   | 67    |
| 5  | 25-04     | HHSS                       | Computer Hardware Renewal Policy and Program       | \$ 4,646,400.00 | \$ 4,646,400.00 | 79    |
| 6  | 25-05     | HHSS                       | Help Desk Call Tracking System                     | \$ 75,000.00    |                 | 83    |
| 7  | 25-06     | HHSS                       | CHARTS Project                                     |                 |                 | 73    |
| 8  | 25-07     | HHSS                       | HIPAA Project                                      |                 |                 | 84    |
| 9  | 25-08     | HHSS                       | NFOCUS Project                                     |                 |                 | 78    |
| 10 | 37-01     | Workers Compensation Court | Extended Computer Automation Project               | \$ 326,000.00   | \$ 24,000.00    | 80    |
| 11 | 47-01     | NET                        | KLNE-TV NTSC Replacement Transmitter               | \$ 650,000.00   |                 | 90    |
| 12 | 47-02     | NET                        | KMNE-TV NTSC Replacement Transmitter               |                 | \$ 650,000.00   | 90    |
| 13 | 47-03     | NET                        | Phone System Replacement / Switch Upgrade          |                 | \$ 198,000.00   | 79    |
| 14 | 78-01     | Crime Commission           | CJIS - Criminal Justice Integration and Automation | \$ 1,020,112.00 | \$ 790,112.00   | 88    |

# **Project Proposal - Summary Sheet**

# Project # 21-01

| Agency             | Project                               | FY2003-04 | FY2004-05 |
|--------------------|---------------------------------------|-----------|-----------|
| State Fire Marshal | FLST Web-Based Application - Phase II | \$20,000  |           |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This proposed project is to complete the items that were not finished in the FLST application during the last budget cycle (security, inspections, reporting, permit printing). These were not completed due to a low estimate and misunderstandings between IMS and this agency of the requirements for the application. As a result we ran out of money to complete the application as planned. Some minor modifications to a few existing components also need to be made during this phase. We cannot fully implement the application without these components, particularly security and reporting, being added to the application.

### **FUNDING SUMMARY**

|                         | Estimated Prior<br>Expended | Req | uest for FY2003-04<br>(Year 1) | Total           |
|-------------------------|-----------------------------|-----|--------------------------------|-----------------|
| 2. Contractual Services |                             |     |                                |                 |
| 2.1 Design              | \$<br>15,500.00             | \$  | 5,600.00                       | \$<br>21,100.00 |
| 2.2 Programming         | \$<br>55,097.00             | \$  | 14,400.00                      | \$<br>69,497.00 |
| TOTAL COSTS             | \$<br>70,597.00             | \$  | 20,000.00                      | \$<br>90,597.00 |
| General Funds           |                             |     |                                | \$<br>-         |
| Cash Funds              | \$<br>70,597.00             | \$  | 20,000.00                      | \$<br>90,597.00 |
| Federal Funds           |                             |     |                                | \$<br>-         |
| Revolving Funds         |                             |     |                                | \$<br>-         |
| Other Funds             |                             |     |                                | \$<br>-         |
| TOTAL FUNDS             | \$<br>70,597.00             | \$  | 20,000.00                      | \$<br>90,597.00 |

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 11         | 12         | 12.3 | 15                  |
| IV: Project Justification / Business Case      | 24         | 20         | 21         | 21.7 | 25                  |
| V: Technical Impact                            | 19         | 18         | 18         | 18.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 8          | 7          | 7          | 7.3  | 10                  |
| VII: Risk Assessment                           | 8          | 9          | 7          | 8.0  | 10                  |
| VIII: Financial Analysis and Budget            | 17         | 15         | 17         | 16.3 | 20                  |
|  |            |            | TOTAL      | 84   | 100                 |

# **REVIEWER COMMENTS**

Reviewer 1: Strengths

Good explanation of alternatives.

# **Project Proposal - Summary Sheet**

### Weaknesses

- No real explanation of the stakeholders and has shown / will show acceptance by them.
- Phase 2 is a result of "a low estimate and misunderstandings between IMS and this agency" of Phase 1. I'm not sure how much confidence I have in the budget.

## Reviewer 2:

# Strengths

- Objectives are consistent with an e-government project, and measurement methods should provide a good indication of whether the project is having the desired impact.
- The business need and the rationale for dismissal of the alternative solution are adequately stated.
- The statements regarding the technical need for the project and adherence to standards are clear.
- Outline seems generally complete
- · Risks are well-stated

### Weaknesses

- There is no actual explanation of the project, although it seems to be the continuation of a project previously undertaken. Presumably the explanation is contained in the previous project proposal.
- There is no indication the agency considered NOL services as an alternative, but given that a
  large portion of the project is for the benefit of agency employees and other agencies, that option
  could be reasonably dismissed.
- Detail on tasks and timelines is lacking.
- Not really a weakness in the application, but communication (or lack thereof) appears to be the primary risk.
- The budget summary provides little detail that can be used to assess reasonableness of cost.

### Reviewer 3:

# Strengths

- This Proposal supports e-Government goals.
- Will allow people outside Lincoln to have access to the data. Also, sponsor will be able to generate many of their reports themselves. These are intangibles that are difficult to put a dollar amount on them.
- The approach uses good current technical solutions.
- The sponsor did identify, in appropriate detail, the tasks and milestones to accomplish the project.
- The sponsor appears to understand some of the more common reasons that projects can be at risk. They have been through a project already, so they have experience.
- This project is not a high cost item, compared to many other agency projects.

- Not sure how they will get "better data".
- Did not see tangible dollars identified (only a description of the benefit).
- No specific timeline has been established, but is estimated to take about 6 months. Not sure what approach was used to determine this duration.
- The sponsor did not state specifically how they were going to ensure better communication and monitor the project more closely.

# **Project Proposal - Summary Sheet**

# Project # 25-01

| Agency | Project                                   | FY2003-04 | FY2004-05 |
|--------|---|-----------|-----------|
| HHSS   | Convert Lincoln NSOB to Ethernet Topology | \$517,750 | \$517,750 |

### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project proposes to replace the Token Ring network topology used by HHSS (Health and Human Services System) in the NSOB (Nebraska State Office Building in Lincoln) with Ethernet. Ethernet is the leading network topology in use today and, as such, benefits from technological advancements in reliability, scalability and cost containment. Existing Token Ring equipment has exceeded its technical life expectancy (in use since the 1970s) and we are seeing a high rate of failure. Replacement parts are getting scarce making them very expensive. Technically skilled people required to maintain the Token Ring environment are much harder to find.

This project also addresses data cabling issues. The data cabling in place no longer meets approved standards and cannot support today's higher data transmission rates required by increased utilization and newer applications. Existing data cabling needs to be replaced according to guidelines and specifications from the Department of Administrative Services, Division of Communications.

This project supports the Agency's staff and ultimate mission of helping people live better lives through **effective** health and human services. The availability of reliable, scalable data network services is essential to the 935 staff from Finance & Support, Health & Human Services and Regulation & Licensure performing their job in the NSOB.

This project also supports the NITC (Nebraska Information Technology Commission) goal of coordinating investment in telecommunications infrastructure so as to aggregate demand, reduce costs and create support networks. The Division of Communications (DOC) and Information Management Services (IMS) have been asked to provide input and assistance in the design, implementation and support of this project. This collaboration of effort will ensure resulting infrastructure meets available guidelines and addresses NITC objectives.

### **FUNDING SUMMARY**

|                         | Request for FY2003-04<br>(Year 1) |            | Request for FY2004-05<br>(Year 2) |            | Total              |
|-------------------------|-----------------------------------|------------|-----------------------------------|------------|--------------------|
| 2. Contractual Services | •                                 |            | •                                 |            |                    |
| 2.4 Other               | \$                                | 279,250.00 | \$                                | 279,250.00 | \$<br>558,500.00   |
| 8. Capital Expenditures |                                   |            |                                   |            |                    |
| 8.1 Hardware            | \$                                | 238,500.00 | \$                                | 238,500.00 | \$<br>477,000.00   |
| TOTAL COSTS             | \$                                | 517,750.00 | \$                                | 517,750.00 | \$<br>1,035,500.00 |
| General Funds           | \$                                | 258,875.00 | \$                                | 258,875.00 | \$<br>517,750.00   |
| Federal Funds           | \$                                | 258,875.00 | \$                                | 258,875.00 | \$<br>517,750.00   |
| TOTAL FUNDS             | \$                                | 517,750.00 | \$                                | 517,750.00 | \$<br>1,035,500.00 |

Project is estimated to take 18 months to complete. This includes 3 months to order, install, configure and test key hardware components and 15 months complete the data cabling based 45 days for each of the ten wiring closets.

Total costs are estimated at \$ 1,035,500 with expenditures spread across two budget cycles.

- \$ 65,000 for the core Ethernet switch in the NSOB
- \$ 35,000 for a layer 3 switch with both Token Ring and Ethernet capabilities for transition

# **Project Proposal - Summary Sheet**

\$543,500 for horizontal data wiring (\$169,500 for voice and \$374,000 data) \$377,000 for Ethernet switches in the quadrant closets (middle of \$143,000 - \$610,000 range) \$ 15,000 for fiber installation

### PROJECT SCORE

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 11         | 14         | 14         | 13.0 | 15                  |
| IV: Project Justification / Business Case      | 20         | 24         | 23         | 22.3 | 25                  |
| V: Technical Impact                            | 16         | 15         | 19         | 16.7 | 20                  |
| IV: Preliminary Plan for Implementation        | 7          | 5          | 8          | 6.7  | 10                  |
| VII: Risk Assessment                           | 6          | 8          | 6          | 6.7  | 10                  |
| VIII: Financial Analysis and Budget            | 13         | 15         | 18         | 15.3 | 20                  |
|  | _          | •          | TOTAL      | 81   | 100                 |

### **REVIEWER COMMENTS**

### Reviewer 1:

# Strengths

- Reasonable explanation of the goals that HHSS is attempting to reach. I did not see a list of projected outcomes - just goals and objectives.
- The agency gives many examples of benefits they feel will be derived from the change.
- Agency makes a valid case for the technical solution they have chosen.
- Adequate plans for implementation.

### Weaknesses

- It is doubtful that the technology being replaced is over twenty-five years old, ten to fifteen maybe. However, there is no disagreement that the technology needs replacement.
- Statements are at times undefended. For example, a statement of "network components for Token Ring are about 5 time higher than Ethernet counterparts" is made without any substantiation.
- Statements made are somewhat misleading. For example, the cabling in the NSOB does meet CAT3 standards. CAT3 is not obsolete; it is the current voice grade standard. The additional estimated cost to ensure redundancy of \$15,000 is due to the design specified by HHSS. The State is installing CAT6 based on current standards; however, it is a negotiated item with the agency.
- No outline for the agency responsibilities to prepare staff for the disruption an installation of this type will cause, or for any training of staff to make this conversion.
- The risk assessment does not include any issues associated with delays from other sources besides IM Services or the Division of Communications. What about shipping delays, or equipment delivery delays, or equipment that does not perform to the levels expected, or the HHSS operational issues that may cause delays? Training issues??
- The budget describes Ethernet switches that ranged from \$143,000 \$610,000. The choice of budgeting for something in the middle price range (\$377,000 each) appears to be a little on the high side. It may be been more appropriate to have seen a recommended type of switch with a cost associated.

# Reviewer 2:

# Strengths

- Very worthwhile project. Relationship to agency goals well documented.
- Good list of benefits. Savings are probably low, but hard to identify.

# **Project Proposal - Summary Sheet**

- Section indicates that agency has implemented Ethernet topology in majority of existing sites, but still have not identified network equipment that will be used for this project. \$467,000 is a big spread between low end and high end equipment needs. This section also indicates that "bandwidth to individual workstations will not be increased". Why not? What will be the speed to the workstations, it's not identified?
- No discussion of project sponsor, nor stakeholders. Does not address work to be performed at each workstation to change from token ring to Ethernet.
- Need to get plan better defined including final decision on equipment and its cost. Doesn't identify any costs for changing the workstations from token ring to Ethernet.

### Reviewer 3:

# Strengths

- Describes why it is needed quite well.
- Seems like a somewhat conservative estimate of benefits.
- Fairly good technical plan.
- Expensive, but I would think absolutely necessary.

- Is the 935 users all HHSS staff or everyone in the NSOB?
- Not sure that the acquisition and staffing ramifications are fully addressed.
- Is there a funding risk? Is there redundancy built in? Does this only address HHSS portion of the NSOB or all of NSOB and the agencies there in?
- Is this for only HHSS part or for the whole building?

# **Project Proposal - Summary Sheet**

# Project # 25-02

| Agency | Project                 | FY2003-04 | FY2004-05 |
|--------|-------------------------|-----------|-----------|
| HHSS   | Server Operating System | \$130,375 | \$130,375 |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project addresses the Health and Human Services Systems (HHSS) IT Technology Plan goal of maintaining a stable, responsive, dependable Local Area Network Server architecture. The project includes the acquisition and installation of a new server operating system required to replace the current NTserver operating systems that will be technically obsolete as of June 30, 2003.

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 server operating systems across the HHSS supports intra-agency collaboration, communication and cooperation and security. It continues the operation of a common information technology platform upon which staff can depend and one that enables them to securely connect to HHSS information technology resources and other networks.

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

### **FUNDING SUMMARY**

|                         | Request for FY2003-04 (Year 1) Request for FY2004-05 (Year 2) |            | Total            |                  |
|-------------------------|---|------------|------------------|------------------|
| 8. Capital Expenditures | •   |            |                  |                  |
| 8.2 Software            | \$  | 130,375.00 | \$<br>130,375.00 | \$<br>260,750.00 |
| TOTAL COSTS             | \$  | 130,375.00 | \$<br>130,375.00 | \$<br>260,750.00 |
| General Funds           | \$  | 65,187.50  | \$<br>65,187.50  | \$<br>130,375.00 |
| Federal Funds           | \$  | 65,187.50  | \$<br>65,187.50  | \$<br>130,375.00 |
| TOTAL FUNDS             | \$  | 130,375.00 | \$<br>130,375.00 | \$<br>260,750.00 |

Cost of the purchase of Windows2000 Server licenses: \$ 260,750. No staffing in addition to permanent HHSS technical staff will be required. No additional Hardware will be required.

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 9          | 13         | 12         | 11.3 | 15                  |
| IV: Project Justification / Business Case      | 15         | 21         | 15         | 17.0 | 25                  |
| V: Technical Impact                            | 12         | 18         | 15         | 15.0 | 20                  |
| IV: Preliminary Plan for Implementation        | 6          | 9          | 8          | 7.7  | 10                  |
| VII: Risk Assessment                           | 5          | 8          | 10         | 7.7  | 10                  |
| VIII: Financial Analysis and Budget            | 12         | 18         | 20         | 16.7 | 20                  |
|  | •          |            | TOTAL      | 75   | 100                 |

# **Project Proposal - Summary Sheet**

### **REVIEWER COMMENTS**

### Reviewer 1:

# Strengths

- Will update version levels for servers to industry current version
- No formal training needed

### Weaknesses

- Project is not fully defined, upgrade of servers will have large-scale side effects but they are not discussed. 350 Servers seems to be too many.
- Other options are not actually explored; one is the possibility of consolidating servers
- It would follow that hardware that was installed with the software would not last years longer without some additional changes, evidently they will need no changes?
- Significant risk of implementation interoperability issue and probable outages. No formal training with OJT poses a significant risk in implementation.
- No hardware expenses for ANY of the 350 servers? Server consolidation possibility should be addressed.

### Reviewer 2:

### Weaknesses

- Only measurement and assessment method is really like a stated outcome.
- Other solutions discussed might have been other operating systems or a slower phased in approach. Only solution discussed is Windows 2000 and full replacement of all server operating systems.
- Total budget is cost of software. I assume that means only staff will install, or if outside help will
  install that those funds will come from operational money already in HHSS budget.

### Reviewer 3:

## Strengths

- The description of the project and its goals is concise and focused.
- The justification clearly makes the point that the NT operating system will not be supported in the future placing reliability at risk.
- The migration process is clearly spelled out.

- The measurement is simplistic and doesn't provide any real metric of success. A migration of this magnitude including active directory needs to be assessed with respect to such criteria as usability, total cost of ownership, etc.
- Very little background is provided as to the function of the 350 servers. If they are simply file
  servers there are options outside of the Windows environment including Linux, OS X Server, and
  UNIX with SAMBA. Those servers providing application services are, of course, constrained by
  platform. That assessment can't be made based on this proposal.
- In a migration of this magnitude including a change of directory structure there are many implementation issues including training. There is no mention of technical elements outside of the upgrade from NT to 2000 or .Net.
- The staff development requirements are confined to operational staff suggesting that there are no client implications. An upgrade of this magnitude includes client issues and these should be addressed.

# **Project Proposal - Summary Sheet**

# Project # 25-03

| Agency | Project                              | FY2003-04 | FY2004-05 |
|--------|--------------------------------------|-----------|-----------|
| HHSS   | Desktop Operating System Replacement | \$589,500 | \$783,300 |

### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project addresses the Health and Human Services Systems (HHSS) IT Technology Plan goal of achieving a single Desktop Platform for all HHSS staff. The project includes the acquisition and installation of new operating systems, desktop memory upgrades, hard drive upgrades, and replacement of desktops unable to run the new operating system.

This project supports the Agency's staff and ultimate mission of helping people live better lives through effective health and human services. The standardization of desktop operating system across the HHSS supports intra-agency collaboration, communication and cooperation. It sets up a common information technology platform upon which staff can depend and one that enables them to help each other understand and effectively use the technology.

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

### **FUNDING SUMMARY**

|                         |    | Estimated Prior<br>Expended | Re | quest for FY2003-<br>04 (Year 1) | Re | quest for FY2004-<br>05 (Year 2) | Total              |
|-------------------------|----|-----------------------------|----|----------------------------------|----|----------------------------------|--------------------|
| 8. Capital Expenditures | •  |                             |    |                                  |    |                                  |                    |
| 8.1 Hardware            |    |                             | \$ | 418,500.00                       | \$ | 418,500.00                       | \$<br>837,000.00   |
| 8.2 Software            | \$ | 193,800.00                  | \$ | 171,000.00                       | \$ | 364,800.00                       | \$<br>729,600.00   |
| TOTAL COSTS             | \$ | 193,800.00                  | \$ | 589,500.00                       | \$ | 783,300.00                       | \$<br>1,566,600.00 |
| General Funds           | \$ | 96,900.00                   | \$ | 294,750.00                       | \$ | 391,650.00                       | \$<br>783,300.00   |
| Federal Funds           | \$ | 96,900.00                   | \$ | 294,750.00                       | \$ | 391,650.00                       | \$<br>783,300.00   |
| TOTAL FUNDS             | \$ | 193,800.00                  | \$ | 589,500.00                       | \$ | 783,300.00                       | \$<br>1,566,600.00 |

Costs include:

| Upgrade 4800 desktop operating system licenses. | \$<br>729,600 |
|---|---------------|
| Upgrade 4200 desktop Random Access Memory (RAM) | \$<br>147,000 |
| Replace 600 desktops                            | \$<br>690,000 |

Total: \$ 1,566,600

Funding Breakdown: \$ 783,300 Federal \$ 783,300 State

Funding Sources will vary in state and federal funding matching rates. The overall match rate was used in the calculations.

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 11         | 5          | 12         | 9.3  | 15                  |
| IV: Project Justification / Business Case      | 5          | 12         | 20         | 12.3 | 25                  |
| V: Technical Impact                            | 15         | 13         | 20         | 16.0 | 20                  |
| IV: Preliminary Plan for Implementation        | 5          | 6          | 10         | 7.0  | 10                  |
| VII: Risk Assessment                           | 5          | 3          | 10         | 6.0  | 10                  |
| VIII: Financial Analysis and Budget            | 16         | 14         | 20         | 16.7 | 20                  |
|  |            | •          | TOTAL      | 67   | 100                 |

### **REVIEWER COMMENTS**

# Reviewer 1:

# Strengths

- Fewer number of operating system versions to support
- Software upgrades are necessary to keep reasonably current
- Individual upgrades should have minimal impact on whole structure
- Costs appear reasonable

### Weaknesses

- Section IV.4 It seems unreasonable to assume 10% could stop operation and if it could, it seems that this
  upgrade without significant desktop replacement would not change that situation. No other solutions
  explored.
- Training for workers on this new operating system is missing. Does not address support issues of these new 5500 desktops.
- No plan for training of users or support teams.

### Reviewer 2:

### Weaknesses

- The 2,400 Windows 95 machines are bad candidates for upgrading to higher levels of operating systems. Printing and communications drivers are prone to failure and/or very slow response times. This is very labor intensive and has a high failure probability. These are slow and very outdated.
- This plan is mix of software and memory upgrades that will require testing and good technical support staff
- I get the sense that this is being viewed as a "Heart Transplant". Just put the new equipment in and away we go. I am afraid that HHSS is not realizing the size of the commitment to training, transferring of programs and making sure every thing works correctly.
- If the predictions of lost productivity are true then there is significant risk associated with this project.
- What are the people costs? Training costs?

### Reviewer 3:

# Strengths

- The proposal clearly states the desire for a homogeneous desktop operating environment and outlines some of the benefits for both end users and those in a support role.
- The description provides necessary information on the scope of the project and the need to update
- Clearly outlines the need for the requested update within the context of support.
- Implementation plan is clear and the timelines are reasonable.
- Risks and barriers are realistically assessed.
- Costs for listed technology are appropriate.

- A project of this magnitude will fundamentally impact every end user, however, no mention is made of how the benefits to this audience will be assessed.
- No mention of the "mission critical" applications and whether alternative computing platforms would work. Declaring that there are no options can't be verified with the information provided.

# **Project Proposal - Summary Sheet**

# Project # 25-04

| Agency | Project                                      | FY2003-04   | FY2004-05   |
|--------|--|-------------|-------------|
| HHSS   | Computer Hardware Renewal Policy and Program | \$4,646,400 | \$4,646,400 |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project proposes to replace one-fourth of the personal computers (PCs) in use by HHSS (Health and Human Services System) per year. HHSS operates approximately 5500 desktop PCs in 150 locations across the state. Many of these PCs are old. 25% were purchased prior to 1998. Use of old PCs hinder job performance for the user. The PCs are slow, the user can only have one program open at a time, many software programs will not run and they experience continual problems causing downtime and requiring a technician to come on-site to repair.

This project supports the Agency's staff and ultimate mission of helping people live better lives through **effective** health and human services. The availability of a reliable PC is essential to HHSS staff performing their job to serve the public of the State of Nebraska.

This project also supports the NITC (Nebraska Information Technology Commission) goal of developing a Technical Plan that recommends a technical infrastructure that will be scalable, reliable, and efficient.

### **FUNDING SUMMARY**

| Annual Replacement of one quarter |                           |             |                      |             |  |  |
|-----------------------------------|---------------------------|-------------|----------------------|-------------|--|--|
|                                   | Regulation<br>& Licensure | Services    | Finance &<br>Support | Total       |  |  |
| Desktops = \$1500                 | \$144,000                 | \$1,369,125 | \$369,375            | \$1,882,500 |  |  |
| Laptops = \$2000                  | \$24,000                  | \$141,000   | \$64,500             | \$229,500   |  |  |
| Subtotal                          | \$168,000                 | \$1,510,125 | \$433,875            | \$2,112,000 |  |  |
| Plus 10%                          | \$184,800                 | \$1,661,138 | \$477,263            | \$2,323,200 |  |  |
|                                   |                           |             |                      |             |  |  |
| Biennium:                         | \$369,600                 | \$3,322,275 | \$954,525            | \$4,646,400 |  |  |
|                                   |                           |             |                      |             |  |  |
| State                             | \$369,600                 | \$2,076,422 | \$954,525            | \$3,400,547 |  |  |
| Federal                           | \$0                       | \$1,245,853 | \$0                  | \$1,245,853 |  |  |

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 13         | 12         | 14         | 13.0 | 15                  |
| IV: Project Justification / Business Case      | 16         | 18         | 23         | 19.0 | 25                  |
| V: Technical Impact                            | 20         | 13         | 18         | 17.0 | 20                  |
| IV: Preliminary Plan for Implementation        | 6          | 6          | 9          | 7.0  | 10                  |
| VII: Risk Assessment                           | 7          | 6          | 8          | 7.0  | 10                  |
| VIII: Financial Analysis and Budget            | 15         | 13         | 19         | 15.7 | 20                  |
|  |            |            | TOTAL      | 79   | 100                 |

# **Project Proposal - Summary Sheet**

### **REVIEWER COMMENTS**

### Reviewer 1:

### Weaknesses

- What is the failure rate of older PCs? Is downtime significant, or do most of the benefits derive from better security by eliminating Win95 and better support by achieving standardization of hardware and operating systems?
- More information is needed to support the assumption that no additional staff will be needed to implement this policy initially. For example, what is the average time to set up new equipment and prepare old equipment for surplusing? Can that realistically be accomplished with existing staff?

# Reviewer 2: Strengths

- Hardware Replacement- good idea, may be advisable to increase to 30+% of PC's/year. A \$1200 PC can be bought. Leasing is an option to consider, but do the math of costs comparison - lease \$'s vs buy \$'s
- No question of justification or need when considering the ages of systems. Need to consider standardization of hardware, software and training.

### Weaknesses

- Need to find a low manpower way to replace many boxes.... Most vendors will pre-configure the equipment any way you want.
- Beside money problem- watch manpower and staff training needs during and after installation.
- No alternative or fail safe plan appears possible.
- Better recalculate and clarify costs- In the Desk Top Operation System portion there is 4800 software operating system licenses and in this part there is a replacement of 25% of PC's which automatically have software. That makes 6100 software upgrades plus 600 PC's listed in the software request.

# Reviewer 3: Strengths

- The sponsor has a good understanding of what they want to accomplish and a workable plan to accomplish it. There is a reasonable measurement approach. Overall, this standard replacement schedule supported by most of industries technical decision-makers.
- The sponsor appears to have a good understanding of their desktop environment.
- This project does enhance the technical environment for HHSS.
- This project has the "approval of the HHSS policy cabinet, administrators, managers and staff".
- It appears that the sponsor has given the identification of barriers and risks adequate thought.
- The sponsor appears to have a good understanding of hardware/software needs and costs.

- Not very specific about funding plan using a revolving fund to be "repaid from operations".
- It may be difficult to have on-going annual support of this effort.
- Sponsor does not explain how the strategies for minimizing risks would be accomplished.
- I am not sure if the sponsor has accounted for the staffing effort (cost) needed for this project.

# **Project Proposal - Summary Sheet**

# Project # 25-05

| Agency | Project                        | FY2003-04 | FY2004-05 |
|--------|--------------------------------|-----------|-----------|
| HHSS   | Help Desk Call Tracking System | \$75,000  |           |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

The purpose of this project is to replace the current "homegrown" Lotus Notes based call-tracking system with a new improved version. A better call tracking system will reduce Help Desk costs and increase efficiency.

The current system was developed by Andersen Consulting in Lotus Notes version 3.0. It is expensive to maintain and nearly impossible to change. Changes are needed to keep this system current with the ever-changing technology support demands of HHSS.

### **FUNDING SUMMARY**

This information is just an estimate based on research into the average cost of Help Desk Call Tracking Systems for an organization the size of HHSS. Actual cost will vary depending on selection of the vendor.

| Server -  | \$ 6,000  |
|---|-----------|
| Licenses – 45 users @ \$700 per license –             | \$31,000  |
| Add'l software – 45 users @ \$210 per license –       | \$ 9,450  |
| Maintenance agreement (for two years) -               | \$ 14,550 |
| Training (including travel expenses for two people) - | \$14,000  |
| Total -   | \$75,000  |

### **PROJECT SCORE**

| Section  | Reviewer 1                              | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|---|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 13                                      | 12         | 13         | 12.7 | 15                  |
| IV: Project Justification / Business Case      | 23                                      | 23         | 20         | 22.0 | 25                  |
| V: Technical Impact                            | 19                                      | 15         | 18         | 17.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 7                                       | 7          | 6          | 6.7  | 10                  |
| VII: Risk Assessment                           | 7                                       | 8          | 8          | 7.7  | 10                  |
| VIII: Financial Analysis and Budget            | 15                                      | 17         | 17         | 16.3 | 20                  |
|  | - · · · · · · · · · · · · · · · · · · · |            | TOTAL      | 83   | 100                 |

### **REVIEWER COMMENTS**

# Reviewer 1:

# Strengths

• Help Desk - most workable of the three plans. Their current \$3000/month maintenance can payout this in less than three years (\$3000 x 36 months = \$108,000).

- Needs more selling to potential customers and higher authority.
- Beware- 2-3 FTE are needed install, configure and implement. There is significant training costs and problem resolution issues when dealing with multiple locations.

# **Project Proposal - Summary Sheet**

# Reviewer 2:

# Strengths

- Goals and outcomes well defined and reasonable.
- Good logic used to discuss alternatives.

### Weaknesses

- Measurement and assessment methods read more like expected outcomes. Might have
  described measurements such as % less time per call, % decreased call volume, % decreased
  calls requiring a technician, % fewer calls required to fix average problem, specific reports that
  would become available that aren't currently, etc.
- Maintenance contract savings only real benefit listed. Might have discussed increased productivity of employees with less time per call and fewer calls. What additional things can the employees do since they will be on the phone with clients less?
- No strengths or weaknesses described. Assumes software will run on current workstations, but doesn't say how they know that.

# Reviewer 3:

### Strengths

Seems fairly straight forward

- Is technician access in the field via a ISP or a VPN or thru a dedicated state network connection. Is this a Internet or Intranet application (has security ramifications).
- I don't see the ability to interface to CAMS listed as a risk.
- Is there any HHSS staff operation support costs that should be listed, even if it is an ongoing operational cost.

# **Project Proposal - Summary Sheet**

# Project # 25-06

| Agency | Project        | FY2003-04 | FY2004-05 |
|--------|----------------|-----------|-----------|
| HHSS   | CHARTS Project |           |           |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

CHARTS (Children Have A Right To Support) is the state's Child Support computer system. CHARTS is a tool used by the Child Support program to enforce child support orders and collect child support money for children who need it. CHARTS is one of the reasons the state's Child Support collections have increased significantly in the last few years. Collections have increased 13.53% or \$19.2 million to an all-time high of \$161.2 million for federal fiscal year 2001.

CHARTS II was designed to support centralized collection and disbursement of Child Support payments. Previously, child support collection and disbursement is handled by Clerks of the District Court in each county. Centralization of child support collection/disbursement is mandated by the Federal government, through the 1996 PRWORA (Welfare Reform) legislation. Programming of CHARTS II was completed in 2001 and implemented in December 2001.

Nebraska successfully completed the implementation process for PRWORA (Personal Responsibility and Work Opportunity Reconciliation Act of 1996) financial distribution. The State Disbursement Unit became fully operational statewide December 21-26, 2001. Nebraska avoided the federal penalty of \$5 million for FFY 2002. Nebraska is already showing increased child support collections in 2002, 723,665 payouts issued to date for \$153,277,750.78. Health and Human Services Administration for Children and Families, Office of Child Support Enforcement acknowledged and awarded the achievement with plaques and a ceremony July 19, 2002.

Nebraska was required to implement the system statewide. The team had to prepare synchronized work plans for the implementation period for CHARTS, the State Distribution Unit (Treasurer's State Payment Center), JUSTICE (the court information system) and Douglas County.

The CHARTSII/SDU was implemented through a "rapid Phase-in" approach. In this approach, CHARTS II was implemented statewide, without a preliminary pilot period or graduated rollout. The combined effect of these characteristics put this project in a relatively high-risk bracket. The team was supported by a Steering Committee comprised of Stakeholders in HHSS/JUSTICE/Treasurers Office/DAS-IMS and the Policy Research Office.

Child support payments can now be made with credit cards, through automatic withdrawal, or by check or money order. Child support payments can also be directly deposited into bank accounts. Almost half of the child support owed in Nebraska is collected through income withholding from paychecks. Employers can now send one check to one location, rather than sending separate checks to each of the 93 counties where their employees might have had a child support court order.

All custodial and non-custodial parents were notified of the changes via mass mailings (monthly beginning in August 2001). HHSS staff provided an automated Voice Response Unit to assist parents; put the Child Support Customer Call Center in place in Wausa, NE to provide personal contact for questions; met with the Clerks of the District Court to provide information and coordinate the changes. The Treasurer's offices established a call center and installed a web site at <a href="https://www.NebraskaChildSupport.com">www.NebraskaChildSupport.com</a> for information about child support payments and a toll free number, 1-877-631-9973. Additionally child support information is available at <a href="https://www.hhs.state.ne.us">www.hhs.state.ne.us</a>.

# **Project Proposal - Summary Sheet**

# **FUNDING SUMMARY**

|       |                                 | 0             | 01 ( 5 1 (   | 0             |
|-------|---------------------------------|---------------|--------------|---------------|
| D. O. | 5.00                            | Charts Budget |              | Charts Budget |
| Db Cd | Debit Description               | FY03          | FY04         | FY05          |
|       |                                 |               |              |               |
|       | MVS - R36 PROCESSOR             | \$ 2,344,622  | \$ 2,723,640 | \$ 3,002,813  |
|       | MVS-DB2 INQUIRY CPU             | 828,515       | 967,483      | 1,065,464     |
|       | MVS-LOCAL PRINTING - 1 PART     | 331           | 324          | 324           |
|       | MVS-TAPE MOUNTS                 | 49,682        | 66,370       | 78,113        |
|       | MVS-JOB SETUP                   | 426,105       | 433,364      | 442,031       |
|       | MVS-DISK STORAGE                | 554,411       | 636,830      | 732,353       |
|       | MVS-JOB OUTPUT                  | 22,994        | 22,727       | 23,182        |
| 32    | MVS-DISPATCH ONLINE VIEW        | 2,942         | 2,854        | 2,854         |
| 34    | MVS-CICS                        | 90,000        | 110,644      | 114,962       |
| 38    | MVS-CICS TEST                   | 1,850         | 2,192        | 2,256         |
| 42    | MVS-LOCAL PRINTING - 2 PART     | 6             | 5            | 5             |
| 45    | PAGE PRINT                      | 81,180        | 74,911       | 73,413        |
| 46    | WARRANT PRINTING                | 2,051         | 1,687        | 1,653         |
| 53    | CMS-R22 PROCESSOR PRIME         | 6             | 5            | 5             |
| 64    | CMS-DISK STORAGE                | 88            | 83           | 78            |
| 107   | JOB SCHEDULER                   | 196           | 156          | 156           |
| 109   | MONTHLY SERVER SUPPORT          | 22,220        | 22,579       | 24,303        |
| 397   | SOFTWARE MAINTENANCE            | 40,645        | 55,328       | 44,571        |
| Misc. |                                 | 142           | 113          | 115           |
|       | Total                           | 4,467,986     | 5,121,296    | 5,608,651     |
|       |                                 |               |              |               |
| 900   | Contractors                     | 6,000,068     | 4,955,000    | 4,930,300     |
| 901   | FTE                             | 1,172,791     | 1,174,250    | 1,169,553     |
|       | Total Staff Cost                | 7,172,859     | 6,129,250    | 6,099,853     |
|       |                                 |               |              |               |
| 170   | DCS                             | 210,684       | 213,084      | 213,084       |
|       |                                 |               |              |               |
|       | Sub-Total                       | 11,851,529    | 11,463,630   | 11,921,588    |
|       |                                 | <br>          |              |               |
| 140   | Business Analysts               | 4,217,734     | 4,147,000    | 4,147,000     |
|       | Grand Total                     | 16,069,263    | 15,610,630   | 16,068,588    |
|       | l                               |               |              |               |
|       | HHS Budget Cost Only            | 2,827,802     | 2,827,800    | 2,827,800     |
|       | IMServices - IS & T Grand Total | 18,897,065    | 18,438,430   | 18,896,388    |

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 13         | 7          | 11.3 | 15                  |
| IV: Project Justification / Business Case      | 24         | 23         | 16         | 21.0 | 25                  |
| V: Technical Impact                            | 16         | 15         | 10         | 13.7 | 20                  |
| IV: Preliminary Plan for Implementation        | 7          | 5          | 3          | 5.0  | 10                  |
| VII: Risk Assessment                           | 9          | 8          | 3          | 6.7  | 10                  |
| VIII: Financial Analysis and Budget            | 14         | 19         | 13         | 15.3 | 20                  |
|  |            |            | TOTAL      | 73   | 100                 |

### **REVIEWER COMMENTS**

### Reviewer 1:

# Strengths

- The sponsor identified in detail the penalties if this is not done (millions of dollars). It is also Federally mandated.
- It was noted that the costs to do this project are far less than the sanctions.
- There is minimal technical impact.
- This is basically a known application and project. Not as much explanation is required.
- Items were well defined in Executive Summary.

### Weaknesses

- Gives only a brief description of the schedule in the Executive Summary.
- Appeared to show total CHARTS budget, rather than the cost of this project.

### Reviewer 2:

### Strengths

- Good job of describing overall issues and phased approach
- Mandate very clear along with financial implications.

# Weaknesses

- Success measures not clear.
- Alternative solutions? Though it sounds like the rapid development approach may have precluded it?
- I recognize that changes are enhancements to existing systems, though it might be useful to clarify the implications on workloads, growth, scalability issues, etc..?

### Reviewer 3:

# Strengths

Fair description of federal mandates and financial benefit of successfully completing project.

- · General description of project background and objectives, but few specific goals provided
- No discussion of alternative solutions.
- There was little discussion of impact on present systems, or applicable standards and compatibility issues. The nature of this project may assume that those standards will be met.
- Again, little information available. Because there is an ongoing team, these issues may be addressed, but the proposal doesn't discuss them.
- Risks are identified in terms of non compliance with Federal mandates. Risks inherent in the project are not addressed.

# **Project Proposal - Summary Sheet**

# Project # 25-07

| Agency | Project | FY2003-04 | FY2004-05 |
|--------|---------|-----------|-----------|
| HHSS   | HIPAA   |           |           |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

The State of Nebraska Health and Human Services System (HHSS) is comprised of three human services agencies. Within HHSS, the Department of Health and Human Services Finance and Support department, hereafter referred to as the Department, is the state agency designated to administer the Nebraska Medical Assistance Program (NMAP). Nebraska has a certified and operational Medicaid Management Information System (MMIS). The Department serves as the fiscal agent for the NMAP.

As a 'covered entity', the NMAP must address HIPAA compliance. The Department recently completed two planning projects related to the enhancement of the MMIS to meet HIPAA mandates and improve current business and data processes. An assessment of the impact of HIPAA legislation on its Medicaid operations and the MMIS has been completed and a project to create a new logical database model for the MMIS was concluded earlier this year. Both projects were approved by the Centers for Medicare and Medicaid (CMS – formerly HCFA) and funded at the 90% FFP level.

Achieving compliance with HIPAA regulations will require major change to the existing MMIS. Nebraska's 25 year old MMIS does not support all mandated functionality and will require broad system enhancements. N-FOCUS and several other mid-range applications will also have HIPAA impacts and require changes.

While remediation of the MMIS is by far the largest effort for HIPAA compliance, additional automated application systems and programs are impacted by HIPAA. These include Distributed Systems, AVATAR/AIMS (case management software used by the 24 hour facilities), N-FOCUS, all health systems, Mental Health and Substance abuse programs and applications, Point of Sale Drug system used by pharmacists statewide, Developmental disability programs and any other applications/programs providing direct services.

# **FUNDING SUMMARY**

### MMIS HIPAA DEVELOPMENT

| Db Cd | Debit Description              | Н  | HIPAA Budget<br>FY03 |    | HIPAA Budget<br>FY04 |    | IPAA Budget<br>FY05 |
|-------|--------------------------------|----|----------------------|----|----------------------|----|---------------------|
| 02/05 | Processor                      | \$ | 1,354,320            | \$ | 924,000              | \$ | 924,000             |
| 13    | Job Setup                      | \$ | 1,213                | \$ | -                    | \$ | -                   |
| 14    | Disk Storage                   | \$ | 201,600              | \$ | 105,000              | \$ | 105,000             |
| 15    | Job Output                     | \$ | 14,616               | \$ | -                    | \$ | -                   |
| 22    | LAN Segment Connection         | \$ | 3,600                | \$ | 3,600                | \$ | 3,600               |
| 34    | cics                           | \$ | 207,000              | \$ | -                    | \$ | -                   |
| 109   | Monthly Server Support         | \$ | 5,760                | \$ | 5,760                | \$ | 5,760               |
| 000   | Misc.                          | \$ | 1,163,000            | \$ | -                    | \$ | -                   |
|       | Total                          | \$ | 2,951,109            | \$ | 1,038,360            | \$ | 1,038,360           |
|       | Total Staff Cost               | \$ | 9,786,900            | \$ | 10,245,180           | \$ | 10,588,320          |
| 170   | DCS                            | \$ | 25,200               | \$ | 25,000               | \$ | 25,000              |
|       | HHS Budget Cost (only)         | \$ | 350,000              | \$ | 350,000              | \$ | 350,000             |
|       | IMService - IS & T Grand Total | \$ | 13,113,209           | \$ | 11,658,540           | \$ | 12,001,680          |

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 13         | 9          | 12.0 | 15                  |
| IV: Project Justification / Business Case      | 24         | 23         | 21         | 22.7 | 25                  |
| V: Technical Impact                            | 18         | 18         | 13         | 16.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 9          | 8          | 6          | 7.7  | 10                  |
| VII: Risk Assessment                           | 10         | 10         | 8          | 9.3  | 10                  |
| VIII: Financial Analysis and Budget            | 13         | 19         | 15         | 15.7 | 20                  |
|  |            |            | TOTAL      | 84   | 100                 |

### **REVIEWER COMMENTS**

# Reviewer 2:

# Strengths

- Goals very specific
- Mandate well described.
- Plans/Milestones well defined
- Risks well noted

### Weaknesses

Training and ongoing support issues/implications?

# Reviewer 3:

# Strengths

- Good discussion of benefits and of mandates leading to project.
- Milestones identified, and high level tasks. Some discussion of project team in other sections was utilized for this scoring.
- · Good discussion of some specific strategies.

- No discussion of sponsors, training requirements, or ongoing support requirements.
- Risks identified are primarily risk of non compliance with Federal requirements. No discussion of project specific risks.

# **Project Proposal - Summary Sheet**

# Project # 25-08

| Agency | Project        | FY2003-04 | FY2004-05 |
|--------|----------------|-----------|-----------|
| HHSS   | NFOCUS Project |           |           |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

The N-FOCUS application provides support and automation for the following HHSS programs:

Aid to Dependent Children/Medicaid (ADC)

Assistance to the Aged; Blind (AABD)

Adult Protective Services (APS)

Child Care (CC)

Children & Family Services/Medicaid (CFS)

Emergency Assistance (EA)

Employment First (EF)

Food Stamp Program (FSP)

Former Ward/Medicaid (FW)

Independent Living/ Medicaid (IL)

Juvenile Court (JC)

Medical (MED)

Refugee Resettlement Program (RR)

Subsidized Adoption - grant only (SA)

Subsidized Adoption/Medical (SA/Med)

Subsidized Guardianship (SG)

Subsidized Guardianship/Medical (SG/Med)

Social Services for Aged & Disabled (SSAD)

Social Services for Children & Families (SSCF)

Traumatic Brain Injury (TBI)

Waiver: Adults with Disabilities (AD) Waiver: Adults with Developmental

Disabilities (ADD)

Waiver: Children with Developmental

Disabilities (CDD)

Waiver: Developmental Disabilities Case

Management (DDCM)

Waiver: Early Intervention (EI)
Waiver: Katie Beckett Plan
Developmental Disabilities (DD)

Included in this project are the updates to the programs that include federal/state mandate or policy changes, necessary technical changes, and changes considered essential to the users of the system. N-FOCUS issues \$28 Million dollars in Benefits and Payments monthly. N-FOCUS supports 2,426 users, both internal and external access. N-FOCUS has over 200 thousand Master Cases and over 600 thousand individuals (clients and others) for whom it tracks data.

# **FUNDING SUMMARY**

|       |                             | N-F Budget   | N-F Budget   | N-F Budget   |
|-------|-----------------------------|--------------|--------------|--------------|
| Db Cd | Debit Description           | FY03         | FY04         | FY05         |
| 02    | MVS - R36 PROCESSOR         | \$ 1,639,152 | \$ 1,945,266 | \$ 2,144,655 |
| 03    | MVS-DB2 INQUIRY CPU         | 371          | 409          | 450          |
| 11    | MVS-LOCAL PRINTING - 1 PART | 5,640        | 5,703        | 5,703        |

# **Project Proposal - Summary Sheet**

| 1:    | MVS-TAPE MOUNTS                 | 113,792    | 151,028    | 177,749    |
|-------|---------------------------------|------------|------------|------------|
| 1:    | MVS-JOB SETUP                   | 260,582    | 279,813    | 285,409    |
| 14    | 4 MVS-DISK STORAGE              | 362,366    | 416,796    | 479,315    |
| 1:    | MVS-JOB OUTPUT                  | 13,566     | 14,566     | 14,857     |
| 3:    | 2 MVS-DISPATCH ONLINE VIEW      | 484        | 444        | 444        |
| 34    | MVS-CICS                        | 1,866,287  | 2,215,665  | 2,302,127  |
| 3:    | MVS-CICS TEST                   | 10,577     | 12,744     | 13,119     |
| 4:    | PAGE PRINT                      | 186,092    | 185,185    | 181,481    |
| 4     | WARRANT PRINTING                | 31,054     | 30,645     | 30,032     |
| 5     | 3 CMS-R22 PROCESSOR PRIME       | 27         | 29         | 28         |
| 109   | MONTHLY SERVER SUPPORT          | 271        | 198        | 166        |
| 30    | IMS TRAINING - CLASSES          | 1,409      | 1,409      | 1,409      |
| 32    | 7 TAPE CARTRIDGE - 3480         | 9          | 9          | 9          |
| 39    | 7 SOFTWARE MAINTENANCE          | 410,237    | 410,237    | 410,237    |
| Misc. |                                 | 2          | 3          | -          |
|       | Total                           | 4,901,918  | 5,670,149  | 6,047,190  |
|       | Total Staff Cost                | 5,763,378  | 5,846,286  | 5,823,146  |
| 170   | DCS                             | 210,684    | 213,084    | 213,084    |
|       | HHS Budget Cost Only            | 1,259,797  | 1,259,796  | 1,259,797  |
|       | IMServices - IS & T Grand Total | 12,135,777 | 12,989,315 | 13,343,217 |
|       |                                 |            |            |            |

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 12         | 10         | 12.0 | 15                  |
| IV: Project Justification / Business Case      | 24         | 21         | 18         | 21.0 | 25                  |
| V: Technical Impact                            | 15         | 17         | 14         | 15.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 9          | 7          | 5          | 7.0  | 10                  |
| VII: Risk Assessment                           | 7          | 7          | 5          | 6.3  | 10                  |
| VIII: Financial Analysis and Budget            | 14         | 19         | 15         | 16.0 | 20                  |
|  |            |            | TOTAL      | 78   | 100                 |

### **REVIEWER COMMENTS**

### Reviewer 1:

# Strengths

- Each effort is very detailed, but not real difficult to comprehend.
- Explains in detail the reasons for the project and the impact if not done.
- There is minimal technical impact.
- This is basically a known application and project. Most of this information has been provided in other attachments.
- The sponsor knows what they want to do. It appears lack of funding is the primary risk.

### Weaknesses

- This is many changes/projects in NFOCUS roled into one proposal. This is good from a "release" perspective, but makes it more difficult to understand from a overall project perspective.
- Appeared to show total NFOCUS budget, rather than the cost of this project.

### Reviewer 2:

# **Project Proposal - Summary Sheet**

# Strengths

- Mandate issues clear.
- Nice and clear breakdown by function and multi year projections.

### Weaknesses

- 1) Alternatives not noted? 2) Scope is large and therefore difficult to "summarize"?
- Undrstand that the base system "in place" would seem that that the "downstream" implications (even if minimal) should be acknowledged?
- Lot of detail in back of form could be summarized for major deliverables for the various pieces?
- Understand that major risks already identified/addressed but not clear about any contingencies/strategies that might be needed?

### Reviewer 3:

# Strengths

- Good description of high level goals, objectives and beneficiaries.
- Good detail regarding benefits of individual initiatives and of mandates leading to project(s).

- Little detail regarding alternative solutions considered.
- Little discussion regarding conformity or compatibility.
- Most of the planning described actions leading to current status. Only a few described milestones or future activities.
- A few risks were identified, but not in a systematic way.

# **Project Proposal - Summary Sheet**

# Project # 37-01

| Agency | Project   | FY2003-04 | FY2004-05 |
|--------|---|-----------|-----------|
|        | Extended Computer Automation Project –Electronic File System,<br>Electronic Forms Automation, and Electronic Records Management | \$326,000 | \$24,000  |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

The court has developed over the last seven years a comprehensive case management system based upon Oracle database technology and an online screen and reporting system developed using Oracle tools. This case management system provides mission-critical information to staff in all areas of the court. (The subsystems are listed in the court's IT Comprehensive Plan.) This "Extended Computer Automation" project is being planned as a long range, ten year effort to implement the court's Strategic Plan as defined in the IT Comprehensive Plan and other mandatory requirements placed on the Court (electronic records management, security, disaster recovery, as examples). In addition the Supreme Court is moving forward with its automation projects, some of which run parallel with strategic plans of the Workers Compensation Court.

This project over it's 10 year life will address Electronic File System, Electronic Forms Automation, Adjudicated Electronic Filing Processes, Electronic Records Management, Security, and Disaster Recovery. The estimated approximate 10 Year Project Cost is: One-Time Hardware, Software, Training \$1,250,000 -- On-Going Costs \$187,500 = \$1,437,500.

During the first two fiscal years of the 10 Year project, the court is planning on addressing the Electronic File System, initial integration of the Electronic File System with the court's Oracle Case Management system, Electronic Forms Automation, and an initial implementation of Electronic Records Management.

### **FUNDING SUMMARY**

|                          | Re | equest for FY2003-<br>04 | Requ | uest for FY2004-<br>05 | Req | uest for FY2005-<br>06 | Requ | est for FY2006-<br>07 | Total            |
|--------------------------|----|--------------------------|------|------------------------|-----|------------------------|------|-----------------------|------------------|
| 2. Contractual Services  |    |                          | •    |                        |     |                        |      |                       |                  |
| 2.4 Other                | \$ | 126,000.00               |      |                        |     |                        |      |                       | \$<br>126,000.00 |
| 5. Training              | \$ | 5,000.00                 |      |                        |     |                        |      |                       | \$<br>5,000.00   |
| 6. Travel                | \$ | 5,000.00                 |      |                        |     |                        |      |                       | \$<br>5,000.00   |
| 7. Other Operating Costs | \$ | 24,000.00                | \$   | 24,000.00              | \$  | 24,000.00              | \$   | 24,000.00             | \$<br>96,000.00  |
| 8. Capital Expenditures  |    |                          |      |                        |     |                        |      |                       |                  |
| 8.1 Hardware             | \$ | 20,000.00                |      |                        |     |                        |      |                       | \$<br>20,000.00  |
| 8.2 Software             | \$ | 146,000.00               |      |                        |     |                        |      |                       | \$<br>146,000.00 |
| TOTAL COSTS              | \$ | 326,000.00               | \$   | 24,000.00              | \$  | 24,000.00              | \$   | 24,000.00             | \$<br>398,000.00 |
| Cash Funds               | \$ | 326,000.00               | \$   | 24,000.00              |     |                        |      |                       | \$<br>350,000.00 |
| TOTAL FUNDS              | \$ | 326,000.00               | \$   | 24,000.00              | \$  | -                      | \$   | -                     | \$<br>350,000.00 |

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 12         | 12         | 12         | 12.0 | 15                  |
| IV: Project Justification / Business Case      | 20         | 19         | 23         | 20.7 | 25                  |
| V: Technical Impact                            | 16         | 15         | 16         | 15.7 | 20                  |
| IV: Preliminary Plan for Implementation        | 8          | 8          | 8          | 8.0  | 10                  |
| VII: Risk Assessment                           | 7          | 6          | 9          | 7.3  | 10                  |
| VIII: Financial Analysis and Budget            | 16         | 17         | 16         | 16.3 | 20                  |
|  |            |            | TOTAL      | 80   | 100                 |

### **REVIEWER COMMENTS**

### Reviewer 1:

# Weaknesses

- At some point, the project should determine what aspects of the Supreme Court's automated system, especially electronic filing, are applicable to the Workers Compensation Court. To what extent are we building two duplicative systems for electronic filing of court cases?
- There is not enough detail and explanation for the reader to understand the technical impact of this project.
- Another risk is financial -- that costs will greatly exceed estimates. The narrative should include strategies to address each specific risk.

### Reviewer 2:

# Strengths

- Good base description of what is planned and why.
- Acknowledges the existence of other systems that may need to be interfaced.
- Have identified all the technologies involved.

### Weaknesses

- Seemed like the we would need to know if this part of their ten year plan is capable of standing by itself (if they rest of the ten year plan is not achieved, undertaken, or funded).
- The hardware requirements seem a little soft. What is needed is identified but the magnitude is not
- Need to describe what the RFP is intended to procure and if there is any phasing to the project.
- Seems to me that the interface between the 'file management' software and the Oracle 'File management' would be a large risk.
- It seems to me that 20,000 for hardware, that would cover both a multiprocessor server and optical juke box is optimistic.

### Reviewer 3:

# Strengths

- Good description of overall goals. Closely tied to agency's comprehensive IT plan.
- Intangible benefits well documented. The agency has worked in collaboration with other state entities, and national organizations, in determining the proposed course of action.
- Risks are well documented and addressed.

## Weaknesses

Tangible benefits and cost savings not well documented.

# **Project Proposal - Summary Sheet**

# Project # 47-01

| Agency | Project                              | FY2003-04 | FY2004-05 |
|--------|--------------------------------------|-----------|-----------|
| NET    | KLNE-TV NTSC Replacement Transmitter | \$650,000 |           |

### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project will replace the existing KLNE-TV transmitter near Lexington, NE. The replacement is necessary for Nebraska Educational Telecommunications Commission (NETC) to continue to provide public educational television programming to Lexington, and the south-central part of Nebraska. The current transmitter is nearly 20 years old and approaching the end of it's useful life. The transmitter uses costly tubes needing periodic replacement. A new solid state transmitter will use transistors, eliminating the costly tube replacements. Parts for the current transmitter are becoming difficult to obtain on a timely basis, and are very costly. As the transmitter ages, the need for replacement parts increases.

There are essentially 3 stages to the DTV conversion. The first is the period of build out. At this point in the process, the new DTV is being installed and tested on a new channel assigned by the FCC. NETC currently uses channel 3 in Lexington for NTSC (analog) transmission. We have been assigned channel 26 for an interim DTV channel. For a period of some years we will have to transmit full power NTSC and interim power DTV simultaneously. This is the second or simulcast phase of the conversion. Whenever the FCC authorizes termination of NTSC transmission, we will have to select a permanent DTV channel and use it. This DTV-only time will be the third stage of the conversion and it will then be complete. For a number of technical reasons, a lower channel assignment is preferred to a higher channel assignment. This means that when we reach the final step we will need to convert the NTSC transmitter to a DTV transmitter to occupy channel 3 and give channel 26 back to the federal government. By occupying channel 3 our electrical costs will be significantly lower than if we were to keep channel 26 instead. This is why we are only operating the interim DTV channel at an interim power and not at full power.

When the NETC eliminates NTSC transmissions in favor of DTV in the Lexington area per FCC regulations, the new transmitter will easily convert to digital. This is expected to occur sometime after 2006. The current transmitter is becoming problematic, and will not convert to digital at all.

The Commission anticipates funding from the federal Public Telecommunications Facilities Program (PTFP) for 40% of the cost of this equipment. The State's portion is considered by PTFP as matching funds.

### **FUNDING SUMMARY**

|                         | Request for FY2003-04<br>(Year 1)      |            | Τα | otal       |
|-------------------------|--|------------|----|------------|
| 8. Capital Expenditures |  |            |    |            |
| 8.1 Hardware            | \$                                     | 650,000.00 | \$ | 650,000.00 |
| 8.4 Other               | Installation included in hardware cost |            | \$ | -          |
| TOTAL COSTS             | \$                                     | 650,000.00 | \$ | 650,000.00 |
| General Funds           | \$                                     | 390,000.00 | \$ | 390,000.00 |
| Federal Funds           | \$                                     | 260,000.00 | \$ | 260,000.00 |
| TOTAL FUNDS             | \$                                     | 650,000.00 | \$ | 650,000.00 |

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 14         | 14         | 14.0 | 15                  |
| IV: Project Justification / Business Case      | 24         | 24         | 21         | 23.0 | 25                  |
| V: Technical Impact                            | 19         | 18         | 18         | 18.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 10         | 9          | 9          | 9.3  | 10                  |
| VII: Risk Assessment                           | 8          | 9          | 6          | 7.7  | 10                  |
| VIII: Financial Analysis and Budget            | 19         | 18         | 16         | 17.7 | 20                  |
|  | _          | _          | TOTAL      | 90   | 100                 |

### **REVIEWER COMMENTS**

# Reviewer 1:

# Strengths

- They did an excellent job of explaining the project, describing the outcomes and measurements, and the relationship to the agency IT plan.
- Benefits were well defined and the DTV conversion process was explained adequately.
- The technical impact statement and the issues surrounding reliability, security and scalability were all addressed very well.
- Implementation plan is well defined. All other issues were addressed well.
- Most of the risks were well defined and discussed with strategies of minimize the risk.
- Appears to be appropriate and well explained. Bottom line is that the State needs to decide whether we wish to continue to offer this service or not. If we decide to offer services in this area, we really have not choice but to replace the transmitter.

### Reviewer 2:

# Strengths

- The goals and objectives are pretty much spelled out by the federal mandate. NETC has done
  this before so should know the process pretty good by now
- Benefits are meeting the federal mandate and providing better service on the local scale. This is spelled out in the application but there are really not a lot of choices available in meeting the FCC charge
- Upgrading of the transmitter and potential repairs seem to have been taken into consideration
- The team in charge of implementing this change is experienced and capable. Other staff development requirements seem to be somewhat minimal. Support and repair has been taken into consideration.
- Risk is in not meeting the mandate and endangering the broadcast license or in having to continue two feeds and spending a lot more on electric bills. Two vendors and a federal mandate do not leave a great many options.

# Reviewer 3:

# Strengths

- Good overview of the project. Obviously, NETC has done this before.
- Good explanation of the technology.
- NETC has a good engineering staff to implement these projects.

- The only weakness is the lack of estimates for the savings from reduced electricity and maintenance.
- One could question the advisability of using channel 3 rather than 26 in Lexington due to the noise and propagation problems. One Nebraska broadcaster is not planning to use low band channels for HDTV.

# **Project Proposal - Summary Sheet**

# Project # 47-02

| Agency | Project                              | FY2003-04 | FY2004-05 |
|--------|--------------------------------------|-----------|-----------|
| NET    | KMNE-TV NTSC Replacement Transmitter |           | \$650,000 |

### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project will replace the existing KMNE-TV transmitter near Bassett, NE. The replacement is necessary for Nebraska Educational Telecommunications Commission (NETC) to continue to provide public educational television programming to Bassett, and the north-central part of Nebraska. The current transmitter is nearly 20 years old and approaching the end of it's useful life. The transmitter uses costly tubes needing periodic replacement. A new solid state transmitter will use transistors, eliminating the costly tube replacements. Parts for the current transmitter are becoming difficult to obtain on a timely basis, and are very costly. As the transmitter ages, the need for replacement parts increases.

There are essentially 3 stages to the DTV conversion. The first is the period of build out. At this point in the process, the new DTV is being installed and tested on a new channel assigned by the FCC. NETC currently uses channel 7 in Bassett for NTSC (analog) transmission. We have been assigned channel 15 for an interim DTV channel. For a period of some years we will have to transmit full power NTSC and interim power DTV simultaneously. This is the second or simulcast phase of the conversion. Whenever the FCC authorizes termination of NTSC transmission, we will have to select a permanent DTV channel and use it. This DTV-only time will be the third stage of the conversion and it will then be complete. For a number of technical reasons, a lower channel assignment is preferred to a higher channel assignment. This means that when we reach the final step we will need to convert the NTSC transmitter to a DTV transmitter to occupy channel 7 and give channel 15 back to the federal government. By occupying channel 7 our electrical costs will be significantly lower than if we were to keep channel 15 instead. This is why we are only operating the interim DTV channel at an interim power and not at full power.

When the NETC eliminates NTSC transmissions in favor of DTV in the Bassett area per FCC regulations, the new transmitter will easily convert to digital. This is expected to occur sometime after 2006. The current transmitter is becoming problematic, and will not convert to digital at all.

The Commission anticipates funding from the federal Public Telecommunications Facilities Program (PTFP) for 40% of the cost of this equipment. The State's portion is considered by PTFP as matching funds.

### **FUNDING SUMMARY**

|                         | Request for FY2004-05<br>(Year 2)      | Total         |
|-------------------------|--|---------------|
| 8. Capital Expenditures | -                                      |               |
| 8.1 Hardware            | \$ 650,000.00                          | \$ 650,000.00 |
| 8.4 Other               | Installation included in hardware cost | \$ -          |
| TOTAL COSTS             | \$ 650,000.00                          | \$ 650,000.00 |
| General Funds           | \$ 390,000.00                          | \$ 390,000.00 |
| Federal Funds           | \$ 260,000.00                          | \$ 260,000.00 |
| TOTAL FUNDS             | \$ 650,000.00                          | \$ 650,000.00 |

# **Project Proposal - Summary Sheet**

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 14         | 14         | 14         | 14.0 | 15                  |
| IV: Project Justification / Business Case      | 24         | 24         | 21         | 23.0 | 25                  |
| V: Technical Impact                            | 19         | 18         | 18         | 18.3 | 20                  |
| IV: Preliminary Plan for Implementation        | 10         | 9          | 9          | 9.3  | 10                  |
| VII: Risk Assessment                           | 8          | 9          | 6          | 7.7  | 10                  |
| VIII: Financial Analysis and Budget            | 19         | 18         | 16         | 17.7 | 20                  |
|  |            |            | TOTAL      | 90   | 100                 |

### **REVIEWER COMMENTS**

### Reviewer 1:

### Strengths

- They did an excellent job of explaining the project, describing the outcomes and measurements, and the relationship to the agency IT plan.
- Benefits were well defined and the DTV conversion process was explained adequately.
- The technical impact statement and the issues surrounding reliability, security and scalability were all addressed very well.
- Implementation plan is well defined. All other issues were addressed well.
- Most of the risks were well defined and discussed with strategies of minimize the risk.
- Appears to be appropriate and well explained. Bottom line is that the State needs to decide whether we
  wish to continue to offer this service or not. If we decide to offer services in this area, we really have not
  choice but to replace the transmitter.

### Weaknesses

• I did not really understand the comment under risks that talked about "NETC will ask to combine funds from that project and this in order to complete the KLNE project in the FY04-05 biennium." Does this mean that one project is more important than the other?

### Reviewer 2:

### Strengths

- NETC has a track record or having done this type of thing before so has the goals of the project down. The fact that a federal mandate exists to complete this project somehow will limit the options available.
- Again, not doing anything is not an option due to federal mandate. Don't know about the economic return on the investment but to not complete the project would be costly. It is hard to measure the economic impact of a tv channel on a community but the intangible of a Nebraska city having access to NETV is important.
- Application touched on the ability to upgrade if the opportunity is presented and also seems prepared for
  potential of replacing parts. This system would be compatible with the statewide infrastructure and the
  federal mandate.
- Everything seems to be in order as it should be since this is not a new process to NETV. The process for
  making the change and training the staff seems feasible.
- Risks are minimal since this process has been used before. Main risk would seem to be in not complying
  with federal mandates. The application seems to outline a manner in which the delay of the process could
  be addressed without endangering the broadcast license.

### Reviewer 3:

### Strengths

- Good overview of the project. Obviously, NETC has done this before.
- Good explanation of the technology.
- NETC has a good engineering staff to implement these projects.

### Weaknesses

• The only weakness is the lack of estimates for the savings from reduced electricity and maintenance.

# **Project Proposal - Summary Sheet**

# Project # 47-03

| Agency | Project                                   | FY2003-04 | FY2004-05 |
|--------|---|-----------|-----------|
| NET    | Phone System Replacement / Switch Upgrade | \$0       | \$198,000 |

# **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

This project will replace the telephone system at the Nebraska Educational Telecommunications Commission (NETC) building.

Telephone services are part of the core of the NETC business infrastructure. The most recent example of this type of service is the "State of Nebraska AMBER Project". This project uses a dedicated phone line to route the State Patrol dispatcher AMBER Alert notifications to NET's on air switcher. Many other essential services such as the Nebraska Video Conferencing Network (NVCN) and the NEB\*Sat Help Desk rely on our phone services. Phone and voice mail communications are essential to the organization for internal business processes and inter-departmental communication as well.

The NET Telephone System Project addresses the replacement of an aging Nortel 51C PBX in use at NET, upgrade to or replacement of the Merridian switch, replacement of phone sets and the attendant console. The Nortel 51C platform is no longer sold and while parts are still available, the system will be phased out. Alltel has confirmed this in a letter sent to NET on August 22<sup>nd</sup> of this year. This system replacement request addresses future options and considerations such as VOIP (voice-over-IP). This will insure NET's investment provides flexibility to take advantage of new telecommunications technology while still addressing current telecomm industry standards.

### **FUNDING SUMMARY**

|                         | Estimated Prior<br>Expended | Request for FY2003-<br>04 (Year 1) | Request for FY2004-<br>05 (Year 2) | Total         |
|-------------------------|-----------------------------|------------------------------------|------------------------------------|---------------|
| 8. Capital Expenditures |                             |                                    |                                    |               |
| 8.1 Hardware            | \$ -                        |                                    | \$ 179,903.00                      | \$ 179,903.00 |
| 8.2 Software            |                             |                                    |                                    | \$ -          |
| 8.3 Network             |                             |                                    |                                    | \$ -          |
| 8.4 Other               |                             |                                    | \$ 18,097.00                       | \$ 18,097.00  |
| TOTAL COSTS             | \$ -                        | \$ -                               | \$ 198,000.00                      | \$ 198,000.00 |
| General Funds           |                             |                                    | \$ 198,000.00                      | \$ 198,000.00 |
| TOTAL FUNDS             | \$ -                        | \$ -                               | \$ 198,000.00                      | \$ 198,000.00 |

### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 10         | 13         | 12         | 11.7 | 15                  |
| IV: Project Justification / Business Case      | 16         | 22         | 22         | 20.0 | 25                  |
| V: Technical Impact                            | 13         | 18         | 17         | 16.0 | 20                  |
| IV: Preliminary Plan for Implementation        | 6          | 8          | 9          | 7.7  | 10                  |
| VII: Risk Assessment                           | 6          | 8          | 8          | 7.3  | 10                  |
| VIII: Financial Analysis and Budget            | 13         | 20         | 15         | 16.0 | 20                  |
|  |            |            | TOTAL      | 79   | 100                 |

# **Project Proposal - Summary Sheet**

### **REVIEWER COMMENTS**

# Reviewer 1: Strengths

- Agency makes a solid case for a replacement telephone system, not necessarily the technology that they have chosen.
- A strong case was made for the technical issues facing NET if they continue with their current voice solution.
- Appears that the agency attempted to get a quote from their current provider to create a budgetary number.

### Weaknesses

- There is a statement indicating that they are a subset of the University system but I do not see any input from the University Telecomm Center. Additionally, the customers they mention are not requiring an IP solution, so it is unclear that an IP solution is necessary to supply the needed telephony change. NET also indicates that they are replacing their voice mail system but not with this purchase. Why? How can they be sure that these systems will be compatible?
- Again, the business case is made for a new telephony solution not necessarily an IP solution. A
  statement is made that "selecting systems capable of both technologies is not more expensive
  ..." Without any supporting documentation, it is difficult to comprehend that this could be true.
  There is a statement that "the University has no plans to adopt IP telephony". If this system is a
  subset of the University, isn't this problematic?
- Is there a requirement on an IP system to change out all analog sets to digital sets? This represents \$36,000 of the expenditure. The proposed system may be IP capable, but will it require additional software costs to enable IP extension ports or tie line ports? Will there be additional Teleco charges to make the connection between the Central Office? It is difficult to identify the warranty issues related to this system.
- The implementation schedule appears to be aggressive considering the RFP process that should/would take place. Administration of an IP Telephony system would require additional training that I don't see accounted for in this document. Does NET have the appropriate staff to maintain this type of system and all issues related to Moves, Adds and Changes? Are the current maintenance fees sufficient to cover an expense for maintaining a fairly complex system?
- The weaknesses did not identify any issues related to operation of an IP solution. How are the
  issues related to E911 resolved? How is the issue of the University infrastructure not considering
  IP telephony create a barrier? Has NET considered a traditional system that has the ability for
  future upgrade?
- This project indicates in the financials the need for assistance and expertise from an entity that is in the voice telecommunications business that does not have a vested interest such as a vendor. The cost for this system appears to be on the high side. Without much effort, we were able to identify almost \$23,000 in savings on this quote for just the sets. There is not disagreement that this system needs to be replaced. We would encourage the agency to work with the appropriate telecommunications entity to identify needs, functions and the appropriate technology to address these issues.

# Reviewer 2: Strengths

- The 51C will probably stop being sold in 2003. Nortel apparently does not have a set time period that they will support a product after they quit selling it. It is in NET's best interests to begin evaluating alternatives to replace the 51C.
- Looking at a flexible solution is an excellent plan. While VoIP solutions are readily available they
  still have some issues to be worked out. It appears the 61C, if chosen, would provide NET the
  opportunity to either stick with traditional telephony service, or incorporate IP telephony as it
  becomes more widely accepted as the trend of the future.

#### NEBRASKA INFORMATION TECHNOLOGY COMMISSION Biennial Budget - FY2003-05

#### **Project Proposal - Summary Sheet**

- If the 61C is selected there are multiple vendors locally available to provide various levels of support on an ongoing basis. NET would continue to be able to support programs within both the State and University environments.
- Good, attainable milestones. Staff will be prepared to support the new system with a little additional training.
- I like the attention that has been given to not wanting to commit NET to a solution that may not fit into the long term picture of the State or UNL's telecom systems.
- I think the budget is well put together and accurate of what the costs will be, and includes the materials and equipment needed.

#### Weaknesses

- Are there specific features or functionalities that an upgraded system will bring that aren't available on the current system?
- What other alternatives are available. A large portion of service to other University and State agencies is provided via centrex. How does this compare to the 36 or 60 month costs of buying, installing and supporting a new PBX?
- What else can the 61C, or Cisco's Call Manager do for NET. Any specific opportunities to expand or improve services or to increase operating efficiencies?
- At some point in time NET may be required to provide the 911 center with a database, updated in real time, of station locations. No mention of that potential need is made in this plan in terms of what might be required for ongoing support.
- What other IP solutions did you look into. Does the fact that they are highly proprietary create any issues in terms of being tied to a particular vendor for all of your needs? What types of licensing issues will there be as people want to experiment with "soft phones"?

# Reviewer 3: Strenaths

- Clear explanation of project and beneficiaries.
- Current system reaching end of its useful life. Reasonable product research and evaluation.
   Current platform not sustainable. Integral part of meeting statutory objectives.
- Description of system and the technical elements. Platform will be flexible, scalable and offers variety of features.
- Project team identified including their roles and responsibilities. Time line adequate and achievable. Training and support addressed.
- Identifies risk of extending life of current system. Maintenance agreement focus.
- Budget estimated cost appears to be inclusive of the list of hardware and software.

#### Weaknesses

- Significant emphasis on IP telephony. No state or federal mandate.
- Strengths and weaknesses of proposal based on analog versus IP configuration.
- Limited information on preliminary plans. Insufficient training prior to cutover.
- Limited discussion of barriers. Tier contract could bind NETV to a system that may not meet expectations.

#### NEBRASKA INFORMATION TECHNOLOGY COMMISSION Biennial Budget - FY2003-05

#### **Project Proposal - Summary Sheet**

#### Project # 78-01

| Agency                  | Project  | FY2003-04   | FY2004-05 |
|-------------------------|--|-------------|-----------|
| Crime Commission / CJIS | CJIS - Criminal Justice Integration and Automation | \$1,020,112 | \$790,112 |

#### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

In 1995 the Crime Commission created the CJIS Advisory Committee (Criminal Justice Information System) in response to an identified need for a standing body to work on information technology needs and data sharing among state and local agencies. There are 26 standing members of the committee including all major state criminal justice agencies, professional associations and larger jurisdictions. While the Crime Commission is not an operational agency this cooperative project is hosted by the Commission due to its contact and interaction with various parts of the criminal justice system.

CJIS has undertaken strategic planning initiatives as well as significant programs to share data (through a secure Internet based data warehouse), to implement local automation and others. CJIS does not encompass nor supercede other initiatives by state or local agencies. Instead it provides a way to both initiate projects that need a collaborative sponsor as well as a forum for state and local agencies to bring issues on data sharing to the forefront. The efforts of CJIS and the Crime Commission reflect ongoing needs and the budget proposal is the culmination of past initiatives and current priorities. It should be noted that general funds are primarily used for ongoing project management and support in addition to project maintenance. Federal grant funds have provided the bulk of monies for project implementation.

#### **FUNDING SUMMARY**

|                           | E  | stimated Prior<br>Expended |    | Request for<br>'2003-04 (Year 1) |    | Request for<br>2004-05 (Year<br>2) |    | Request for<br>2005-06 (Year<br>3) | FY | Request for<br>'2006-07 (Year<br>4) | Future           | Total               |
|---------------------------|----|----------------------------|----|----------------------------------|----|------------------------------------|----|------------------------------------|----|-------------------------------------|------------------|---------------------|
| 1. Personnel Costs        | \$ | 186,000.00                 | \$ | 76,209.00                        | \$ | 76,209.00                          | \$ | 78,000.00                          | \$ | 80,000.00                           | \$<br>80,000.00  | \$<br>576,418.00    |
| 2. Contractual Services   |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  |                     |
| 2.1 Design                | \$ | 3,000,000.00               | \$ | 500,000.00                       | \$ | 300,000.00                         | \$ | 300,000.00                         | \$ | 300,000.00                          | \$<br>300,000.00 | \$<br>4,700,000.00  |
| 2.2 Programming           | \$ | 3,000,000.00               | \$ | 400,000.00                       | \$ | 300,000.00                         | \$ | 300,000.00                         | \$ | 300,000.00                          | \$<br>300,000.00 | \$<br>4,600,000.00  |
| 2.3 Project<br>Management | \$ | 26,369.00                  | \$ | 17,403.00                        | \$ | 67,403.00                          | \$ | 75,500.00                          | \$ | 83,500.00                           | \$<br>83,500.00  | \$<br>353,675.00    |
| 2.4 Other                 |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  | \$<br>•             |
| Supplies and<br>Materials | \$ | 5,000.00                   | \$ | 1,000.00                         | \$ | 1,000.00                           | \$ | 1,000.00                           | \$ | 1,000.00                            | \$<br>1,000.00   | \$<br>10,000.00     |
| 4. Telecommunications     |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  | \$<br>-             |
| 5. Training               |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  | \$<br>-             |
| 6. Travel                 | \$ | 10,000.00                  | \$ | 12,500.00                        | \$ | 12,500.00                          | \$ | 12,500.00                          | \$ | 12,500.00                           | \$<br>12,500.00  | \$<br>72,500.00     |
| 7. Other Operating Costs  |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  | \$<br>-             |
| 8. Capital Expenditures   |    |                            |    |                                  |    |                                    |    |                                    |    |                                     |                  |                     |
| 8.1 Hardware              | \$ | 50,000.00                  | \$ | 10,000.00                        | \$ | 10,000.00                          | \$ | 10,000.00                          | \$ | 10,000.00                           | \$<br>10,000.00  | \$<br>100,000.00    |
| 8.2 Software              | \$ | 100,000.00                 | \$ | 23,000.00                        | \$ | 23,000.00                          | \$ | 23,000.00                          | \$ | 23,000.00                           | \$<br>23,000.00  | \$<br>215,000.00    |
| TOTAL COSTS               | \$ | 6,377,369.00               | \$ | 1,040,112.00                     | \$ | 790,112.00                         | \$ | 800,000.00                         | \$ | 810,000.00                          | \$<br>810,000.00 | \$<br>10,627,593.00 |
| General Funds             | \$ | 2,073,714.00               | \$ | 290,112.00                       | \$ | 290,112.00                         | \$ | 300,000.00                         | \$ | 310,000.00                          | \$<br>310,000.00 | \$<br>3,573,938.00  |
| Cash Funds                | \$ | 250,000.00                 | \$ | 250,000.00                       |    |                                    | \$ | 500,000.00                         |    |                                     |                  | \$<br>1,000,000.00  |
| Federal Funds             | \$ | 4,053,925.00               | \$ | 500,000.00                       | \$ | 500,000.00                         |    |                                    | \$ | 500,000.00                          | \$<br>500,000.00 | \$<br>6,053,925.00  |
| TOTAL FUNDS               | \$ | 6,377,639.00               | \$ | 1,040,112.00                     | \$ | 790,112.00                         | \$ | 800,000.00                         | \$ | 810,000.00                          | \$<br>810,000.00 | \$<br>10,627,863.00 |

#### NEBRASKA INFORMATION TECHNOLOGY COMMISSION Biennial Budget - FY2003-05

#### **Project Proposal - Summary Sheet**

#### **PROJECT SCORE**

| Section  | Reviewer 1 | Reviewer 2 | Reviewer 3 | Mean | Maximum<br>Possible |
|--|------------|------------|------------|------|---------------------|
| III: Goals, Objectives, and Projected Outcomes | 13         | 14         | 14         | 13.7 | 15                  |
| IV: Project Justification / Business Case      | 20         | 24         | 20         | 21.3 | 25                  |
| V: Technical Impact                            | 18         | 18         | 18         | 18.0 | 20                  |
| IV: Preliminary Plan for Implementation        | 7          | 9          | 9          | 8.3  | 10                  |
| VII: Risk Assessment                           | 9          | 9          | 9          | 9.0  | 10                  |
| VIII: Financial Analysis and Budget            | 16         | 18         | 20         | 18.0 | 20                  |
|  |            |            | TOTAL      | 88   | 100                 |

#### **REVIEWER COMMENTS**

#### Reviewer 1:

• The score would have been higher if the proposal had focused more on those initiatives to be undertaken with this budget request.

#### Reviewer 2:

- Score is based on the quality of the planning and review process already in place for CJIS. Lack
  of detailed information on specific projects in this request is mitigated by documentation and
  review process used for CJIS projects.
- Federal funds are the primary source for project funding.

#### Reviewer 3:

#### Strengths

- Excellent summary of CJIS project history, investment, strategy and scope. and priority This
  project is clearly and priority for the Crime Commission and important to Nebraska.
- Good justification of project in broad terms.
- CJIS clearly represents progress in data sharing.
- Good summary of stakeholders and milestones
- · Risks have been identified
- Budget appears sound assuming general funds, cash funds and federal funds are available.

#### Weaknesses

- Lack of detail for the major investment categories of planning and programming and clarity of what capabilities for CJIS are current versus planned.
- Weak in projecting the estimate of financial and community safety payback. How many investigations per year save 45 minutes to 2hours what is the "effectiveness" increase from access to more data? How many law enforcement agencies are targeted to use CJIS? How many small police departments. What new capabilities are enabled?
- It is not clear how the software examples given will be integrated into the CJIS technical architecture nor how broadly they will be implemented in Nebraska.
- It is not clear where the bulk of the FY2003-2004 expenses \$ 900,000 for design and programming are going.
- Local applications and integration will continue to be challenges for CJIS.

# **Project Proposal Form**

Project Title Last Mile Wireless Effort

Agency/Entity Wayne State College

Form Version: 20021007

#### **Project Proposal Form**

#### **Section I: General Information**

Project Title Last Mile Wireless Effort

Agency (or entity) Wayne State College (WSC)

Contact Information for this Project:

lame Dennis Linster

Address | 1111 Main, Wayne State College

City, State, Zip | Wayne, Nebraska - 68787

Telephone 402-375-7286

E-mail Address | Delinst1@wsc.edu

#### **Project Proposal Form**

#### **Section II: Executive Summary**

The goal of this project is to provide a wireless Internet service and a municipal area network that might be used to demonstrate how various groups supported by tax dollars might share their technology resources. This could be used as a statewide model for service delivery in comparable communities.

The initial goal is to connect Wayne State College to the City of Wayne with a wireless Radio Frequency (RF) connection. The City of Wayne will then connect its other buildings to their main building via similar wireless connections and therefore create an administrative computing network. The wireless connection to Wayne State College will provide the city with Internet bandwidth. In addition, the College will provide leadership and training to the city in technology and wireless networking and thereby start a collaborative process that will help train a technological workforce.

The second phase of the project is to invite (do you mean invite? or include) the Wayne Public Schools, Wayne County, and other tax supported entities in the deployment process.

The desired outcome is a more technologically literate work force at all sites, overall resource requirement reduction through collaboration, and a more functional, integrated electronic community.

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

This project is fully intended to be a last mile telecommunications solution that could easily be adapted by other cities with similar support needs and opportunities. The goal is to connect the City of Wayne in a wireless format with Wayne State College. It is WSC's intent to leverage the college's support mechanisms to advance opportunities for the greater community, which is well within WSC's charge as a regional college in Nebraska. Our vision statement is: **Wayne State College will be a regional and national model for strengthening rural communities through student learning, service, and leadership.** 

The project intends to connect Wayne State College to the City of Wayne via wireless technology and provide leadership to accelerate their technology advancement. This last mile service will provide the city with Internet access to all city facilities that are critical to their mission of serving the general public. The City of Wayne has a total of 50 computers compared to Wayne State College that supports 1600 end user PC's. Wayne State College's peak Internet utilization is during the early evening and into the night. Wayne State College has open bandwidth that could easily be utilized during the day by the City of Wayne or other public entities and not create any additional resource requirement. This will save tax dollars and allow the City of Wayne to establish its own municipal area network without incurring the very expensive deployment of terrestrial networking.

- Since Wayne State College expects to extend this service opportunity to Wayne Public Schools, the Wayne County Courthouse, and other tax supported entities in the community, the abovedesignated groups can be named primary beneficiaries. The taxpayers of the City of Wayne, Wayne County, and the State of Nebraska benefit through this aggregation as their technology costs for this area are reduced significantly as well as the opportunity to improve their networking services.
- It is expected that in two years the result will be a totally connected and aggregated resource deployment in technology that will save the taxpayers money, provide a much needed last mile telecommunications solution, and help us grow our own technologists.

The measurement and assessment method is really not very difficult to outline, but it is not scientifically elegant. Information will be collected from each entity to identify what it will take for this plan to be successful for them in the short term and in the long term. The agreed-upon outcomes will be evaluated to determine whether the needs were met or not.

#### **Project Proposal Form**

Wayne State College's comprehensive technology plan does provide for the college to become an active force in our service region in the form of providing technology leadership that will enable our regional to be more technology aware and progressive.

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

The City of Wayne has the following buildings that need to be connected in some manner: Main city office building, electrical distribution building, electrical generation facility; water treatment facility; fire hall, library; and community activity center.

The City of Wayne could never afford to connect these building with fiber. It would cost over \$400,000 and is really not cost effective. The wireless connections will cost well under \$30,000 if completed in a turnkey fashion. The City of Wayne will assume financial responsibility for the project.

At this time the City of Wayne does not have an enterprise Internet connection. They use Digital Subscriber Lines (DSL). DSL does not provide for a complex, city wide centralized data network nor does it allow for local control. Connecting the City of Wayne to Wayne State College will require very little investment and will provide low cost Internet bandwidth in an aggregated fashion. The initial connection likely will not have any cost implications, as it will simply be a load leveling function of aggregation.

This project is not the result of a federal or state mandate. It does however address a serious concern for the State of Nebraska and all of its taxpayers. Last mile telecommunications solutions have always been available, but they have generally either been too expensive to implement, or too restrictive in use. This project takes advantage of new wireless technology and is scalable at a price that is affordable. This project does address Homeland Security and the lack of affordable last mile telecommunications solutions in Nebraska in a very meaningful way. There are a number of communities that could affordably adapt and implement this model .

#### **Section V: Technical Impact (20 Points)**

This plan replaces the City of Wayne's DSL implementation and launches them into a centralized, standardized technology environment. The overall approach will allow them to become more efficient users of technology.

Initially, the wireless 802.11b standard has been chosen for the wireless implementation between buildings. In buildings that are not wired and with few personal computers the same technology will be deployed for internal use. In the event that this standard becomes unusable for this project, Wayne is positioned to apply for its own broadcast zone. Routers are to be used at each end in the areas where security is a real concern. The Cisco routers will allow encryption. In the areas where security is not a concern, browsers will be used with encryption.

One strength of the project is the willingness of the entities to move forward. The project is considered to be low cost and manageable. .

This project uses technically standard equipment in the telecommunications industry. The 802.11b and 802.11a wireless standards are accepted within the industry.

#### **Project Proposal Form**

#### **Section VI: Preliminary Plan for Implementation (10 Points)**

The preliminary plan is:

- a) Orally present plan to the NITC Tech Panel October 9, 2002 for their advice (Completed)
- b) Complete Project Proposal Form for NITC before November 8, 2002 meeting
- c) Secure final project approval from Wayne State College President in November 2002
- d) Secure final project approval from Wayne City Council in November 2002
- e) Secure project bidding process and bid in early December 2002
- f) Order required equipment by mid January 2003
- g) Install first piece of equipment by mid March 2003– connecting city to campus
- h) Complete building connections by July 2003
- i) Start phase II...connecting the Court House and/or public school

At each phase the city technician will work with Network and Technology Services personnel from Wayne State College. On-site training and support will be supplied prior to the project implementation. Training will include preliminary documentation, setup, installation, operation, and post documentation.

This project will break new ground in the area of support and maintenance related to technology distribution in Wayne, Nebraska. It is anticipated that ongoing communication regarding support needs, professional development, and overall system planning will now be required. In the past these items were done as a courtesy with little communication between entities.

#### Section VII: Risk Assessment (10 Points)

Cleary wireless technology is a technology that is on the verge of being the technology of choice. It is highly serviceable and constantly improving. Fiber has been the standard bearer for years and offers several advantages at the present time. The advantages are in the area of capacity. Fiber does have disadvantages as well. They are in the area of cost and ease of installation. Fiber and wireless are both here to stay. Fiber is mature and wireless is evolving.

Industry specialists have indicated that weather and other natural effects have not had serious effects on wireless performance. Cleary fiber can be cut and it has been known to have collisions with a backhoe that can and do cause more long term service issues than weather will for wireless.

Providing Internet service to the City of Wayne, Wayne County, and/or Wayne Public Schools is clearly a goal. 802.11b is clearly capable, in a point to point connection, of providing the participants with the needs of today and the long term. 802.11b does provide in point to point service 20 times the bandwidth that the City of Wayne presently deploys. The college is clearly positioned to support all entities technically with technical equipment presently in place and track peak entity use and bill according to use.

Clearly this is a voluntary opportunity for all entities. They are free to participate or not participate. We are offering services that will allow for more support, broader implementation capabilities, and be much more scalable than present implementation.

The college purchases their telecommunications from Qwest. The City of Wayne purchases their DSL from Connection Point in Norfolk. Connecting Point purchases their DSL from Qwest. Connecting Point will, as the middle man, be eliminated from the plan.

#### **Groupware Architecture**

| Title                 | Secure E-mail for State Government Agencies   |  |  |  |  |
|-----------------------|---|--|--|--|--|
| Category              | Groupware Architecture  |  |  |  |  |
| Applicability         | State Government Agencies (See the "Applicability" section below.)  |  |  |  |  |
| Status                | <ul> <li>□ Standard - A degree or level of requirement that all jurisdictions should use, which would be enforceable by duly authorized entities. With any standard, there may be circumstances that merit exceptions.</li> <li>☑ Guideline - A statement of general policy or procedure by which to determine a course of action. Adherence is voluntary.</li> </ul> |  |  |  |  |
| Date Adopted          | DRAFT   |  |  |  |  |
| Date of Last Revision | August 8, 2002  |  |  |  |  |
| Date of Next Review   | June 2004   |  |  |  |  |

#### A. Authority

Section 86-516 (6). "[The Nebraska Information Technology Commission shall] adopt minimum technical standards, guidelines, and architectures upon recommendation by the technical panel."

#### B. Purpose and Objectives

The purpose of this guideline is to provide state government agencies a suggested technical solution for sending and receiving e-mail and electronic documents that require secure transmission.

Some agencies that handle sensitive information may need to securely transmit such information electronically. E-mail messages and documents sent over the Internet are generally sent in a non-secure format; however, there are various methods available to secure e-mail messages and electronic documents. This guideline recommends one method for use by state government agencies, but does not preclude an agency from using another method.

IMServices is developing a secure, Web-based document transmission system for Health and Human Services. The system, known as Secure Information Xchange (SIX), is expected to be operational by January 2003, and has been designed to allow other agencies to utilize this secure method of document transmission.

The Technical Panel will periodically review this guideline and the technical solution chosen to ensure it continues to meet the needs of state agencies.

#### C. Guideline

State agencies needing to send or receive secure electronic communications should consider utilizing the Secure Information Xchange system, the Web-based document transmission system maintained and hosted by IMServices. Agencies are encouraged to contact IMServices for more information.

Agencies utilizing a secure, electronic communications system should develop policies for the use of such a system within their agency.

#### **Groupware Architecture**

#### D. Key Definitions

<u>Secure E-mail</u> means a system for sending electronic messages and attached documents over a computer network in a manner in which the message and attached documents are protected from unauthorized access.

#### E. Applicability

<u>State Government Agencies</u> - Agencies needing secure e-mail and electronic document transmission are encouraged to utilize the Secure Information Xchange system maintained and hosted by IMServices.

### F. Responsibility

#### G. Related Policies, Standards and Guidelines

(http://www.nitc.state.ne.us/standards/) E-mail Standards for State Agencies Security Policies

| Title                 | Disaster Planning Procedures for Information Technology   |  |  |  |  |
|-----------------------|---|--|--|--|--|
| Category              | Security Architecture   |  |  |  |  |
| Applicability         | All Public Entities (See the "Applicability" section below.)  |  |  |  |  |
| Status                | □ <b>Standard</b> - A degree or level of requirement that all jurisdictions should use, which would be enforceable by duly authorized entities. With any standard, there may be circumstances that merit exceptions.  ☑ <b>Guideline</b> - A statement of general policy or procedure by which to determine a course of action. Adherence is voluntary. |  |  |  |  |
| Date Adopted          | DRAFT (October 2, 2002)   |  |  |  |  |
| Date of Last Revision |   |  |  |  |  |
| Date of Next Review   |   |  |  |  |  |

#### A. Authority

Section 86-516 (6). "[The Nebraska Information Technology Commission shall] adopt minimum technical standards, guidelines, and architectures upon recommendation by the technical panel."

The Nebraska Information Technology Commission (NITC) has adopted a security policy pertaining to disaster recovery, which states that:

"Each agency must have a disaster recovery plan that at least identifies and mitigates against risks to critical systems and sensitive information in the event of a disaster. The plan shall provide for contingencies to restore information and systems if a disaster occurs. The disaster recovery plan for information technology may be a subset of an agency's comprehensive disaster recovery plan. The concept of a disaster recovery includes business resumption." (<a href="http://www.nitc.state.ne.us/standards/index.html">http://www.nitc.state.ne.us/standards/index.html</a>)

#### B. Purpose and Objectives

Information technology (IT) and automated information systems are vital elements in most business processes. Because these IT resources are so essential to an organization's success, it is critical that the services provided by these systems are able to operate effectively without excessive interruption. Contingency planning supports this requirement by establishing thorough plans, procedures, and technical measures that can enable a system to be recovered quickly and effectively following a service disruption or disaster. Interim measures may include the relocation of IT systems and operations to an alternate site, the recovery of IT functions using alternate equipment, or the performance of IT functions using manual methods.

This template provides instructions, recommendations, and considerations for Nebraska State Government IT contingency planning. It discusses essential contingency plan elements and processes, highlights specific considerations and concerns associated with contingency planning for various types of IT systems, and provides examples to assist readers in developing their own IT contingency plans. The scope ranges from minor incidents causing short-term disruptions to disasters that affect normal operations for an extended period. Because IT systems vary in design and application, specific incident types and associated contingency measures are not provided in this document. Instead, the planning guide defines

a process that may be followed for any IT system to identify planning requirements and develop an effective contingency plan.

#### C. Assumptions

Following is a list of typical planning assumptions to be considered in writing the disaster recovery plan. Each agency must review and modify this list to meet their specific requirements. In particular, this list of assumptions does not entail certain worst-case scenarios, such as losing staff that would perform critical functions in exercising the disaster recovery plan.

- 1. The IT business continuity plan is part of a bigger plan that covers areas outside of IT (i.e., facilities, personnel, etc). The Nebraska Emergency Management Agency (NEMA) is currently revising the State Emergency Operations Plan (SEOP). Changes to the SEOP may provide state and local government with guidance on preparing business continuity plans that address internal operations and the ability to provide public services following a disaster. The relationship between the IT business continuity plan and the overall agency business continuity plan includes the following points:
  - The IT business continuity plan is a subset of the agency's overall business continuity plan.
  - Internal and external dependencies will be listed in the IT business continuity plan.
  - The IT business continuity plan will address internal dependencies, and the agency's overall business continuity plan will address external dependencies.
- 2. The plan will be approved and endorsed by management.
- 3. The plan will only cover critical information systems in the order of the highest priority. It will not cover every information system within an organization.
- 4. Staff is available to perform critical functions defined within the plan.
- 5. Staff can be notified and can report to the backup site(s) to perform critical processing, recovery and reconstruction activities.
- 6. Off-site storage facilities and materials will survive.
- 7. The disaster recovery plan is current.
- 8. Subsets of the overall plan can be used to recover from minor interruptions.
- 9. An alternate facility is available.
- 10. The necessary utilities (i.e., long distance and local communications lines, Wide Area Network and Internet connectivity, power, etc.) are available to the organization as defined in the dependencies section of the plan.
- 11. Outside organizations, including vendors will perform according to their general commitments to support the organization in a disaster.
- 12. Development, test, and implementation of new technologies and applications will be suspended during the disaster so that all resources will be available to the recovery.
- 13. Other assumptions.

#### D. IT Contingency Planning Process

To develop and maintain an effective IT contingency plan, organizations should use the following approach in the sequence shown:

Develop the contingency planning policy statement.
 A formal policy provides the authority and guidance necessary to develop an effective contingency plan. The Security Architecture Work Group (a Work Group sponsored by the Technical Panel of the Nebraska Information Technology Commission) developed the

state's Disaster Recovery Policy: http://www.nitc.state.ne.us/tp/workgroups/security/security\_policies.htm.

2. Conduct the business impact analysis (BIA) and risk analysis (RA). The BIA helps to identify and prioritize critical IT systems and components. It's purpose is to correlate specific system components with the critical services that they provide, and based on that information, to characterize the consequences of a disruption to the system components. Key steps include listing critical IT resources, identifying disruption impacts and allowable outage times, and developing recovery priorities.

When working on the BIA phase of the IT continuity plan, there are two goals to keep in mind for each business process: the recovery time objective (RTO) and the recovery point objective (RPO). RTO defines the tolerable maximum length of time that a business process can be unavailable, while RPO defines how much work in progress can be lost.

The BIA and risk assessment procedures are documented in Chapter 3 of the Security Officer Instruction Guide (<a href="http://www.nitc.state.ne.us/tp/workgroups/security/documents.htm">http://www.nitc.state.ne.us/tp/workgroups/security/documents.htm</a>). Business continuity coordinators should reference that document for information on conducting an BIA. NIST SP 800-34 contains a sample BIA process and template that may also be used.

Having determined the impacts, it is now important to consider the magnitude and likelihood of risks. Again, this is a critical activity - it will determine which scenarios are most likely to occur and which should attract most attention during continuity planning. This should include both partial and total system loss as well as least and worst case scenarios. Assessing the probability of an event and the likely loss should it occur associated with specific disaster scenarios helps determine appropriate and cost-effective preventive controls and recovery strategies.

Identify preventive controls.

In some cases, the outage impacts identified in the BIA may be mitigated or eliminated through preventive measures that deter, detect, and/or reduce impacts to the system. Where feasible and cost-effective, preventive methods are preferable to actions that may be necessary to recover the system after a disruption. Preventive controls should be documented in the contingency plan, and personnel associated with the system should be trained on how and when to use the controls. Adequate insurance coverage is one means to mitigate the financial impact of a disaster.

Business continuity coordinators should list all preventive controls.

4. Develop recovery strategies.

Recovery strategies provide a means to restore IT operations quickly and effectively following a service disruption. Strategies should address disruption impacts and allowable outage times identified in the BIA. Several alternatives should be considered when developing the strategy, including cost, allowable outage time, security, and integration with larger, organization-level contingency plans. These strategies should be prioritized, based on the scenarios developed in the risk analysis phase.

The selected recovery strategy should address the potential impacts identified in the BIA/RA and should be integrated into the system architecture during the design and implementation phases of the system life cycle. It should include a combination of methods that complement one another to provide recovery capability over the full spectrum of incidents. A wide variety of recovery approaches may be considered; the

appropriate choice depends on the incident, type of system, budget resources and its operational requirements as determined in the previous phases.

Assumptions and dependencies should be identified as part of the recovery strategy. These are areas beyond the scope of control of the planners.

#### 5. Format an IT Contingency Plan.

IT contingency plan development is a critical step in the process of implementing a comprehensive contingency planning program. The plan contains detailed roles, responsibilities, teams, and procedures associated with restoring an IT system following a disruption. The contingency plan should document technical capabilities designed to support contingency operations. Each organization must tailor the contingency plan and its requirements to fit their needs. Plans need to balance detail with flexibility; usually the more detailed the plan, the less scalable and versatile the approach.

The contingency plan comprises five main components:

- Supporting Information
- Notification/Activation Phase
- Recovery Phase
- Reconstitution Phase
- Plan Appendices

See Section IV for more details.

#### 6. Plan Testing, Training, and Exercises.

Each IT contingency plan element should be tested to confirm the accuracy of individual recovery procedures and the overall effectiveness of the plan. Testing enables plan deficiencies to be identified and addressed. Testing also helps evaluate the ability of the recovery staff to implement the plan quickly and effectively.

The ideal disaster test scenario uses a true-to-life model that draws participants into the exercise and allows them to test their procedures realistically. The test scenario may be at any level from a single system to an entire enterprise being affected. Planners should use explicit test objectives and success criteria in their test plan in order to assess the effectiveness of each plan element and the overall plan. Information collected during the test and post-test reviews that improve plan effectiveness should be incorporated into the contingency plan.

#### 7. Plan Maintenance.

To be effective, the plan must be maintained in a ready state that accurately reflects system requirements, procedures, organizational structure, and policies. IT systems undergo frequent changes because of shifting business needs, technology upgrades, or new internal or external policies. Therefore, it is essential that the contingency plan be reviewed and updated regularly, as part of the organization's change management process, to ensure new information is documented and contingency measures are revised if required. Responsibility for plan currency must be assigned as part of critical job duties. As a general rule, the plan should be reviewed for accuracy and completeness at least annually or whenever significant changes occur to any element of the plan. Certain elements will require more frequent reviews, such as contact lists. Based on the system type and criticality, it may be reasonable to evaluate plan contents and procedures more frequently.

The business continuity plan should be stored away from the organization's primary facility. Records management has the ability to store these documents in their repository; however, they take no responsibility for the documents.

#### E. Contingency Plan Development

This section discusses the key elements that comprise the contingency plan. The plan contains detailed roles, responsibilities, teams, and procedures associated with restoring an IT system following a disruption. It should be tailored to each department or agency.

#### 1. Supporting Information

The Supporting Information component includes an introduction and concept of operations section that provides essential background or contextual information that makes the contingency plan easier to understand, implement, and maintain. These details aid in understanding the applicability of the guidance, in making decisions on how to use the plan, and in providing information on where associated plans and information outside the scope of the plan may be found.

#### a) Introduction Section

This section orients the reader to the type and location of information contained in the plan. It contains the following subsections:

- i) Purpose
- ii) Applicability
- iii) Scope
  - (1) Scenarios
  - (2) Assumptions
  - (3) Dependencies
- iv) References/requirements
- v) Record of Changes
- b) Concept of Operations

This section provides additional details about the IT system, the contingency planning framework; and response, recovery, and resumption activities. This section may include the following elements:

- i) System Description
- ii) Line of Succession
- iii) Responsibilities
- iv) External Communications

#### 2. Notification/Activation Phase

The Notification/Activation Phase defines the initial actions taken once a system disruption or emergency has been detected or appears to be imminent. This phase includes activities to notify both management and recovery personnel, assess system damage, and implement the plan. Notification/Activation must match the overall organizational recovery plan. At the completion of the Notification/Activation Phase, recovery staff will be prepared to perform contingency measures to restore system functions on a temporary basis.

#### 3. Recovery Phase

The Recovery Phase begins after the contingency plan has been activated, damage assessment has been completed (if possible), personnel have been notified, and appropriate teams have been mobilized. Recovery phase activities focus on contingency measures to execute temporary IT processing capabilities, repair damage to the original system, and restore operational capabilities at the original or new facility. At the completion of the Recovery Phase, the IT system will be operational and performing the functions designated in the plan. Depending on the recovery strategies defined in the plan, these functions could include temporary manual processing, recovery and operation on an alternate system, or relocation and recovery at an alternate site. Teams with

recovery responsibilities should understand and be able to perform these recovery strategies well enough that if the paper plan is unavailable during the initial stages of the event, they can still perform the necessary activities.

#### 4. Reconstitution Phase

In the Reconstitution Phase, recovery activities are terminated, and normal operations are transferred back to the organization's facility. If the original facility is unrecoverable, the activities in this phase can also be applied to preparing a new facility to support system processing requirements. Once the original or new site is restored to the level that it can support the IT system and its normal processes, the system may be transitioned back to the original or to the new site. Until the primary system is restored and tested, the contingency system should continue to be operated. The Reconstitution Phase should specify teams responsible for restoring or replacing both the site and the IT system.

#### 5. After Action Review

An After Action Review (AAR) is an assessment conducted after the business continuity activity (i.e., disaster, test, etc.) that allows employees and leaders to discover what happened and why. It may be thought of as a professional discussion of an event that enables employees to understand why things happened during the progression of the process and to learn from that experience. The AAR is an essential element to complete the four-step planning cycle of review, update, modify, and plan.

#### 6. Contingency Plan Appendices

Contingency Plan Appendices provide key details not contained in the main body of the plan. The appendices should reflect the specific technical, operational, and management contingency requirements of the given system. Appendices can include, but are not limited to contact information for contingency planning team personnel; vendor contact information, including offsite storage and alternate site POCs; standard operating procedures and checklists for system recovery or processes; equipment and system requirements lists of the hardware, software, firmware, and other resources required to support system operations; vendor agreements, reciprocal agreements with other organizations, and other vital records; description of, and directions to, the alternate site; and the BIA.

#### F. Applicability

The issue of disaster recovery planning for information technology applies to any agency or institution that relies on information technology to support critical business functions. Agencies or institutions should follow a structured methodology, such as these guidelines, in developing a disaster recovery plan for information technology.

#### G. Responsibility

- Nebraska Emergency Management Agency (NEMA). NEMA is responsible for preparing and maintaining the State Emergency Operations Plan. One element of this plan pertains to continuity of government operations. Disaster planning procedures for information technology is a subset of continuity of government operations.
- 2. State Records Management Division, Secretary of State's Office. The Records Management Division serves as a repository for back-up media. The Records Management Division will also store electronic and paper copies of an agencies disaster recovery plan.

- Agency and Institutional Heads. The highest authority within an agency or institution is
  responsible for the protection of information resources, including developing and
  implementing information security programs, including disaster recovery plans for
  information technology. The authority may delegate this responsibility but delegation
  does not remove the accountability.
- 4. Agency Information Officer. In most cases, the highest authority within an agency or institution delegates the general responsibility for security of the agency's information technology resources to the agency's highest-ranking information technology professional. This responsibility includes development and promulgation of agencyspecific information security policies, including disaster recovery planning for information technology.
- Agency Security Officer. In some cases, the Agency Information Officer assigns an Agency Security Officer who is responsible for preparing a disaster recovery plan for information technology. They must understand the risks posed by disruption of computer systems. They must help prepare contingencies and be ready to implement the disaster recovery plan for information technology.

#### H. Related Standards and Guidelines

- NITC Disaster Recovery Policy (<a href="http://www.nitc.state.ne.us/tp/workgroups/security/security-policies.htm">http://www.nitc.state.ne.us/tp/workgroups/security/security-policies.htm</a>)
- 2. NITC Security Officer Handbook (http://www.nitc.state.ne.us/standards/security/so\_guide.doc)
- 3. Nebraska Emergency Management Agency Information Paper on Continuity of Operations Plan (available from NEMA at 402.471.7430)

#### I. References

- 1. NIST SP 800-34, Contingency Planning Guide for Information Technology Systems, http://csrc.nist.gov/publications/drafts/ITcontingency-planning-guidelines.pdf
- 2. Business Continuity Planning & Management on-line, http://www.contingencyplanning.com/
- 3. Disaster Recovery Journal, http://www.drj.com/
- 4. Contingency Planning and Disaster Recovery, http://www.disasterplan.com/
- Kansas, Department of Administration, Contingency Planning On-Line, http://csrc.nist.gov/publications/drafts/ITcontingency-planning-guideline.pdf
- FEDERAL EXECUTIVE BRANCH CONTINUITY OF OPERATIONS (COOP), http://www.fas.org/irp/offdocs/pdd/fpc-65.htm

#### J. Additional Information For State Agencies

1. Insurance Coverage. State agencies should consider insurance coverage to mitigate the financial impact of a disaster. The Risk Management Division of the Department of Administrative Services offers two types of insurance coverage. Content insurance applies to fixtures and equipment within a building. Current cost is \$.05 per \$100 value, with a \$5,000 deductible per event. Inland Marine Insurance covers non-permanent fixtures that are highly portable, such as laptops. The cost is \$.12 to \$.15 per \$100 value. When calculating the value of equipment to be covered, agencies should include the cost of any services that might be used to restore services. Insurance should not be used instead of good disaster planning and mitigation strategies.

The Risk Management Division is working with the state's insurance broker to narrow the current exclusion of "terrorism". The state's insurance contracts provide some assistance with conducting risk assessments. The state's insurance broker also offers business continuity planning services for a fee.

- 2. Personnel issues. Agencies should be aware of labor contract requirements when developing their disaster recovery plans. The labor contract may affect options regarding leave time when the work site is not available, ability to work at an alternate site, working from home, and other issues. Counseling is available through the state's employee assistance program contract. Temporary staff is available through State Personnel's SOS program and IMServices' contractual services agreements.
- 3. Purchasing Issues. The Materiel Division can assist agencies with replacing equipment. Surplus Property is one option to consider. Existing contracts facilitate acquiring equipment, without the need for bids. The contract with IBM obligates the vendor to give priority and expedite shipment in the event of a disaster. Similar terms are being negotiated with Dell. Agencies should maintain complete equipment lists, including current configurations.
- 4. Information Management Services Division. IMServices houses much of the state's data and applications either on the mainframe or LAN servers located in the 501 Building. As custodians of this equipment and information, IMServices has its own disaster recovery plans to protect those assets. Agency information technology disaster recovery plans are simplified when IMServices manages the hardware, software and data resources, but agencies should include references and communications with IMServices regarding expectations for how much and how fast their applications and data functions need to be restored. Procurement of replacement LAN servers housed in 501 but owned by an agency are the responsibility of the agency. IMServices provides and manages backup services for mainframes, LAN servers at the 501 Building, and agency-owned servers that may be located anywhere on the campus LAN. Backup tapes (and the Gator backup System) are housed in the Capitol Computing Center and will be available for business resumption once the platform and/or network are restored.

A Business Impact Analysis process to aid in applying the appropriate level of planning and investment against loss of IT assets and capability is contained in the Security Officer Guide developed by the NITC (http://www.nitc.state.ne.us/standards/security/so\_guide.doc).

5. Communications. The Division of Communications (DOC) is currently involved in a feasibility study in conjunction with IMS to determine if the existing core routing equipment can be duplicated off site, or split between two sites. DOC carries a limited amount of spare equipment that can be used at disaster sites, and we require our main vendors (Qwest and Alltel) to carry a certain number of spares. Although we do not have a formal agreement with the telcos, we expect to receive priority service from the telcos in the event of an emergency. DOC also has caches of cellular phones located at strategic positions about the State that can be quickly activated and distributed. DOC also assists agencies, such as NEMA, for coordinating radio communications when needed.

#### **Groupware Architecture**

| Title                 | Use of Computer-based Fax Services by State Government Agencies   |
|-----------------------|---|
| Category              | Groupware Architecture  |
| Applicability         | State Government Agencies (See the "Applicability" section below.)  |
| Status                | <ul> <li>□ Standard - A degree or level of requirement that all jurisdictions should use, which would be enforceable by duly authorized entities. With any standard, there may be circumstances that merit exceptions.</li> <li>☑ Guideline - A statement of general policy or procedure by which to determine a course of action. Adherence is voluntary.</li> </ul> |
| Date Adopted          | DRAFT (November 5, 2002)  |
| Date of Last Revision |   |
| Date of Next Review   |   |

#### A. Authority

Section 86-516 (6). "[The Nebraska Information Technology Commission shall] adopt minimum technical standards, guidelines, and architectures upon recommendation by the technical panel."

#### B. Purpose and Objectives

The purpose of this guideline is to provide state government agencies a suggested technical solution for sending and receiving electronic faxes directly from personal computers.

#### Background

Sending Faxes - The traditional method for sending faxes is to scan printed copy into a facsimile machine and manually entering a phone number to transmit a copy to an external fax machine. This method consumes staff time when copies must be sent to multiple destinations. Sequential transmissions to a large number of recipients can take too much time in an emergency situation.

Some agencies have contracted for mass distribution services from external companies. These services can be costly and require advance arrangements for entering recipient fax connection information.

An alternative method for faxing documents is the use of a high-capacity, state-run fax server activated directly from personal computers. The sender never leaves the workstation and can fax announcements directly from existing agency e-mail systems. The body of the e-mail can include a wide array of attachment formats.

Destination fax numbers can be stored in email address books. Group lists can be used for mass distribution. Multiple destination fax machines can be contacted at the same to reduce the total time to deliver information in an emergency situation.

For agencies with non-standard e-mail, it is possible to utilize a web site to send faxes.

#### **Groupware Architecture**

Receiving Faxes - The traditional method for receiving faxes is to have incoming faxes printed at a local facsimile machine. An attendant watches for incoming faxes and manually routes the document to the intended user. Photocopies must be produced manually when the information needs to be routed to several people.

An eFax Server routes incoming faxes to an e-mail inbox where the information can be reviewed for distribution. This electronic image can be forwarded to multiple e-mail addresses without need from printing or photocopy services.

An added benefit of receiving electronic fax images is that the image can be copied into a document management system for processing without the need for scanning the printed faxes.

*eFax* - Three agencies, Information Management Services ("IMServices"), Health and Human Services ("HHS") and Workers' Compensation Court, identified a need for the use of a fax server. In a collaborative effort, these agencies are sharing the use of a fax server maintained and hosted by IMServices. A fax server is a computer connected to a network that uses a pooled collection of phone lines for users to send and receive faxes.

The state run electronic fax server system, called "eFax", is available for use by other agencies within state government.

#### C. Guideline

State agencies needing fax services based on electronic mail systems should consider utilizing the "eFax" system maintained and hosted by IMServices. Agencies are encouraged to contact IMServices for more information and a cost-benefit analysis.

#### D. Key Definitions

<u>Fax server</u>. A computer in a network that uses a pooled collection of phone lines for users to send and receive faxes.

<u>eFax</u>. A fax server maintained and hosted by IMServices for use by state government agencies that uses electronic mail for sending and receiving faxes.

#### E. Applicability

State Government Agencies - Adherence to this guideline is voluntary.

#### F. Responsibility

#### G. Related Policies, Standards and Guidelines

(http://www.nitc.state.ne.us/standards/)
Secure E-mail for State Government Agencies

## Nebraska Information Technology Commission Technical Panel

# Statewide Synchronous Video Network Work Group Charter

| Purpose                          | Make recommendations to the Technical Panel on how to implement a   |  |  |  |
|----------------------------------|---|--|--|--|
|                                  | Statewide Synchronous Video Network.  |  |  |  |
| Sponsor                          |   |  |  |  |
| Scope/<br>Boundaries             | This work group should define the technical and non-technical requirements for interconnecting all synchronous video networks and meeting the scheduling needs of different participants. Issues to be addressed should include business case, event scheduling and clearinghouse, traffic prioritization, security, quality assurance, cost-sharing, and existing contractual arrangements of regional networks.   |  |  |  |
| Desired<br>Goals and<br>Outcomes | <ul> <li>a. Conduct informative and working sessions to determine the needs, issues, and participants regarding synchronous video interoperability within and outside the state;</li> <li>b. Encourage participants to improve educational opportunities in the state via continued evolving video distance education;</li> <li>c. Determine the support structures and augmentation needed to maximize the synchronous distance learning experience;</li> <li>d. Prepare an implementation plan for adherence to the new video/audio standards while making the most efficient use of the existing distance learning facilities;</li> <li>e. Identify or develop a "core sponsor" for video distance education in the state that will be the focal point to coordinate all of the activities associated with enhancement of services and interrelationships that will be critical for continued success;</li> <li>f. Evaluate options for providing ongoing support services.</li> </ul> |  |  |  |
| Authority                        | This work group will:  a. Formulate and present recommendations to the Technical Panel regarding the implementation of a Statewide Synchronous Video Network serving education, communities, and state government. Issues to be addressed include business case, scheduling, traffic prioritization, security, quality assurance, cost-sharing, and existing contractual arrangements of regional networks and such other issues deemed relevant by the Technical Panel.  |  |  |  |
| Membership                       | <ul> <li>Membership shall include representatives from the following entities:</li> <li>(State Government) DOC, National Guard;</li> <li>(Education) Nebraska distance learning consortia, Higher Education institutions, ESU Network Operations Committee;</li> <li>(Communities) Telehealth, Public Libraries;</li> <li>NITC Councils and other members as determined by the sponsor</li> </ul>   |  |  |  |
| Reporting                        | The sponsor of the work group will report to the Technical Panel as needed.   |  |  |  |
| Timeframe                        | This work group will function until this charter is repealed.   |  |  |  |

**Background** The following excerpt is Recommendation #12 of the Final Report and Recommendations of the Nebraska Network Work Group, adopted by the NITC on Monday, September 16, 2002.

- 12. The Technical Panel, as a continued extension of its video standards activity, should establish an implementation work group to determine how to provide a Nebraska Statewide Synchronous Video Network. The network should incorporate the facilities of K-12 interactive distance learning consortia, higher education, telehealth, National Guard video network, and the Nebraska Video Conferencing Network (NVCN). The work group should include representation of the Community Council, Education Council, State Government Council and affected entities. It should define the technical requirements for interconnecting all synchronous video networks and meeting the scheduling needs of different participants. Issues to be addressed should include business case, scheduling, traffic prioritization, security, quality assurance, cost-sharing, and existing contractual arrangements of regional networks. Specific steps might include:
- a. Create a working group to continue the activities of the Video Standards Work Group to prepare an implementation plan for adherence to the new video/audio standards;
- b. Conduct informative and working sessions to determine the needs, issues, and participants regarding interoperability within and outside the state;
- c. Encourage participants to improve educational opportunities in the state via continued evolving video distance education;
- d. Identify a "core sponsor" for video distance education in the state that will be the focal point to coordinate all of the activities associated with enhancement of services and interrelationships that will be critical for continued success;
- e. Evaluate options for providing support services.

# Nebraska Information Technology Commission Technical Panel

# Network Architecture Work Group Charter

| Purpose                          | Make recommendations to the Technical Panel on all matters relating to the state's network architecture.   |
|----------------------------------|--|
| Sponsor                          | Brenda Decker, DAS - Division of Communications  |
| Scope /<br>Boundaries            | Section 3 of the Statewide Technology Plan establishes a state enterprise architecture framework to provide guidance on various aspects of the state's technical environment. The network architecture one element of this framework defines and provides guidance for the communications infrastructure and issues relating to interconnectivity of systems. This includes physical and logical network topologies as well as the software protocols that enable all the devices to interoperate with one another. The work group should follow the outline of the network architecture contained in the Statewide Technology Plan. |
| Desired<br>Goals and<br>Outcomes | <ul> <li>Review and revise the "scope" of the network architecture.</li> <li>Review and revise the "principles" for the network architecture.</li> <li>Identify "best practices" for the network architecture.</li> <li>Recommend "standards and guidelines" for the network architecture.</li> </ul>  |
| Authority                        | This work group will:  • Make recommendations to the Technical Panel regarding the network architecture, including: scope; principles; best practices; and standards and guidelines.  • Identify problems and issues related to the technical environment.  Decisions on proposed recommendations will be determined by a vote of the members.   |
| Membership                       | Any member of one of the NITC Councils or Technical Panel may participate on the work group, with permission of the sponsor. Membership shall include representatives from the following entities: State agencies (HHS, Roads, Labor, NET, NDE, IMServices, IDSD); Education (University of Nebraska, State Colleges, Community Colleges, ESUs); and Others (NOL). The sponsor of the work group may solicit membership from other entities to provide additional perspectives and information.  |
| Reporting                        | The sponsor of the work group will report to the Technical Panel as needed.  |
| Timeframe                        | This work group will continue in existence until this charter is repealed.   |

Adopted by the Technical Panel on April 11, 2000