Nebraska Information Technology Commission

Project Proposal Form

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

FY2007-09 Biennium

Project Title	**Court Re-engineering – Vocational Rehabilitation**
Agency/Entity	**Workers' Compensation Court**

Notes about this form:

1. **USE.** The Nebraska Information Technology Commission ("NITC") is required by statute to "make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested." Neb. Rev. Stat. §86-516(8) In order to perform this review, the NITC and DAS Budget Division require agencies/entities to complete this form when requesting new or additional funding for technology projects.
2. **WHAT TECHNOLOGY BUDGET REQUESTS REQUIRE A PROJECT PROPOSAL FORM?** See the document entitled "Guidance on Information Technology Related Budget Requests" available at http://www.nitc.state.ne.us/forms/.
3. **DOWNLOADABLE FORM.** A Word version of this form is available at http://www.nitc.state.ne.us/forms/.
4. **SUBMITTING THE FORM.** Completed project proposal forms should be submitted as an e-mail attachment to rick.becker@nitc.ne.gov.
5. **DEADLINE.** Completed forms must be submitted by September 15, 2006 (the same date budget requests are required to be submitted to the DAS Budget Division).
6. **QUESTIONS.** Contact the Office of the CIO/NITC at (402) 471-7984 or rick.becker@nitc.ne.gov

Section 1: General Information

Project Title	Court Re-engineering – Vocational Rehabilitation
Agency (or entity)	Nebraska Workers' Compensation Court

Contact Information for this Project:

Name	Randall Cecrle
Address	1221 N Street, Ste 402, PO Box 98908
City, State, Zip	Lincoln, NE 68508-8908
Telephone	402-471-2976
E-mail Address	IT.Manager@wcc.ne.gov

Section 2: Executive Summary

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

This project is a continuation of a multi-year project that will procure, develop, install, and support Court Re-Engineering enhancements in the Vocational Rehabilitation section of the court. This will be based upon the results from current internal re-engineering analysis. From the current internal analysis and court priorities, the first software products to be introduced to the court will be from one or more of the Key Technologies currently identified in the internal analysis that cannot be achieved with existing resources.

This project's additional key technologies are:

- Adhoc Message Composition, Secured Message Delivery, and Electronic Message Reception

This project will also provide the court with monies for contract programming during development phases.

Project Update
Phase 1, VRS Counselor Certification Notification & Assignment System, is in the final stages of development, testing, and conversion. This phase introduced electronic document management and the outgoing message management (programmatic communications by email, efax, and letter). This phase was scheduled to be completed in the 1st Qtr of FY2005-06, but because of higher priority projects and introduction of new technologies is now projected to be completed in the 1st Qtr of FY2006-07.

Phase 2, VRS Case Management will focus on VRS Case Management and re-engineer data, programs, and processes associated with managing Workers Compensation Rehabilitation Cases.

This phase will also introduce to the court integrated adhoc outgoing message composition which will allow staff to compose free-form communications that will be programmatically rendered to PDF,

saved in the integrated Case/Document management repository, and then delivered by email, electronic fax, or letter. It will also address Secured Message Delivery, and Electronic Message Reception It will also address Secured Message Delivery, and Electronic Message Reception.

Section 3: Goals, Objectives, and Projected Outcomes (15 Points)

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

Goals, Objectives, Outcomes
The court has several internal re-engineering projects in various stages of development. Each has identified key technology(s) that are critical to the project that will later have broader use in other sections of the court. This project's additional key technologies are:

*   Adhoc Message Composition, Secured Message Delivery, and Electronic Message Reception

Within the Vocational Rehabilitations Services (VRS) re-engineering project, during the previous two fiscal years the court has completed its first phase of implementation of data systems and software technology which has created an Enhanced E-Files (document management) environment that is tightly integrated with the courts structured case management data system and software technology.

The court has completed the first phase of Message Management (letter and document) by creating an automated system for computer-generating pre-designed messages (letters/documents), sending those messages either to printers or directly to the recipients either by electronic fax or unsecured email. These messages are automatically captured with recipient information into the courts integrated case/document management system with no extra work on part of the staff. The court contracted with the Office of the CIO in the development of Webservices that created interface points between the courts custom developed Windows Services and the states enterprise electronic fax server. The ultimate goal is that all "business line" communications will occur within the "box" of the courts integrated case/document/message management system.

As the court moves into the next phase of VRS re-engineering (and other projects), the court must implement secured email and file transfer features and is a participant in the in the State Government Councils Secured Email workgroup. Implementation of Secured Email will require enhancements to the existing Message Management systems be developed based upon the system implemented to create a Secured Email environment. In addition the court is exploring secured file transfer options that would allow minimal administration of accounts and possibly provide acknowledgements of file "pick-up." During this phase of Message Management, the court must also procure/develop software that will allow staff to easily retrieve incoming email and fax communications and "attach" them to individual cases. In addition, the court must implement message composer technologies to allow staff to compose adhoc emails within the integrated case/document/message management system.

Ultimate beneficiaries will include all external stakeholders of the court, including attorneys, insurance companies, injured employees, employers, etc. Court staff will also reap work and information improvements.

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

Specific functional and performance requirements will be defined for each key technology. Post project reviews will be performed to assure that requirements were met. Whenever possible, proof of concept testing will be performed to assure that the technology can meet requirements before procurement occurs.

The court will test and verify that delivery is happening securely. Workload will not be increased to manage accounts for retrieval of secured information. The court will have reduced to a minimum the number of outside secured message systems that it must use.

The number of manual steps to add an incoming message to the integrated case/document management system is considerable and can take up to 3-5 minutes to perform. It requires staff to print the message to PDF, save to disk, switch to the case/document management system, open the proper case, open the folder where the PDF was saved, name and describe the document, and attach to the case. In the process of printing to PDF, court is not capturing meta-data that could be important if questions about the delivery of the document were ever asked.

The automated Incoming Message Retrieve system will reduce the manual steps by one-half to two-thirds and reduce the time to process by at least half.

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

This project was discussed in 1.2. Projects Currently Active and subsequent sections of the *AGENCY INFORMATION TECHNOLOGY PLAN FOR 2007-09 BIENNIAL BUDGET.*

Section 4: Project Justification / Business Case (25 Points)

4. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

Enhanced E-Files has begun to provide the court with a robust document management system integrated into our current relational database case management system. In the future both case/document management will be managed through full life-cycle records management. The goal of a "paper-less" environment is being facilitated by a combined case/document management system allowing the court to share files and documents with multiple court members. It also positions the court for the ultimate sharing of information

electronically with external parties through secured Internet, email, and file transfer. E-Files provide information at the point of need for responding to requests for information.

Message Management will integrate word processing and automated communications generation with data extracted on a real-time basis from our case management systems. Messages will be sent not only by paper/mail, but through e-fax and secured and unsecured information exchanges. The messages, with any attachments, will be automatically captured and stored in the combined case/document management repository eliminating the need to scan and attach these communications. Staff workload will be reduced while achieving the "paper-less" environment. Programmatic redirecting incoming computerized faxes and emails directly into the integrated case/document/message management "inbox" will allow staff with minimal effort to incorporate these incoming communications into the "paper-less" file. In addition, the court will be able to capture meta-data, such as date received and routing information into structured fields.

Secured message delivery will allow the court to deliver content electronically that today it is not allowed to deliver in an unsecured environment. Social Security Numbers cannot be sent by internet email today. Because of the inability to send this information and any other information in the future that is deemed private, other means such as mail, electronic fax, and phone calls must be used to supplement these communications. Secured message delivery with reduce the necessity to use these other alternative communications methods because the private information will be able to be sent with the first communication.

Because of the relative newness of E-Files, the court has not yet reached the need to manage its computerized information fully as records. The court is beginning to incorporate full life-cycle records management requirements of classification, protection, and destruction using automated tools into each system that is re-engineered. Classification of computerized information is easily performed at either the file-system folder level or at the database schema/table level. Protection of computerized information is handled through both application and file-system/database security. Tools for destruction are not readily available. Requiring users to identify individual electronic records for deletion is infeasible because of the amount of time required to perform the activity. Identification, notification, approval, and destruction of records through an automated system are the only feasible way to comply with the records retention schedules. The court will continue to research solutions to the automated destruction of records over the next two years.

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

The court has created a custom case/document management environment based upon Oracle 9i relational database technology and will continue to build upon that technology platform.

The court has preliminarily reviewed both Lotus and Oracle third-party tools for "data-mining" electronic faxes and emails from its Lotus Domino Mail server. The court will need to complete its evaluation of options prior to the next biennium.

The court previously reviewed and tested solutions to integrating adhoc document composition into its Borland Delphi applications to accomplish developing a comprehensive Message Management system. As this project proceeds, it will revisit alternative technologies to determine how best to create this environment prior to the next biennium.

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

    Not applicable.

Section 5: Technical Impact (20 Points)

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

    The key technologies are all enhancements to our current Microsoft Windows Application and Oracle Relational Database environment. Because the court's offices in Lincoln are on 100 megabit data communications, band-width requirements are not an issue.

    Message management will require the purchase of third-party component software that will provide word-processing, spell-checking, and conversion to Adobe PDF features directly into its Borland Delphi developed applications. Today staff is used to creating documents in Microsoft Word. This third-party software will vary somewhat from these word-processing products and staff will need to adjust.

    The use of an enterprise system for secured email communications is central to electronic communications with external parties. The product selected by the State Government Councils Secured Email workgroup will determine how the court will interface with its systems. The court will be dependant on the availability and reliability of this system.

    A File Transfer Appliance will require the development of additional Message Management Windows Services to integrate with the appliance to both send files and retrieve acknowledgements of pickup.

    To retrieve incoming emails and electronic faxes, the court will need to procure software that will extract Lotus Domino mail documents from Domino Mail-in databases or implement a specialized incoming SMTP mail server, transform those documents into PDF documents that contain both business content and meta-data and transfer them into a Delphi/Oracle "Inbox" for processing by court staff.

    E-Files (document management) have given us the first step to become paper-less as possible. The database will grow at a faster rate than it does today and in the future will require additional disk storage and a higher performance server. Backups will take longer. The court in Fiscal Year 20005-06 participated in Virtual Client Workgroup and the outcome of that has moved the court to enhance its computing environment with "virtual machines." During the Fiscal Year 2006-07, the court will have evaluated the Office of the CIO's options

for Virtual Server Session leasing and will have determined what mix of physical and virtual servers best support the courts needs. The court will also have evaluated the Office of the CIO's Systems Storage Area Network (SAN).

The court and the Office of the CIO have come to agreement on backup medium retention. The court will adjust its backup medium retention schedule from two weeks to a month which will allow the court to move away from its own backup system to the Office of the CIO's enterprise backup system without incurring additional hardware costs.

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

The court uses Oracle's relational database which is one of the three top database systems in the industry. It is known for its reliability, scalability, performance, recoverability, and security.

The court has already performed proof-of-concept testing on the third-party word-processing and spell-checking tools that will be integrated with the Borland Delphi development system. Saved drafts must not become corrupted. Software that creates "Published" Adobe PDF documents must take full advantage of Adobe PDF security features to allow the court to create authenticable and electronically signed portable documents. The court must also investigate and implement software that generates the new PDF/A (PDF/Archive) for long-term preservation.

"Transmission systems" (e-fax and securely acknowledged message transfer) must have low rates of failure and when failures do occur, notifications must be back to the system. The transmission systems must produce transmission/receipt logs. They must secure the messages so that they are accessible to only authorized persons. As volumes increase, the transmission systems must be upgradeable to meet specific service levels. Proof-of-concept testing will indicate whether these systems will meet all of these needs.

The gateways between applications must have minimal failures and must be able to monitor and report on failures when they occur.

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

The court participated in a joint project with IMServices to define accessibility development standards for Microsoft Windows development. Those same standards with other published standards will be used when procuring third-party software solutions. Other standards and guidelines will be reviewed at appropriate times during the projects.

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

The Office of the CIO will be brought in to review any new technologies for compatibility.

Section 6: Preliminary Plan for Implementation (10 Points)

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

All project plans below are estimates and will be revised based as better information is gathered during the development life-cycle.

Phase 1 of the re-engineering began in Fiscal Year 2000-06, with the deliverable of phase one to be completed in Fiscal Year 2006-07. The second phase began in late Fiscal Year 2006-07, early 2007-08 and will carry into at least Fiscal Year 2008-09.

Court stakeholders have participated in the first phase of the re-engineering and will continue in subsequent phases.

The project sponsor is the manager of the Vocational Rehabilitation section of the court. The Information Technology project leader/primary developer is a Senior Application Developer. The design team will be comprised of the Vocational Rehabilitation Manager, Specialists and staff. The Information Technology Manager / Database Administrator will function as data analyst. Policy issues that need to be addressed will be taken to the Court Administrator.

Experience

Title	Total	In Current Position
Senior Application Developer (IT Project Leader)	8+	4
Vocational Rehabilitation Manager	32+	6
VR Specialists	32+	7+
VR Staff	32+	7+
IT Manager/DBA	30	11

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

- Fiscal Year 2007-08 – Implementation of Message Management composition.
- Fiscal Years 2007-08 thru 2008-09 - Message delivery through secured email and/or file transfer.
- Fiscal Year 2007-08 - Programmatic redirecting of incoming computerized faxes and emails directly into the integrated case/document/message management "Inbox".

11. Describe the training and staff development requirements.

For all the key technologies, not only will there be major training requirements, but changes in mindset on how to perform the duties. Message Management will require a change in mindset that will include simplification and standardization and the desire and ability to view documents electronically instead of producing paper copies. Internal training will be provided by IT Staff on how to use the Message Management functions. There will need to be training on any secured email systems or file transfer appliances. IT staff will need training on any software procured.

12. Describe the ongoing support requirements.

All purchased software will need to be placed under upgrade/maintenance agreements. All in-house developed software will be maintained by on-board staff or contract developers if applicable and funds are available. IT applications development staff must be retained to provide application support and enhancements.

Section 7: Risk Assessment (10 Points)

13. Describe possible barriers and risks related to the project and the relative importance of each.
14. Identify strategies which have been developed to minimize risks.
(Combined Answer)

- Acceptance of the change by court personnel.
  - Managers are involved in projects.
  - Staff is involved in design and selection processes.
- Messages will fail to be delivered electronically.
  - Monitoring through test messages must be performed on a regularly scheduled basis.
  - Alerts must be developed that notify when processing nodes fail.
  - Acknowledgements must be returned and matched to the original message.
- Messages must be delivered securely to avoid loss of personal information.
  - Monitoring through test messages must be performed on a regularly scheduled basis.

Section 8: Financial Analysis and Budget (20 Points)

15. Financial Information

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

(1) If the information is available in some other format, either cut and paste the information into this document or transmit the information with this form; or

(2) Provide the information by completing the spreadsheet provided below.

Instructions: Double click on the Microsoft Excel icon below. An imbedded Excel spreadsheet will be launched. Input the appropriate financial information. Close the

spreadsheet. The information you entered will automatically be saved with this document. If you want to review or revise the financial information, repeat the process just described.

Excel Spreadshee
(Double-click)

Financial information from the embedded spreadsheet appears at the end of this PDF version of the document.

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

See side notes on spreadsheet above.

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

Program Number 530.

VR Re-engineering

(Revise dates as necessary for your request.)

	Estimated Prior Expended	Request for FY2007-08 (Year 1)	Request for FY2008-09 (Year 2)	Request for FY2009-10 (Year 3)	Request for FY2010-11 (Year 4)	Future	Total	
1. Personnel Costs							$ -	
2. Contractual Services								**2.2 Programming**
2.1 Design							$ -	Represents use of contract programming to develop specific applications and interfaces to Office of the CIO systems
2.2 Programming	$ 10,000.00	$ 30,000.00	$ 30,000.00				$ 70,000.00	
2.3 Project Management							$ -	
2.4 Other							$ -	**7. Operating Costs** **$2,400**
3. Supplies and Materials							$ -	Secured Email Transaction Fees $2,400
4. Telecommunications							$ -	
5. Training							$ -	***
6. Travel							$ -	**8.1a Hardware One Time**
7. Other Operating Costs		$2,400	$2,400	$2,400	$2,400	$2,400	$ 12,000.00	File transfer applicance $20,000
8. Capital Expenditures								
8.1a Hardware - One Time		$ 20,000.00					$ 20,000.00	
8.1b Hardware - Cont			$ 3,000.00	$ 3,450.00	$ 3,967.50	$ 4,562.63		**8.1b Hardware Cont**
8.2a Software - One Time	$ 5,000.00	$ 35,000.00					$ 40,000.00	Maintenance, support, replacement costs
8.2b Software - Cont		$ 7,000.00	$ 8,050.00	$ 9,257.50	$ 10,646.13	$ 12,243.04	$ 47,196.67	
8.3 Network							$ -	
8.4 Other							$ -	
TOTAL COSTS	$ 15,000.00	$ 94,400.00	$ 43,450.00	$ 15,107.50	$ 17,013.63	$ 19,205.67	$ 204,176.79	**8.2a Software One Time** **$35,000**
General Funds							$ -	Message Composition Software $5,000
Cash Funds	$ 15,000.00	$ 94,400.00	$ 43,450.00	$ 15,107.50	$ 17,013.63	$ 19,205.67	$ 204,176.79	Electronic Message Reception Software $30,000
Federal Funds							$ -	
Revolving Funds							$ -	***
Other Funds							$ -	**8.2a Software Cont**
TOTAL FUNDS	$ 15,000.00	$ 94,400.00	$ 43,450.00	$ 15,107.50	$ 17,013.63	$ 19,205.67	$ 204,176.79	Support,upgrades, etc.

Biennium Total $ 137,850.00