

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Project Proposal - Summary Sheet
2015-2017 Biennial Budget

Project #27-01
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Project #	Agency	Project Title
27-01	Department of Roads	Mainframe Migration

SUMMARY OF REQUEST (Executive Summary from the Proposal)

[Full text of all proposals are posted at: http://nitc.nebraska.gov/commission/project_proposals/2015-2017.html]

The mainframe has been a valuable tool for the NDOR over the last 40 years. But as with all technologies, things change over time and organizations should evaluate the state of their applications; are we providing our users the functionality they need, are we doing it in a cost-effective manner and are we able to support these needs not just over the next few years but in the next 10 years or possibly longer.

That is what the NDOR is doing. We talked with our users about their current systems and their future needs and then looked at our current workforce and the ability to support this environment in the future as we face retirements and the ability to find the skills necessary to support the environment. We determined that the best course of action for the NDOR is to migrate our applications off of the mainframe to a platform we believe provides the functionality our users are looking for and also something that we are able to support in the future. Our plan is to create an RFP to hire an outside source either re-host or convert our mainframe applications to a technology centered on Microsoft and hosted by the Office of the CIO. An RFI has been completed that received two responses, which helped us in determining what we should budget for this project.

FUNDING SUMMARY

	Prior Expended	FY2015 Appr/Reappr	FY2016 Request	FY2017 Request	Future	Total
1. Personnel Costs						\$ -
2. Contractual Services						
2.1 Design			\$ 300,000.00	\$ 300,000.00		\$ 600,000.00
2.2 Programming			\$ 700,000.00	\$ 700,000.00		\$ 1,400,000.00
2.3 Project Management			\$ 200,000.00	\$ 200,000.00		\$ 400,000.00
2.4 Other						\$ -
3. Supplies and Materials						\$ -
4. Telecommunications						\$ -
5. Training						\$ -
6. Travel						\$ -
7. Other Operating Costs						\$ -
8. Capital Expenditures						
8.1 Hardware			\$ 25,000.00	\$ 25,000.00		\$ 50,000.00
8.2 Software			\$ 25,000.00	\$ 25,000.00		\$ 50,000.00
8.3 Network						\$ -
8.4 Other						\$ -
TOTAL COSTS	\$ -	\$ -	\$ 1,250,000.00	\$ 1,250,000.00	\$ -	\$ 2,500,000.00
General Funds						\$ -
Cash Funds			\$ 1,250,000.00	\$ 1,250,000.00		\$ 2,500,000.00
Federal Funds						\$ -
Revolving Funds						\$ -
Other Funds						\$ -
TOTAL FUNDS	\$ -	\$ -	\$ 1,250,000.00	\$ 1,250,000.00	\$ -	\$ 2,500,000.00

PROJECT SCORE

Section	Reviewer 1	Reviewer 2	Reviewer 3	Mean	Maximum Possible
Goals, Objectives, and Projected Outcomes	12	10	13	12	15
Project Justification / Business Case	20	15	23	19	25
Technical Impact	15	15	18	16	20
Preliminary Plan for Implementation	7	7	8	7	10
Risk Assessment	6	8	10	8	10
Financial Analysis and Budget	15	13	20	16	20
TOTAL				78	100

REVIEWER COMMENTS

Section	Strengths	Weaknesses
Goals, Objectives, and Projected Outcomes	<ul style="list-style-type: none"> - The goal of consolidating application platforms and languages does help with staffing by limiting skills required by staff. - Clearly states goal and the objectives of the project. 	<ul style="list-style-type: none"> - The expectation that this can be done with an existing COTS tool is not reasonable. The more likely outcome is the rewrite or replacement of the business system. - Measurement and assessment methods could use some fleshing out.
Project Justification / Business Case	<ul style="list-style-type: none"> - Based on the age of their applications, it is appropriate for NDOR to be exploring this to ensure they are where they need to be as an Agency in regards to their applications. - The plan recognizes the need to replace or update aging business systems. - Clearly defined tangible benefit of a significant cost savings. 	<ul style="list-style-type: none"> - This might be a difficult project to determine tangible benefits due to the size of it and not knowing if NDOR has already mapped out interdependencies between applications to see when and how all applications are tied together. - The return on investment will be 4 years using the \$1.4M estimate, 7 years if the costs are \$2.5M. I do not think the all of the cost to convert these applications has been identified and the ROI will be much longer. - Still evaluating other solutions - no mention of any solutions being rejected.
Technical Impact	<ul style="list-style-type: none"> - NDOR understands the implications of staying where they are unless something is done in the way of training and teaching students to ensure these applications can be supported in the language they are currently written in. This project could potentially have a huge technical impact on the users within NDOR as there might be a need for extensive training for their staff. - When completed technology will be consolidated for DOR applications. - Clearly describes replacement of technology / platform that is growing increasingly difficult to support due to limited available resources. 	<ul style="list-style-type: none"> - Unless applications are rewritten, you are just trading one dependency for another. - Complete reliance upon a single-vendor proprietary technology / platform. Does not address security related to the project objectives.
Preliminary Plan for Implementation	<ul style="list-style-type: none"> - NDOR has spent a considerable amount of time preparing for this possible change by issuing the RFI and researching as much as possible. - RFP has not been completed, but clearly describes intended plans, teams, resources, etc. 	<ul style="list-style-type: none"> - Understand no timeline yet but NDOR needs to make sure they recognize all of the potential interdependencies with a project of this size and have strong project management. Still so early in the project it is difficult to tell if the plan for implementation is solid. - Many of the resources required for this implementation are the same ones mentioned in other plans. Are there adequate staffing to implement this solution in a timely manner.
Risk Assessment	<ul style="list-style-type: none"> - Reasonable examination of the risks. - Good description of possible barriers and mitigation strategy. 	<ul style="list-style-type: none"> - Pretty generic risk assessment statements. Do not know how much time NDOR has spent on uncovering specific risks to any of their Division's as a result of this change. - There are multiple variables that could impact this project and many of them are outside of the control of the agency.
Financial Analysis and Budget	<ul style="list-style-type: none"> - RFI has been issued, some details have been identified. - Very clear, easy to understand, and quite reasonable to see the anticipated cost savings. 	<ul style="list-style-type: none"> - Because it is so early in the project, it is difficult to say for sure what the financial benefits will be or the costs may be once interdependencies are determined. - All costs have not been identified and details on what technical solution (convert or translate) will be implemented are not clear.

TECHNICAL PANEL COMMENTS

Technical Panel Checklist				Comments
	Yes	No	Unknown	
1. Is the project technically feasible?	✓			
2. Is the proposed technology appropriate for the project?	✓			
3. Can the technical elements be accomplished within the proposed timeframe and budget?			✓	

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Project #27-02
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Project #	Agency	Project Title
27-02	Department of Roads	Stock Supply System

SUMMARY OF REQUEST (Executive Summary from the Proposal)

[Full text of all proposals are posted at: http://nitc.nebraska.gov/commission/project_proposals/2015-2017.html]

The existing supply system application is mainframe based and has been in production for over 15 years. This has been a useful tool for the Procurement section of the Operations Division and it has made it easier for all Divisions and District to order supplies necessary for them to do their day to day operations.

As with all software applications and with hands on day-to-day operations, there comes a time when users determine new needs, see opportunities to make improvements and take advantage of newer technologies. Moving applications off of the mainframe is but one of the Business Technology Support Division's (BTSD) goals. NDOR is a Microsoft based shop utilizing newer technologies such as C#.NET and SQL Server 2012 while our software development methodology follows the Agile practice.

The goal of this project is finding or developing a system to provide for a warehouse management system (WMS) of supplies that will replace the legacy Supply Inventory System (SUP). The goal is to have a system that will allow for inventory control/monitoring of stock, ordering, receiving, picking, replenishments, shipping and returns while utilizing Radio Frequency Identification (RF) devices or other similar electronic scanning functionality. The WMS should also provide substantial reporting features that will help with overall WMS management. I have attached a Business Process Modeling report produced in-house which outlines the current Stock Supply system and describes what NDOR had envisioned to be a suitable replacement for the current system.

FUNDING SUMMARY

	Prior Expended	FY2015 Appr/Reappr	FY2016 Request	FY2017 Request	Future	Total
1. Personnel Costs						\$ -
2. Contractual Services						
2.1 Design			\$ 75,000.00	\$ 75,000.00		\$ 150,000.00
2.2 Programming			\$ 75,000.00	\$ 75,000.00		\$ 150,000.00
2.3 Project Management			\$ 30,000.00	\$ 30,000.00		\$ 60,000.00
2.4 Other						\$ -
3. Supplies and Materials						\$ -
4. Telecommunications						\$ -
5. Training						\$ -
6. Travel						\$ -
7. Other Operating Costs						\$ -
8. Capital Expenditures						
8.1 Hardware			\$ 20,000.00	\$ 20,000.00		\$ 40,000.00
8.2 Software			\$ 100,000.00	\$ 100,000.00		\$ 200,000.00
8.3 Network						\$ -
8.4 Other						\$ -
TOTAL COSTS	\$ -	\$ -	\$ 300,000.00	\$ 300,000.00	\$ -	\$ 600,000.00
General Funds						\$ -
Cash Funds			\$ 300,000.00	\$ 300,000.00		\$ 600,000.00
Federal Funds						\$ -
Revolving Funds						\$ -
Other Funds						\$ -
TOTAL FUNDS	\$ -	\$ -	\$ 300,000.00	\$ 300,000.00	\$ -	\$ 600,000.00

[Note: After the project proposal was submitted, NDOR received responses to their Request for Information (RFI) relating to this project. Costs estimates from the responses ranged from \$200,000 to \$1,400,000 for the project.]

PROJECT SCORE

Section	Reviewer 1	Reviewer 2	Reviewer 3	Mean	Maximum Possible
Goals, Objectives, and Projected Outcomes	14	12	15	14	15
Project Justification / Business Case	21	25	25	24	25
Technical Impact	17	15	18	17	20
Preliminary Plan for Implementation	9	7	8	8	10
Risk Assessment	9	7	10	9	10
Financial Analysis and Budget	15	15	19	16	20
			TOTAL	87	100

REVIEWER COMMENTS

Section	Strengths	Weaknesses
Goals, Objectives, and Projected Outcomes	<ul style="list-style-type: none"> - It would appear a significant amount of time has been spent on documenting and determining what is needed internally by NDOR. - Project team has identified requirements and business users were involved. - Clearly defined goals, objectives, and expected outcomes. Measurement and assessment methods are in line with real world system functions, and seem reasonable. 	<ul style="list-style-type: none"> - Large systems with many users.
Project Justification / Business Case	<ul style="list-style-type: none"> - The justification is appropriate that if NDOR is able to successfully procure the right solution, the benefits they have listed are what should be realized. Department of Correctional Services is using a module in E1/JD Edwards for the same purpose so it might be beneficial to talk with them. - Time for mainframe solution to be replaced to enhance functionality. - Tangible (cost savings) and intangible benefits (better interface) seem reasonable and clearly defined. 	<ul style="list-style-type: none"> - At this point, it does not appear that NDOR is able to determine an economic return on investment with this project. - Requirements definition may be more challenging than described, limited internal resources to complete the project
Technical Impact	<ul style="list-style-type: none"> - It is appropriate for NDOR to be considering updating this based on the age of what they currently have and its apparent inability to meet their internal needs. Would encourage them to work with OCIO for the placement of any hardware into the State Data Center as well as using the wireless access points that the State has standardized on. - Team has spent time collecting business flow and some requirements. 	<ul style="list-style-type: none"> - Need to minimize the number of interfaces into the State ERP system so would encourage NDOR to utilize E1 if possible. - Technical interfaces with multiple financial systems will be complicated and require ongoing coordination and maintenance - Solution has not been selected, so technical descriptions are somewhat vague. Does not address security.
Preliminary Plan for Implementation	<ul style="list-style-type: none"> - The team that has been assembled to work on this project is diverse and represents NDOR business needs - Project team has worked with business clients to identify some requirements. - Teams and sponsors clearly defined. 	<ul style="list-style-type: none"> - Although the RFP has not been completed, there should be a reasonable timeframe that can be established to get this implemented. - Finding vendor with solution to meet needs without modification will be difficult. - No RFP issued yet, so details somewhat lacking in terms of plan, etc.
Risk Assessment	<ul style="list-style-type: none"> - Project team has worked with business clients to identify some requirements - Possible barriers, and mitigation strategies are clearly defined. 	<ul style="list-style-type: none"> - Solution is complex and requires interfaces to multiple systems.
Financial Analysis and Budget	<ul style="list-style-type: none"> - Financial information seems sufficient and reasonable. 	<ul style="list-style-type: none"> - Pretty generic estimates. - Cost estimate is seems low for application of this size.

TECHNICAL PANEL COMMENTS

Technical Panel Checklist				Comments
	Yes	No	Unknown	
1. Is the project technically feasible?	✓			
2. Is the proposed technology appropriate for the project?			✓	- Unknown until a specific technology is chosen for the project.
3. Can the technical elements be accomplished within the proposed timeframe and budget?			✓	

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Project #27-03
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Project #	Agency	Project Title
27-03	Department of Roads	ARMS Enhancements

SUMMARY OF REQUEST (Executive Summary from the Proposal)

[Full text of all proposals are posted at: http://nitc.nebraska.gov/commission/project_proposals/2015-2017.html]

ARMS stands for Automated Right-of-Way Management System. In the late 90s, the head of our Right-of-Way (ROW) Division had this idea of a workflow solution to handle the ROW process from the time preliminary plans came to the Division until the purchasing of ROW had been completed and the project was to be archived. They worked with developers at NDOR to design a system that used Lotus Notes as the base, since at that time it was the e-mail system that was used by most State Agencies. In 2008, the Office of the CIO (OCIO) began to implement a statewide e-mail system based on Microsoft Outlook. Agencies were to eliminate other mail systems, which meant NDOR had to get rid of Lotus Notes. That being the case, we began work on developing an RFP to find a vendor who could provide a Commercial off the Shelf (COTS) system to replace ARMS. All of this, including the award of the RFP, was completed prior to the decision to implement OnBase as the Enterprise Content Management System (ECMS) for the State.

As with a number of software implementations, as the work was being done a number of enhancements arose once the ROW Division began testing the software. We also discovered a number of items that we overlooked in the RFP that should have been included. Also, change in leadership along with other key members in the Division has led to changes in their processes which need to be taken into account in the system. The implementation has been going on for over two years and final sign-off for the RFP is planned in June, 2015. Once that is done, we will be in maintenance mode and any enhancements or additional work must be done as separate statements of work. That is the reason for this project.

FUNDING SUMMARY

	Prior Expended	FY2015 Appr/Reappr	FY2016 Request	FY2017 Request	Future	Total
1. Personnel Costs						\$ -
2. Contractual Services						
2.1 Design			\$ 75,000.00	\$ 75,000.00		\$ 150,000.00
2.2 Programming			\$ 100,000.00	\$ 100,000.00		\$ 200,000.00
2.3 Project Management			\$ 75,000.00	\$ 75,000.00		\$ 150,000.00
2.4 Other						\$ -
3. Supplies and Materials						\$ -
4. Telecommunications						\$ -
5. Training						\$ -
6. Travel						\$ -
7. Other Operating Costs						\$ -
8. Capital Expenditures						
8.1 Hardware			\$ -	\$ -		\$ -
8.2 Software			\$ -	\$ -		\$ -
8.3 Network						\$ -
8.4 Other						\$ -
TOTAL COSTS	\$ -	\$ -	\$ 250,000.00	\$ 250,000.00	\$ -	\$ 500,000.00
General Funds						\$ -
Cash Funds			\$ 250,000.00	\$ 250,000.00		\$ 500,000.00
Federal Funds						\$ -
Revolving Funds						\$ -
Other Funds						\$ -
TOTAL FUNDS	\$ -	\$ -	\$ 250,000.00	\$ 250,000.00	\$ -	\$ 500,000.00

PROJECT SCORE

Section	Reviewer 1	Reviewer 2	Reviewer 3	Mean	Maximum Possible
Goals, Objectives, and Projected Outcomes	12	10	15	12	15
Project Justification / Business Case	20	19	22	20	25
Technical Impact	15	16	15	15	20
Preliminary Plan for Implementation	6	6	7	6	10
Risk Assessment	7	6	10	8	10
Financial Analysis and Budget	15	13	18	15	20
			TOTAL	77	100

REVIEWER COMMENTS

Section	Strengths	Weaknesses
Goals, Objectives, and Projected Outcomes	<ul style="list-style-type: none"> - New systems moves away from Lotus notes and uses enterprise content management solution. - Clearly defined goals, objectives, outcomes, etc. 	<ul style="list-style-type: none"> - It is not clear on the division of work to be done in the ROW application or ECM.
Project Justification / Business Case	<ul style="list-style-type: none"> - The justification is appropriate. - Project makes use of enterprise solutions. - Automation and improved records management are reasonable justifications for a project such as this. 	<ul style="list-style-type: none"> - It would appear that this project is a result of missing items in the original RFP that was issued for the replacement of their automated ROW system. NDOR needs to ensure that this second attempt they are making will be all inclusive of their needs. - Scope of work is not clear - No indication of other solutions evaluated.
Technical Impact	<ul style="list-style-type: none"> - DOR has experience with solutions to be implemented. 	<ul style="list-style-type: none"> - NDOR needs to ensure they have a clearly defined scope to their "definition of change" comment otherwise this could become quite costly for them. - Scope of work to be implemented in ROW and ECM not clear. - Overall technical impact is vague. Does not address security.
Preliminary Plan for Implementation	<ul style="list-style-type: none"> - Teams and sponsors clearly identified. 	<ul style="list-style-type: none"> - Because the initial project is not completed, it is hard to evaluate the implementation for the phase 2 part of this project. It would appear, based on the comments in the executive summary, that strong project management needs to be put into place to ensure the deliverables are well defined and delivered in a timely manner. - Current project not completed scope of work not well defined. - No identification of plans.
Risk Assessment	<ul style="list-style-type: none"> - It looks like NDOR has a contingency plan to ensure that they are able to complete this project. - Reasonable description of possible barriers and good mitigation strategies identified. 	<ul style="list-style-type: none"> - ROW projected not implemented and ECM work not defined.
Financial Analysis and Budget		<ul style="list-style-type: none"> - Not too much detail - these are pretty generic categories. - Without scope of work defined, cost cannot be estimated. Information provided is a ball park number? - Difficult to judge the financial aspect when technical impact is vague, but seems likely reasonable with the provided information.

TECHNICAL PANEL COMMENTS

Technical Panel Checklist				Comments
	Yes	No	Unknown	
1. Is the project technically feasible?	✓			
2. Is the proposed technology appropriate for the project?	✓			
3. Can the technical elements be accomplished within the proposed timeframe and budget?	✓			