

**Project Name:** LEGEND

**Agency:** NDLC

**Project Sponsor:** Jason Steckler

**Project Manager:** Sonja Olson

#### Project Description

The current information technology systems in the North Dakota Legislative Branch have been designed and built over a period of several years beginning in the 1960's. The resulting custom-built applications are based on the unique requirements of the North Dakota legislative process and fully support the various activities. The longevity of the systems has provided time to correct, modify and enhance the systems to provide much of the required functionality. Most of the systems are mainframe-based and are hosted by North Dakota Information Technology Department (ITD). Many other computer systems were developed over time to support the entire legislative process.

By replacing the current legislative applications, North Dakota Legislative Council (NDLC) is expected to yield business value in the following ways:

- Reduce risk
- Enhance ease-of-use
- Reduce cost
- Enhance level of service to North Dakota legislators and other stakeholders.

#### Business Need or Problem

The problem of technology obsolescence and loss of knowledgeable support personnel affects the State of North Dakota legislature and related support agencies. The impact is a system that will be unsupported (operations and maintenance) in the near future and a significant risk of loss of critical systems that support the legislative process.

NDLC is at great risk of having systems that are unsupported in the near future due to the age (25+ years old) of key computer programs and related technologies. In addition, NDLC is in danger of losing support for these mission-critical systems due to the loss of key personnel (retirement or job change) and since certain critical system technologies (BookMaster, ISPF, REXX) may become, in practice, unsupported within the next four years.

The risk of loss of support is amplified by the strong possibility that it may take as many as 4 years to completely renovate the entire software platform. A new solution and renovation plan should be developed and implemented as soon as possible.

#### Key Metrics

Project Start Date	Estimated Length of Project	Estimated Cost
December 2008	28 months	\$5,637,066

#### Benefits to Be Achieved

Project Objectives	Measurement Description
Reduce the risk of the system becoming obsolete and/or unusable due to subject matter expertise obsolescence for maintenance and enhancement of the system.	System maintenance and administration expertise are shared across multiple personnel.
Document Management	Survey the stakeholders after session. The respondents will respond with an average level of 4 or higher (on a scale of one to 5) on the Likert scale to the Ease-of-use questions.
Model Office Utilization	Provide training and product familiarization throughout project and implementation. Users will have the product knowledge for 2011 session execution.

Hosting costs will be reduced.	75% of mainframe hosting costs will be eliminated after production rollout for Phase 1. New hosting costs will be gathered 90 days after this production rollout and average per month. These will be compared to the average monthly mainframe costs for a similar time period.
Leveling costs throughout biennium.	In May of 2011, mainframe costs will be gathered for the 2007-2009 and 2009-2011 biennium. These will be compared to see if the spikes in mainframe expenses have leveled.
Maintenance costs will be reduced.	Beginning in May of 2011, mainframe consultant labor hours will be tracked and compared to the previous biennium's labor hours.
Enhance level of service to NDLC stakeholders.	The product will provide the ability for automatic enrolling and engrossing by 2011 session.
Enhance level of service to legislators during session.	The product will provide the ability to display amendments in context.
Remove the system from the mainframe in order to avoid technology obsolescence and exponentially increasing costs.	75% of mainframe applications will be eliminated after production rollout for Phase 1.

### Cost/Benefit Analysis

The table below shows the 10-year costs, by biennium, of replacing the current applications over the next two biennia.

Projected Costs for <u>Replacing</u> Current Legislative Applications over 2 biennia						
Cost Component	2005-2007	2007-2009	2009-2011	2011-2013	2013-2015	10-Year Total
Hardware Replacement		\$10,000	\$35,000	\$25,000	\$40,000	\$110,000
Software Maintenance		\$30,000	\$35,000	\$45,000	\$50,000	\$160,000
Application Support			\$330,000	\$370,000	\$400,000	\$1,100,000
Implementation Costs	\$1,200,000	\$3,700,000				\$4,900,000
Current Systems Costs	\$1,200,000	\$800,000				\$2,000,000
<b>Total Biennium Cost</b>	<b>\$2,400,000</b>	<b>\$4,540,000</b>	<b>\$400,000</b>	<b>\$440,000</b>	<b>\$490,000</b>	<b>\$8,270,000</b>

The table below shows the projected 10-year costs, by biennium, of keeping the current systems in place.

Projected Costs for <u>Remaining</u> with Current Legislative Applications						
Cost Component	2005-2007	2007-2009	2009-2011	2011-2013	2013-2015	10-Year Total
Hardware Replacement	\$15,000	\$30,000	\$20,000	\$25,000	\$20,000	\$110,000
Software Maintenance	\$15,000	\$20,000	\$20,000	\$25,000	\$30,000	\$110,000
Application Support – ITD and contractors	\$1,300,000	\$1,500,000	\$1,700,000	\$1,900,000	\$2,100,000	\$8,500,000
ITD Hosting Costs	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
<b>Total Biennium Cost</b>	<b>\$1,730,000</b>	<b>\$1,950,000</b>	<b>\$2,140,000</b>	<b>\$2,350,000</b>	<b>\$2,550,000</b>	<b>\$10,720,000</b>

## Key Constraints or Risks

Risk		Description/Definition	Risk Management
Changes in Scope		Scope changes can take several forms, including the functions to be addressed, the number of organization units to be involved, the level of detail of products, the specific products to be provided, the allocation of resources, etc. Each change has the potential to put timely project completion at risk, or to cause rework or to examine task/product incompatibilities.	<p><b>Mitigation Actions:</b> Implement and ensure strict change control processes are adhered to at all times.</p> <p><b>Contingency Plan:</b> Call an emergency meeting of the project Executive Steering Group members to address issues and define impact at a contractual level.</p>
Probability: M			
Impact On	Cost: H		
	Schedule: H		
Function: M			

Risk		Description/Definition	Risk Management
Schedule Slippage		Schedule slippage is the failure to deliver intended artifacts according to the schedule in the project plan. NDLC, ITD, and the selected vendor can cause slippage. Such slippage can have a domino effect on subsequent tasks in the project and can put actions and benefits dependent upon timely project completion in jeopardy.	<p><b>Mitigation Actions:</b> Weekly status reports and meetings between Project Managers that will address schedule, identifying any expected changes to deliverable dates. Actions to take will be defined at these meetings.</p> <p><b>Contingency Plan:</b> Increase resource allocation to the project to bring the schedule back on track.</p>
Probability: L			
Impact On	Cost: M		
	Schedule: H		
Function: L			

Risk		Description/Definition	Risk Management
Resource Availability, Coordination and Diversion		Insufficient resources mean that appropriately skilled individuals are not available when needed. Lack of the necessary skills on the project team not only causes a shortage of resources needed to get the work done, but can reduce the productivity of other team members. Reassignment of team members to another team or to work outside the project is costly in terms of time lost in obtaining a replacement and learning curve for the replacement.	<p><b>Mitigation Actions:</b> Resources assigned to this project must make the project a top priority at all times. Requests for time outside of the project must only be agreed to after assurance that the project timeline is not impacted.</p> <p><b>Contingency Plan:</b> Formally raise issues to the responsible party's executive team. If commitment cannot be maintained, additional resources may be assigned to the project to fill the resource gap.</p>
Probability: H			
Impact On	Cost: H		
	Schedule: H		
Function: M			

Risk		Description/Definition	Risk Management
Product Integration and Conflicting Priorities		The technical dependencies within the project may be of a level of complexity or require a degree of integration that risks the overall success of the project. If priorities conflict, one team may emphasize timing, detail or quality in a way that is incompatible with the needs of the other team.	<p><b>Mitigation Actions:</b> Extreme focus on an integrated system design with continuous and direct communication between developers must be maintained. Monthly technology planning and review meetings between senior technical project members from NDLC, ITD, and the selected vendor.</p> <p><b>Contingency Plan:</b> Call an emergency meeting of the project Executive Steering Group members to address issues and define impact at a contractual level.</p>
Probability: M			
Impact On	Cost: H		
	Schedule: H		
Function: M			

Risk		Description/Definition	Risk Management
Missed/Misunderstood Requirements During Spec Phase		It is crucial that all questions are asked and all information required for the configuration of the system be addressed during the specification phase. If items are missed or misunderstood, the project timelines could slip or rework may be required.	<p><b>Mitigation Actions:</b> Implementing peer-review strategy. Specification walkthroughs prior to sign-off including NDLC and the selected vendor.</p> <p><b>Contingency Plan:</b> Use change control process to define specification criteria.</p>
Probability: M			
Impact On	Cost: H		
	Schedule: H		
Function: M			

Risk		Description/Definition	Risk Management
Data Conversion Delays		The complexity of the data conversion, such as the amount and current location of data, combined with the need to ensure clean data can have an impact on the project.	<p><b>Mitigation Actions:</b> Cleaning of data prior to conversion.</p> <p><b>Contingency Plan:</b></p>
Probability: L			
Impact On	Cost: H		
	Schedule: M		
Function: L			

Risk		Description/Definition	Risk Management
Production Environment		The production environment must be capable of accommodating the new system or system changes.	<p><b>Mitigation Actions:</b> Take adequate measures and conduct tests to ensure that the production environment is stable enough to support new developments.</p> <p><b>Contingency Plan:</b> Call an emergency meeting of the project Executive Steering Group members to address issues and define impact at a contractual level.</p>
Probability: L			
Impact On	Cost: M		
	Schedule: M		
Function: M			

Risk	Description/Definition	Risk Management
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Risk		Description/Definition	Risk Management
Withheld Information		Information regarding current systems and technology withheld from the project team may severely jeopardize the accuracy of the project results. Information can be deliberately withheld, withheld through carelessness or the failure to understand what is needed. In any case, the impact is the same.	<b>Mitigation Actions:</b> <b>Contingency Plan:</b>
Probability: L			
Impact On	Cost: M		
	Schedule: M		
	Function: H		