

# Startup Reports

## Judicial Branch, Disaster Recovery System Project

... to establish a disaster recovery site in a remote location, which will provide a means for minimizing data loss and expediting a return to normal service in the event of a disaster caused by environmental factors.

- Baseline Start: 10/23/2015
- Baseline End: 12/30/2016
- Baseline Budget \$2,000,000

<https://www.nd.gov/itd/sites/itd/files/ND%20Courts%20DR%20Project%20Start-up%20Report.docx>

# Closeout Reports

## **Dept. of Emergency Services, CAD2/Statewide RMS**

... a joint effort between the North Dakota Criminal Justice Information Sharing Program (CJIS) and the DES, Division of State Radio, to implement a statewide Records Management System as an upgrade or a successor system to the current CJIS Law Enforcement Records Management System.

- All business objectives met
- Finished 7.5% under budget, with an actual cost \$1,084,312
- Finished 384% behind

<https://www.nd.gov/itd/sites/itd/files/StatewideRMScloseoutReport.rtf>

# Closeout Reports

## Information Technology Dept., Billing System Rewrite

ITD had three legacy billing systems that ran on two separate ITD mainframes. These systems were over twenty-seven years old. This project involved the rewrite of two of those systems to a more current technology platform, which also allowed internal business efficiencies to be gained while giving agencies better access to billing details and reports.

- Eight business objectives met, two partially met
- Finished 7.2% under budget, with an actual cost of \$933,931
- Finished 9.6% behind

<https://www.nd.gov/itd/sites/itd/files/ITD%20Billing%20Rewrite%20Closeout%20Report.docx>



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# PROJECT STARTUP REPORT

Submitted to Large Project Oversight on 10/23/2015

## GENERAL INFORMATION

**Project Name:** ND Courts Disaster Recovery

**Branch:** Judicial

**Project Sponsor:** Sally Holewa

**Project Manager:** Tom Harris

## PROJECT DESCRIPTION

The purpose of this project is to establish a disaster recovery site in a remote location, which will provide a means for minimizing data loss and expediting a return to normal service in the event of a disaster caused by environmental factors, either man-made or natural.

## BUSINESS NEEDS AND PROBLEMS

1. Need to minimize the likelihood of impacts to ND Courts' day to day activities potentially caused by IT system outages
2. Need to ensure ND Courts IT systems can continue to provide access to judicial services regardless of environmental or man-made factors at the primary data center site
3. Need to mitigate ND Court risk to potential liability and fraud due to lost records and data
4. Need to mitigate ND Court risk to potential litigation, penalties and fines as a result of not performing statutory and regulatory requirements

## PROJECT BASELINES

Baseline Start Date	Baseline End Date	Baseline Budget
10/23/2015	12/30/2016	2,000,000

## OBJECTIVES

Business Objective	Measurement Description
Mitigate the costs / impacts of an interruption to court operations	By the end of the project, establish a solution capable of supporting failover within 24 hours of an event
Mitigate risk of not meeting statutory and regulatory requirements	By the end of the project, confirm capability to continue to provide processing for applications that support court operations and services after a failover event
	By the end of the project, confirm the capability to continue to provide accurate records, matching primary data center accuracy with minimal data lag, after a failover event

## COST BENEFIT ANALYSIS

# PROJECT STARTUP REPORT

Submitted to Large Project Oversight on 10/23/2015

Without a DR site, the costs at the time of a disaster to the primary site are similar to the cost of developing DR capabilities originally as similar equipment and facilities would be required. However, if the primary datacenter was destroyed, the total restoration time to restore the systems and process the backlog would be approximately 3 months. Most stakeholders would suffer a significant loss in productivity due to a high level of reliance on automated systems to perform their business processes. The loss of productivity and the increase in overtime during the 3 month recovery period would be at least 50% of personnel costs. Public safety would also potentially be affected by a disruption of court operations. The benefits of implementing a DR site include the following:

- Capability to continue to provide processing for critical applications that support critical court operations and services
- Capability to reduce the impact of an incident or disaster to all internal and external stakeholders
- Fast recovery time
- Minimal disruption to court operations
- Avoidance of productivity losses
- Reduce planned, predictable downtime as well as unplanned downtime
- Assist in maintaining service levels in times of high volume and growth
- Avoidance of overtime expenses to process the backlog from an IT outage
- Avoidance of problems with manual record keeping

## KEY CONSTRAINTS AND/OR RISKS

The project has the following constraints:

- Implementation of the solution should be completed consistent with the recommendations in the business case, except where noted otherwise by the project sponsor
- Cost, schedule, scope, and quality are often in conflict during projects. The sponsor elected to prioritize these as follows:
  1. Scope
  2. Quality
  3. Cost
  4. Schedule

The key risks for this project include the following:

1. If equipment is damaged prior to installation, then the project could experience a schedule delay due to repair or replacement
2. If the DR site cannot support the installed equipment, then the project could experience a schedule delay pending changes to the DR facility
3. If the pre-approved vendor is no longer able to deliver adequate software or cannot provide maintenance support, then the project could experience a delay caused by the need to conduct a new or revised procurement

# Project Closeout Report

**Project Name:** CAD2/RMS

**Agency:** Dept. of Emergency Services

**Business Unit/Program Area:** State Radio

**Project Sponsor:** Mike Lynk

**Project Manager:** Jeff Metzger, Justin Data

Objectives		
Project Objectives	Measurements	
	Met/ Not Met	Description
Develop a holistic system that saves time and reduces errors in order to increase record accuracy and increase efficient sharing of select information for participating agencies.	Met	a) At project implementation, establish a configurable system that can accurately and effectively share information between participating agencies. b) At project implementation, 100% of all records can be shared between participating agencies, to include increased identity accuracy, as required by participating agencies. c) At implementation, provide a system that is individually configured and approved by 100% of the participating pilot test agencies.
Build a cost effective system that meets the needs of the participating agencies	Met	At project implementation, field a system that provides increased visibility of all development and maintenance costs for a records management system that can be used by multiple agencies across North Dakota.

Schedule Objectives					
Met/ Not Met	Original Baseline Schedule (in Months)	Final Baseline Schedule (in Months)	Actual Schedule (in Months)	Variance to Original Baseline	Variance to Final Baseline
Not Met	4 months	4 months	12 months	384% behind	384% behind

*Note: Because the execution phase of this project was relatively short, by holding the project open to ensure the final defect list was 100% completed (and not held off until "maintenance") the variance aggregated exponentially. It should be noted, then, that the original product implementation target date was hit – it was just the finalizing of associated defects that caused the schedule variance. The project and schedule were held open to ensure delivery of those required punch list items.*

Budget Objectives					
Met/ Not Met	Original Baseline Budget	Final Baseline Budget	Actual Costs	Variance to Original Baseline	Variance to Final Baseline
Met	\$1,280,018	\$1,172,579	\$1,084,312	17% under	7.5% under

Major Scope Changes
None.

Lessons Learned
<ul style="list-style-type: none"> <li>Requirements gathering should have been more structured and group-focused (rather than individual-agency focused)</li> <li>[Customized] views should be limited. Agencies often think they know what they want but often may get a better result with [what is out of the box]</li> <li>It is never too early to begin training, nor is it possible to be too detailed in training</li> <li>In training, make sure you are training the advanced concepts as well as just the basics</li> <li>In training, could be good to have follow up training scheduled for a time period after the initial product has rolled out (after staff has had to use the system and may have more questions)</li> </ul>

# Project Closeout Report

## Success Stories

- Introducing the Premier One JMS has been a welcomed addition to our organization. Both Motorola & CJIS have been wonderful to work with. They are receptive to our needs and the program continues to evolve. (Comment from a jail administrator.)
- Have more users on the system now since converting to the new system with the funding provided through the full funding provided by the 2015-17 Legislative Assembly. This translates into cost savings for local jurisdictions.
- With more users on the system the information available and data shared is more robust. Additionally, there is now a larger database of records from which to search, which will continue to increase as more jurisdictions come onto the system.
- Currently have eight new agencies that came on the system since new funding was provided, and six more plan on joining in the next year.
- According to a new agency on the system, "The state providing funding for a records system is great peace of mind for the agency. They don't have to worry about budgeting for software."

# PROJECT CLOSEOUT REPORT

Submitted to Large Project Oversight on 01/28/2016

## GENERAL INFORMATION

**Program/Project Name:** Billing Rewrite

**Agency Name:** ITD

**Project Sponsor:** Dan Sipes

**Project Manager:** Brandi Fagerland

## PROJECT BASELINES

Original/ Final	Baseline Start Date	Baseline End Date	Baseline Budget	Actual Finish Date	Schedule Variance	Actual Cost	Cost Variance
Originally Baselined Information	11/04/2013	06/09/2015	\$1,007,061	08/03/2015	9.6% Behind	\$933,931.20	7.2% Under
Final Baseline Information	11/04/2013	06/09/2015	\$1,007,853	08/03/2015	9.6% Behind	\$933,931.20	7.2% Under

### Notes:

## MAJOR SCOPE CHANGES

- User Interface High-level Design - The original plan did not include efforts towards the user interface high-level design that is an enhanced component within the new ITD SDLC. An ITD architect highly recommended this deliverable be added within the scope of the project.
- New UI Framework Library - As a result of moving to a more responsive UI framework, a new Javascript framework library needed to be found to go with it.
- Time Entry Distribution Rules - There was a change in how time entry data is received, coupled with the decision to NOT store ITD employees as AD Users in the system.
- UI Theme Change - The "theme" of the UI was changed to match the ITD website. This was not in the original scope of the project.
- Disk Amounts - The way that disk amounts are charged needed to be changed to incorporate an "overflow" bill code that is used when usage hits a specified threshold.
- Rate History - The business lead decided NOT to do any conversion for historical rates as a part of the conversion process.
- Convert People/User Data - It had previously been decided NOT to convert people/user data into the new system. It was then decided to go ahead with implementing a conversion process that will use a spreadsheet created by the admins to populate the system.
- Import CPU User Changes - It was determined that this task will be a manual task in the new system.

## PROJECT OBJECTIVES

Business Objective	Measurement Description	Met/ Not Met	Measurement Outcome
<b>Business Need/Problem 1:</b> Due to the ITD goal to shut down the mainframe, ITD	<u>Measurement 1.1.1:</u> Within six months of the new system implementation, the project	Met	<u>Result:</u> The TC mainframe application was shut down on June 30, 2015. The DP mainframe billing system was shut

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<p>needs to migrate the DP and TC billing applications to a current technology platform</p> <p><u>Objective 1.1:</u> Within six months of the new system implementation, the old system is shut down on the mainframe.</p>	<p>manager and technical lead will confer with the project sponsor to ensure the old system can be shut down. They will then make contact with ITD development and mainframe staff to shut down the system and follow-up to ensure it is shut down.</p>		<p>down on July 30, 2015. The reports viewer on the mainframe still is functional for users. Users use this viewer to view more data reports than ITD billing reports.</p>
<p><b><u>Business Need/Problem 2:</u></b> Build a new billing system that meets ITD's business needs, gives more flexibility, and helps gain some internal business efficiencies</p> <p><u>Objective 2.1:</u> Create both system and user documentation for the new ITD billing system.</p>	<p><u>Measurement 2.1.1:</u> By final system implementation, the system and user documentation is complete and a process for keeping the documentation current has been developed.</p>	Partially Met	<p><u>Result:</u> A user's guide was developed and distributed by system implementation. The business team will review and update this user's guide annually. The system documentation created is an analysis package including use cases, requirements, and a data model. A process to maintain the use cases and requirements has not yet been developed but the data model is updated as changes are made to the database.</p>
<p><b><u>Business Need/Problem 2:</u></b> Build a new billing system that meets ITD's business needs, gives more flexibility, and helps gain some internal business efficiencies</p> <p><u>Objective 2.2:</u> Provide more flexibility in defining revenue breakouts</p>	<p><u>Measurement 2.2.1:</u> Within six months of the new system implementation, ITD Administrative Services staff will be surveyed to determine whether they feel they have more flexibility in defining revenue breakouts than they did with the old system.</p>	Met	<p><u>Result:</u> ITD Administrative Services staff indicate that the flexibility exists to break out charges to multiple revenue sources. This functionality didn't exist in the mainframe application.</p>
<p><b><u>Business Need/Problem 2:</u></b> Build a new billing system that meets ITD's business needs, gives more flexibility, and helps gain some internal business efficiencies</p> <p><u>Objective 2.3:</u> The current system adequately meets several business needs. The new system must be built to continue to adequately meet those business needs.</p>	<p><u>Measurement 2.3.1:</u> Within six months of the new system implementation, ITD Administrative Services staff and ITD Software Development staff will be surveyed to determine whether the new system continues to meet the business needs that were met by the old system.</p>	Met	<p><u>Result:</u> ITD Administrative Services staff indicate that the new system allows for invoice creation and billing record retention the same as the mainframe. They are able to generate end of month reports to do financial analysis in the same manner as before.</p>
<p><b><u>Business Need/Problem 2:</u></b> Build a new billing system that meets ITD's business needs, gives more flexibility, and helps gain some internal business efficiencies</p>	<p><u>Measurement 2.4.1:</u> Within six months of the new system implementation, ITD Administrative Services staff and ITD Software Development staff will be surveyed to determine whether efficiencies</p>	Met	<p><u>Result:</u> ITD Administrative Services staff are able to send invoices electronically, which is an improvement from the mainframe system. This has saved one person a full day of time during the week. They</p>

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<p><u>Objective 2.4:</u> Create efficiencies in the processes in the new system that aren't working ideally in the current system</p>	<p>have been gained.</p>		<p>also now have automatic imports, which has also saved a day of manual entry. Reporting functionality for the customers has greatly improved. The ease of access to data is appreciated by the customers as well.</p>
<p><b><u>Business Need/Problem 2:</u></b> Build a new billing system that meets ITD's business needs, gives more flexibility, and helps gain some internal business efficiencies</p> <p><u>Objective 2.5:</u> Reduce the need for manual processes for distributing revenue</p>	<p><u>Measurement 2.5.1:</u> Within six months of the new system implementation, ITD Administrative Services staff and ITD Software Development staff will be surveyed to determine whether the need for manual processes for distributing revenue has been reduced.</p>	<p>Partially Met</p>	<p><u>Result:</u> While the ITD Administrative Services staff has some ability to distribute revenue, there are still some manual allocations during the financial reviews.</p>
<p><b><u>Business Need/Problem 3:</u></b> Provide customers better electronic access to billing reports and billing detail data</p> <p><u>Objective 3.1:</u> Neither the ITD billing system mainframe client nor any other client software is needed by customers to access billing reports and billing detail data</p>	<p><u>Measurement 3.1.1:</u> Within six months of the new system implementation, ITD billing system customers will be surveyed to determine if access to ITD billing system reports and data is easier or harder to gain than with the old system.</p>	<p>Met</p>	<p><u>Result:</u> Customers were surveyed about the ability to get reports and information from BILLIT. ITD received 30 responses to the survey. Of the 21 applicable respondents, 16 felt the system was an improvement over the legacy mainframe.</p>
<p><b><u>Business Need/Problem 3:</u></b> Provide customers better electronic access to billing reports and billing detail data</p> <p><u>Objective 3.2:</u> ITD billing system customer reports are easier to navigate</p>	<p><u>Measurement 3.2.1:</u> Within six months of the new system implementation, ITD billing system customers will be surveyed to determine if ITD billing system reports are easier to navigate.</p>	<p>Met</p>	<p><u>Result:</u> Customers were surveyed about the ability to navigate BILLIT. ITD received 30 responses to the survey. Of the 16 applicable respondents, 14 felt the system was an improvement over the legacy mainframe.</p>
<p><b><u>Business Need/Problem 3:</u></b> Provide customers better electronic access to billing reports and billing detail data</p> <p><u>Objective 3.3:</u> Eliminate some static reports and replace with query capability</p>	<p><u>Measurement 3.3.1:</u> Within six months of the new system implementation, ITD billing system customers will be surveyed to determine if the query capabilities better meet their business needs than the old system static reports.</p>	<p>Met</p>	<p><u>Result:</u> Customers were surveyed about the ability to search for information within BILLIT. ITD received 30 responses to the survey. Of the 18 applicable respondents, 16 felt the system was an improvement over the legacy mainframe.</p>
<p><b><u>Business Need/Problem 3:</u></b> Provide customers better electronic access to billing reports and billing detail</p>	<p><u>Measurement 3.4.1:</u> Within six months of the new system implementation, ITD billing system customers will be surveyed to</p>	<p>Met</p>	<p><u>Result:</u> Customers were surveyed about the ability to export information from BILLIT. ITD received 30 responses to the survey. Of the 16</p>

# PROJECT CLOSEOUT REPORT

Submitted to Large Project Oversight on 01/28/2016

<p>data</p> <p><u>Objective 3.4:</u> Provide the ability for customers to export data out of the new system in order to import that data into a State supported tool to do their own analysis</p>	<p>determine if the exporting of data functionality in the new system allows them to import that data and perform analysis.</p>		<p>applicable respondents, 13 felt the system was an improvement over the legacy mainframe.</p>
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## POST-IMPLEMENTATION REPORT

Post-Implementation Reports are performed after a project is completed. A “PIR” is a process that utilizes surveys and meetings to determine what happened in the project and identifies actions for improvement going forward. Typical PIR findings include, “What did we do well?” “What did we learn?” “What should we do differently next time?” Notable findings are presented in this closeout report.

The lessons learned from the project were:

- Plan ahead for SDLC phase changes, so transition is smoother and work can begin immediately
- New technologies can impact our time estimates and I am wondering if there is a lesson learned on the initial login issues
- The overall project came in under budget which is very good, however, there were many ‘new’ things in this project that we just were not able to provide an accurate estimate for – which then put us behind in the development schedule. The approach that was taken for estimating both schedule and costs seems to be a good approach that should be carried forward to future projects (i.e., breaking the design, development and testing efforts down to the process level).
- We should have taken better notes in accounting to document why we made some decisions that we made. At the onset, you don’t realize how long two years really is to remember details. The technical lead was outstanding in this area.
- Our whole accounting team has a great understanding of the billing process now and how the data flows from start to finish. This was great cross-training for us!
- Given enough time, I would have done a better job of “mirroring” a monthly billing
- Having the system analyst start and remain with the project through project completion contributed to the success of the project
- The core project team worked well together

The success stories for the project were:

- The project went very well
- I thought the work we did digging in to how the processes worked today and how we thought things would work in the new system was an important part of the project
- While the prior system was a good system, having this system now more easily accessible to our customers and hopefully much easier for our administrative staff to use for the billing process is a success story
- We have saved a day for mailing invoices
- We have saved at least a day of doing data entry into the mainframe
- We have reportable, exportable historical records that can be looked at many different ways
- We have had many customers say that once they have gotten used to how BILLIT works, they like it and it is better than the mainframe