

LEGISLATIVE AUDIT DIVISION

Tori Hunthausen, Legislative Auditor
Deborah F. Butler, Legal Counsel



Deputy Legislative Auditors:
Cindy Jorgenson
Angus Maciver

MEMORANDUM

TO: Legislative Audit Committee Members
FROM: Miki Cestnik, Information System Auditor
CC: Dore Schwinden, Director
Angie Riley, Chief, Information Technology Bureau
Barbara Quinn, Chief, Financial Services Bureau
Hollie Koehler, Internal Auditor
DATE: May 2016
RE: Information Systems Audit Follow-Up (16SP-05): Public Employee Retirement
Information System Development Life Cycle (14DP-03)
ATTACHMENTS: Original Performance Audit Summary

Introduction

The *Public Employee Retirement Information System Development Life Cycle (14DP-03)* report was issued to the Committee in September 2014. The audit included three recommendations to the Montana Public Employee Retirement Administration (MPERA). In December 2015, we conducted follow-up work to assess implementation of the report recommendations. This memorandum summarizes our follow-up work

Overview

The Montana Public Employee Retirement Administration is investing over \$11 million to develop a new pension management information system. An information systems audit was conducted to ensure system development was proceeding according to plan and that MPERA would receive a quality and satisfactory product upon completion. Audit work identified the need for improvements in controls monitoring, commitment tracking, system testing done by contractors, and documentation of project management decisions. Our audit contained three recommendations to MPERA. Based on follow-up work, MPERA has not implemented two of the recommendations and has partially implemented the third recommendation. Since the audit, MPERA experienced turnover in key project positions, the system's implementation date was extended, and an additional \$1.2 million in funding for the system was requested and approved by the board. Current MPERA staff recognized issues within the project, some similar to concerns we identified in the original audit, and are working to implement controls and process changes to ensure further project extensions are not needed.

Background

MPERA is investing over \$11 million to develop a new pension management information system that was originally set to be implemented in June 2015. Our audit occurred during the system's development phase and reviewed the development life cycle. Audit work was completed to ensure project plans were being followed and the system development was monitored by MPERA staff.

Our audit identified MPERA needed to improve monitoring of contractor testing, commitment tracking, and documentation of project management decisions. By improving these processes MPERA would be better able to mitigate the risks of the system not satisfying the needs, or commitments, of the state. Additionally, MPERA would be better able to implement the system on time and within budget.

Audit Follow-Up Results

The following sections summarize the progress toward implementation of the report recommendations. We reviewed documents and information referred to in the corrective action plan to determine if monitoring and documentation were improved. We also reviewed documentation of development work completed after the audit to determine if issues identified within the audit were still occurring or impacting the timeliness and budget of the project. The current project status was also discussed with MPERA staff.

Since the audit, MPERA has experienced key staff turnover and the project was delayed from June 2015 to May 2016, with an extra \$1.2 million added to the budget. The funding increase covered the extension of the project, as well as change requests outside the original scope of the project. While audit work did identify issues that, if corrected, may have affected the need for an extension. The main cause of the time extension was additional changes to the system, along with data conversion and user acceptance testing falling behind schedule

Implementation of audit recommendations is not complete; however, the project is currently too far along for MPERA to implement at this point. Current project staff are working to implement additional controls, including additional testing, to mitigate any further issues with the project. These controls should improve user acceptance testing and better ensure the system will meet the needs of MPERA.

RECOMMENDATION #1

We recommend the Montana Public Employee Retirement Administration establish process controls to ensure:

- A. Commitment mapping changes are documented, executed and accurate, and**
- B. Mapped commitments are represented in the corresponding use case scenario as indicated by the Oversight Consultant Tool.**

Implementation Status – Not Implemented

Commitment mapping is the process of ensuring the original needs (commitments) of the system are met by the final product. Audit work identified controls over commitment mapping could be improved to ensure each commitment was represented in the final product. Through review of documentation, there was no evidence that commitment mapping changes were documented or discussed to ensure necessary changes were being made in the commitment tracking tool. The contractor who managed commitment tracking at the time of the audit is no longer with the project since MPERA did not renew the contract after October 2015. By the time the current project staff started, commitment mapping was finalized and any changes to commitments have been handled through change requests. No documentation of a commitment review prior to use case scenarios being approved were found during follow-up work either. A use case scenario, that was finalized after the audit, was reviewed and we identified commitments were not accurately represented. This reduces the ability of MPERA to ensure the system will meet all of its needs. As such, this recommendation has not been implemented by MPERA.

RECOMMENDATION #2

We recommend the Montana Public Employee Retirement Administration strengthen controls over its test case approval process to ensure:

- A. Test case documentation is complete, and**
- B. Test cases address all business rules and processes from the use case scenario that satisfy commitments.**

Implementation Status – *Not Implemented*

Initial audit work reviewed the testing process and whether controls were in place to ensure testing was complete. Test cases are documented scenarios created to ensure the system meets the needs of the administration. While the administration indicated in its corrective action plan that it would implement a test case review checklist, follow-up work identified no documentation related to a test case review checklist. While our review identified improved test case documentation, it was still incomplete. We also identified a portion of commitments not identified as tested when reviewing system test case documentation for a specific use case scenario which means test cases do not address all business rules and processes. If there are system issues with the missed commitments, the issues will now have to be caught during user acceptance testing, when it is more costly to find issues. We recognize that MPERA cannot go back to implement this recommendation; however, current staff are taking steps to improve testing going forward. Since the audit, MPERA's staff have requested additional contractor testing and are improving its testing process to ensure MPERA receives a quality product. While these changes will put MPERA in a better place to ensure it receives a quality product, since test documentation was not complete early in the project, it is difficult to determine whether any incomplete test cases will be caught during other testing phases and the overall impact on the project.

RECOMMENDATION #3

We recommend the Montana Public Employee Retirement Administration only initiate changes after they have gone through its formal change management process including:

- A. Montana Public Employee Retirement Administration review of time, budget, scope, or quality of product and documentation supporting decision,**
- B. Document steering committee approval, and**
- C. Reviewing and documenting whether the change is material and should be escalated to the Montana Public Employees Retirement Board.**

Implementation Status – *Partially Implemented*

When reviewing change requests and documentation to support the request, we found controls have been improved to ensure MPERA is following its change management process. During audit reporting, MPERA established the Change Control Board, consisting of various MPERA staff, to review every change request. The project's change management plan has also been updated and states MPERA executive sponsor approval is needed for any changes to budget, scope, or timeline.

When reviewing change request documentation during follow-up work, when a change incurred a cost to MPERA, there was no documentation of executive sponsor approval. Additionally, for some of the change request forms, the disposition and whether the change request was approved is not documented. This approval is necessary to ensure changes of higher magnitude or impact are being reviewed and the determination to escalate the issue to the board is documented. While the major funding increase and time extension were approved by the board, disposition of the change request is not complete and executive sponsor review and approval was not documented. Additionally, other change requests reviewed during follow-up work did not have executive sponsor review or complete documentation. Since the documentation and approval ensures issues are reviewed individually prior to board approval to validate the risk and cost associated with the issue, by implementing this recommendation, MPERA would have better assurance that commitment changes only occur if impact to the project is understood and all required parties have approved the change.