Office of the Auditor General
Follow-Up Report on Prior Audit Recommendations

IT Project Management Processes
Department of Technology, Management, and Budget

August 2018

State of Michigan Auditor General
Doug A. Ringler, CPA, CIA

071-0585-16F

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

Article IV, Section 53 of the Michigan Constitution

OAG
Office of the Auditor General

Report Summary

Follow-Up Report

IT Project Management Processes

Department of Technology, Management, and Budget (DTMB)

Report Number:
071-0585-16F

Released:
August 2018

We conducted this follow-up to determine whether DTMB had taken appropriate corrective measures in response to the four material conditions and three reportable conditions noted in our February 2017 audit report.

Prior Audit Information	Follow-Up Results		
	Conclusion	**Finding**	**Agency Preliminary Response**
Finding #1 - Material condition Full implementation of envisioned project management organizational structure needed. Agency agreed.	Partially complied	Material condition still exists. See Finding #1.	Agrees
Finding #2 - Material condition Controls to ensure continuous process improvement needed. Agency agreed.	Partially complied	Material condition still exists. See Finding #2.	Agrees
Finding #3 - Material condition Consistency needed in executing projects as described in the project management plan. Agency agreed.	Partially complied	Material condition still exists. See Finding #3.	Agrees

Prior Audit Information *(Continued)*	Follow-Up Results		
	Conclusion	**Finding**	**Agency Preliminary Response**
Finding #4 - Material condition Improved tracking of performance data needed. Agency agreed.	Complied	Not applicable	
Finding #5 - Reportable condition Improved project initiation and planning needed. Agency agreed.	Partially complied	Reportable condition still exists. See Finding #5.	Agrees
Finding #6 - Reportable condition Enhanced project closure activities needed. Agency agreed.	Partially complied	Reportable condition still exists. See Finding #6.	Agrees
Finding #7 - Reportable condition Organizational training plan needs further development. Agency agreed.	Complied	Not applicable	

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August 7, 2018

Mr. David L. DeVries
Director, Department of Technology, Management, and Budget
Chief Information Officer, State of Michigan
Lewis Cass Building
Lansing, Michigan

Dear Mr. DeVries:

This is our follow-up report on the four material conditions (Findings #1 through #4), three reportable conditions (Findings #5 through #7), and seven corresponding recommendations reported in the performance audit of IT Project Management Processes, Department of Technology, Management, and Budget. That audit report was issued and distributed in February 2017. Additional copies are available on request or at audgen.michigan.gov.

Your agency provided preliminary responses to the follow-up recommendations included in this report. The *Michigan Compiled Laws* and administrative procedures require an audited agency to develop a plan to comply with the recommendations and to submit it within 60 days of the date above to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We appreciate the courtesy and cooperation extended to us during our follow-up. If you have any questions, please call me or Laura J. Hirst, CPA, Deputy Auditor General.

Sincerely,

Doug Ringler

Doug Ringler
Auditor General

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TABLE OF CONTENTS

IT PROJECT MANAGEMENT PROCESSES

	Page
Report Summary	1
Report Letter	3
Introduction, Purpose of Follow-Up, and Description	6
Prior Audit Findings and Recommendations; Agency Plan to Comply; and Follow-Up Conclusions, Recommendations, and Agency Responses	8
Findings:	
1. Full implementation of envisioned project management organizational structure needed.	8
2. Controls to ensure continuous process improvement needed.	11
3. Consistency needed in executing projects as described in the project management plan.	14
4. Improved tracking of performance data needed.	16
5. Improved project initiation and planning needed.	17
6. Enhanced project closure activities needed.	19
7. Organizational training plan needs further development.	21
Supplemental Information	
Exhibit #1 - Description of the 9 Projects Reviewed	22
Exhibit #2 - Summary of Compliance With Project Management Methodology (PMM)	23
Follow-Up Methodology, Period, and Agency Responses	24
Glossary of Abbreviations and Terms	27

INTRODUCTION, PURPOSE OF FOLLOW-UP, AND DESCRIPTION

INTRODUCTION

This report contains the results of our follow-up of the four material conditions* (Findings #1 through #4), three reportable conditions* (Findings #5 through #7), and seven corresponding recommendations reported in our performance audit* of IT Project Management Processes, Department of Technology, Management, and Budget (DTMB), issued in February 2017.

PURPOSE OF FOLLOW-UP

To determine whether DTMB had taken appropriate corrective measures to address our corresponding recommendations.

DESCRIPTION

DTMB established the Project Management Methodology (PMM) as the State's formal IT project management practices. Adherence to the PMM is required for all projects, regardless of size or complexity. Key components of the PMM relate to the following project life cycle phases:

- Initiation - Project initiation is the first phase of the project management life cycle and includes the processes needed to define a new project. Within the initiation phase, project scope is defined and initial resources are committed.

- Planning - Project planning follows project initiation and is often considered the most important phase in project management. The planning phase includes the development of the project management plan, which defines the actions necessary to accomplish project goals and objectives. The project management plan addresses all aspects of project management, including scope, time, cost, quality, risks, and stakeholder engagement.

- Execution - Project execution begins immediately after the project management plan is approved by project sponsors. The execution phase involves carrying out and managing all activities described in the project management plan.

- Monitoring and Control - Project monitoring and control spans all phases of the PMM and includes the processes required to track and review project progress and performance. It also includes the identification of any areas where changes to the plan are required.

- Closeout - Project closeout includes the processes performed to conclude all activities, including reviewing the project management plan to ensure that work is

** See glossary at end of report for definition.*

completed, the project has met its objectives, and the customer has accepted the final product.

DTMB is responsible for IT project management practices, including adherence to the PMM. Various divisions within DTMB have significant roles in IT project management, including:

- The Enterprise Portfolio Management Office (EPMO) provides guidance and establishes policy for IT project management, including the PMM. EPMO is responsible for the administration of Changepoint*, which is the State's system for tracking and monitoring project data. EPMO includes project managers who manage some of the State's IT projects. As of December 31, 2017, EPMO had 164 project manager positions with 107 (65%) filled positions and 57 (35%) vacancies. EPMO also had 82 contracted project managers.

- Agency Services acts as the liaison between DTMB and the executive branch departments. Agency Services ensures execution of many of the project activities.

** See glossary at end of report for definition.*

PRIOR AUDIT FINDINGS AND RECOMMENDATIONS; AGENCY PLAN TO COMPLY; AND FOLLOW-UP CONCLUSIONS, RECOMMENDATIONS, AND AGENCY RESPONSES

FINDING #1

Audit Finding Classification: Material condition.

Summary of the February 2017 Finding:
DTMB had not fully implemented its envisioned IT project management organizational structure, resulting in unclear roles and responsibilities, incomplete guidelines and procedures, lack of sharing of best practices, and potential inefficiencies.

Recommendation Reported in February 2017:
We recommended that DTMB fully implement its envisioned IT project management organizational structure.

AGENCY PLAN TO COMPLY*

On August 3, 2017, DTMB indicated that it planned to fully implement the envisioned project management structure by May 31, 2018. DTMB developed an IT governance process that encompasses the executive level and includes various management levels throughout the organization. As new project control offices (PCOs) are established or PCO renewals occur, the following guidelines will be adhered to:

- The services provided by the PCO will be implemented with the oversight of the DTMB Agency Services Business Relationship Manager in partnership with the DTMB EPMO.
- The authority structures for the PCO resources will follow DTMB responsible authority structures for the associated roles and functions.
- DTMB's EPMO is ultimately responsible and accountable for program and project management throughout the State of Michigan (SOM) enterprise.

In addition, the EPMO, general manager or equivalent, DTMB executives, and agency stakeholders will collaborate to develop and implement an organizational change management plan that will ensure centralization of IT project and program management. The plan will encompass a service management organizational model as well as a governance and sourcing model. The organizational change management plan will be delivered by August 31, 2017.

FOLLOW-UP CONCLUSION

Partially complied. A material condition still exists.

** See glossary at end of report for definition.*

DTMB is in the process of implementing its new organizational structure. EPMO developed a business plan requesting executive support and funding to complete the centralization of EPMO and enhance IT project management service delivery. Specifically, with regard to parts a. through d. of the finding, we noted that DTMB:

a. Partially complied. DTMB is working with State agencies to clarify roles and responsibilities. In addition, DTMB has drafted revisions to SOM Policy 1355.00 to clarify the responsibilities of State department directors, the DTMB director, and the EPMO director for IT project management. In addition, DTMB has drafted definitions of the terms IT and project.

b. Partially complied. DTMB is implementing a standard process for obtaining project managers. In June 2017, DTMB issued procedures for obtaining project managers from its IT staff augmentation services contract with Computer Aid, Incorporated. In addition, EPMO has representation on the Michigan Staff Augmentation Management Board, which oversees the procurement of IT staff.

c. Partially complied. DTMB is in the process of aligning PCO and non-EPMO project management resources under EPMO. EPMO has aligned 5 of the 6 PCOs and is working with each State agency to implement EPMO's centralized organizational structure. However, DTMB informed us that it has not fully aligned all major departments.

d. Partially complied. As noted in part a., DTMB drafted revisions to SOM Policy 1355.00 regarding whether EPMO will manage a project or obtain a contractor to manage a project. The policy states that the EPMO director will identify an individual to act as project manager.

Although DTMB has made significant progress toward implementing its planned organizational structure, we consider this finding to be a material condition because DTMB had not fully documented in policy and procedure its new organizational structure for project management and had not fully aligned all State agencies under EPMO, several of which account for a significant amount of IT resources. Without full alignment, EPMO's ability to monitor agencies' project management practices will be limited, thereby increasing the likelihood that IT projects will not always be managed in accordance with the State Unified Information Technology Environment (SUITE) PMM.

FOLLOW-UP RECOMMENDATION

We again recommend that DTMB fully implement its envisioned IT project management organizational structure.

FOLLOW-UP AGENCY RESPONSE

DTMB provided us with the following response:

DTMB agrees with the recommendation. DTMB continues to execute its plan to implement the envisioned IT project management organizational structure.

Revisions to SOM Policy 1355.00 are nearing completion and are expected to be presented for signature by July 31, 2018.

DTMB implemented its standard process for obtaining project managers and has presented this information to all Agencies for compliance. The Computer Aid, Inc. (CAI) sourcing process was implemented in early 2017, followed by a request for proposal that established a labor pool contract on November 7, 2017.

DTMB is no longer creating new PCOs. DTMB continues alignment of remaining departments through execution of its centralized organizational structure. Key milestones include:

a. *Completion of Leadership Alignment: Agency inclusion of EPMO PMO manager, project prioritization, governance, project manager execution of the SUITE process and adherence to EPMO Project Management standards.*

b. *Completion of Contract Alignment & Centralization: Transfer of existing Agency project management contracts to DTMB EPMO contract mechanism, implementation of EPMO organizational reporting structure, and transfer of existing project managers to EPMO PMO manager, under new organizational structures, where needed.*

c. *Implementation of a Consistent Sourcing Model: Agency compliance with the direction that, going forward, all new IT projects' project managers will be sourced through the EPMO.*

DTMB has a centralized policy and organizational structure for project and portfolio management services; agency compliance with the policy has not been fully enforced. Through the Enterprise Risk Control Committee (ERCC) and related IT governance mechanisms, these compliance issues will be addressed.

FINDING #2

Audit Finding Classification: Material condition.

Summary of the February 2017 Finding:
DTMB did not implement controls to ensure continuous process improvement of IT project management.

Recommendation Reported in February 2017:
We recommended that DTMB implement controls to ensure continuous process improvement of IT project management.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that it had made substantial efforts to improve the project management culture across the State. For example, prior to the start of the audit, DTMB had already begun the process to reestablish and mature the Software Engineering Process Group (SEPG), which is responsible for delivering continuous process improvements.

In addition, DTMB conducted a Lean Process Improvement (LPI) for SUITE. Initial teams for both Process & Product Quality Assurance (PPQA) and SEPG were reestablished on November 20, 2016. The teams were developing operating and release plans while completing actions from the SUITE LPI. This will ensure that controls are in place, process improvements continue for IT program and project management, areas for improvement are addressed, and independent project reviews are conducted to ensure compliance.

In February 2017, the PPQA team began basic PMM audits and the SEPG team created a process improvement backlog and established a monthly release schedule. Process improvement suggestions are submitted to SUITE@michigan.gov. Process improvement requests are evaluated on a weekly basis for value to the enterprise and, if appropriate, are implemented within the monthly release schedule.

To fully comply with this recommendation, additional dedicated staff need to be hired and properly trained. A comprehensive funding plan and business plan are in progress with a target completion date of May 31, 2017. The funding plan will include a request for IT Investment Fund (ITIF) funds, new money, and rate increase funding to support the enterprise. The business plan will detail the anticipated return on investment (ROI) and detail the timelines for bringing the PPQA and SEPG teams to the necessary level of performance to realize the expected benefits.

DTMB will continue to move forward with compliance measures as outlined in the business plan, which was being finalized by May 31, 2017. Assuming the business plan and funding plan are approved, DTMB will be in full compliance with this finding by March 31, 2019.

FOLLOW-UP CONCLUSION

Partially complied. A material condition still exists.

DTMB performed an LPI on its project management processes. DTMB also developed a business plan and funding request for implementing controls to ensure continuous process improvement of IT project management. Specifically, with regard to parts a. through c. of the finding, DTMB:

a. Partially complied. DTMB requested funding in its fiscal year 2018 and 2019 budgets to staff the PPQA team. The current team has one dedicated employee and seven volunteers. As a stopgap measure, EPMO performs basic compliance testing quarterly to ensure the existence of key project artifacts* for IT projects over $1 million. EPMO informed us that, with its current resources, it does not have the capacity to review the quality of the project artifacts.

   Also, to streamline project management processes, DTMB developed a tailoring tool to determine which project artifacts are required based on each project's complexity and development methodology. Although DTMB had not yet developed procedures for the use of the tool, it has trained project managers on how to use the tool.

b. Partially complied. DTMB reestablished the SEPG team in November 2016. During our follow-up fieldwork, SEPG consisted of one dedicated employee and two volunteers. DTMB plans to staff the SEPG with six dedicated full-time positions. However, DTMB's plan is contingent on the approval of additional funding.

c. Complied. DTMB established a backlog of activities needed to address issues identified by SUITE LPI, lessons learned, and other assessments. EPMO informed us that it is remediating the issues based on risk. In addition, DTMB requested funding for a new Standard CMMI Appraisal Method for Process Improvement* (SCAMPI) appraisal.

We consider this finding to be a material condition because, without dedicated full-time resources, DTMB does not have the capacity to fully improve its project management processes and perform quality assurance reviews. The lack of quality assurance reviews has resulted in DTMB not fully complying with Findings #3, #5, and #6.

FOLLOW-UP RECOMMENDATION

We again recommend that DTMB implement controls to ensure continuous process improvement of IT project management.

** See glossary at end of report for definition.*

FOLLOW-UP AGENCY RESPONSE

DTMB provided us with the following response:

DTMB agrees with this recommendation. DTMB's fiscal year 2019 funding request has been approved since this audit period closed. This funding allows for the implementation of a permanent organizational capability which will replace current temporary, voluntary support. DTMB will assign sufficient resources to review projects for compliance with the PMM.

DTMB continues to remediate this finding through implementation of controls to ensure continuous process improvement of IT project management.

FINDING #3

Audit Finding Classification: Material condition.

Summary of the February 2017 Finding:
DTMB did not consistently execute activities described in the project management plan to ensure high quality projects.

Recommendation Reported in February 2017:
We recommended that DTMB consistently execute activities described in the project management plan.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that a firm compliance date was not available due to the unknown details related to staff funding. The PPQA team developed a phased quality assurance approach to ensure quality is built into every project and determine how quality will be addressed throughout the life cycle of the project. The initial phase, started in February 2017, consists of reviewing all active projects between $1 million and $10 million for project artifacts including signed charters, project closure reports, and customer satisfaction surveys. The next phase will expand that review to all active projects. Future improvements will focus on the quality of artifacts and additional artifacts. Assuming the business plan and funding plan are approved, DTMB will be in full compliance with this finding by March 31, 2019.

FOLLOW-UP CONCLUSION

Partially complied. A material condition still exists.

As noted in Finding #2, DTMB has not fully staffed the PPQA team. As an interim measure, PPQA performed limited project compliance reviews to ensure the existence of required project artifacts for all projects exceeding $1 million. During the project planning and initiation phase, a tailoring tool is used to identify required project artifacts. In addition, EPMO performs a monthly review of project status reports to improve project consistency and provide feedback to project managers. However, DTMB has not implemented controls to ensure that projects consistently execute quality assurance activities, such as structured walkthroughs and stage exits, of key project documents.

We reviewed 5 judgmentally selected projects (see Exhibits #1 and #2). With regard to parts a. through d. of the finding, we noted that DTMB:

a. Partially complied. DTMB prepared a quality assurance plan for all 5 projects reviewed, and one department contracted for independent verification and validation (IV&V) services. However, until EPMO performs quality reviews, it cannot ensure that all quality assurance activities, such as structured walkthroughs and stage exits, have been properly conducted.

b. Partially complied. DTMB prepared risk management and issue management plans for all 5 projects reviewed, and

one department's IV&V contractor was responsible for reviewing the project's risk and issue management practices. However, until EPMO performs quality reviews, it cannot validate that the plans have been properly executed.

c. Complied. DTMB documented and approved change requests for significant changes to the project budget, schedule, or scope for all 5 projects reviewed.

d. Partially complied. DTMB did not report an accurate project status for 1 of 5 projects. Specifically, DTMB did not change the project status from green to red after missing the target date for resolving a critical project issue. However, DTMB prepared corrective action plans for the 2 projects requiring a plan.

We consider this finding to be a material condition because, although DTMB is reviewing project management plans for the existence of quality assurance, risk management, and issue management plans, it did not implement reviews to ensure that the plans were consistently executed.

FOLLOW-UP RECOMMENDATION

We again recommend that DTMB consistently execute activities described in the project management plan.

FOLLOW-UP AGENCY RESPONSE

DTMB provided us with the following response:

DTMB agrees with this recommendation. DTMB continues to remediate this finding through implementation of controls to ensure activities defined within the project management plan are consistently executed. As Findings #2, #3, #5, and #6 are closely associated, remediation of Finding #2 will contribute to the remediation of Findings #3, #5, and #6.

With the establishment of the funded PPQA Team in the fiscal year 2019 budget, DTMB will begin implementing enhanced quality reviews to ensure that the quality assurance plan and the risk and issue management plans have been properly and consistently documented and executed.

FINDING #4

Audit Finding Classification: Material condition.

Summary of the February 2017 Finding:
DTMB did not fully track project performance data to determine whether projects were completed on time, were within budget, and met customer expectations.

Recommendation Reported in February 2017:
We recommended that DTMB fully track project performance data to determine whether projects were completed on time, were within budget, and met customer expectations.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that it required all employees to record work activity in Changepoint and, therefore, was confident that all projects were in Changepoint as of October 1, 2016. DTMB performs a monthly health check on all active projects to ensure that budget information is included in the PPM tool. Also, as of January 2017, DTMB offers a monthly Changepoint budgeting training session for project managers to promote more extensive use of the budget tracking features in Changepoint. DTMB will continue to expand its efforts in using an enterprise-wide project portfolio management tool to fully track project performance data to determine whether projects were completed on time, were within budget, and met customer expectations.

FOLLOW-UP CONCLUSION

Complied.

The EPMO portfolio team conducts monthly reviews of Changepoint projects for completeness and consistency and provides feedback to its PMO managers. Our follow-up of Changepoint data disclosed:

a. Changepoint contained all IT projects active as of October 1, 2016.

b. Changepoint contained cost budgets, actual costs, and project duration data for all IT projects completed between June 1, 2017 and February 14, 2018.

FINDING #5

Audit Finding Classification: Reportable condition.

Summary of the February 2017 Finding:
DTMB did not properly initiate and plan IT projects in accordance with the PMM.

Recommendation Reported in February 2017:
We recommended that DTMB properly initiate and plan IT projects in accordance with the PMM.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that it had reestablished and would continue to mature the PPQA team, which is responsible for mentoring and conducting quality assurance on SOM projects and ensuring that proper initiation and planning take place in accordance with the PMM. DTMB will enhance existing training and education to ensure that staff properly initiate and plan projects in compliance with the PMM.

In February 2017, the PPQA team began conducting quarterly quality assurance sessions with project managers to ensure that projects were in compliance with the PMM. In March 2017, the initial reports were completed and a baseline of compliance scores was established for each area, as well as the enterprise. These reports will be updated on a quarterly basis and will be used to identify where improvements or additional training may be required. Finally, the PPQA team began a pilot program to provide mentoring on project tailoring to promote consistency and solid project management execution. Based on the success of the pilot, the mentoring activities will be expanded as staff are available in accordance with the overall business plan for the PPQA team.

FOLLOW-UP CONCLUSION

Partially complied. A reportable condition still exists.

As noted in Finding #2, DTMB has not fully staffed the PPQA team. As an interim measure, PPQA performed limited project compliance reviews to ensure the existence of required project artifacts for all projects exceeding $1 million. We reviewed 5 judgmentally selected projects (see Exhibits #1 and #2). With regard to parts a. through c. of the finding, we noted that DTMB:

a. Partially complied. For 2 of the 5 projects reviewed, DTMB did not prepare and approve the project charter. During the tailoring process, DTMB approved the substitution of vendor contracts for the project charters. Although a vendor contract may contain some of the same information found in a project charter, the contract is a legal agreement between the State and the vendor and does not serve the same purpose as the project charter. According to the PMM, the project charter is required for all projects to formally authorize the start of a project. In addition, the project charter provides a high level

description of each project, initial project planning estimates, and key internal and external stakeholders.

b. Partially complied. DTMB created a project management plan for all 5 projects; however, 2 of the 5 project management plans did not have stakeholder signatures indicating approval. Plan approval is necessary because it gives the project manager the authority to move the project into the execution phase.

c. Partially complied. For 2 of the 5 projects reviewed, DTMB did not ensure that the cost budget contained all project costs. According to the PMM, the high level budget should include all costs including hardware, software, contractor, and DTMB and other State agency staff. Although the initial budgets only included vendor costs, DTMB did track actual costs for the 2 projects.

FOLLOW-UP RECOMMENDATION

We again recommend that DTMB properly initiate and plan IT projects in accordance with the PMM.

FOLLOW-UP AGENCY RESPONSE

DTMB provided us with the following response:

DTMB agrees with this recommendation. DTMB continues to remediate this finding through implementation of Quality Reviews to ensure projects are initiated and planned in accordance with the PMM. As Findings #2, #3, #5, and #6 are closely associated, remediation of Finding #2 will contribute to the remediation of Findings #3, #5, and #6.

DTMB continues its remediation through a reevaluation of the PMM and the four required artifacts to our tailoring process. With the establishment of the fully funded PPQA Team, DTMB will begin implementing enhanced quality reviews to ensure all known project costs are captured and all required project artifacts are completed.

FINDING #6

Audit Finding Classification: Reportable condition.

Summary of the February 2017 Finding:
DTMB did not always perform project closure activities to determine project success and identify opportunities for improvement.

Recommendation Reported in February 2017:
We recommended that DTMB always perform project closure activities to determine project success and identify opportunities for improvement.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that it would enhance existing training and education to include training on the importance of project closure activities. In addition, the newly established PPQA team will conduct audits to ensure compliance so that closure activities can help determine project success and identify opportunities for improvement. The current quality assurance reviews cover project closure and success and will be expanded to all projects by August 2019. In addition, the PPQA team will conduct mentoring on how to properly complete the project closure report and capture lessons learned. Ongoing quality checks will be conducted to ensure that lessons learned are captured and financial records are finalized.

FOLLOW-UP CONCLUSION

Partially complied. A reportable condition still exists.

The PPQA team conducted limited scope audits to review for the existence of project closure artifacts. As noted in Finding #2, DTMB has not fully implemented controls to ensure the quality of project closure activities. We reviewed project closure artifacts for 5 judgmentally selected projects (see Exhibits #1 and #2) and noted that, with regard to parts a. through d. of the finding, DTMB:

a. Partially complied. DTMB should ensure that its benefits realization guidance provides instructions for calculating a project's updated ROI. EPMO informed us that an updated ROI analysis will be completed as part of its new benefits realization process. However, benefit realization procedures did not explicitly provide clear instructions for updating ROI.

b. Partially complied. DTMB did not prepare a project closure report for 1 of 5 projects reviewed. In addition, the project closure report was not signed by stakeholders for 2 of 5 projects reviewed.

c. Partially complied. DTMB documented final project costs in Changepoint for all 5 projects reviewed. In addition, DTMB began utilizing Changepoint to calculate project labor costs using DTMB's standard rates. However, DTMB had not fully developed processes to validate the

completeness and accuracy of final project costs. DTMB informed us that cost data was not available from the State's new accounting system.

d. Partially complied. DTMB documented lessons learned for all 5 projects reviewed. However, EPMO did not consistently utilize its lessons learned database because of the database's limited search capabilities. EPMO informed us that it intends to create a centralized repository of all IT project documents, including lessons learned.

FOLLOW-UP RECOMMENDATION

We again recommend that DTMB always perform project closure activities to determine project success and identify opportunities for improvement.

FOLLOW-UP AGENCY RESPONSE

DTMB provided us with the following response:

DTMB agrees with this recommendation. DTMB continues to remediate this finding through implementation of Quality Reviews to ensure project success and identify opportunities for improvement through completion of project closure activities. As Findings #2, #3, #5, and #6 are closely associated, remediation of Finding #2 will contribute to the remediation of Findings #3, #5, and #6.

With the establishment of the fully funded PPQA Team, DTMB will begin implementing enhanced quality reviews to ensure project closure reports have been properly completed, approved, and shared for enterprise project management success.

FINDING #7

Audit Finding Classification: Reportable condition.

Summary of the February 2017 Finding:
DTMB should develop and implement an organizational training plan for project managers.

Recommendation Reported in February 2017:
We recommended that DTMB develop and implement an organizational training plan for project managers.

AGENCY PLAN TO COMPLY

On August 3, 2017, DTMB indicated that it planned to develop and implement an organizational training plan for program and project management staff by October 31, 2017. EPMO will develop recommendations for improvements, with associated funding requests, for presentation to DTMB senior management. In March 2017, the SUITE LPI team presented a training curriculum related to SUITE/Project Management to management. This proposal addresses the project management training needs for the entire organization. In addition, DTMB hired two trainers who have provided additional input on the organizational training plan and have begun streamlining existing project management workshops as well as developing role based training for all levels of the organization, including vendors and customers. They began executing the training plan and conducting classes on April 4, 2017. Additional classes will be added as needs are identified. Plans are underway to implement a learning management system to aid this effort.

FOLLOW-UP CONCLUSION

Complied.

Our follow-up noted:

a. EPMO evaluated the training needs of its project managers and prepared a training plan that focuses on the SUITE PMM and includes three levels of workshops and two certifications. EPMO informed us that it had completed the Level 1 workshops, which provided a high-level overview of project management concepts. EPMO was in the process of conducting Level 2 workshops. According to the training plan, EPMO will start the development of Level 3 role-based training in fiscal year 2019.

b. EPMO manually tracked project manager training and certifications. EPMO informed us that it intends to begin tracking these items in the Civil Service Commission Learning Management System as soon as the tool becomes available to EPMO.

c. The individual development plans for three project managers and four IT project coordinators indicated participation of project managers and project coordinators in SUITE training.

SUPPLEMENTAL INFORMATION

Exhibit #1

IT PROJECT MANAGEMENT PROCESSES
Department of Technology, Management, and Budget

Description of the 9 Projects Reviewed

Project	Abbreviation	Department	Project Description
Medical Marihuana Facility Licenses	MMFL	LARA	A system to manage medical marihuana facility licenses, including the issuance of licenses, collection of fees, license renewals, and complaints.
Agencywide Licensing and Inspection System Program	ALIS	MDARD	A system to replace MDARD's silos of licensing and inspection systems with a single Web-based application.
Customer and Automotive Records System	CARS	Department of State	A system to replace and modernize the State of Michigan's driver and vehicle systems into a newer platform.
Sexual Assault Evidence Kit Tracking	SAEK	MSP	A Web-based tracking system to track the status of sexual assault evidence kits from the time they are completed at the healthcare facility through the completion of the laboratory processing and examination.
Michigan Fuel and Tobacco Integrated System	MiMATS	Treasury	An application to replace the Department of Treasury's current motor fuel, motor fuel statutory refund, tobacco, correspondence, and financial systems.
State Revolving Fund Rewrite	SRF	DEQ	A system to replace DEQ's State Revolving Fund (SRF) and grants databases that are used to monitor dates, coordinate contracts, provide cost estimates, tabulate costs, and issue loan and grant payments.
Ignition Interlock System	IIS	Department of State	An automated system to process ignition interlock violation reports. The system receives data from interlock devices, identifies violations, and adds Order of Action to driving record.
MPINS Modernization Project	MPINS	MDOT	A Web-based application to replace the Map Project Information System (MPINS), which is used by MDOT employees to manage the scope, schedule, and proposed funding for roads, bridges, and multi-modal projects.
Michigan Education and Career Pathfinder	Pathfinder	TED	A Web-based application designed to provide real-time, value-added information for users to make more informed decisions on education and career opportunities.

Source: The OAG prepared this exhibit using information obtained from DTMB's project records and Michigan.gov.

IT PROJECT MANAGEMENT PROCESSES
Department of Technology, Management, and Budget

Summary of Compliance With Project Management Methodology (PMM)

	MDARD - ALIS	Department of State - CARS	MSP - SAEK	Treasury - MiMATS	LARA - MMFL	DEQ - SRF Rewrite	Department of State - IIS	MDOT - MPINS Modernization	TED - Pathfinder
Finding #3, part a. - Quality Assurance	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review				
Finding #3, part b. - Risk and Issues	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review	No EPMO QA Review				
Finding #3, part c. - Project Changes									
Finding #3, part d. - Project Status			Change in status not reported timely						
Finding #5, part a. - Project Charter		Not prepared		Not prepared					
Finding #5, part b. - Project Management Plan			Not signed by stakeholders	Not signed by stakeholders					
Finding #5, part c. - Project Budget		Included only vendor costs	Included only vendor costs						
Finding #6, part b. - Closure Report					Not prepared		Not signed by stakeholders	Not signed by stakeholders	
Finding #6, part c. - Final Cost Tracking					Final costs not validated by EPMO	Final costs not validated by EPMO	Final costs not validated by EPMO	Final costs not validated by EPMO	Final costs not validated by EPMO
Finding #6, part d. - Lessons Learned							Not in EPMO's lessons learned database	Not in EPMO's lessons learned database	Not in EPMO's lessons learned database

Gray shading - Test not applicable.

FOLLOW-UP METHODOLOGY, PERIOD, AND AGENCY RESPONSES

METHODOLOGY

We reviewed DTMB's corrective action plan; the PMM; and other policies, procedures, and standards related to project management. Specifically, for:

a. Finding #1, we:

- Interviewed EPMO to obtain an understanding of EPMO's progress in implementing a centralized project management structure.
- Reviewed EPMO's business plan and related funding requests.
- Obtained an understanding of DTMB's progress in aligning PCO and non-EPMO project management resources under the EPMO project management office.
- Reviewed proposed revisions to SOM Policy 1355.00 and reviewed DTMB Administrative Policy 600.16.

b. Finding #2, we:

- Determined SEPG and PPQA staffing levels.
- Reviewed SUITE LPI results.
- Reviewed SEPG project management backlog.

c. Finding #3, we:

- Judgmentally selected 5 projects and tested:
  - For the existence of a quality assurance plan and risk management and issue management plans.
  - Whether project changes were documented and approved.
  - Whether project statuses were accurately represented and corrective action plans were developed when required.

d. Finding #4, we:

- Obtained confirmation from DTMB Agency Services general managers that Changepoint contained all IT projects active as of October 1, 2016.

- Traced 9 judgmentally selected projects from Data Collection and Distribution System* (DCDS) reports to Changepoint.

- Verified that Changepoint contained budget, actual costs, and project duration data for all IT projects active completed between June 1, 2017 and February 14, 2018.

e. Finding #5, we:

- Judgmentally selected 5 projects and tested for the existence of:

  - An approved project charter.

  - An approved project management plan.

  - A detailed project budget.

f. Finding #6, we:

- Judgmentally selected 5 projects and tested:

  - Whether an updated ROI analysis had been completed after project closeout.

  - For the existence of an approved project closure report.

  - Whether final project costs were tracked and reported in Changepoint.

  - Whether lessons learned were prepared and documented in the lessons learned database.

g. Finding #7, we:

- Reviewed EPMO's project manager training plan.

- Reviewed EPMO's training and certification spreadsheet.

- Reviewed a selection of individual development plans for evidence that EPMO encouraged its project managers and project coordinators to obtain training and certifications.

PERIOD

Our follow-up generally covered October 1, 2016 through May 31, 2018.

** See glossary at end of report for definition.*

AGENCY RESPONSES

Our follow-up report contains 5 recommendations. DTMB's preliminary response indicates that it agrees with all of the recommendations.

The agency preliminary response that follows each follow-up recommendation in our report was taken from the agency's written comments and oral discussion at the end of our fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require an audited agency to develop a plan to comply with the recommendations and to submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

GLOSSARY OF ABBREVIATIONS AND TERMS

agency plan to comply	The response required by Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100). The audited agency is required to develop a plan to comply with Office of the Auditor General audit recommendations and to submit the plan within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.
artifacts	One of many kinds of documents produced during software development. These documents align projects to business objectives, address the needs of sponsors and clients, and properly set the project team's expectations. Examples include project charter, business case, and requirements documents. Artifacts are formally updated to reflect changes in scope and exist so that everyone involved in the project has a shared understanding of all information related to the effort.
Changepoint	A project portfolio management tool used to track project data.
Data Collection and Distribution System (DCDS)	The State's client/server system that recorded, allocated, and distributed payroll costs within the accounting system through fiscal year 2017.
DEQ	Department of Environmental Quality.
DTMB	Department of Technology, Management, and Budget.
EPMO	Enterprise Portfolio Management Office.
IT	information technology.
IV&V	independent verification and validation.
LARA	Department of Licensing and Regulatory Affairs.
LPI	Lean Process Improvement.

material condition	A matter that, in the auditor's judgment, is more severe than a reportable condition and could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the judgment of an interested person concerning the effectiveness and efficiency of the program. Our assessment of materiality is in relation to the respective audit objective.
MDARD	Michigan Department of Agriculture and Rural Development.
MDOT	Michigan Department of Transportation.
MSP	Michigan Department of State Police.
PCO	project control office.
performance audit	An audit that provides findings or conclusions based on an evaluation of sufficient, appropriate evidence against criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision-making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.
PMM	Project Management Methodology.
PMO	project management office.
PPM	project portfolio management.
PPQA	Process & Product Quality Assurance.
reportable condition	A matter that, in the auditor's judgment, is less severe than a material condition and falls within any of the following categories: an opportunity for improvement within the context of the audit objectives; a deficiency in internal control that is significant within the context of the audit objectives; all instances of fraud; illegal acts unless they are inconsequential within the context of the audit objectives; significant violations of provisions of contracts or grant agreements; and significant abuse that has occurred or is likely to have occurred.
ROI	return on investment.

SEPG	Software Engineering Process Group.
SOM	State of Michigan.
Standard CMMI Appraisal Method for Process Improvement (SCAMPI)	An appraisal that describes the strengths and weaknesses of an organization's processes based on Standard Capability Maturity Model Integration (CMMI) best practices.
SUITE	State Unified Information Technology Environment.
TED	Department of Talent and Economic Development.

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