

Performance Audit

Statewide Change Management Controls

Department of Technology, Management, and Budget (DTMB) Report Number: 071-0520-16

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Change management is the process of authorizing, testing, documenting, and monitoring modifications to the infrastructure or any aspect of IT services in a controlled and planned manner, enabling the implementation of changes with minimal disruption of operations. The State's change management process involves various DTMB teams, such as Agency Services and Data Center Operations. Between October 1, 2015 and March 31, 2016, approximately 9,300 changes and 1,300 requests for change were placed into production.

Audit Objective		Conclusion			
Objective #1: To assess the sufficiency of DTMB's governance structure over change management processes related to the State's IT applications.				Sufficient, with exceptions	
Findings Related to This Audit Objective	Material Condition	Reportable Condition		Agency Preliminary Response	
DTMB had not fully established comprehensive policies, standards, and procedures for its change management process. Lack of clear and comprehensive guidance resulted in reduced monitoring and oversight, lack of documentation supporting changes, and insufficient segregation of duties as further defined in Findings #2, #3, and #5 (<u>Finding #1</u>).	X			Agrees	
DTMB did not effectively monitor its change management process to help reduce the risk that intentional or inadvertent changes would impair the proper functioning or integrity of the State's IT systems. DTMB had not assigned configuration management managers for 8 (47%) of the 17 executive branch departments (<u>Finding #2</u>).		Х		Agrees	

Audit Objective	Conclusion				
Objective #2: To assess the effectiveness of DTMB's efforts to implement change management controls over the State's IT applications.				Moderately effective	
Findings Related to This Audit Objective	Material Condition	Reportal Conditio		Agency Preliminary Response	
Documentation of key control activities were lacking throughout the change management lifecycle. For example, DTMB did not maintain documentation of the authorization to initiate or implement a change (for 36% and 26% of the changes selected, respectively) and did not maintain documentation of post-implementation testing for 56% of the changes selected. Also, key testing phase activities were lacking documentation for 26% to 77% of changes reviewed (<u>Finding #3</u>).		Х		Agrees	
DTMB did not consistently perform quality assurance testing (QAT) activities for 9 (53%) of the 17 executive branch departments. QAT helps ensure the quality of the change, that the change will work as designed, and that the change reflects business owner requirements (<u>Finding #4</u>).		Х		Agrees	
DTMB should improve the segregation of duties throughout the change management lifecycle to reduce the risk that unintended or unauthorized changes are implemented in the State's IT environment. We identified instances in which DTMB, instead of the business owner, performed authorization and testing duties and allowed developers to test and implement their own work (<u>Finding #5</u>).		Х		Agrees	
DTMB did not consistently create and maintain listings of persons authorized to approve changes at each phase of the change management lifecycle for 12 (71%) of the 17 executive branch departments (<u>Finding #6</u>).		Х		Agrees	
DTMB did not input all changes into the Service Management and Monitoring System to ensure that all changes were identified, authorized, and assessed for adverse impact on the State's IT environment prior to implementation. DTMB did not follow procedures for entering 57 (27%) of 209 changes reviewed (<u>Finding #7</u>).		Х		Agrees	

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