



Office of Information Technology Services

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Governor

MARGARET MILLER
Chief Information Officer

January 13, 2017

By Electronic and U.S. Mail

John Buyce
Audit Director
Office of the State Comptroller
Division of State Accountability
110 State Street, 11th Floor
Albany, NY 12236

Re: *"Security and Effectiveness of Department of Motor Vehicles' Licensing and Registration Systems"* Report 2015-S-2

Dear Mr. Buyce:

On behalf of the Office of Information Technology Services ("ITS"), I write to provide additional information to clarify and expand ITS' responses to OSC's three Partially Implemented recommendations in the Final Follow-up Report.

I. Background and Improvements to Date

Due to its level of complexity, the Department of Motor Vehicles ("DMV") data center was originally last in the schedule to migrate into the new consolidated data center at the Colleges of Nanoscale Science and Engineering (CNSE). In the early spring of 2016, there was a critical site power outage and a major uninterrupted power supply failure that affected DMV core business applications and systems. These two catastrophic events resulted in a joint decision (by ITS and DMV) to accelerate migration of DMV computer and storage workloads to infrastructure in the new Data Center at CNSE starting April 2016. ITS has since successfully migrated DMV's Data Center into the CNSE Tier 3 Data center, offering 99.82% availability, enhanced security, monitoring and incident detection, and business continuity. DMV systems, now running at CNSE, are re-platformed on the latest versions of application middleware, OS and server virtualization. Identity systems are replaced using enterprise standard mechanisms. Application servers have been reorganized to provide better load management and to isolate non-related application failures from others. Application presentation mechanisms have been brought up to the latest compliance requirements for assisted device technologies. For data health, additional data structures have been positioned using standard database technology to provide consistency and data quality. On the process side, Open Systems have been developed with industry standard tools for application lifecycle management and release and deployment management.

II. Recommendations in the Report

OSC Recommendation 1: Create, maintain, and monitor a log of patches applied to Department software to ensure timely completion.

Status per OSC – Partially Implemented:

ITS Response:

The Data Center migration project for DMV started with approximately 558 servers, of which 173 servers were decommissioned at the old data center and not migrated to CNSE. ITS is now supporting the remaining 385 servers comprised of different operating systems.

All DMV systems are being scanned for vulnerability regularly using the existing scanning solution, and will be patched to address any security vulnerability identified as necessary based on risk.

ITS is implementing incident detection system (IDS) and incident prevention system (IPS) security controls, and also increasing audit logging. ITS anticipates that most of these remaining systems to be decommissioned over time as DMV applications are modernized.

OSC Recommendation 2: Continue to move forward toward the implementation of a complete and viable change management and user access management process that will provide adequate controls.

Status per OSC – Partially Implemented:

ITS Response:

ITS has already implemented a strong change management process and culture. Given the critical nature, visibility and sensitivity of DMV applications, all significant changes are subject to multiple layers of review and approval.

ITS already has a robust process framework in place. The enhancements made to the ITS service management process, including the configuration management database (CMDB) improvements, will only increase the ability of ITS management to assess and measure the implementation of many category changes.

With respect to user access provisioning, user access changes are dependent on service requests initiated by the requesting business. The specific processes for provisioning and de-provisioning access will vary based on agency or directory. ITS has two in-flight projects that will consolidate and rationalize both the directories in which user data is stored and the processes used to provision and de-provision.

OSC Recommendation 3: Develop and implement a succession plan, including Assembler and COBOL program language training, to ensure continuity of Department operations and service.

Status per OSC – Partially Implemented:

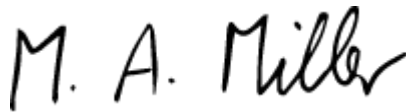
ITS Response:

As part of the 2012-13 ITS/Agency Governance process, ITS conducts an annual planning process focused on IT priority investments. As part of that process, ITS requires all agencies to include investments focused on application remediation for legacy systems (*i.e.*, replacement for out of support or end of life technologies).

With regard to modernization efforts, given the size and complexity of the legacy systems in use at DMV, careful planning is required to develop the new architecture and develop an implementation plan that aligns with current business practices, budgets, timelines and constraints. It is not uncommon for efforts of similar size to take multiple years to become fully developed. During that period, the use of the legacy system is still required as well as updates to that system to respond to immediate new business needs (*e.g.*, legislative changes). Multiple resources will be working on the code over time and put coding standards in place such that newer resources can understand how to work on the systems to maintain the framework and coding standards of the original application.

If you have any questions regarding this report, please do not hesitate to contact Rajni Chawla, ITS Director of Internal Audit, at (518) 457-5465.

Very truly yours,

A handwritten signature in black ink that reads "M. A. Miller". The signature is written in a cursive, flowing style.

Margaret Miller
NYS Chief Information Officer
Director, NYS Office of Information Technology Services

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