







# **VIRGINIA LOTTERY**

REPORT ON AUDIT
FOR THE YEAR ENDED
JUNE 30, 2018

Auditor of Public Accounts Martha S. Mavredes, CPA

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### **AUDIT SUMMARY**

Our audit of the Virginia Lottery for the year ended June 30, 2018, found:

- the financial statements are presented fairly, in all material respects;
- internal control findings requiring management's attention; however, we do not consider them to be material weaknesses; and
- instances of noncompliance required to be reported under <u>Government Auditing</u> Standards.

We have audited the basic financial statements of the Virginia Lottery as of and for the year ended June 30, 2018, and issued our report thereon, dated October 15, 2018. Our report is included in the Virginia Lottery's Annual Report that it anticipates releasing in January 2019.

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### STATUS OF PRIOR YEAR FINDINGS

## Improve Application and Database Controls over the Enterprise Resource Planning System

**Type:** Internal Control and Compliance

**Severity:** Significant Deficiency

**Repeat:** Yes (first issued in fiscal year 2016)

During the fiscal year 2016 audit, we identified multiple internal control weaknesses as a result of the implementation of the Virginia Lottery's (Lottery) enterprise resource planning system.

We obtained a status update from Lottery on the corrective actions related to these weaknesses. As of our report date, the Lottery had implemented corrective actions with respect to this previously reported finding, but had not completely implemented all corrective actions. Lottery began updating and implementing new procedures during fiscal year 2017 and plans to fully implement all corrective actions during fiscal year 2019.

Lottery should continue to dedicate the necessary resources to implement the controls that will align Lottery's operations with industry best practices and the Commonwealth's Information Security Standard, SEC 501 (Security Standard). We will review the implementation of management's completed corrective actions during our next audit.

### INTERNAL CONTROL AND COMPLIANCE FINDINGS AND RECOMMENDATIONS

### **Improve Server Operating System Security**

**Type:** Internal Control and Compliance

Severity: Significant Deficiency

Repeat: No

Lottery is missing some required and recommended security controls for one of the server operating systems that support Lottery's primary financial management system. These missing controls are either required by Lottery's policy or the Commonwealth's Security Standard. Further, industry best practices, including the Center for Internet Security and the Defense Information Systems Agency's Security Technical Implementation Guide, also recommend certain controls to protect data confidentiality, integrity, and availability.

We identified misconfigured controls related to least functionality and system monitoring. We communicated details about the specific control weaknesses to management in a separate document marked Freedom of Information Act Exempt under §2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

Not configuring the server according to least functionality and using inadequate monitoring controls increases the risk that Lottery will not be able to prevent, detect, or mitigate security incidents involving the server in a timely manner that also complies with Lottery's policy and the Security Standard.

Lottery should update their server configuration process to include the missing controls so that they align with Lottery's policy, the Security Standard, and industry best practices. Implementing these controls will help maintain the confidentiality, integrity, and availability of the sensitive and mission critical data stored and processed on the server.



# Commonwealth of Virginia

### Auditor of Public Accounts

P.O. Box 1295 Richmond, Virginia 23218

October 15, 2018

The Honorable Ralph S. Northam Governor of Virginia

The Honorable Thomas K. Norment, Jr. Chairman, Joint Legislative Audit
And Review Commission

Virginia Lottery Board Virginia Lottery

# INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States, the financial statements of the **Virginia Lottery** as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise Virginia Lottery's basic financial statements, and have issued our report thereon dated October 15, 2018.

### **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Virginia Lottery's internal control over financial reporting to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Virginia Lottery's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Virginia Lottery's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. We did identify certain deficiencies in internal control over financial reporting entitled "Improve Server Operating System Security" and "Improve Application and Database Controls over the Enterprise Resource Planning System" which are described in the sections titled "Internal Control and Compliance Findings and Recommendations" and "Status of Prior Year Findings" that we consider to be significant deficiencies.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Virginia Lottery's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under <u>Government Auditing Standards</u> and which are described in the sections titled "Internal Control and Compliance Finding and Recommendations" and "Status of Prior Year Findings" in the findings entitled "Improve Server Operating System Security" and "Improve Application and Database Controls over the Enterprise Resource Planning System."

### The Virginia Lottery's Response to Findings

We discussed this report with management at an exit conference held on October 4, 2018. The Virginia Lottery's response to the findings identified in our audit is described in the accompanying section titled "Agency Response." The Virginia Lottery's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

### **Status of Prior Findings**

The Virginia Lottery has not completed corrective action with respect to the previously reported finding "Improve Application and Database Controls over the Enterprise Resource Planning System." Accordingly, we included this finding in the section entitled "Status of Prior Year Findings." The Virginia Lottery has taken adequate corrective action with respect to audit findings reported in the prior year that are not repeated in this report.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in

accordance with <u>Government Audit Standards</u> in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

**AUDITOR OF PUBLIC ACCOUNTS** 

AVC/clj



October 15, 2018

Martha S. Mavredes, CPA Auditor of Public Accounts 101 North 14th Street Richmond, Virginia 23219

Dear Ms. Mavredes:

Thank you for this opportunity to respond to the annual audit of the Virginia Lottery, for the year ended June 30, 2018. As noted in your status of prior year findings, the Lottery has continued to work towards improving application and database controls over the enterprise resource planning (ERP) system implemented in 2016. As is the case every year with your audit, I am reassured that the combination of the Lottery's commitment and your thorough reviews will continue to safeguard the Lottery's assets and integrity of Lottery systems.

I am pleased to provide the following response to the issue contained in the internal control report:

### Improve Server Operating System Security

During this past year, efforts related to securing the system's environment have been focused on mitigating controls, including but not limited to access control and operating system patching, with significant advances. The Lottery is currently reviewing CIS benchmarks and the application of these configuration settings to servers in the system's environment. This evaluation will continue for the next several months and will focus on the entire set of controls in the CIS benchmark, including the areas noted in the audit. Then the Lottery will test the full set of controls in the QA environment to ensure system functionality and security beginning in November 2018. The result of this effort will be an operating system baseline configuration, including documentation explaining deviations from CIS recommendations or Lottery Policy.

The Lottery remains diligently committed to continuous improvement, integrity, and the security of all Virginia Lottery operations.

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Ke√in Hall

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Mr. Ferhan Hamid, Chairman, Virginia Lottery Board Ms. Cynthia Lawrence, Chairman, Virginia Lottery Board Audit Committee

## **VIRGINIA STATE LOTTERY DEPARTMENT**

As of June 30, 2018

Kevin Hall Executive Director

### **BOARD MEMBERS**

Ferhan Hamid Chairman

Scott A. Price Vice Chairman

Robert M. Howard Cynthia D. Lawrence