

STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY

Report Required Under
Government Auditing Standards

FOR THE PERIOD
JULY 1, 2018 – JUNE 30, 2019

**STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
For the Year Ended June 30, 2019**

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STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
For the Year Ended June 30, 2019

DEPARTMENT OFFICIALS

Secretary	Ron Guerrier, Acting (3/4/19-Current) Jennifer Ricker, Acting (2/11/19-3/3/19) Jack King, Interim (1/1/19-2/11/19) Kirk Lonbom, Acting (7/1/18-12/31/18)
Assistant Secretary	Vacant
Chief Administrative Officer	Jenifer Johnson (6/1/19-Current) Vacant (1/1/19-5/31/19) Clark Kaericher (7/1/18-12/31/18)
Chief of Staff	Jennifer Ricker (2/11/19-Current) Tyler Clark (7/1/18-2/15/19)
Chief Internal Auditor	Douglas Tinch
Affirmative Action/Equal Employment Opportunity Officer	Vickie Simpson
Chief Service Officer	Vacant (2/16/19-Current) Robert Kashmer (8/16/18-2/15/19) Vacant (7/1/18-8/15/18)
ERP Program Director	Gregg Easterly (10/9/18-Current) Vacant (10/6/18-10/8/18) Kevin O'Toole (7/1/18-10/5/18)
Chief Enterprise Architect (Prior to March 16, 2019 the title was Chief Strategy Officer)	Brad Long (4/16/19-Current) Vacant (2/20/19-4/15/19) Shannon Rahming (7/1/18-2/19/19)
Chief Technology Officer	Lori Sorenson (4/16/19-Current) Vacant (2/14/19-4/15/19) Jack King (7/1/18-2/13/19)
Chief Information Security Officer	Adam Ford (4/16/19-Current) Vacant (1/26/19-4/15/19) Chris Hill (7/1/18-1/25/19)

**STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
For the Year Ended June 30, 2019**

DEPARTMENT OFFICIALS (continued)

Group Chief Information Officers:

Family, Children, Elderly, & Veterans	Vacant (4/16/19-Current) Brad Long (7/1/18-4/15/19)
Government & Public Employees	Gloria Lasley (11/1/18-Current) Vacant (8/4/18-10/31/18) Monica Carranza (7/1/18-8/3/18)
Business & Workforce	Sunil Thomas
Natural & Cultural Resources	Troy Horton (7/2/18-Current) Vacant (7/1/18)
Public Safety	Mark Sullivan (4/16/19-Current) Vacant (9/1/18-4/15/19) Steve Buche (7/1/18-8/31/18)
Students	Kevin Parker (7/2/18-Current) Vacant (7/1/18)
Transportation	Vacant

The Department's main offices are located at:

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Springfield, Illinois 62702

100 West Randolph Street
Chicago, Illinois 60601

DEPARTMENT OF INNOVATION AND TECHNOLOGY
GOVERNMENT AUDITING STANDARDS REPORT

Government Auditing Report Summary

The examination of the “Description of the IT General Controls and Application Controls for the Department of Innovation and Technology’s Information Technology Shared Services system” (System and Organization Control Report) was performed by the Office of the Auditor General in accordance with *Government Auditing Standards*. Based on their examination, the Service Auditors expressed an adverse opinion on the Department’s Description of the information technology general controls and application controls for the Department of Innovation and Technology’s Information Technology Shared Services System. The System and Organization Control Report was issued under separate cover dated August 8, 2019.

Summary of Findings

The Service Auditors identified certain deficiencies in internal control over the “Description of the IT General Controls and Application Controls for the Department of Innovation and Technology’s Information Technology Shared Services system” that they consider to be material weaknesses, which are described in the accompanying Schedule of Finding on pages 7-12 of this report as Finding 2019-001, *Inaccurate Description of System*, Finding 2019-002, *Controls Were Not Suitably Designed*, and Finding 2019-003, *Controls Did Not Operate Effectively*.

Exit Conference

The findings and recommendations appearing in this report were discussed with the Department at an exit conference on August 8, 2019. Attending were:

Representing the Department of Innovation and Technology

Jennifer Ricker, Chief of Staff
Jenifer Johnson, Chief Administrative Officer
Douglas Tinch, Chief Internal Auditor
Margaret van Dijk, Chief Legal Counsel
Tony Collings, Deputy Chief Information Security Officer
Judy Zhu, Security and Compliance
Deborah Shotts, Security Consultant
Adam Ford, Chief Information Security Officer
Lori Sorenson, Chief Technology Officer
Pedro Guzman, Chief of Enterprise Operations

Representing the Office of the Auditor General

Kathy Lovejoy, Senior Manager
Brian Metzger, Supervisor
Miranda Stromquist, Supervisor

The responses to the recommendations were provided by Jennifer Ricker, Chief of Staff on August 8, 2019.

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OFFICE OF THE AUDITOR GENERAL
FRANK J. MAUTINO

**INDEPENDENT SERVICE AUDITOR'S REPORT ON INTERNAL CONTROL
OVER REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED
ON AN EXAMINATION OF A SERVICE ORGANIZATION PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Honorable Frank J. Mautino
Auditor General
State of Illinois

We have examined, in accordance with the attestation standards established by the American Institute of Certified Public Accountants and the standards applicable to attestation engagements contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the State of Illinois, Department of Innovation and Technology's "Description of the IT General Controls and Application Controls for the Department of Innovation and Technology's Information Technology Shared Services system" (description) for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019, and have issued our report thereon under separate cover dated August 8, 2019.

Internal Control over Reporting

Management of the State of Illinois, Department of Innovation and Technology is responsible for establishing and maintaining effective internal control over (1) fairly presenting the State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019, and (2) establishing and maintaining effective internal control over the suitable design and operating effectiveness of the controls related to the control objectives within the State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019 (internal control over reporting). In planning and performing our examination, we considered the State of Illinois, Department of Innovation and Technology's internal control over reporting to determine the examination procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019, but not for the purpose of expressing an opinion on the effectiveness of the State of Illinois, Department of Innovation and Technology's internal control

over reporting. Accordingly, we do not express an opinion on the effectiveness of the State of Illinois, Department of Innovation and Technology's internal control over reporting.

A deficiency in internal control over reporting 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 in internal control over reporting* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Department's description will not be prevented, or detected and corrected on a timely basis. *A significant deficiency in internal control over reporting* 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 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 reporting that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings as items 2019-001 through 2019-003, that we consider to be material weaknesses.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019, is fairly presented and the controls related to the control objectives in the State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019, were suitably designed and operating effectively, 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 State of Illinois, Department of Innovation and Technology's description for the information technology general controls and application controls throughout the period from July 1, 2018, through June 30, 2019. However, providing an opinion on compliance with those provisions was not an objective of our examination and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

State of Illinois, Department of Innovation and Technology's Responses to Findings

The State of Illinois, Department of Innovation and Technology's responses to the internal control findings identified in our examination are described in the accompanying schedule of findings. The State of Illinois, Department of Innovation and Technology's responses were not subjected to the procedures applied in the examination and, accordingly, we express no opinion on the responses.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the State of Illinois, Department of Innovation and Technology's internal control over reporting or on compliance. This report is an integral part of an examination performed in accordance with *Government Auditing Standards* in considering the State of Illinois, Department of Innovation and Technology's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

SIGNED ORIGINAL ON FILE

Jane Clark, CPA
Director of Financial and Compliance Audits

Springfield, Illinois
August 8, 2019

SIGNED ORIGINAL ON FILE

Mary Kathryn Lovejoy, CPA, CISA
Senior Audit Manager

STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
CURRENT FINDINGS-GOVERNMENT AUDITING STANDARDS
For the Year Ended June 30, 2019

2019-001 **Finding** Inaccurate Description of System

The “Description of the IT General Controls and Application Controls for the Department of Innovation and Technology’s Information Technology Shared Services system” (description of system), as provided by the Department of Innovation and Technology (Department), contained inaccuracies and omissions.

The Department provides State agencies with information technology general controls and application controls for their use. As such, the Department, as a service provider, provides services which are likely relevant to user agencies’ internal control over financial reporting. Therefore, the Department is required to develop an accurate and complete description of system documenting its internal controls over the services provided.

During our examination of the Department’s description of system, we noted:

- it contained inaccurate statements. Specifically, we noted:
 - Technical accounts were not reviewed annually;
 - The ERP Production Support did not communicate through a dedicated email address;
 - The Illinois Tollway did not go live with the ERP on July 1, 2017;
 - The Incident Management Process Guide did not reflect the changes in the Major Outage Response Team (MORT) process;
 - The Department did not publish the monthly, quarterly, or annual metric of incident statistics or provide to management;
 - The Lost or Stolen Equipment Policy did not reflect the actual processes followed;
 - Services and performance statistics were not communicated at the DoIT Daily meeting until September 12, 2018, and were never communicated at the CIO meetings;
 - Antivirus definition files were not pushed out to servers beginning eight hours after availability;
 - The System Management Facility violation record reports were not reviewed by the Manager of Mainframe Support Services;
 - The Department was not responsible for the scheduling and backup of agencies’ applications and data;
 - The Department did not utilize Secure File Transfer Protocol (SFTP) to secure the transfer of mainframe data;
 - The Department did not utilize security experts and vendor subscription services to assist in determining risk from potential and newly discovered vulnerabilities; and,
 - Vulnerability scans were not conducted within the defined frequencies.

- it omitted internal controls. Specifically, the description of system did not include:
 - complementary subservice organization controls for the subservice providers utilized;
 - controls to comply with Complementary User Entities Controls documented in subservice providers' System and Organization Reports;
 - controls for monitoring services provided by the Department of Central Management Services;
 - controls over the maintenance and patching of the mainframe operating systems;
 - the frequency for which backups were missed prior to the SQL Team being notified; and,
 - a statement describing how the System Administrator ran the systems programmer and high profile user ID report and provided to the Manager of Mainframe Support Services.

The Fiscal Control and Internal Auditing Act (30 ILCS 10/3001) requires the Department to establish and maintain a system, or systems, of internal fiscal and administrative controls to provide assurance that resources and funds applicable to operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over the State's resources.

Department management indicated the errors were due to oversight.

Failure to provide an accurate and complete description of system resulted in an adverse opinion on the Department's System and Organization Control Report. Additionally, without an accurate and complete description of system, the user agencies' internal control over financial reporting may have unidentified deficiencies and the user agencies' auditors are unable to rely on the internal controls related to the services provided by the Department. (Finding Code 2019-001, 2018-001)

Recommendation

We recommend the Department review the description of system to ensure it is complete, accurate, and contains all internal controls over the services provided to user agencies.

Department Response

The Department agrees with the finding and will review the description of system to make it as complete, accurate, and comprehensive as possible covering internal controls over services provided to user agencies.

STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
CURRENT FINDINGS-GOVERNMENT AUDITING STANDARDS
For the Year Ended June 30, 2019

2019-002 Finding Controls Were Not Suitably Designed

The controls related to the control objectives stated in the “Description of the IT General Controls and Application Controls for the Department of Innovation and Technology’s Information Technology Shared Services system” (description of system), as provided by the Department of Innovation and Technology (Department), were not suitably designed to provide reasonable assurance the control objectives would be achieved.

As part of testing to determine if the controls were suitably designed, we requested the Department to provide populations related to:

- Individuals authorized to approve physical access to Department facilities;
- Change requests; and,
- Unplanned outages.

However, the Department did not provide complete and accurate populations. Due to these conditions, we were unable to conclude the Department’s population records were sufficiently precise and detailed under the Attestation Standards promulgated by the American Institute of Certified Public Accountants (AT-C §320.30) to test the suitable design of the controls. As such we could not perform detailed testing.

In addition, during our testing, we noted:

- The Mainframe Change Management Procedures did not address the prioritization of requests, required approvals, testing and documentation requirements, and post implementation reviews;
- The WebServices Change Management Procedures did not address the prioritization of requests, required approvals, testing and documentation requirements, and post implementation reviews;
- Major Outage Response Team (MORT) incidents which occurred after business hours did not follow the documented process; and,
- The Department could not provide the Chief Information Officer’s review of Incident Reports for the period from July 1, 2018 through March 31, 2019.

As a result of the above noted exceptions, we were unable to determine if the controls were suitably designed.

The Fiscal Control and Internal Auditing Act (30 ILCS 10/3001) requires the Department to establish and maintain a system, or systems, of internal fiscal and administrative controls to provide assurance that resources and funds applicable to operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over the State’s resources. Furthermore, the State Records Act (5 ILCS 160/8) requires the Department to make and reserve records containing adequate and proper

documentation of the functions, policies, decisions, procedures, and actions of the Department in order to protect the legal and financial rights of the State.

Department management indicated the errors were due to oversight.

Failure to provide controls that were suitably designed resulted in an adverse opinion on the Department's Systems and Organization Control Report. Additionally, without controls that are suitably designed at the Department, the user agencies' auditors will be unable to rely on the operating effectiveness of the Department's controls over the user agencies' internal control over financial reporting. (Finding Code 2019-002, 2018-002)

Recommendation

We recommend the Department ensure the controls are suitably designed over the services provided to user agencies.

Department Response

The Department agrees with the finding and will assess internal processes to identify where additional controls may be applied and existing controls can be strengthened.

STATE OF ILLINOIS
DEPARTMENT OF INNOVATION AND TECHNOLOGY
CURRENT FINDINGS-GOVERNMENT AUDITING STANDARDS
For the Year Ended June 30, 2019

2019-003 **Finding** Controls Did Not Operate Effectively

The controls related to the control objectives stated in the “Description of the IT General Controls and Application Controls for the Department of Innovation and Technology’s Information Technology Shared Services system” (description of system), provided by the Department of Innovation and Technology (Department), did not operate effectively.

During our testing of the controls related to the control objectives stated in the description of system, we noted specific controls which did not operate effectively. Specifically, we noted:

Human Resources

- Multiple instances where employees or contractors:
 - did not have properly completed DoIT Badge Request forms;
 - had not completed security awareness training or cybersecurity training;
 - did not have a probationary or annual evaluation completed or it was completed late; and,
 - had not completed the annual acknowledgement of compliance with security policies.

Access Provisioning and De-Provisioning

- Instances occurred where:
 - Security software violation reports were not reviewed;
 - Separation reports were not reviewed;
 - Mainframe administrator accounts were not revoked;
 - Terminated individuals’ access was not revoked;
 - Terminated individuals’ access was not timely revoked; and,
 - HANA access requests were not completed.

Application Edits

- 4 States’ tax rates were incorrect in the CPS tax tables.

Change Management

- Changes related to applications and the infrastructure did not always have Backout Plans or Test Plans; and,
- ERP change request forms did not always have all required fields completed.

Device Configurations

- Multiple instances where:
 - Systems were not up-to-date with the latest antivirus;
 - Systems were not up-to-date with the latest virus definitions;
 - Systems did not have antivirus product version installed; and,

- The Department did not provide support demonstrating network hardware and software alerts were reviewed.

As a result of the above noted exceptions, the controls were not operating effectively to provide reasonable assurance that the control objectives stated in the description were achieved.

The Fiscal Control and Internal Auditing Act (30 ILCS 10/3001) requires the Department to establish and maintain a system, or systems, of internal fiscal and administrative controls to provide assurance that resources and funds applicable to operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over the State's resources.

Department management indicated the errors were due to oversight, staffing shortages and human error.

Failure to ensure controls operated effectively to provide reasonable assurance that the control objectives stated in the description were achieved resulted in an adverse opinion on the Department's System and Organization Control Report. Additionally, without effective operating controls, the user agencies' auditors will be unable to rely on the operating effectiveness of the controls impacting the user agencies' internal control over financial reporting. (Finding Code 2019-003, 2018-003)

Recommendation

We recommend the Department ensure its controls operate effectively over the services provided to user agencies.

Department Response

The Department agrees with the finding and will assess internal behaviors and practices to identify the cause of the breakdown in published controls. The Department will remind data owners of their obligations for data integrity such as out-of-state tax rate accuracy.