Office of the City Auditor

Audit of Human Services:
Access to Information Systems (Part II)

Report Date: May 16, 2011

Office of the City Auditor

"Promoting Accountability and Integrity in City Operations"

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Date: May 16, 2011

To: James K. Spore, City Manager

Subject: Audit of Human Services: Access to Information Systems (Part II)

I am pleased to present the report of our audit of Human Services: Access to Information Systems (Part II). The results of this audit will be distributed to City Council through the City's Audit Committee.

The objective of our review was to determine whether Human Services' employee access and use of information through the Virginia Department of Social Services' system referred to as SPIDeR is reasonable and in compliance with guidelines established for the uses of client information.

The results of our review are provided in this report. Findings considered to be of insignificant risk have been discussed with management. We completed our fieldwork on March 25, 2011.

The Office of the City Auditor reports to City Council through the City's Audit Committee and is organizationally independent of all City departments. This report is intended solely for the information and use of the Audit Committee, City Council, City Manager, and appropriate City management. It is not intended to be, and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

We would like to commend the staff of the Department of Human Services for the courtesy and cooperation extended to us during the review. We would also like to thank the Virginia Department of Social Services for their cooperation and assistance.

If you have any questions about this report or any audit-related issue, I can be reached at 385-5872 or via email at lremias@vbgov.com.

Respectfully submitted,

Lyndon S. Remias, CPA, CIA
City Auditor

c: City Council Members
        Audit Committee Members
        Cindy Curtis, Acting Deputy City Manager, City Manager's Office
        Robert Morin, Director, Department of Human Services

Purpose

To determine whether Department of Human Services' (Human Services) employee access and use of information available through the Virginia Social Services' *System Partnering in a Demographic Recovery* (SPIDeR) is reasonable and in compliance with established guidelines.

Scope and Objectives

The scope of our review was limited to system access and use of the Virginia Department of Social Services' information system referred to as SPIDeR, *System Partnering in a Demographic Recovery*.

For test purposes, we reviewed searches in SPIDeR made by employees during the month of October 2010.

The objective of our review was to determine whether Human Services' employee access and use of information through SPIDeR is reasonable and in compliance with guidelines established for the uses of client information.

Methodology

To accomplish our objectives, we performed the following procedures:

- Obtained and reviewed pertinent laws, regulations and available agreements regarding access and use of protected information.
- Reviewed internal controls related to access and use of information through inquiry and examination of documents and data.
- Assessed whether the design of the key controls were adequate in reducing risk to an acceptable level.
- Met with appropriate staff to discuss current access and uses of SPIDeR.
- Obtained an extract of the searches performed by employees for the period under review.
- Obtained employee and caseload information for the period under review.
- Performed analysis and tests of data designed to identify usage trends and searches meeting our high risk criteria.
- Selected a sample of employee searches for review based on the results of our analysis.
- Traced our sample searches to documentation supporting the search.
- Investigated irregularities.
- Performed appropriate follow up activities for prior recommendations made by the Office of the City Auditor.
- Made recommendations as appropriate to improve processes, increase efficiency and reduce risk to the City of inappropriate access and/or use of data.

Standards

Our audit was conducted in accordance with generally accepted government auditing standards. The Office of the City Auditor reports to City Council through the Audit Committee and is organizationally independent of all City Departments. This report will be distributed to the City's Audit Committee, City Council, City Manager, and appropriate management within the City. This report will also be made available to the public.

Background

Human Services provides a wide variety of services to Virginia Beach residents in order to provide residents the opportunity to achieve self-sufficiency, safety and quality of life. The department receives Federal, State, local, fees, and grant funding. The total Human Services budget for FY2011 is $112,168,678 with the City's portion at $31,209,390. The Department has approximately 1,045 employees.

For purposes of this audit, we focused on the Financial Assistance and Adult and Family Services Divisions. These Divisions are the primary users of the information systems with access to the private data of citizens through SPIDeR.

The Adult and Family Services Division aids citizens in meeting their fundamental needs during times of temporary economic and social crisis; works to protect children and vulnerable adults from abuse and neglect; administers a range of services to help maintain families in the least restrictive and intrusive manner possible; and assists in preparing citizens to find and retain employment.

The Financial Assistance Division administers many different financial assistance programs, most of which are financed by the Federal and State government. The programs target families and individuals with incomes at or below the poverty level. These programs include: temporary, emergency or general assistance to needy families or indigents; grants for the disabled; food stamps; and Medicaid.

In order for Human Services staff to determine an individual or family's eligibility for financial assistance and/or services, access to appropriate information and its residing systems is necessary. These information systems include Department of Motor Vehicles (DMV), Social Security Administration (SSA), Virginia Employment Commission (VEC) and others. The various information systems have been conveniently grouped under an umbrella system developed by the Virginia Department of Social Services (VDSS) called *System Partnering in a Demographic Recovery*, or by its acronym, SPIDeR.

Instead of inquiring up to 13 different information systems one at a time, just one query in SPIDeR can cover them all. The following systems are currently accessible through SPIDeR:

- ADAPT   Application Benefit Delivery Automation Project
- APECS   Automated Program for the Enforcement of Child Support
- ASAPS   Adult Services and Adult Protective Services
- DMV   Department of Motor Vehicles
- Energy   COOL; FUEL/CRISIS
- MEDPEND   Pending Status For Medicaid Approval
- OASIS   Online Automated Services Information System
- SDX   State Data Exchange
- SOLQ-I   SSA State Online Query
- VACIS   Virginia Client Information System
- VaMMIS   Virginia Medicaid Management Information System
- VEC   Virginia Employment Commission
- Work Number   3rd Party Employment information provided by TALX Corporation

There are approximately 300 City employees with various levels of access to SPIDeR. Virginia Beach programs log approximately 120,000 individual searches per month.

Findings and Recommendations

Controlling employee access and use of information obtained through SPIDeR

VDSS partners with external agencies (i.e., SSA, VEC, DMV, et al) to provide access to the various agency data through SPIDeR. Access permissions and use of the data available through SPIDeR is controlled based on local policies, agreements with partners, and policies of VDSS' system owners. State and Federal regulations require that sensitive data and personal information pertaining to Virginia Department of Social Services systems and clients have protection from unauthorized access and use. Only authorized personnel may access information. State and Federal confidentiality rules apply when accessing the data available through SPIDeR.

Authorization for access to SPIDeR is determined and approved at the local level. In Virginia Beach, unit supervisors are

Table 1. Employee Permissions by SPIDeR Application	
Application	Number of Employees with Access through SPIDeR
ADAPT	294
APECS	199
ASAPS	46
DMV	225
Energy/COOL/FUEL	215
MEDPEND	50
OASIS	152
SDX	236
SOLQ-I	189
VACIS	286
VaMMIS	238
VEC	191
Work Number	146
TOTAL Employees with Access	300

responsible for determining which systems are necessary to fulfill job responsibilities of their staff. The Program Manager authorizes the permissions approved by the Supervisor.

Unauthorized access, use, misuse, or modification of the data accessible through SPIDeR, as well as unauthorized printing or release of information, is a violation of VDSS policy. Violators may be subject to disciplinary action, criminal and/or civil penalties.

Other than the Information Security Policies developed by the State, Human Services does not have formal written policies and/or guidelines pertaining to the access and use of information obtained through SPIDeR.

Recommendations

1.1   In order to reduce the risk of unauthorized access and/or use of data obtained through SPIDeR, we recommend management develop and *adopt* standardized access templates for all employee job classifications to document the minimum level of access required to perform job responsibilities. The templates should be used as the basis for granting access to all new employees and for determining whether the current level of access for current employees is reasonable. Deviations from the minimal requirements should be allowed only when a documented business need exists.

1.2   Human Services should develop Departmental policies, procedures and standards for granting access to SPIDeR and the associated information. These policies should address appropriate use of the information as well as the consequences for failure to abide by the policies and procedures.

1.3   Human Services should review the agreements between Virginia Department of Social Services and external partners (ex. Social Security Administration, Virginia Employment Commission, Department of Motor Vehicles, Medicaid, etc.) to determine whether the department is in compliance with all agreement terms for access, use and documentation requirements.

1.4   Human Services should remove non-essential permissions from SPIDeR systems as result of achieving compliance with the developed policies, access templates and the VDSS partner agreements.

Management's Response[1]

Each division (Services, Eligibility and Administration) will validate the business need for the use of each system within SPIDER. Once this has been completed, templates will be designed depicting each division unit that identifies the worker title and the business need justification for each system within SPIDER. These templates will be sent to Richmond to request approval of our business use request.

Each unit will submit justification to the division director to validate the use of each system by functional worker to the division director for approval. The division director will analyze all submissions to ensure that all requests are valid and within the confounds of the memorandum of agreements (MOA). The division directors will seek advice from the state through IT staff concerning any ambiguous language within the MOAs.

The division directors in coordination with IT staff will develop a method to ensure that staff transfers will trigger a review of SPIDER access to make necessary changes dictated by the new job function.

After receiving approval from the state on the acceptable use of our templates the division directors in coordination with the department directors will draft an administrative instruction/or procedure on SPIDER use that defines access.

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[1]   Management's Response excerpted from email from Robert Morin, Director, Department of Human Services to Lyndon Remias, City Auditor dated April 22, 2011

Monitoring employee access and use of SPIDeR

Each time an employee logs into SPIDeR, they are reminded via a "Warning" screen of the restrictions and penalties for inappropriate access and use of information. SPIDeR has a built-in audit trail that tracks all transactions. User account, worker name, IP address, date/time stamp, and inquiry search criteria are recorded in the audit trail. The availability of this information enables authorized personnel from local agencies, VDSS, and partnering systems to validate that SPIDeR is being used for business purposes and that search activities are consistent with the existing policies, agreements, and regulations.

As part of our audit, we reviewed a sample of 383 transactions from the 118,645 individual searches recorded in the October 2010 audit log. Our sample was randomly selected from searches matching various high risk criteria. For audit purposes, a search was considered high risk if it met any of the following criteria: initial search by name, searches of related case members, searches performed outside of normal operating hours, "drill in" searches and searches of external systems.

We were able to trace each search in our sample to an active case or application as well as to the employee assigned to the case or the employee's job responsibility (i.e., fraud unit, information security, file and/or mailroom, triage desk, supervisory review). In cases where the relationship was not readily apparent, we interviewed workers, reviewed intake logs, case documentation, error logs, work schedules, etc to validate the search. There were no exceptions.

We offer the following recommendations to increase efficiency and reduce the risk of inappropriate access and use of information.

Recommendations

2.1   Human Services should regularly review SPIDeR access logs for a randomly selected sample of SPIDeR users to ensure appropriate use. In accordance with established reporting requirements at both the State and local levels, findings indicative of possible misuse should be forwarded to the Office of the City Auditor for further review. The Virginia Department of Social Services should be notified as well.

2.2   Human Services should development and implement "refresher" SPIDeR training to review the basics (i.e., use of personal preferences, search parameters, documentation, new applications, features and/or restrictions, best practices, etc). This training should also address the federal, state and departmental policies and procedures related to access and use of SPIDeR systems.

Management's Response[2]

> *The department will utilize IT staff to train all SPIDER users on the proper use of SPIDER and to prevent unnecessary SPIDER hits. There is no estimated completion date because this will be ongoing training that will be incorporated periodically or as designated by the department director.*

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[2]   Management's Response excerpted from email from Robert Morin, Director, Department of Human Services to Lyndon Remias, City Auditor dated April 22, 2011

Follow Up of Prior Audit Recommendations

As part of our audit, we reviewed the department's progress toward implementation of the recommendations from our Memorandum to management, dated August 24, 2009, which resulted from several investigations into inappropriate access and use of information from SPIDeR and the City Auditor's Report entitled, *Audit of Human Services' Access to Information Systems (Part I)* issued on June 30, 2010. Our recommendations addressed conducting a periodic random selection of SPIDeR users and reviewing their use of the system; implementing a process for recording and reporting unauthorized accesses to the systems; security training of employees; and finally development and distribution of policies and procedures regarding access to information systems and the use of information. These recommendations were issued as preventive and detective measures to assist in minimizing unauthorized accesses to the SPIDeR system.

Of the nine collective recommendations made in previous audit reports, five have yet to be implemented. At the start of this audit, management was working with the Virginia Department of Social Services to acquire the necessary information to address these issues. These outstanding recommendations have been incorporated in the recommendations made in this report.

Conclusion

Human Services has made considerable progress in implementing our previous recommendations related to emphasizing the importance of maintaining the integrity and privacy of client information with its employees. However, there is still opportunity to further minimize the risks to the City and individual employees through: (1) implementation of written policies and procedures related to access and use of information through SPIDeR; (2) providing employees with formalized training in SPIDeR; (3) streamlining the access request and authorization processes; and, (4) ensuring employee access to SPIDeR is granted at the minimum level required to perform his/her responsibilities.

Acknowledgments

We would like to thank Human Services' staff for their responsiveness to our requests during the review and their receptiveness to questions and comments. We would also like to thank the Virginia Department of Social Services for their cooperation and assistance. Additionally, we offer our assistance should concerns regarding implementation of these recommendations or other audit issues arise.