



CITY OF ATLANTA

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TO: Honorable Mayor, City Council President, and members of the City Council

FROM: Leslie Ward, City Auditor 

DATE: November 30, 2011

SUBJECT: Audit Report on Information Technology Controls at the Department of Aviation

The purpose of this memo is to communicate the results our assessment of information technology controls in the Department of Aviation. Our audit objectives were to answer the following questions:

- Are controls in place to maintain data security for critical aviation systems?
- Is the Information Services Division following the ITIL (Information Technology Infrastructure Library) framework?

We conducted the audit in accordance with generally accepted government auditing standards. We evaluated:

- logical access controls specific to 11 of 33 applications that the Department of Aviation identified as critical to its operations
- network infrastructure configuration and security settings
- disaster recovery preparedness
- selected entity level controls, including service level agreements and conformance with aspects of ITIL (Information Technology Infrastructure Library)
- progress addressing security weaknesses consultants identified in June 2010

We provided an interim report to the city's interim chief information officer detailing specific security and/or control weaknesses, with recommendations for corrective action. The interim chief agreed with all of our recommendations. This report omits details that could compromise system security. Vulnerability assessments for technology infrastructure are not subject to disclosure under the Georgia Open Records Act.¹

¹ O.C.G.A. § 50-18-72(15)(A)(i).

The Department of Aviation made some changes to strengthen logical access controls consistent with recommendations from our 2009 performance audit, *Airport Terminal Leases*. However, we found instances where the new procedures were not followed and continued risk from former employees and contractors retaining access to critical systems after they no longer worked for the department. As the city consolidates its information technology operations, we recommend the interim chief information officer develop procedures to document users' authorization to access applications, periodically monitor user access to ensure continued appropriateness, and promptly remove access from employees and contractors when they terminate employment.

Aviation has implemented a number of controls to help secure its network, including enforcing password parameters, configuring local area networks, and setting network access rules to ensure computers meet the minimum requirements for accessing aviation's network. We recommend some changes to network configuration settings to better secure critical resources. We also recommend the interim chief information officer resolve the remaining seven of 23 security issues that we followed up from June 2010 consultant reports. These pertain primarily to obsolete software and hardware and one vendor-supported system.

The department continues to be vulnerable to prolonged service interruptions because its hot site is not yet operational and procedures to store backup tapes offsite were not consistently followed. The department could also face challenges complying with PCI (payment card industry) standards and in meeting service level agreements. Aviation Information Services Division managers' assessment of technology management indicates that most practices are sound, but identified a few areas, particularly within security and configuration management, where practices could be strengthened.

We were unable to assess whether the department followed its procedures for establishing new user accounts in the Parking Revenue Control System. Neither the Department of Aviation nor its vendor, ACS Transport Systems, provided complete data including dates the user accounts were established. The department's inability to obtain data and the vendor's lack of responsiveness indicate a potentially significant control weakness. Our audit schedule for 2012-13 includes a performance audit of aviation parking fees.

Generally accepted government auditing standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

If you have questions you may call Damien Berahzer at 404/330-6806, or you may reach me at 404/330-6804. We appreciate staff's courtesy and cooperation throughout the audit. The team for this project was Eric Palmer, Lesia Johnson, and Katrina Clowers.