Audit Follow Up:  
2001 Report on the Cyborg HR Payroll System

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Office of the County Auditor
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EXECUTIVE SUMMARY

Payroll staff within the Accounting Division have resolved many of the individual internal control issues raised in the June 2001 report issued by the Office of Internal Audit in conjunction with KPMG LLP dealing with deficiencies of the County’s Human Resources/Payroll System (Cyborg).

However, we conclude that further action is needed to resolve the following significant outstanding issues:

1. Lack of agency coordination for payroll processing increases the risk of errors or irregularities.
2. Inconsistent data validation among divisions responsible for HR/Payroll data may result in inaccurate personnel data.
3. Data and system integrity exposures are present due to lack of written security procedures and inconsistent security administration practices.

The Cyborg HR/Payroll system is administered primarily by staff from the Accounting Division, Human Resources (HR), and the Office of Management & Budget (Budget). In order to effectively resolve the collective issues, a coordinated effort between these agencies is required. Accordingly, we recommend the Board direct the County Administrator to

1. Establish a coordinated internal control structure over payroll processing that defines controls and individual responsibility assignments for all staff involved in payroll processing (Payroll staff/supervisors, division staff liaisons, staff from HR and Budget); complements controls in automated time and attendance systems at Mass Transit and WWS and provides a basis for future initiatives to consider time & attendance systems for potential county-wide use; assigns review responsibilities for exception and other audit reports; and defines review criteria, frequency of required reviews and recommended actions for noted exceptions.

2. Institute regular, consistent data validation practices among division staff responsible for payroll processing where HR staff perform regular, routine reviews and validation of personnel data maintained on the Cyborg system (master classification tables, master pay plans); HR staff routinely review and validate employee data generated by HR master pay plans, master classification tables, employee records and approved BC-102 forms; Budget staff perform regular, routine reviews and validation of position management data maintained on the Cyborg system; and HR and Budget staff coordinate with Payroll section staff to review Cyborg data and identify and resolve data conflicts, data outside of established parameters and data that does not correspond to master tables.

3. Complete security “clean-up” activities and establish a written Cyborg Security Policy that defines staff responsibilities for administration, maintenance and monitoring of system security parameters within Cyborg and the server environment; addresses data security, data ownership, privacy requirements, user access administration, personnel usage policies, monitoring/audit procedures, exception escalation protocols, and procedures for dealing with security violations; and provides for separation of security and system administration responsibility (including “backup” administrator staff) from staff who perform payroll functions.
PURPOSE

This report addresses actions taken by the Accounting Division in response to the Office of Internal Audit report dated June 2001. Our objective was to determine the extent to which previously identified control risks have been addressed and satisfactorily resolved. To accomplish this objective, we conducted the following work:

- Interviewed staff from the Accounting, HR, and Budget Divisions,
- Interviewed staff responsible for payroll/time and attendance from Libraries, Parks & Recreation and Water & Wastewater (WWS) Divisions
- Reviewed and performed online testing of Cyborg system data and system security,
- Independently generated and reviewed Cognos reports of Cyborg data, and
- Reviewed established procedures and controls over payroll processing.

BACKGROUND

Broward County utilizes the Cyborg system to store and process employee information for the purposes of human resource management and compensation administration. All Broward County employees are paid from the Cyborg system on a bi-weekly basis. Data processed by the system includes social security number, contact information, hire/termination dates, promotional data, salary/wage grades, leave balances, benefits, employment taxes, etc.

Another system used in conjunction with Cyborg is the Cognos reporting tool. Cognos is a “bolt-on” system that hooks into Cyborg data to enable management reporting. Cognos is not utilized to process payroll; rather, Cognos reports on the results of payroll processing.

The current payroll process – from employee hire to disbursement through termination – relies on the coordinated efforts of staff from all County agencies. Each employee’s division, HR, Budget and the Payroll section of the Accounting Division are responsible for some element of payroll, as follows:

Human Resources
Staff maintain the County’s Salary Grade and Job Tables, as well as authorize all requests for employee changes (hires, terminations, transfers, promotions, etc.).

Office of Management & Budget
Staff establish the County’s position management structure and manage employee assignments to “budget position numbers” (BPN) within that structure.

Employee Divisions
Staff from the employee’s division are responsible for inputting time and attendance into Cyborg and reporting employee status changes to HR.

Accounting (Payroll)
Payroll staff utilize the Cyborg system to process data from all divisions, generate the bi-weekly payroll for employees, and maintain vacation/sick leave accounts.

Cyborg interfaces with the County’s financial system, AMS, to record payroll expenses.

PRIOR FINDINGS

The June 2001 report identified serious control risk concerns with the Cyborg System application. The report identified internal control deficiencies, including weaknesses in security practices,
processing controls and inadequate reporting.

**CURRENT STATUS**

While many issues reported in 2001 have been resolved, concerns that remain outstanding can be summarized in three major areas: coordination of agency procedures and controls over payroll processing, data integrity and security policy/practices.

**Lack Of Agency Coordination For Payroll Processing Increases The Risk Of Errors Or Irregularities**

Although responsibilities and controls for payroll processing are distributed among all divisions, the Accounting Division has not formally coordinated procedures and controls for payroll processing between the agencies. The current state of internal controls exposes the integrity of the Cyborg system and payroll data.

Currently, agencies place undue reliance on another division's performance of a control procedure (e.g., reconciliations of bi-weekly hours) while the other division is assuming the first is actually executing the control; meanwhile, the control fails for non-performance. For example, there is no formal procedure for verifying accurate and timely handling of division requests to update employee status for hires, terminations, bonuses, transfers, etc.¹ HR staff review and approve the request and route the paperwork depending on the nature of the request (to budget, to risk management, to payroll). The approved request is then routed to the Payroll section where Payroll staff input the requested change to Cyborg to affect payroll processing. Processing is considered complete and there is no formal communication back to the requesting division of actions taken. There is no verification by HR or Budget staff that the request was completed timely and accurately.

We recommend the Board direct the County Administrator to establish a coordinated internal control structure over payroll that:

- Defines controls and individual responsibility assignments for all staff involved in payroll processing (Payroll staff/supervisors, division staff liaisons, staff from HR and Budget);
- Complements automated controls present in time and attendance systems at Mass Transit and WWS and provides a basis for future initiatives to consider time & attendance systems for potential county-wide use; and
- Assigns review responsibilities for exception and other audit reports and defines review criteria, frequency of required review and recommended actions for noted exceptions.

**Inconsistent Data Validation May Result In Inaccurate Personnel Data**

Staff from Human Resources and the Budget Office perform limited validation of employee data. The Cyborg system requires duplicate entry of the same change – once in the Budget or HR screens and again in the payroll screens. Since Cyborg does not automatically synchronize and update the screens maintained by HR and Budget staff, data conflicts between HR/Budget data will have an adverse effect on employees’ data.

For example, Budget staff maintain a position classified as ‘white collar’ in the

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¹ Division requests for HR action are submitted using a standard form BC-102; thus, these requests are typically referred to as a “BC-102”.

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Budget screens; HR approves and routes a BC-102 new-hire request for this position, but the request is incorrectly classified as 'professional.' Payroll staff creates the employee in Cyborg, classified as 'professional' with the corresponding pay and entitlements. Payroll would appear to be correct; even though data conflicts with Budget position data.

We recommend the Board direct the County Administrator to institute regular, consistent data validation practices among Division staff responsible for payroll processing where:

- HR staff perform regular, routine reviews and validation of Human Resources data maintained on the Cyborg system (master classification tables, master pay plans);
- HR staff routinely review and validate employee data with HR master pay plans, master classification tables, employee records and approved BC-102 forms;
- Budget staff perform regular, routine reviews and validation of position management data maintained on the Cyborg system; and
- HR and Budget staff coordinate with Payroll section staff to review Cyborg data and identify and resolve data conflicts, data outside of established parameters and data that does not correspond to master tables.

Data And System Integrity Exposures Are Present Due To Lack Of Written Security Procedures And Inconsistent Security Administration Practices

System security standards and procedures for maintaining system security have not been coordinated or defined. For example, in a review of Unix security, we noted several division level staff had active, unrestricted root access to the Cyborg production data files. Although this access does not permit viewing of production data outside of Cyborg, these users have the capability to delete the production data file. The Payroll production data file could be unknowingly or intentionally deleted, causing a loss of data and interruption to payroll processes.

The Payroll section is currently working with Division Directors and OIT to update Cyborg access (User IDs) for terminated/transferred employees and employees who might no longer require Cyborg/Unix access for performing their job functions. Accounting Division management has also reassigned responsibility for primary security administration to an individual separate from payroll functions.

In order to promote and maintain automated security and controls over the Cyborg payroll processing environment, we recommend the Board direct the County Administrator to complete security “clean-up” activities and establish a written Cyborg Security Policy that

- Defines staff responsibilities for administration, maintenance and monitoring of system security parameters within Cyborg and the server environment;
- Addresses data security, data ownership, privacy requirements, user access administration, personnel usage policies, monitoring/audit procedures, exception escalation paths, and procedures for dealing with security violations; and
- Provides for separation of security administration responsibility (including “backup” administrator staff) from staff who perform payroll functions.