



# HARFORD COUNTY, MARYLAND

## Office of the County Auditor

June 21, 2013

Honorable Members of the County Council  
Harford County, Maryland  
212 S. Bond St., 2<sup>nd</sup> Floor  
Bel Air, MD 21014

County Executive David Craig  
Harford County, Maryland  
220 S. Main St.  
Bel Air, MD 21014

Dear Council Members and Mr. Craig:

In accordance with Section 213 of the Harford County Charter, we have performed an audit of Harford County's Payroll Controls. The results of that audit, our findings and recommendations for improvement are detailed in the attached report. We would like to thank the participating members of management for their cooperation during the audit.

The audit found that most components of the payroll process work as expected. However, we identified some inconsistencies in time keeping procedures and leave accruals for Elected Officials. We also identified areas for improvement related to personnel changes and system reconciliations.

While the audit testing showed that the payroll process has been effective in the past, the related controls should be improved to ensure that future errors are prevented or identified and corrected. In particular, the payroll process can be improved by performing regular reconciliations and by confirming that the system interfaces are completed without error. Improved controls will help ensure the payroll process remains effective in the future.

The audit team is available to respond to any questions you have regarding the attached report.

Sincerely,

Chrystal Brooks, CPA, CGFM, CIA, CISA, CGAP  
County Auditor

*~ Preserving Harford's past; promoting Harford's future ~*

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Audit Report No.: 2012-A-04

cc: Mr. Scott Gibson, Director of Human Resources  
Ms. Kathryn Hewitt, Treasurer



HARFORD COUNTY, MARYLAND  
Office of the County Auditor

**AUDIT OF PAYROLL CONTROLS**

Period Covered:  
**07/01/2010 through 07/31/2012**

**Report Number: 2012-A-04**

Date Issued:  
**06/21/2013**

**Audit Team:**

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County Auditor

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## **BACKGROUND INFORMATION**

### **INTRODUCTION AND KEY STATISTICS**

Harford County Government pays approximately \$100 million (gross) each year to employees who work for the County Government, the Harford County Sheriff's Office and the State's Attorney's Office. Employees are paid for their time worked, paid leave (time off), overtime, shift differentials and various allowances; deductions from pay are made for health insurance, taxes, retirement contributions and a number of other reasons.

Each pay period, employee work and leave hours must be recorded, time or salary adjustments may be necessary, benefit deductions must be made, accounting transactions must be recorded and payments must be deposited to employees' bank accounts. All of these actions must be performed completely and correctly. The payroll process is a collaborative effort involving Human Resources specialists, timekeepers in each department and accountants in the Treasurer's Office. Together these groups ensure that approximately 1,800 employees are paid every two weeks.

Payroll processing is a key administrative function that employees should expect to be correct and timely. Further, the payroll process and related controls are critical components of various other County functions, including use of grant funds, budget projections of salary, benefit and retirement costs, future pension costs and current pension administration.

### **REVIEW OBJECTIVE, SCOPE AND METHODOLOGY**

The objective of this audit was to confirm that controls are adequately designed and effective to ensure that payroll calculations, time entry, leave balances, benefit deductions and leave payouts are correct. The scope of this audit was limited to reviewing payroll transactions, leave use, benefit deductions, and leave payouts. The audit did not include a complete evaluation of internal control, but instead, relied on substantive testing to support conclusions. Due to the narrow scope of this review, our evaluation of internal control was limited to the above mentioned areas. This lack of a complete review of internal control did not affect our achievement of the audit objective.

The audit focused on activity during the period of June 1, 2010 through July 31, 2012. Our audit procedures included interviewing personnel, observation, data analysis and substantive testing.

Specifically, we met with the Human Resources department to understand and observe the procedures for adding new employees to the relevant systems and the procedures to make

changes to employee information such as salary or benefits. We met with timekeepers from various departments to determine how they ensure that each employee's time worked is captured and approved correctly. Further, we met with Treasury employees to determine how paychecks are calculated and payroll is entered into the general ledger.

Based on our understanding of the underlying processes, we tested a sample of paychecks to see that they were supported by timekeeping records and employee benefit selections. We reviewed a sample of separated employees to ensure that their leave payouts were correct. We performed reconciliations of bi-weekly and annual payroll and tax reports.

Harford County relies heavily on computer systems to manage human resources, time entry, payroll and accounting data and to perform most of the payroll related calculations. Harford County uses an internally developed time entry system and a purchased human resources information system (Cyborg) to process payroll and manage employee records. The time entry system interfaces with Cyborg to create the bi-weekly payroll files. The payroll files, including benefit deductions, taxes and paycheck information, are uploaded to Cyborg and transactions are created to update the County's accounting system. To ensure controls were adequate, we performed reviews of both systems. Prior to our audit, we were advised that the County plans to purchase a new timekeeping system. Consequently, the extent of our testing related to the timekeeping system was limited to key controls that would prevent an error.

The audit was performed in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient 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.

## **REVIEW RESULTS**

Harford County management is responsible for establishing and maintaining effective internal controls. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets and compliance with applicable laws, rules and regulations are achieved. Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected.

Our review disclosed that manual procedures are sufficient to expect that false employees are not created and paid. Our test of employees supports that expectation. We also noted that employees' salaries were approved, but changes to employee information are not

always reviewed independently. It may be possible for a pay rate to be changed without being approved or reviewed.

We observed that timekeeping procedures vary between departments, but in all cases, time entry should be approved by a supervisor. In most cases, employees do not enter or confirm their own time in the timekeeping system; additionally, it is possible that approvers may not have direct knowledge of an employee's time worked. We observed that the time entry system prevents some data entry errors and that payroll employees review the time entry for reasonableness and correct any errors identified.

Our review of a sample of paychecks showed that employees were paid correctly; their pay was supported by approved pay rates, time entry data and benefit selections. We also reviewed separated employees' records and noted that their leave payouts were correct and they were not paid for working hours after their termination date. Our analysis of payroll data showed that employees' use of leave and overtime appeared reasonable. However, our review of elected officials' pay and leave showed that each submitted timesheets indicating that they worked five 8-hour days (40 hours) each week during our review period. The time entry process for these officials is used to simplify reporting for State pension purposes; it is assumed that the nature of these positions requires work outside of normal business hours and may be much more or less than 40 hours per week. Officials should consider how to most fairly record time entry to ensure proper pay and qualification for benefits.

As a practical matter, all employees have some need to spend time away from the office. This usually results in the use of paid leave. The elected officials did not use any paid leave other than County holidays. We additionally noted that they did not earn or use overtime or compensatory leave. However, we noted that one of the elected officials was accruing Annual, Personal and Sick Leave that could be paid out upon separation from the County. In this case, we estimate that the official's leave payout, which is at its maximum and does not include sick leave, will be approximately \$24,700. This is allowable under a Personnel Department Regulation for Exempt Personnel adopted May 31, 1979. The Regulation allows exempt employees to use and accrue leave in the same manner as classified employees. Part-time exempt employees receive pro-rated amounts of leave, but will not receive payment for sick or annual leave upon separation.

The regulation for Exempt Personnel is still in force, but is outdated considering the significant technology advancements since 1979. Current technology allows employees and elected officials to perform some of their required duties while away from the office, eliminating or reducing the use of paid leave. If employees do not need to use paid leave to be paid their salary, then they do not need to accrue paid leave.

We performed reconciliations of payroll totals for individual pay periods and for the end-of-years 2010 and 2011. The payroll totals did reconcile as expected, indicating that the County payments for deductions and payments to employees equaled the amount earned by the employees.

We reviewed controls related to the payroll systems and found that they can be improved. We determined that reconciliations are not performed to determine if the systems' interfaces properly transfer data. When data interfaces do not function correctly, data may be lost or be inaccurate. Calculations that depend on the data will then be incorrect.

In our opinion, based on the paychecks and employee details tested, we believe that many of the components of the payroll process function as expected so that employees will receive proper paychecks.

Areas for improvement are described in the Findings and Recommendations section of this report. Management has been provided an opportunity to respond to this report; responses are included below and in the Findings and Recommendations section.

## **MANAGEMENT RESPONSE**

We are pleased to note that the audit found no major concerns, and in some cases provided an independent endorsement of decisions made by the administration prior to the audit commencing. This is not inconsistent with the experience the Departments have had during their many external audits. We do, however, disagree with the audits findings in two areas for reasons that will be explained in detail. Fully half of the findings relate to the County's timekeeping system, which the Administration began the process of replacing prior to the audit commencing. The findings identified in the audit were consistent with the concerns previously identified by the Administration. In this regard, the audit endorsed decisions already made by the Administration.

With respect to critical payroll changes, the Administration believes that its practices are reasonably controlled and consistent with common industry practice. We note that the auditor did not find any uncorrected errors, and that the auditor did not discover fraud of any kind. We also do not believe that payroll is the party best suited to review Human Resources changes. Those reviews are best left to the authorizing departments and affected employees. We will, however, remind departments of the importance of reconciling their accounts and employees of the importance of reviewing their pay statements.

While not included in her findings, we took note of the auditors comments about a rule and regulation adopted in 1979. The audit found no payments were made in violation of the



regulation or that any actions were taken that was inconsistent with the regulation. Whether or not a regulation adopted in 1979 should remain in effect or be modified is a policy decision and is outside the scope of the Auditor's authority. Section 213 of the Harford County Charter specifically establishes the powers of the County Auditor. These powers in no way authorize a County Auditor to opine on changing or revising issues dealing with policy. Administrative policy changes are clearly within the purview of Management and as these changes do not constitute either the receipt or expenditure of County Funds would therefore be outside the Auditor's established powers under the Charter. While the Council has the power to assign additional duties to the Auditor (see Charter 213(d)) these additional duties must be ancillary to the overall duties contained in 213 of the Charter which management or performance type audits are not. A charter change would be necessary to allow for this type of audit.

## FINDINGS AND RECOMMENDATIONS

### **Finding Number: 2012-A-04.01 Payroll Application Interfaces**

**There is no reconciliation between the time entry and payroll systems to ensure that data is transferred completely and accurately.**

**Analysis:** Harford County uses an internally developed time entry system and a purchased human resources information system (Cyborg) to process payroll and manage employee records. The employee information such as name, direct deposit information, address, benefit selection, pay rate is all stored in Cyborg. Departments enter employees' pay and leave hours in the time entry system. The time entry system interfaces with Cyborg to create the bi-weekly payroll files. The payroll files are uploaded to Cyborg and transactions are created to update the County's accounting system.

We noted that while a computer operator confirms that the batch process was completed, there is no reconciliation performed to confirm that the data transferred completely and accurately, without error. If there were an error in the data being transferred from the time entry system, an employee could be paid too much or too little. If there were an error in the system's calculations, multiple employees could be paid incorrectly or the accounting records may not reconcile completely.

**Recommendation:** We recommend management confirm that each system interface job completed successfully without any abnormal ends (abends) each time payroll is processed. Any abends should be reviewed, corrected and documented to ensure software issues are resolved.

**Management Response:** We agree with the recommendation. To correct this matter, Payroll has requested the Department of Information and Communication Technology (ICT) to write a report from the time entry system and compare it to a Cyborg report to ensure that all of the time data is included in the transfer. ICT has completed the programming for the reconciliation report and the report was used for the first time for pay period ending May 24, 2013. The reconciliation was successful.

**Expected Completion Date:** May 15, 2013

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**Finding Number: 2012-A-04.02 Critical Payroll Data Changes**

**Critical changes made to Payroll and Human Resources data are not subject to an independent review to ensure the changes were authorized and proper.**

**Analysis:** The Human Resources and Payroll department employees enter changes such as pay rate changes, paycheck adjustments and leave adjustments into the Cyborg system. However, while there is some cursory review of the HR changes by Payroll, they do not ensure all changes made to an employee's records were authorized and proper. Managers within each department receive periodic budget reports. Detection of inappropriate changes relies on management review of those reports. Some changes would also be identified by an employee's review of their pay statement.

Furthermore, for the changes made in the Payroll Department, there was no documented independent review to ensure changes were proper. An employee with the required system access could process a manual adjustment to increase an employee's pay without detection.

As a result of the lack of this review, we noted one employee's deductions were calculated as full-time although the employee was part-time, resulting in the employee paying the lower full-time rate for both medical and dental coverage. The error was discovered 7 pay periods later through a review of the IS-WAS report and the employee was required to reimburse the County through a payment plan. We did not identify any false employees in our testing.

**Recommendation:** We recommend the Payroll and Human Resources Departments independently confirm all changes are authorized and proper and both departments document their reviews.

**Management Response:** We disagree with the recommendation. The Payroll Department has procedures in place to verify all authorized changes within payroll. The types of adjustments that Payroll make are leave corrections, missed time, work out of class and various non-standard employee hours. All changes made by Payroll are authorized by the initiating department either through an email or memorandum, and the documents are maintained as an audit trail. A different Payroll staff member reviews the changes to the source documents provided by the department to verify that the adjustment was properly completed. Prior to this audit, the review was completed, but not documented with a positive sign-off on the documents by the reviewer. Since the audit, a new procedure has been implemented that the reviewer must sign and date the review. These documents are maintained in the Payroll file for a period of two years.

All changes made by Human Resources are authorized by either the initiating department or through employee self-service. Access to these systems is controlled by password and by access level security. Both the employee and the authorizing department are equipped with the data

needed to review critical payroll changes, and it is incumbent on them to do so.

The audit relies on one error, which it notes was identified and corrected. The audit seems to place undue weight on the time lapsed to correct the error. However, the timeframe is consistent with a department reconciling its accounts on a quarterly basis. Notwithstanding this, departments and staff will be advised to review charges on a more frequent basis. Employees will also be reminded around July 1 to review their pay statements to confirm that benefit deductions are correct.

**Expected Completion Date:** July 15, 2013

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**Finding Number: 2012-A-04.03 Certification of Employee Timekeeping**

**There is no County policy in place requiring employee or supervisor certification of employee time worked.**

**Analysis:** There is no policy in place directing the departments on certifying the time worked for each employee. County policy 08-20-02 'Pay Date and Pay Periods' states:

"Department's timekeepers are responsible for reporting employee time and attendance on timesheets and leave requests forms... Leave request forms for these dates should accompany the timesheets submitted. These records will support the payroll procedure for the pay date and the pay period."

However, in our review, not all departments had the leave requests on file for selected employees. The current time entry process is exception based, meaning that most employees are paid 80 hours each pay period unless they report something different such as overtime or leave used. This requires Department-level approvers (within the time entry system) to manually verify leave request forms exist for any time not worked. This step does not happen in every department and in some cases leave request forms were never created. Additionally, the department-level approver is certifying the hours worked, but may not have direct knowledge that the hours were actually worked.

There is some risk that employees may be paid for time worked when they should be paid for leave time used. This would not normally affect an employee's current pay, but would affect the amount of leave available for payout when the employee leaves County service.

It is best practice for the employee to certify his/her time worked and the direct supervisor to approve the time entered. To ensure the time being entered into the system is accurate and to promote fairness and consistency between departments, there should be minimum standards for acceptable documentation. In some departments, timesheets or time clocks may be needed; in other departments, a scheduling calendar may be more appropriate. While each department may

have different procedures for accomplishing the minimum documentation, their results should be comparable and should always support the information recorded in the time entry system.

**Recommendation:** We recommend the County consider requiring time entry to be certified by the employee and a supervisor with direct knowledge of the employee's time worked. We further recommend the County require explanatory documentation when someone other than a knowledgeable supervisor approves an employee's time entry.

**Management Response:** We agree with the recommendation. Prior to this audit, the Administration recognized a need to improve the time and attendance system and to move away from the common practice of exception-based timekeeping. Again, prior to the audit commencing, the Administration had already taken steps to procure a new time and attendance system. The system, TimeLink, was approved by the Board of Estimates, and the contractor has been brought on board to analyze all of the work rules and policies and adjust their system to accommodate our employee base and our work rules. The improvements suggested in this finding were already identified by the Administration and will be implemented with the new system.

Having said that, under our current exception-based system, we note that when a supervisor approves leave that in turn is certifying that the employee was on leave. These approved leave slips are then provided to the timekeeper who should enter the leave slips into the current system. If the timekeeper does not have a leave slip then the timekeeper should assume that the employee was at work based on the fact that the supervisor did not provide any leave slips. We also note that the workforce is divided in such a way that it is reasonable to expect that a supervisor will know when one of his/her subordinates is not working in order to require a leave slip.

**Expected Completion Date:** March 31, 2014

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**Finding Number: 2012-A-04.04 Time Entry System**

**The time entry system can be improved to prevent data entry errors.**

**Analysis:** We observed the time entry system in use and noted that the system has edits in place to prevent some data entry errors. However, we observed that a timekeeper could enter more than 24 hours per day for an employee. This functionality may be appropriate, in emergency cases, to allow payment of multiple pay codes on extended work days, but not more than 24 hours of regular pay.

We also noted that all timekeepers also have the ability, within the time entry system, to approve time. Further, all system users have the ability to update time records, although, some only need

to view the information. The system is designed, however, to prevent a timekeeper from approving time if they were the last person to make changes to the time data. This control may help detect, but may not prevent, changed data from being approved inadvertently.

**Recommendation:** We recommend management ensure manual controls are in place to supplement the system's missing validations. We additionally recommend that management include this additional functionality in the requirements for the new time entry system.

**Management Response:** We believe this finding is the result of continuing confusion over the functionality of the two systems used by Human Resources and Payroll: the time entry system and the Cyborg system which is a Human Resources Information System. As explained prior to the audit, the Payroll Department does have manual controls in place to supplement the system's missing validations. Currently, Payroll reviews every employee's timesheet by location after they have been approved to check for any unusual issues. They contact the department for additional information if necessary. Payroll has requested that security be changed so that those employees who should have "view only" access cannot change any time entry documents. Additionally, the last person to make a change to a time entry record (i.e., the timekeeper) cannot approve the employee's time. A timekeeper can enter more than 24 hours in a day because of the County's work rules and policies. In the event of a super holiday or an emergency closure, an employee may have 8 hours worked plus a second shift plus straight overtime and time and one-half. These may add up to more than 24 hours in a day. An example was the hurricane closure on October 29, 30 and 31, 2012.

Time Entry System Code	Hours	Explanation
WH - Normal work schedule	8 hours	Straight work schedule
EC - Earned straight comp	8 hours	Emergency closure during normal schedule earns 8 hours of compensatory time
01 - Premium overtime	16 hours	Worked additional schedules during the emergency will be paid at 1.5 times
Total hours	32 hours	

With our current systems, time entry handles the number of hours and the Cyborg system applies the pay rate. The Cyborg system is exception based and will record each employee for a standard work schedule per pay period unless there is adjusting documents such as approved leave slips and overtime hours entered through the time entry system. When the new time and attendance system is implemented, we will discontinue using an exception based system.

**Expected Completion Date:** March 31, 2014