

**Leslie Wilks Garcia, C.P.A., M.Jur.**

*First Assistant County Auditor  
Accounting Division*

**Errika Perkins, C.P.A., C.I.A.**

*Chief Assistant County Auditor  
Audit Division*



1001 Preston, Suite 800  
Houston, Texas 77002-1817  
(832) 927-4600

Fax (713) 755-8932  
Help Line (832) 927-4558

**MICHAEL POST, C.P.A., M.B.A.  
HARRIS COUNTY AUDITOR**

January 16, 2024

Dear Mike Post, County Auditor:

The Harris County Auditor's Office Audit Division has completed an audit of the Harris County Auditor's Office business continuity procedures. The results of our audit are included in the attached report.

We appreciate the time and attention provided by your team. Your team will receive an email request to complete our Post Engagement Survey. We look forward to your feedback. If you have any questions, please contact Bruce Tran, 713-274-5676, or Errika Perkins, Chief Assistant County Auditor, 713-274-5673.

Sincerely,

A handwritten signature in blue ink that reads "Errika Perkins".

Errika Perkins  
Chief Assistant County Auditor

Report Copies:

District Judges  
County Judge Lina Hidalgo  
Commissioners:

Lesley Briones  
Rodney Ellis  
Adrian Garcia  
Tom Ramsey  
Christian Menefee



INTERNAL AUDIT REPORT  
**AUDITOR'S OFFICE BUSINESS CONTINUITY AUDIT**  
JANUARY 16, 2024

## Executive Summary

---

### OVERALL CONCLUSION

The Harris County Auditor's Office (Auditor's Office) has demonstrated knowledge of business continuity and recovery procedures to be performed in the event of a disaster. However, this knowledge has not been formally documented, tested, and communicated. The Auditor's Office Emergency Operations Plan (EOP) needs to be routinely reviewed and updated to confirm their approach to disaster preparedness and recovery are aligned with current needs. Periodic testing of these procedures will assist with continuous optimization and preparedness. The EOP procedures should define how to secure physical documentation as either critical or confidential as part of disaster preparation.

The issues were discussed with the Executive Administration, Accounts Payable, and Payroll teams. A management action plan has been developed that will address the issues identified by March 29, 2024.

---

### SCOPE AND OBJECTIVE

The audit procedures tested controls over the disaster recovery and business continuity preparedness. The scope period of our audit was January 1, 2022, to December 31, 2022.

The objective of this audit was to determine whether:

- Business continuity plans are in place for maintaining key functions during a disaster event and minimize impact thereafter.
- Critical and confidential documentation are secured in the event of a disaster.

---

### SUMMARY OF AUDIT ISSUE[S]

- EOP is not being reviewed and updated periodically.
- Standard operating procedures (SOPs) for Accounts Payable and Payroll have not been updated since implementation of PeopleSoft/STARS.
- Testing of contingency plans are not performed.
- Procedures for identification and protection of physical confidential information is not defined.

The audit issues, management's action plan to address the issues, and background information regarding this audit are discussed in more detail on the following pages. Each audit issue is ranked based on the likelihood and impact of the risk to Harris County.

## AUDIT ISSUE[S]

### **ISSUE #1: Emergency Operations Plan Is Not Reviewed Periodically [HIGH]**

**What is the Issue:** The Auditor's Office Emergency Operations Plan (EOP) has not been reviewed since 2018. As a result, the following issues were identified:

- Annual communication and distribution to Auditor's Office employees have not occurred.
- Assigned Fire Warden to coordinate evacuations is no longer employed by the Auditor's Office.
- EOP hazard events and incident response procedures are not reviewed for alignment with the Harris County Office of Homeland Security & Emergency Management (HCOHSEM) Basic Plan for the County.
- Incident response procedures to cybersecurity attacks are not defined.
- Web links to the existing EOP containing critical information during a disaster do not work.

**Why it Happened:** The ongoing update and maintenance of the EOP has not been prioritized and responsibilities were not defined.

**Why it Matters:** Without periodic review and updates, the EOP is less effective in addressing risks and challenges during hazardous events, potentially compromising the response and recovery efforts.

**What is Expected:** The Federal Emergency Management Agency's (FEMA) Comprehensive Guide for Developing and Maintaining Emergency Operation Plans states expectations for plan maintenance, review, and updates on a standard cycle are to be set.

**What Action(s) are Suggested:** A review schedule should be created specifying the frequency of review (e.g., annually, every two years) for the EOP. When the EOP is reviewed, it should be updated to reflect current practices, contacts, and key information for recovery. The County Office of Homeland Security & Emergency Management (HCOHSEM) Basic Plan should be referenced, as applicable. A cybersecurity incident response plan should be developed and added to the EOP as a proactive measure against cybersecurity attacks. The plan should align with the cybersecurity incident response plan as set forth by Harris County Universal Services.

### **MANAGEMENT'S ACTION PLAN**

**Responsible Party:** Mike Post, The Harris County Auditor

The Auditor's Office will review its EOP annually. The County Auditor, the First Assistant County Auditor and the Executive Assistant will review. A signoff sheet will be kept with the EOP documenting the reviewer and the date of the review. The reviewers will update the EOP to reflect current practices, contacts, and key information for recovery. The County Office of Homeland Security & Emergency Management's Basic Plan will be referenced as applicable. In addition, a cybersecurity incident response plan will be added to the EOP.

**Due Date:** January 31, 2024

### **ISSUE #2: Standard Operating Procedures for Accounts Payable and Payroll Are Outdated [HIGH]**

**What is the Issue:** The EOP and the Standard Operating Procedures (SOPs) do not accurately represent the current Accounts Payable (AP) and Payroll processes to facilitate a disaster



---

recovery and continuity of operations in the event of a disaster. The SOPs are reflective of the legacy Enterprise Resource Planning software, the Integrated Financial Accounting System (IFAS), and were not updated to reflect the County's transition to PeopleSoft/STARS.

**Why it Happened:** Prioritization and education of EOP standards did not occur, subsequently SOPs were not updated timely.

**Why it Matters:** Outdated SOPs are no longer aligned with current operational requirements resulting in a lack of communications to employees on the recovery procedures to be performed prior, during, and after an event.

**What is Expected:** The FEMA's Comprehensive Guide for Developing and Maintaining Emergency Operation Plans states consideration for reviewing and updating the EOP after events such as a change in operational resources (e.g., management processes, equipment) are necessary for continued improvement.

**What Action(s) are Suggested:** AP and Payroll should update their SOPs within the EOP to facilitate continued operations in the event of an extended downtime. These procedures should encompass updated preventative measures for hazardous events, plans for prolonged disruptions, testing of application functionality post system restoration, and a listing of critical hardware assets and their configurations.

### **MANAGEMENT'S ACTION PLAN**

**Responsible Party:** Reginald Yancey, Director of Accounts Payable, Jenny Ly, Director of Payroll

**Accounts Payable:** Accounts Payable will update the standard operating procedures within the EOP to minimize the impact to operations in the event of any extended downtime. These procedures will include preliminary measures that will take place in preparation for any anticipated prolonged downtime. Upon the systems return to operation, restored information will be tested by Accounts Payable as needed to ensure all required functionality has been restored.

In the event of potential wind or water damage, all critical hardware (e.g., high speed scanners, printers, toners) will be covered within the EOP. Configurations needed to restore key manual functions is maintained by desktop support personnel.

**Payroll:** Payroll Standard Operating Procedures will be updated to aim to improve Payroll's operational efficiency, compliance, and overall performance within Harris County Auditor's Office. A clear communication strategy will minimize disruptions and ensure department payroll are clear of their responsibilities. The plan is to include detailed timeline with specific milestones and due dates. Obtaining a backup printer and toners at another remote location is in discussion with Universal Services. Essential personnel will be included in the training in addition reallocating existing personnel to assist during an emergency.

**Due Date:** February 29, 2024

### **ISSUE #3: Exercise of Contingency Plans and Responsibilities Not Performed** **[HIGH]**

**What is the Issue:** A business continuity exercise to determine operation readiness has not been performed since 6/14/2018. Furthermore, action plans to improve preparedness were made at the time,



---

but there is no evidence of tracking and implementation. In addition, the existing testing scenarios do not reflect PeopleSoft processes.

**Why it Happened:** Awareness and understanding have not been considered regarding the importance of tabletop exercises for enhancing preparedness.

**Why it Matters:** Failure to conduct regular testing of the standard operating and response procedures may result in the emergence of issues during an actual disaster event leading to extended downtime and delayed recovery processes.

**What is Expected:** The FEMA's Comprehensive Guide for Developing and Maintaining Emergency Operation Plans states training exercises help validate the EOP for adequacy. Also, after-action reports help to analyze the exercise to identify areas of improvement.

**What Action(s) are Suggested:** Business continuity exercises should be performed annually to validate the effectiveness of SOPs and recovery processes. An after-action review/report should be developed to identify any areas of improvement and tracked for completion; the EOP should be updated accordingly.

## **MANAGEMENT'S ACTION PLAN**

**Responsible Party:** Mike Post, The Harris County Auditor, Reginald Yancey, Director of Accounts Payable, Jenny Ly, Director of Payroll

**Executive Administration:** A yearly Disaster response training exercise will be conducted for the Floor Wardens practicing evacuation procedures; testing tools needed such as flashlights, and walkie-talkies for effectiveness. Necessary equipment will be checked for proper functioning to prepare for tabletop testing by Payroll and AP. Current contact numbers, emergency information numbers and procedures will be reviewed and updated as necessary. SOPs will be updated in the EOP by Executive Administration once all testing exercise are completed. Once completed the EOP will be reviewed by the County Auditor for approval and submission to all Directors.

**Accounts Payable:** Testing scripts previously used for IFAS will be updated to enable similar testing in STARS. Test exercises will be performed annually to validate the effectiveness of standard operating procedures and recovery processes. Proof of testing and results will be maintained to confirm that testing was performed. Any areas needing improvement will be noted and the EOP will be updated accordingly.

**Payroll:** Updating SOPs and routinely performing tabletop exercises will improve our ability to handle critical situations. A mock payroll run will be performed annually to take proactive approach and enhance our emergency preparedness response. Moreover, the tabletop exercises will be clear and concise, identify and collaborate with key essential personnel, and most importantly communicate and coordinate with all team members on their roles and responsibilities. After the tabletop exercise, the team will meet to debrief and gather feedback to enhance our emergency response procedures.

**Due Date:** March 29, 2024

## **ISSUE #4: Protection of Confidential Information Not Defined [MODERATE]**

**What is the Issue:** An assessment of the Accounts Payable and Payroll areas was conducted to evaluate security measures and procedures for protecting confidential documents in the event of a disaster. The following were identified:



- There are cabinets within the Payroll area that contain personally identifiable information, such as former employee information, that are not locked.
- A room utilized to scan invoices within AP is not locked and is located next to an unsecured door.
- Check stock in AP is maintained in a locked room via a key, but there is a sliding glass window allowing access to the room.
- Badge access records identified individuals not affiliated with Payroll and Accounts Payable being granted access to those areas.

**Why it Happened:** Securing physical copies of confidential information was not considered as part of disaster preparedness.

**Why it Matters:** A lack of security controls can result in a loss of confidential information and trust from the public.

**What is Expected:** The National Institute of Standards and Technology (NIST) states physical protection is needed for both electronic and physical documents to have access control mechanisms to prevent unauthorized entry.

**What Action(s) are Suggested:** The Auditor's Office should consider developing security measures to protect physical copies of critical or confidential information. These measures should encompass the identification and prioritization of essential/confidential documents, and designate secure storage locations with badge readers. Additionally, activity logs for the badge readers should be reviewed after an event for unusual access to the designated areas.

## **MANAGEMENT'S ACTION PLAN**

**Responsible Party:** Reginald Yancey, Director of Accounts Payable, Jenny Ly, Director of Payroll

**Accounts Payable:** Measures will be created securing hardcopies of critical or confidential documents/information. Critical documents will be identified and relocated to a more secure location when necessary. Invoices and other documents containing sensitive or confidential information (banking, social security numbers, etc.) will be stored in a secure location located in an interior room on the floor. Unopened boxes of check stock will be inventoried and secured in place. Open boxes of check stock will be placed in a secure cabinet and locked prior to leaving as well. Secure storage locations on the interior of the floor will be designated and integrated into pre-event preparations outlined in the EOP.

**Payroll:** To access the secured area, you must badge into the main payroll area, then rebadge to get into the file room. Identify a plan to review the badge access annually, safeguard, and secure important payroll documents during an emergency. An extra security measure will be added to lock down the individual cabinet files during the pre-emergency preparations.

**Due Date:** January 31, 2024



---

## BACKGROUND

The HCOHSEM has developed an approach to emergency operations in the event of a disaster called the Harris County Basic Plan (HCBP). The HCBP's purpose is to provide a framework for the County response of emergency tasks and responsibilities. The departments are to independently develop an Emergency Operations Plan (EOP), or equivalent, outlining what steps will be taken to prepare, respond, and recover from a hazardous event. The departmental EOP differs from the HCBP because these responses are unique to the risks the department will face in the event of a disaster. HCOHSEM provides the HCBP annually to each department via interoffice mail on a thumb drive so the department has information (e.g., key identified hazard events, Federal Emergency Management Agency information) to align their EOP with the County's strategies and response plans.

Universal Services (US) plays a critical role in disaster recovery for the County departments by developing a disaster recovery plan (DRP) to recover critical systems and communication. US performs annually a Rehearsal of Concept (ROH) to confirm their strategies are effective in the event of a disaster. However, a sole reliance on US for recovery is not recommended because they may be overwhelmed, or unforeseen issues may occur during the disaster.

The Auditor's Office encompasses two critical functions to the County, which is AP and Payroll. AP processes invoices for payment to vendors while Payroll process payroll to over 18,000 employees. These functions are considered critical to support emergency operations and employees receiving funds.

Harris County officially transitioned from IFAS (their former ERP system) to PeopleSoft/STARS on 3/2/2020. AP and Payroll primarily utilize PeopleSoft as their enterprise resource planning (ERP) system. Other applications utilized by these departments are OpentText for processing electronic invoices and Outlook for email. Shared electronic information is stored on network drives.

## ACCOUNTABILITY

We conducted our audit in accordance with the International Standards for the Professional Practice of Internal Auditing (Standards). The Standards require that we comply with the Code of Ethics and obtain reasonable assurance that significant risks to the activity are minimized to an acceptable level.

The engagement's scope did not include a detailed inspection of all transactions. There is a risk that fraud or errors were not detected during this engagement. Therefore, the official retains the responsibility for the accuracy and completeness of their financial records and for ensuring sufficient controls are in place to detect and prevent fraud, errors, or omissions.

