

OFFICE OF THE CITY CONTROLLER



**DEPARTMENT OF
PUBLIC WORKS AND ENGINEERING (PWE)
FISCAL YEAR 2016
AUDIT FOLLOW-UP REPORT**

Chris B. Brown, City Controller

Courtney E. Smith, City Auditor



**OFFICE OF THE CITY CONTROLLER
CITY OF HOUSTON
TEXAS**

CHRIS B. BROWN

May 17, 2016

The Honorable Sylvester Turner, Mayor

**SUBJECT: Report #2016-10
Department of Public Works and Engineering (PWE) – FY 2016
Audit Follow-Up Report**

Mayor Turner:

The Office of the City Controller's Audit Division has completed its follow-up procedures related to the FY2016 remediation efforts performed by PWE management. As part of providing independent and objective assurance services related to efficient and effective performance, compliance, and safeguarding of assets, we also perform follow-up procedures to ensure that corrective actions are taken related to issues reported from previous audits.¹

The Audit Division (Division) Audit Follow-Up Process uses a risk-based approach, which contains two primary components:

- Management Status Updates and
- Audit Testing/Verification.

Based on the procedures performed above, we obtained sufficient and appropriate evidence to render our conclusions as follows:²

- There were a total of five (5) open findings issued under audit reports 2009-26 and 2014-04. Our test work determined that three (3) of these findings had been Closed/Remediated (Objective 1).
- In reviewing the department's remediation process associated with the five (5) findings, we concluded the overall assessment to be Adequate (Objective 2).

¹ IIA Standard 2500 - requires a process that "...auditors evaluate the adequacy, effectiveness, and timeliness of actions taken by management on reported observations and recommendations...."

GAGAS 2.10, 4.05, 5.06, 6.36, 7.05, and A3.10c(4)

GAGAS Appendix I Supplemental Guidance A1.08 states "Managers have fundamental responsibilities for carrying out government functions. Management of the audited entity is responsible for...f. addressing the findings and recommendations of auditors, and for establishing and maintaining a process to track the status of such findings and recommendations..."

² See Exhibit 1 for the Detailed Remediation Assessment, 2016 Audit Follow-Up Procedures Matrix



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CHRIS B. BROWN

We would like to thank the Department of Public Works and Engineering Management for their cooperation during the audit follow-up process.

Respectfully submitted,

Chris B. Brown
City Controller

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Office of the City Controller
Audit Division

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EXECUTIVE SUMMARY

BACKGROUND

The Office of the City Controller's Audit Division has completed its follow-up procedures related to the FY2016 remediation efforts performed by management. As part of providing independent and objective assurance services related to efficient and effective performance, compliance, and safeguarding of assets, we also perform follow-up procedures to ensure that corrective actions are taken related to issues reported from previous audits.

The Audit Division (Division) Audit Follow-Up Process utilizes a risk-based approach, which contains two primary components:

- Management Status Updates
- Audit Testing/Verification

MANAGEMENT STATUS UPDATES:

Prior to the issuance of audit reports, findings are ranked according to three levels of risk to the Department as a whole (high, medium, and low). Our continuous follow-up process includes, sending requests for status updates related to management's progress toward the remediation of open findings. Management provides status updates through an online portal that alerts the Division when received. This information is then assessed by the follow-up auditor considering (1) responsiveness to the original issue and (2) remediation of the issue. A status update which indicates that a finding has been remediated is tested/verified by the follow-up auditor prior to being closed.

FIELDWORK/TESTING VERIFICATION:

The information received through management status updates is used as a basis for follow-up testing. Additional supporting information is gathered by the follow-up auditor if it is needed to provide sufficient and appropriate evidence to achieve our objectives. Once the testing/verification of a department's findings has been completed, the department's remediation process is then assessed (Adequate or Inadequate). A rating of **Adequate** indicates the department has processes in place to sufficiently monitor and address issues identified. This could be demonstrated by findings being completely remediated (if the finding is Closed) or the department exhibiting progress in their remediation efforts (if the status is Ongoing). An **Inadequate** rating is assessed when the status of the findings is not as reported by management and/or the issues have not been addressed as stated in a status update.



AUDIT SCOPE AND OBJECTIVES

The objectives of our Follow-Up Procedures were to determine:

1. The status for each open item and
2. The adequacy of the department's remediation process in place to resolve its universe of open findings.

PROCEDURES PERFORMED

Audit procedures performed to meet the audit objectives and provide a basis for our conclusions were as follows:

- Obtained, reviewed and assessed management's status updates to open findings;
- Determined the findings for which management's status updates indicated remediation;
- Determined and requested the documentation necessary to support the findings status reported by management;
- Performed Interviews with management and relevant staff; and
- Reviewed supporting documentation and other evidence provided for sufficiency and appropriateness.

AUDIT METHODOLOGY

We conducted Follow-Up Procedures in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the Government Accountability Office (GAO) and The International Standards for the Professional Practice of Internal Auditing as promulgated by The Institute of Internal Auditors. Those standards require that we plan and perform our work to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained meets these standards to support our findings and conclusions based on our audit objectives.

CONCLUSIONS

Based on the procedures performed above, we obtained sufficient and appropriate evidence to render our conclusions as follows:

- There were a total of five open (5) findings issued under audit reports 2009-26 and 2014-04. Our test work determined that three (3) of the five (5) had been Closed/Remediated (Objective 1).
- In reviewing the department's remediation process associated with the five (5) findings, we concluded the overall assessment to be Adequate (Objective 2)



ACKNOWLEDGEMENT AND SIGNATURES

We would like to thank the Department of Public Works and Engineering for their cooperation during our follow-up process.

A handwritten signature in blue ink, reading "Scott Haiflich", is written over a horizontal line.

Scott Haiflich, CGAP
Lead Auditor

A handwritten signature in blue ink, reading "Theresa Watson", is written over a horizontal line.

Theresa Watson, CIA
Audit Manager

A handwritten signature in blue ink, reading "Courtney E. Smith", is written over a horizontal line.

Courtney E. Smith, CPA, CIA, CFE
City Auditor

EXHIBIT 1

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Office of the City Controller - Audit Division
Project: FY 2016 Follow-Up
Department of Public Works and Engineering - 2016 Follow-Up Procedures

Exhibit 1 - Detailed Remediation Assessment, 2016 Audit Follow-Up Procedures

Audit Report Number	Finding Title	Finding	Management's Status Update	Conclusion	
				Ongoing/Closed	Remediation Process
2009-26	Competitive Bidding Limit Requirement	<p>During our review of the PWE P-Card transactions for the audit scope period, we noted P-Card purchases of \$73,642 and \$55,854 respectively from two non-contract vendors. We also noted this to be a repeat finding for the third consecutive year since the two vendors mentioned above were listed as two of the merchants that exceeded the \$50,000 limit in the PWE's Internal Review Section's annual review for the years ending July 5, 2006, July 5, 2007, and on this most current report.</p> <p>The audit team recognizes the progress made by the Department in reducing the number of vendors exceeding the \$50,000 threshold over the previous three years.</p>	<p>PWE continued to implement the internal control system that has been in place to monitor the use of non-contract vendor expenditures. In FY14, there were two occurrences that went over the \$50,000 threshold (RDI and Grainger). SPD had a change order in place with RDI that allowed "all other jobs" (non-maintenance equipment related work) under \$25,000 to be handled through this contract/vendor. As a result, RDI exceeded the \$50,000 threshold for FY14 as it has previously exceeded in the past fiscal year. In FY14, PWE also exceeded its \$50,000 non-contract threshold with Grainger. Grainger is the top p-card vendor for PWE with expenditures of over \$500,000 each year. The contract with Grainger expired at the end of February 2014. Emails were sent out to notify cardholders of the expired contract on March 4th and by April 17th, an email was sent out to restrict p-card purchasing due to expenditures reaching the \$50,000 threshold. The renewal contract was being worked on and wasn't approved by Council until June 2014, which caused PWE to exceed the \$50,000 non-contract threshold during those three months.</p> <p>In FY15, PWE did not have any vendors exceed the \$50,000 non-contract threshold by vigorously monitoring transactions and committed to continue to do so throughout FY16.</p>	Closed - PWE provided a description of the process they have implemented to monitor p-card expenditures from non-contract vendors. The process includes internal controls to provide reasonable assurance that the \$50,000 limit is not exceeded. They also provided monthly reports supporting that, since the implementation of the process, the \$50,000 non-contract threshold has not been exceeded.	Adequate

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				Ongoing/Closed	Remediation Process
2014-04	Inefficient Field Technician ERT/Meter Reread Process	<ul style="list-style-type: none"> • There are a proportionally high amount of repeated manual rereads (three or more rereads for the same account) <p>To measure impact and magnitude, we performed a resource cost calculation that combined the count of two re-read categories (Missed Reads and Lower than Previous).</p> <p>Although the Active No Usage re-reads could indicate the ERT is not performing correctly, we removed this category from our resource cost calculations for determining impact and magnitude but provided a chart showing the amount of these type re-reads and suggest that management work to reduce these types of work orders with additional system automation and/or less frequent tech visits in response to this type of job code.</p> <p>We also subtracted the first two technician re-reads of any account to allow for special weather conditions that could affect signal transmissions. Our charts above show if faulty or poorly performing ERTs (36,749 units) were detected and replaced by the third re-read UCS could lower technician re-read work orders by 267,881 potentially reducing technician cost by \$2,670,774 for an 18 month period.</p> <p>(See Report for Graph 3)</p> <ul style="list-style-type: none"> • No reports showing rereads to specific accounts with high manual re-reads. • No management reports or timely review of these reports from the Advantage system showing technician field notes indicating faulty equipment identified while on site performing the re-reads. 	<p>UCS continues to address the overall health of the system by implementing a "first visit fix" process. The "first visit fix" process ensures minimal labor costs by optimizing the assignment of resources.</p> <p>1. Historical analysis and performance suggests that our current practice of reviewing the aggregate field notes provides sufficient information to ensure monitoring of the overall health of the system. Additional reports have been created to help. Trends, outliers, and repeating faults are all reported, monitored, and result in dispatch of field personnel to correct applicable causes. One example is the Consecutive Re-read Analysis Project, which identifies accounts that require manual reading three consecutive months, and result in necessary work orders to address malfunctioning, damaged, or vandalized transmitters, and reduce unnecessary manual reads.</p> <p>2. UCS currently has a process to identify vacant properties and closed accounts, which is used to limit resources assigned to these properties.</p>	<p>Ongoing - The following is a status update received from PWE on 02/22/16:</p> <p><i>The first time fix model was implemented early 2014 following the finding in this audit. First time fix caused an increase in meter reading estimates due to the inability to read meters on time in the billing cycle. As a result, the first time fix model was suspended. UCS is currently exploring other options for remediation to reduce multiple work orders to the same location.</i></p>	Inadequate

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2014-04	Impact of Improper or Inaccurate Estimates	Of the 14 accounts adjusted, 7 accounts (50%) received adjusted billings that were 75% higher than the estimated billing they received prior to their meter repair. The total monetary impact to the customers was \$17,380.62.	<p>Because of the warranty and life-cycle issues addressed in ERT Product Recall and Replacement History beginning on p.3 of the original audit, UCS needed to bill customers based on long-term consecutive estimates, and/or retroactively bill for belatedly observed consumption. This ensured the CUS received adequate revenue to operate effectively. If the amount of actual prior under-billing could not be determined by a manual reading at the time of repair, the customer's post-repair consumption was used as the basis for estimating back-billing.</p> <p>UCS addressed the base cause of the issue through the various warranty, lifecycle, and field processes, of which the Estimated Read Elimination Project (EREP) was but one initiative. From January 2014 through June 2015 estimates decreased by 41%.</p> <p>1. The incoming billing system includes a much more robust capability, which should enhance UCS' ability to estimate consumption more closely. Estimated billing outcomes post system implementation will be evaluated for effectiveness and corrective actions executed as required.</p>	<p>Ongoing: The following is a status update received from PWE on 02/22/16:</p> <p><i>Exhibits C&D answer the RFI as specified, showing the total estimated reads reducing in quantity by 41% (Jan 2014 compared to June 2015). By addressing the root cause of total estimates, UCS has reduced the impact estimates have overall on the system. Regarding increased accuracy of estimations, UCS anticipates accuracy will improve with implementation of the new IPS billing system. Once implemented the system will be evaluated for accuracy of the estimates.</i></p>	Inadequate

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			<p>2. The EREP transitioned into the Remediation Program in April 2014 to address all causes of consecutive read failures. While the goal of the program is still to address the vast majority of issues within 3 months, we also understand that some issues will take longer to address.</p> <p>Therefore, an additional goal is to not allow any meters to go unread more than six months and incorporates a verification process to check effectiveness of repairs. The Remediation program is now a part of normal operations within UCS and is used to address issues such as ongoing construction and main replacement, customer actions that impede reading their meter, and transmitters which become eligible for replacement. Therefore, the remediation process will never end.</p> <p>3. UCS concluded that the life-cycle and warranty issues discussed on pages 3 and 4 of the original audit had been resolved to the point that the effect of a policy change in this area would be minimal.</p>		

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2014-04	Inconsistent Application of Customer Service High Water Bill Quick Reference Guide	We found no instances where the Rep informed the customer of how to check for leaks, why high bills might occur, and the options available to them that might result in an adjustment that would credit their account.	<p>The High Water Bill Quick Reference guide is used for training and as additional source of information for the customer service representative (CSR). It is not a procedure. Use of the guide is driven by the specific circumstances of the call. UCS maintains that the guide should be used only as applicable dependent upon the reason for the call. Further, the Guide is not a part of the Contact Center's standard operating procedures.</p> <p>1. Customers who have provided an email address do receive "email blasts" with information on possible causes of high consumption. Additionally, customers who register for an online account and are on our fixed network may elect to receive excessive consumption alerts (Consumption Awareness Program) and have the opportunity to review their water consumption before receiving a high bill. Alerts can be received by email, cell phone, or in the UCS mobile app. For all other customers, UCS continues to maintain that the diversity of customer usage patterns do not warrant sending a form letter by post when a customer consumes over 2x their average.</p> <p>2. See "first time fixes" in the Management Answer to Finding #1.</p>	<p>Closed: The following is a status update received from PWE on 02/22/16, which we consider to adequately address the issue:</p> <p><i>UCS continues to maintain that the diversity of customer usage patterns do not warrant sending a form letter by mail or a phone call when a customer consumes over 200% their average. However, there currently are mechanisms embedded in the billing system that allow for automatic generation of an exception, which requires a bill review. After the account is analyzed, if warranted, the customer will be contacted by phone, email or letter (Exhibit E).</i></p>	Adequate

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2014-04	Lack of Program/System Documentation Supporting SDLC Changes	During the audit no formal documentation (manuals, Power Points, etc.) regarding the key data elements of the system were provided to the audit team to support the claims of the COBOL Analyzer. Systems process explanations and definitions of systems data were provided via email narratives or Excel spreadsheets, but not from raw system generated reports and thus could not be adequately verified. Also, system changes made throughout the SDLC were not indicated or reflected in the information provided. As a result of the deficiency in program documentation, institutional knowledge of the system used by UCS to manage daily business processes is concentrated in one IT manager as supported by the significant resource issues encountered during the audit in obtaining system data from the UCS group in a timely manner.	<p>1.UCS agrees that thorough documentation and updates within the new Infor Public Service (IPS) system are needed. Currently, in IPS, documentation of installation procedures, additional modules, and any applicable changes are being created and maintained for future reference. Additionally, training materials were prepared for the employees and used to train a pool of testers and employee leads in March of this year, after which it was concluded that further configuration and user testing was necessary prior to beginning parallel testing of the system. The time needed for the additional work has allowed policies and procedures to be updated to support changes required by IPS.</p> <p>2.Programmers, end-users, and Infor representatives are in constant contact to ensure widespread understanding. Further, UCS will develop a knowledge transfer plan to increase the number of technical experts in the new billing system.</p>	<p>Closed: The following is a status update received from PWE on 02/22/16 and the referenced documentation was provided:</p> <p><i>All IPS Training materials and system documentation are attached. The Knowledge Transfer Plan is to be completed as part of our Post Go-Live efforts.</i></p>	Adequate