OFFICE OF THE CITY CONTROLLER

ADMINISTRATION AND REGULATORY AFFAIRS DEPARTMENT
PARKING MANAGEMENT DIVISION
PERFORMANCE AUDIT

Chris B. Brown, City Controller
Courtney E. Smith, City Auditor

Report No. 2017-04
August 23, 2016

The Honorable Sylvester Turner, Mayor
City of Houston, Texas

SUBJECT: 2017-04 Administrative and Regulatory Affairs Department (ARA) Parking Management Division (PMD) Performance Audit

Mayor Turner:

The Office of the City Controller’s Audit Division has completed a performance audit of parking management operations performed at the City of Houston (City) by the Administrative and Regulatory Affairs Department’s Parking Management Division (PMD). PMD is responsible for managing, servicing and maintaining over 9,200 on-street parking spaces across the greater Houston area, 19 surface parking lots, parking enforcement, on-street parking permits, and helps develop Neighborhood Parking Management Plans. The City received more than $7.4 million in parking meter related revenues in Fiscal Year 2015. The primary audit objectives were:

1. Document processes and associated internal controls governing the most significant parking revenue streams;
2. Determine whether PMD has adequate controls in place to ensure that all collections are properly recorded and accounted for; and
3. Evaluate the cash handling of parking meter revenue in PMD.

Our engagement scope consisted of the analysis of parking revenue, operating processes and transactions for the period of January 1, 2015 through June 30, 2015.

Based on the procedures performed during the audit, we concluded the following:

- Processes and associated internal controls governing the most significant parking revenue streams including meters and contract parking lots should be strengthened - specifically processes and controls focused on the monitoring of communications from smart meters, meter collections, and inventory;
- Additional controls are needed to ensure all parking meter revenue is collected and accounted for properly; and
- Cash handling controls related to monitoring, reporting and adequate retention of documentation could be improved.

Strengthening processes and internal controls will enhance the City’s ability to safeguard assets and provide timely and reliable information for management.
We noted that PMD management recently began detailed analysis of operations which has led to some process improvements in areas identified in the audit.

We would like to express our appreciation for the time and effort expended by the management and staff of PMD during the course of the audit.

Respectfully submitted,

Chris B. Brown
City Controller

xc: Tina Paez, Director, Administration and Regulatory Affairs Department
City Council Members
Alison Brock, Chief of Staff, Mayor's Office
Kelly Dowe, Chief Business Officer, Mayor's Office
Harry Hayes, Chief Operations Officer, Mayor's Office
Valerie Berry, Assistant Director, Administration and Regulatory Affairs Department
Maria Irshad, Assistant Director, Administration and Regulatory Affairs Department
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<td>1</td>
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</tr>
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</table>
EXECUTIVE SUMMARY

INTRODUCTION

The Office of the City Controller’s Audit Division has completed a Performance Audit of the Parking Management Division (PMD) specifically focused on revenue generated from City managed parking lots and all parking meters, and associated internal controls. The audit considered compliance with City of Houston (City) parking policies, and the efficiency and effectiveness of procedures in place to ensure 1) revenue is collected, and 2) all revenue transactions were recorded and approved. The audit was included in the Fiscal Year (FY) 2015 Audit Plan and was a direct result of our Enterprise Risk Assessment process.

BACKGROUND

Parking Management is a Division of the Administration & Regulatory Affairs Department. PMD has 75 budgeted FTEs, who are responsible for managing, servicing and maintaining over 9,200 on-street parking spaces (metered spaces along the street curbs) across the greater Houston area. PMD also helps to develop Neighborhood Parking Management Plans to empower neighborhoods with tools to ease parking issues, administers Newsrack and Valet permits, provides on-street parking permits and parking enforcement, and off street parking via operation of 19 surface parking lots. They are also responsible for the administration of on-street regulations in Chapter 26 of the City’s Code of Ordinances.

Parking revenue generated in FY 2015 was just over $20.3 million. Approximately $9.5 million (48%) of the total came from metered parking, surface lot parking, and certain permit fees.

ON-STREET PARKING

On-street metered parking represented $7.4 million (36.5%) of the total FY 2015 revenue. A mix of manual and smart meters facilitates the City’s on-street parking. Permitting related to bagged meters added approximately $274 thousand in revenue during FY 2015.

In 2006, PMD began replacing its old manual style parking meters with Luke smart meters. PMD currently uses 479 manual parking meters in low volume areas. The City had 997 Luke smart meters in use at the time of the audit. Smart meter technology provides both convenience and improved service to the City and the parking public.
The City purchased 1,075 smart meters at a total cost of over $9.7 million from 2006 through March 2015. Table 1 reflects the number of smart meters purchased and the corresponding cost each fiscal year.

### TABLE 1

<table>
<thead>
<tr>
<th>YEAR PURCHASED</th>
<th>NUMBER PURCHASED</th>
<th>COST**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>250</td>
<td>$2,279,000</td>
</tr>
<tr>
<td>2007</td>
<td>500</td>
<td>$4,558,000</td>
</tr>
<tr>
<td>2010</td>
<td>250</td>
<td>$2,279,000</td>
</tr>
<tr>
<td>2013</td>
<td>75</td>
<td>$683,700</td>
</tr>
<tr>
<td>Total</td>
<td>1,075</td>
<td>$9,799,700</td>
</tr>
</tbody>
</table>

**Cost includes shipping, installation, and vendor product support

Customer friendly features include:

- Ability to use credit cards and currency;
- Smart phone application to pay parking fees\(^1\);
- Commercial parking rates;
- Parking Hopper for use in downtown Houston\(^2\); and
- Instructions in 3 languages; English, Spanish, and Vietnamese.

---

\(^1\) The application also allows parking time extensions without returning to the meter

\(^2\) The Parking Hopper allows parking customers to pay one (1) higher fee and park throughout downtown without incurring any additional parking fees at any parking meters on the same day
The convenience of credit card and currency use helped increase parking revenue 70% from 2007 through 2009.

The Luke Smart Meters have cell phone type communication technology capable of transmitting data to the PMD T2 software system in the Iris application. T2 has 2 (two) software applications, Iris and BOSS for the management of the meters. The Iris application generates real-time status alerts from the smart meters and the BOSS application stores all of the transactions for each meter. The technology benefits the City by:

- Processing credit card transactions immediately, and
- Communicating meter status information
  - Current amount of cash in the meter;
  - Low paper/low battery;
  - Coin and bill stacker jams;
  - Open meter door; and
  - Shock alerts

Smart meter technology allows PMD to schedule smart meter collections based on data transmitted regarding parking revenue amounts stored in those meters. Meter collectors no longer needed to collect every meter every week as was done when the majority of meters in use were old manual meters. PMD subsequently established a smart meter collection threshold and collected high volume meters weekly or bi-weekly, as needed based on the threshold (see Table 3, page 8 for threshold amounts). A minimum collection period of one month was established for all low volume smart meters to insure each smart meter is physically visited. This allows PMD’s meter collection staff to verify the meters are in proper working order and to collect meters that did not communicate meter status information to the T2 system.

We noted multiple issues associated with disruptions in smart meter communication during the audit. These included bad modems and batteries. In addition, we observed that PMD had not retained reports that were used to generate smart meter collections as required by City Code of Ordinance, Chapter 2, Administrative, Article IV, Section 2-112 related to city records states, “No city official or employee has, by virtue of his or her position, any personal or property right to such records even though he or she may have developed or compiled with them. The unauthorized destruction, removal from files, or use of such records is prohibited.” Also, PMD did not retain any ad hoc reports produced/run periodically showing meters that had communicated trigger alerts to include, low battery, meter door open, and shock alerts to signal potential problems or fraudulent collections.

Following the conclusion of our audit procedures, PMD implemented the use and retention of various ad hoc reports to monitor meter activity and revenue prior to completion of the audit.

During January 1, 2015 through March 31, 2015, the period covered by our audit, parking meter collections were as much as $42,967.95 from a single meter in a high volume area. Table 2
summarizes the funds collected, by dollar range, for those meters with revenue reported in the T2 BOSS system. The 907 meters with documented collection activity represent 91% of the active meters in place from January to March 2015. An additional 86 meters did not have any documented collection activity.

### TABLE 2

<table>
<thead>
<tr>
<th>DOLLAR RANGE OF TOTAL COLLECTIONS BY SMART METERS (ONLY)</th>
<th>SMART METER COUNT</th>
<th>PERCENT OF TOTAL SMART METERS</th>
<th>PERCENT OF TOTAL REVENUE</th>
<th>TOTAL SMART METER PARKING REVENUE JANUARY – MARCH 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$100.00</td>
<td>109</td>
<td>12.0%</td>
<td>0.2%</td>
<td>$4,084.10</td>
</tr>
<tr>
<td>$100.00 - $499.99</td>
<td>175</td>
<td>19.3%</td>
<td>2.5%</td>
<td>$48,989.45</td>
</tr>
<tr>
<td>$500.00 - $999.99</td>
<td>139</td>
<td>15.3%</td>
<td>5.3%</td>
<td>$103,989.60</td>
</tr>
<tr>
<td>$1,000.00 - $1,999.99</td>
<td>169</td>
<td>18.6%</td>
<td>12.4%</td>
<td>$244,318.50</td>
</tr>
<tr>
<td>$2,000.00 - $2,999.99</td>
<td>108</td>
<td>11.9%</td>
<td>13.4%</td>
<td>$263,421.60</td>
</tr>
<tr>
<td>$3,000.00 - $3,999.99</td>
<td>71</td>
<td>7.8%</td>
<td>12.5%</td>
<td>$246,528.45</td>
</tr>
<tr>
<td>$4,000.00 - $5,000.00</td>
<td>46</td>
<td>5.1%</td>
<td>10.4%</td>
<td>$205,638.15</td>
</tr>
<tr>
<td>&gt;$5,000.00</td>
<td>90</td>
<td>9.9%</td>
<td>43.4%</td>
<td>$855,321.30</td>
</tr>
<tr>
<td>Totals</td>
<td>907</td>
<td>100%</td>
<td>100%</td>
<td>$1,972,291.15</td>
</tr>
</tbody>
</table>

**Off-Street Parking**

PMD has agreements in place to lease eight (8) parking lots under Interstate 45 (I-45) and Pierce Street (referred to as Pierce Elevated area of downtown). The agreements are with local businesses including a church, a hospital, a high-rise condominium complex and the Metropolitan Transit Authority of Harris County, Texas (Metro). Customers of these parking lots pay a monthly fee. The monthly fee is calculated based on the number of parking spaces in each lot. Revenue from these lots was over $1.1 million for FY2015, with an additional $971,500 in surface parking revenue.

**Audit Scope and Objectives**

Our original audit objectives were broadly defined to encompass controls over revenue from parking lots, meter bagging, parking permits and smart parking meters, and recording of those transactions. After further research, the audit objectives were further refined as follows:

1. Document processes and associated internal controls governing the most significant parking revenue streams;
2. Determine whether PMD has adequate controls in place to ensure that all collections are properly recorded and accounted for; and
3. Evaluate the cash handling of parking meter revenue in PMD.

The initial period of review included transactions, procedures, and other relevant activities that occurred during the third and fourth quarters of Fiscal Year 2015. However, the engagement scope was modified to include the analysis of parking revenue, processes and transactions for the period of July 1, 2013 through September 30, 2015.

**PROCEDURES PERFORMED**

In order to obtain sufficient evidence to achieve audit objectives and support our conclusions, we performed the following:

- Downloaded Smart Meter data from the T2 parking software system;
- Downloaded parking revenue journal transaction data from SAP;
- Interviewed PMD staff regarding their policies, procedures, and monthly activities and documented our understanding of PMD’s processes;
- Obtained and reviewed smart meter inventory
- Performed field inventory spot checks of meters by assigned meter number and serial number;
- Reviewed Parkmobile billing transactions;
- Reviewed Pierce Elevated parking lots contracts;
- Reviewed City Employee parking lot contracts;
- Performed field spot checks of bagged meters;
- Reviewed Smart Parking Meter maintenance data;
- Observed parking meter collectors in the field during collection of meters;
- Observed the cash counting process;
- Observed the parking permitting process;
- Reconciled journal entry data uploaded into SAP to PMD Count Room daily cash totals of the same period; and
- Performed substantive testing and documented the results from meter data downloaded during the parking meter T2 parking software system.

**AUDIT METHODOLOGY**

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards and in conformance with the International Standards for the Practice of Internal Auditing as promulgated by the Institute of Internal Auditors. Those 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.
The scope of our work did not constitute an evaluation of the overall internal control structure of PMD. Management is responsible for establishing and maintaining a system of internal controls to ensure that City assets are safeguarded; financial activity is accurately reported and reliable; and management and employees are in compliance with laws, regulations, and policies and procedures. The objectives are to provide management with reasonable, but not absolute assurance that the controls are in place and effective.

**Conclusions and Significant Issues**

We believe that we have obtained sufficient and appropriate evidence to adequately support the conclusions provided below as required by professional auditing standards. Each conclusion is aligned with the related Audit Objective for consistency and reference. For detailed findings, recommendations, management responses, comments and assessment of responses see the “Detailed Findings, Recommendations, Management Responses, and Assessment of Responses” section of this report.

**Conclusion 1 – (Audit Objective #1)**

Based on the results of the audit procedures performed for scope period July 2013 through September 2015, we determined that there is a need to strengthen processes and associated internal controls governing the most significant parking revenue streams to include metered and bagged meter permit parking. Management should focus specifically on the monitoring of smart meters with no communication to trigger meter collections, and the inventory of smart meters. (See Findings #1, #2, #3, #5, and #6).

We noted during the course of the audit that PMD management had begun analyzing processes to make improvements that address some of the internal controls identified during the audit fieldwork.

**Conclusion 2 (Audit Objective #2)**

Additional controls are needed to safeguard all collections from parking meters to ensure revenue is collected and accounted for properly.

PMD had drafted divisional cash handling policies and procedures prior to the start of our audit and those procedures were finalized and implementation completed in April 2016 after the audit fieldwork was completed. (See Findings #3, #2, #1, and #5)

**Conclusion 3 (Audit Objective #3)**

Controls related to cash handling could be strengthened by increased monitoring, reporting, and adequate retention of documentation for:

- Smart meter communication triggers for collection;
• Meter collections activity; and
• Bagged meters permitting compliance.

(See Findings #1, #4, and #5)

ACKNOWLEDGEMENT AND SIGNATURES

The Audit Team would like to thank PMD management for their cooperation, time, and efforts throughout the course of the engagement.

David Baszile
Assistant City Auditor III

Theresa Watson, CIA
Audit Manager

Courtney Smith, CPA, CIA, CFE
City Auditor
**DetaileD FIndings, ReCoeMmendations, MAnageMent R esponses, and AsSeSSMeNt of ResPOnses**

**Finding #1 – Smart Meters With No Communication To Trigger Collections**  
(Risk Rating = High)

**Background:**
Parking Management Division (PMD) uses Luke Smart Meters that utilize the Digital Iris (Iris) System to manage the meters. Luke Smart Meters are products of T2 Systems, Inc. (T2). T2 has 2 (two) software applications, Iris and BOSS for the management of the meters. The Iris application generates real-time status alerts from the smart meters and the BOSS application stores all of the transactions for each meter. The Luke Smart Meters have cell phone type communication technology capable of transmitting data to the PMD T2 software system in the Iris application. These Smart meters are capable of transmitting current monetary status (amount of money the meter contains), last collection date, and maintenance alerts including low paper, low battery, meter shock alarms, and coin or bill jams. PMD collection and maintenance supervisors use this data to determine the need for meter maintenance. The information also aids the collection supervisor’s establishment of daily collectors’ routes based on predetermined collection thresholds.

<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smart Meter Collection Thresholds by Meter Model</strong></td>
</tr>
<tr>
<td><strong>Meter</strong></td>
</tr>
<tr>
<td>Luke</td>
</tr>
<tr>
<td>Radius</td>
</tr>
<tr>
<td>Luke 2</td>
</tr>
</tbody>
</table>

During the meter collection process, meter collectors download transaction data from the Smart Meter to a USB thumb drive. The transaction data is uploaded into the BOSS application of the T2 System, which captures each transaction recorded by the meter since the last collection. The data in the Iris application is transmitted by smart meter via cell phone type transmissions. Smart meter collection data is transmitted once daily, if functioning properly. We reviewed three (3) months of communication data retrieved from the Luke Smart Meters to determine the frequency and reliability of communication.
Finding:

- PMD was not following their policy regarding collection of all smart meters every 30 days including those with no communication triggers for collection or zero collections.
- There was no record of any monetary status (i.e., quantity of currency and coins) communication by these smart meters to the PMD Iris application nor any documented records of collection by PMD meter collectors during the 90 day period of January through March 2015.

A review of three (3) months of collection communication data retrieved from the Luke Smart Meters (uploaded data from the BOSS and Iris applications) compared to the smart meter inventory provided by PMD revealed there were eighty-six (86) smart meters with no communication to PMD to trigger collections. A review of both the BOSS and Iris applications’ reports revealed that there was no record of any monetary status (i.e., quantity of currency and coins) communication by these smart meters to the PMD Iris application nor any documented records of collection by PMD meter collectors during the 90 day period of January through March 2015.

<table>
<thead>
<tr>
<th>YEAR PURCHASED</th>
<th>NUMBER OF YEARS OWNED</th>
<th>COUNT OF SMART METERS PURCHASED</th>
<th>NUMBER OF SMART METERS NOT COMMUNICATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>9</td>
<td>250</td>
<td>12</td>
</tr>
<tr>
<td>2007</td>
<td>8</td>
<td>500</td>
<td>26</td>
</tr>
<tr>
<td>2010</td>
<td>5</td>
<td>250</td>
<td>22</td>
</tr>
<tr>
<td>2013</td>
<td>2</td>
<td>75</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1075</td>
<td>86</td>
</tr>
</tbody>
</table>

Additionally, there were no collections reported by meter collectors over a 90 day period for these 86 smart meters. See Table 4 above. The lack of adequate monitoring procedures for smart meters with no communication triggers for collections or physical contact over an extended period of time could allow fraudulent meter collections to occur without management’s knowledge, resulting in a potential loss or theft of parking revenue. It was noted that the smart meter inventory report used to conduct the testing did not adequately reflect the status (i.e., bagged, not in service, etc.) of each meter.

Audit also performed an additional review of revenue collection data of nearby surrounding meters to include 20 randomly selected meters from the list of 86 Smart
meters that had no communication to trigger collections. See Table 5 below for results of nearby meters that were collected during the testing period.

**TABLE 5**

<table>
<thead>
<tr>
<th>Non Collected Meters</th>
<th>Location of 1st Close by Meter to Non Collected Meter</th>
<th>90 Day Revenue Reported At Meter #1</th>
<th>Number of Parking Tickets Sold</th>
<th>Location of 2nd Close by Meter to Non Collected Meter</th>
<th>90 Day Revenue Reported At Meter #2</th>
<th>Number of Parking Tickets Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Meter 1</td>
<td>Across The Street</td>
<td>$331.70</td>
<td>129</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 2</td>
<td>Next To Meter</td>
<td>$174.85</td>
<td>52</td>
<td>Next Block</td>
<td>$598.35</td>
<td>289</td>
</tr>
<tr>
<td>Test Meter 3</td>
<td>No Close Meter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 4</td>
<td>Next To Meter</td>
<td>$24.30</td>
<td>5</td>
<td>Across The Street</td>
<td>$181.00</td>
<td>62</td>
</tr>
<tr>
<td>Test Meter 5</td>
<td>Across The Street</td>
<td>$4,418.90</td>
<td>1,771</td>
<td>Across The Street</td>
<td>$2,794.00</td>
<td>1,071</td>
</tr>
<tr>
<td>Test Meter 6</td>
<td>Next Block</td>
<td>$1,505.00</td>
<td>656</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 7</td>
<td>Next Block</td>
<td>$10.60</td>
<td>81</td>
<td>Next Block</td>
<td>$195.00</td>
<td>69</td>
</tr>
<tr>
<td>Test Meter 8</td>
<td>Next Block</td>
<td>$361.20</td>
<td>150</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 9</td>
<td>Next To Meter</td>
<td>$461.10</td>
<td>139</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 10</td>
<td>Next Block</td>
<td>$884.80</td>
<td>498</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 11</td>
<td>Next Block</td>
<td>$82.90</td>
<td>92</td>
<td>Next Block</td>
<td>$48.45</td>
<td>38</td>
</tr>
<tr>
<td>Test Meter 12</td>
<td>Next Block</td>
<td>$10.80</td>
<td>8</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 13</td>
<td>Next Block</td>
<td>$927.70</td>
<td>373</td>
<td>No Close Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 14</td>
<td>Next Block</td>
<td>$833.35</td>
<td>568</td>
<td>Next Block</td>
<td>$553.05</td>
<td>585</td>
</tr>
<tr>
<td>Test Meter 15</td>
<td>Across The Street</td>
<td>$2.70</td>
<td>3</td>
<td>Next To Meter</td>
<td>$57.20</td>
<td>22</td>
</tr>
<tr>
<td>Test Meter 16</td>
<td>Next Block</td>
<td>$1,186.25</td>
<td>761</td>
<td>Next Block</td>
<td>$1,182.40</td>
<td>776</td>
</tr>
<tr>
<td>Test Meter 17</td>
<td>Next Block</td>
<td>$0.70</td>
<td>2</td>
<td>Next Block</td>
<td>$0.90</td>
<td>4</td>
</tr>
<tr>
<td>Test Meter 18</td>
<td>No Close Meter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Meter 19</td>
<td>Next Block</td>
<td>$323.70</td>
<td>94</td>
<td>Next Block</td>
<td>$393.20</td>
<td>179</td>
</tr>
<tr>
<td>Test Meter 20</td>
<td>Across The Street</td>
<td>$190.60</td>
<td>67</td>
<td>Next Block</td>
<td>$839.85</td>
<td>340</td>
</tr>
</tbody>
</table>

Non Collected Meters = Meters with no record of communication to trigger collections and no collections.

Next To Meter = Meters located on the same side of the street and within the same block as the test meter.

Across The Street = Meters located across the street and within the same block as the test meter.

Next Block = Meter located in the next hundred block on either side of the street from the test meter.
RECOMMENDATIONS:

PMD management should continue to follow established monthly collection guidelines for all Smart meters. Additionally, those meters should be monitored to facilitate safeguarding of assets and accurate accounting of parking revenue. PMD management should ensure the smart meter inventory is updated and accurate. Weekly reviews of this report will identify meters that have not communicated a collection trigger to PMD in a timely manner.

PMD’S MANAGEMENT RESPONSE:

The pay stations communicate with IRIS via Sprint modems and some of the pay stations are 10 years old now. Maintaining communication with these pay stations can be challenging due to aging technology as well as interference from tall buildings.

PMD implemented a collection on-demand policy when the new pay stations were deployed in 2006. However, it quickly became apparent that there was a need to regularly collect from pay stations that failed to communicate via the network to ensure revenues were collected and reported.

Since then, PMD has maintained an informal policy to empty communicating pay stations on demand while ensuring that non-communicating meters are emptied at least once every 30 days. If a pay station is communicating properly and bill and coin counts haven’t met the bill and coin thresholds (250 bill count & 350 coin count for regular Luke and Radius meters and 500 bill and 350 coin on Luke 2) PMD will not collect the pay station. If pay stations are continuously showing zero revenue in IRIS for a significant time period, the supervisor will include the pay stations in collections to ensure that there is nothing wrong with the machine and that the information is being transmitted to IRIS as expected.

Pay stations that do not communicate will never connect with IRIS. They only connect to BOSS via the BOSS Key (Flash Drive) once a collector or mechanic downloads the transactions to the BOSS Key. If a non-communicating or communicating meter does not have transactions (zero revenue) they will never connect with either system for purposes of collection reporting as there is zero revenue to report.

To demonstrate, pay station ABC123, in a low demand area, shows zero transactions for May 2015 in IRIS and also appears on the non-communicating pay station list. A meter technician visits ABC123 as directed by their supervisor to ensure the pay station is collected and transactions, if any, do not linger in the machine. The collector
will insert the flash drive to download any transactions that were not communicated via the network. If no parking transactions took place at the machine, nothing will download to the flash drive resulting in nothing uploaded to BOSS because there are no parking transactions to upload. This would suggest that the pay station has not been collected when in reality there have been no transactions to report back to the system.

For communicating pay stations that have zero transactions, we can see the machine in IRIS and we can see how much revenue it is holding. A meter technician will not be dispatched to collect the pay station until it reaches the collection on-demand threshold unless management determines that the machine should be checked to ensure it is performing and communicating as expected.

With regard to table 5, pay stations in close proximity to other machines do not necessarily mean that revenues generated will be equal. A pay station on one side of the street may manage 20 head-in spaces while the pay station on the opposite side of the street may only manage a handful of parallel parking spaces. While these meters are neighbors, the pay station managing 20 head-in spaces will generate revenues that greatly exceed those of the pay station on the opposite side of the street. Similarly, pay stations located adjacent to a parking lot will have less revenue than a pay station across the street that is adjacent to a public building. The physical placement of the machine and the number of spaces being managed by it can impact the revenues and this plays a role in the collection strategy.

Collecting all pay stations once a month is inefficient and in some cases, the cost of collecting the pay station will exceed the revenue it has generated. A reliable back office that clearly provides real-time revenue information allows for collection on demand. Pay stations that are functioning as expected bring efficiency to a parking operation. When pay stations do not communicate with the back office, these must be collected once per month.

Meter Technicians are responsible for collecting revenue from the meters and by employing collection on-demand, we are able to utilize resources more efficiently. The division oversees a fleet of 1000+ pay stations of which half is at end of life and require more maintenance to ensure availability for the general public. As part of their duties, Meter Technicians are also responsible for performing preventive maintenance when they are not collecting. Preventive maintenance includes replacing paper rolls, batteries, cleaning the interior and exterior of the meter, ensuring the screen is clear.
and readable and that all information posted on the meter is legible. Failure to perform preventive maintenance will mean pay stations will be out of service more frequently thereby impacting parking revenues and the general public.

We do agree with CTR findings for pay stations that fail to communicate and have been collecting pay stations that fail to communicate at least once every 30 days.

We also agree that the inventory list must be updated and accurate.

PMD will formalize the collection practices in the current Collection Procedure.

Finally, there is a program underway to refresh all 1000+ pay stations over the next five years. Phase I of the refresh program was completed in March 2016 and 276 pay stations were replaced. Phase II will be complete by December 2016 at which point an additional 291 pay stations will be replaced. The new pay stations include electronic locks for the collections cabinet. Electronic locks require the programming of permissions by Meter Operations management in order to collect. Electronic locks increase security levels related to cash in the machines in addition to providing a more robust audit trail of collections including the time, date and staffer who accessed the machine.

**RESPONSIBLE PARTY:** Jerry Keeth

**ESTIMATED DATE OF COMPLETION:** March 2017

**ASSESSMENT OF RESPONSE:**

The Audit Division agrees with PMD’s commitment to continue to follow established monthly collection guidelines, update the smart meter inventory, formalizing the collection practices in the current Collection Procedure, and refreshing the smart meters with electronic locks to monitor and restrict access.

Table 5 is included in this audit finding above to illustrate that meter collectors performed collections at nearby meters to those that had no communication to trigger collections during the testing period. PMD should ensure that there is adequate monitoring and assessment of smart meters that are not communicating a collection trigger within 30 days and that documentation is retained to facilitate trending of potential problems and/or misappropriations of parking revenue.
FINDING #2 – INCOMPLETE INVENTORY OF SMART METERS
(RISK RATING = HIGH)

BACKGROUND:

The Parking Management Division (PMD) maintains inventories of its parking meters in the T2 parking management software system. PMD’s staff tracks coin bags and bill stacker containers used inside the smart parking meters on an Excel spreadsheet. PMD creates meter names to track the smart meters. Meter names contain a combination of an abbreviated street name, the block number location, and a meter count number of the block. PMD provided three versions of incomplete inventory reports to the Audit Division (AD). The AD performed on-site verifications of smart meters both in the field and in the designated meter storage lot. Additionally, the AD observed the inventory and storage area for coin bags and bill stackers used in the smart meters. Prior to the completion of the audit, PMD provided a final inventory report that was used for the audit. It was noted that although the final inventory report included serial numbers and dates of purchase, there were meter names and meter status information (i.e., in storage or bagged) not included for all smart meters.

PMD provided an additional report to the AD to identify those meters removed from service and placed in storage. Removal is done when meters are damaged or because they are located near a construction site and may be in danger of being damaged. These meters are stored in an outside fenced site near downtown. The AD observed the storage lot and shop area where these meters were stored and performed a complete count of those parking meters.

The City of Houston’s Administrative Procedure 4-7, “Fixed Asset Management” (AP 4-7) provides guidelines for tracking fixed assets and references the “Fixed Asset Accounting and Management Procedure Manual” (Procedure Manual) as the designated guidance for fixed asset management. The Procedure Manual contains sections that define fixed assets and detail activities required when acquiring, maintaining, or disposing of fixed asset inventory. More specifically, Section 5, Acquisition:

a) Requires that all departments assign, record, and affix identification numbers (tags) to all fixed assets;

b) All fixed assets and controlled items will be assigned an asset number upon receipt and before the item is placed into service;

c) The department will affix tags to an asset in a conspicuous convenient location; and
d) Tags will remain on the asset throughout the life of the asset. Damaged tags will be replaced as needed.

Section 7, Retirement and Disposals requires that departments dispose of assets in accordance to Section 13, paragraph 5.2, “Transfer of the Property Disposal Management Office (PDMO)”, states that “Excess or obsolete fixed assets or controlled items that are no longer required by one city department will be transferred to the PDMO”.

Section 8, Asset Inventory, “requires that all departments conduct a full inventory of all property under their stewardship”. The City owns approximately 1,077 smart meters at a total acquisition cost of over $9.7 million ($9,116 each). This cost includes shipping, installation, and vendor product support.

Section 10, “Records Maintenance”, requires that “fixed asset records will be a complete and accurate accounting for fixed assets of significant value and are fundamental to sound financial management. Fixed asset records will be maintained for the life of each asset and retained in accordance with the requirements of the City for the retention of accounting records.”

FINDING:

Our audit found that PMD is not adhering to AP 4-7 and the corresponding Fixed Asset Accounting Procedure Manual as indicated below:

- Smart Meters are not assigned fixed asset identification numbers (or tags) nor are fixed asset identification tags affixed to all smart meters as required in Section 5.
- Serial number tags were removed from four (4) damaged smart meters that had been removed from service, thereby making it impossible to verify the true identity of those meters. Section 5(d), requires that “Tags will remain on the asset throughout the life of the asset”.
- Replacement meters are given the same name as previous damaged meters thereby impeding tracking and reporting.
- Upon request from AD, PMD did not provide copies of documentation showing proper disposal of the twelve (12) missing smart meters as required by Section 7.
- PMD had not conducted a full physical inventory of Smart Meters nor is there a complete, current, and accurate inventory of all Smart Meters as required by Section 8.

3 Identity assigned by the manufacturer
• Two smart meters were not found at locations indicated on inventory reports (WAS5200, WAS5900); and one smart meter was at a location different than noted on the inventory report (WAS702; serial number listed as WIL800 on inventory report).
• PMD does not have a complete, current, and accurate inventory of Smart Meters, coin bags, and stackers.
• Twelve (12) smart meters included in the storage inventory could not be found and/or identified. Section 10, Records Maintenance requires complete and accurate accounting records for the life of the asset.
• New replacement coin bags and stackers are given the same numbers as their replacements which reduces PMD’s ability to track the proper disposal of replaced coin bags and stackers. These units contain locks which may be salvaged and used to potentially make duplicate keys that will be used for unauthorized access to parking meters.
• There is no documentation/audit trail on disposal of old coin bags and bill stackers.

RECOMMENDATIONS:

PMD should ensure compliance with AP 4-7 and the corresponding Fixed Asset Accounting Procedure Manual by:
1. Assigning identification numbers (tags) to all smart meters in compliance with Section 5 of the Procedure Manual. All meters with missing serial numbers should be reported and identified with PDMO.
2. Conducting and documenting the full inventory of smart meters ensuring to include serial numbers and asset identification numbers for each to maintain compliance with Section 8 of the Procedure Manual. The inventory list should identify current locations of all meters. PMD should discontinue using duplicate or the same name for replacement meters. A unique number should be assigned to replacement meters with the standard naming schema, but include an additional character or number to indicate that it is a replacement.
3. Identifying and documenting all meters disposed of from inception to present and complete proper documentation for disposal of those assets and submit to the PDMO. Additionally, PMD should ensure compliance with asset disposal procedures as required in Section 13, paragraph 5.2 of the Procedure Manual.
4. Conducting, documenting, and maintaining a full inventory of coin bags and bill stackers utilized in smart meters.
PMD’s Management Response:

There are two reasons for the numbers on the bill stackers and the coin bags. A) To keep the collection devices together as a set; B) inventory purposes.

When a coin bag is damaged, the coin bag is sent back to the manufacturer through an RMA. When this is done, it leaves a stacker behind with an identifying # and no matching bag to be used with the bill stacker. If this occurs, when we receive the replacement coin bags, we label the replacement coin bag with the matching set number from the bill stacker. We know that the coin bag was sent back to the manufacturer and disposed of there, as we no longer have possession of the bag.

For bill stackers, 99 percent of the time the stacker is repaired and put back in service. When a bill stacker is not repairable, the stacker is destroyed in the meter shop and witnessed by management. If a good coin bag is available without a matching bill stacker, a new bill stacker could be paired up with the coin bag and numbered to match.

Additionally, there is a program underway to refresh all 1000+ pay stations over the next five years. Phase I of the meter refresh program was completed in March 2016 and 276 pay stations were replaced. Phase II will be complete by December 2016 at which point an additional 291 pay stations will be replaced. The new pay stations provide electronic locks that require programming in order to access. A key in addition to the permissions scheduled by the Meter Operations management will be required in order to collect meters thereby increasing security levels related to cash in the machines.

PMD will take the steps outlined below:

1. Work with PDMO to properly dispose of all meters that need to be removed from inventory. Moving forward this will procedure will be adhered to as meters are removed from service.
2. PMD will perform a complete inventory of all Smart Meter Pay-Stations, by end of March 2017.
3. PMD will perform an inventory of all collection devices by end of March 2017.

Responsible Party: Jerry Keeth
ESTIMATED DATE OF COMPLETION: March 2017

ASSESSMENT OF RESPONSE:
The Audit Division agrees with PMD’s commitment to ensure compliance with AP 4-7. Although PMD management addressed the plan to ensure smart meters are properly tagged, replacements, and a full inventory of coin bags and bill stackers going forward, management should also ensure that a physical inventory of parking meters is conducted annually as required by AP 4-7. The Audit Division also agrees with PMD’s decision to add additional security to the pay-stations/smart meters with the installation of the electronic locks as the smart meters are refreshed to facilitate monitoring and restricting unauthorized access.

The Audit Division disagrees with the practice of removing and replacing serial numbers on the cabinets of the parking meters because this is only identification from the manufacturer that could help facilitate inventory management of those meters.
FINDING #3— INCOMPLETE DIVISION LEVEL CASH HANDLING POLICIES AND PROCEDURES  
(RISK RATING = HIGH)

BACKGROUND:
The Parking Management Division (PMD) of Administration and Regulatory Affairs employs personnel responsible for meter collections (i.e., meter collectors). The meter collectors are responsible for retrieving cash (i.e., currency and coins) from parking meters throughout the city as requested by management. The collectors take this cash to a central location for automated counting. An armored service is scheduled to transfer these funds daily to a local bank, where the money is recounted and deposited. Collections from parking meters average over $250,000 a month.

The City of Houston’s Administrative Procedure 4-8, “Cash Handling” section 6.1.1, states that all “departments shall develop a departmental policy that further defines the framework established in this Administrative Procedure.”

There is security staff on-site during business hours and security cameras in the count room with live streaming to video monitors located in the offices of two Parking supervisors. Both supervisors have other full time responsibilities that hinder their ability to continually monitor the video feed. There is no subsequent review of the video captured.

FINDING:
PMD has drafted cash handling divisional policies and procedures, but has not implemented them resulting in inadequate safeguarding of assets and inadequate monitoring of the count room. The draft policies and procedures address essential internal controls regarding access and safeguarding City assets, specifically the draft policies include requiring applicable employees to sign cash handling forms, utilizing sign-in sheets for anyone entering the count room, and daily armored car pick-ups.

RECOMMENDATION:
PMD should implement the cash handling divisional policies and procedures previously drafted to facilitate adequate safeguarding of assets and security in the count room.

Additionally, PMD should strengthen procedures to ensure that cash collected from Smart meters is retrieved and counted under dual control, and realign responsibilities to allow supervisors to monitor the video feed of the count room. Additionally,
management should consider establishing a video review process for count room footage.

**PMD’s Management Response:**

PMD agrees with this recommendation. At the time of the audit, the cash handling policy was in draft form. The policy was formalized in April 2016.

In line with the recommendations provided, PMD officially implemented a cash handling policy as of April 2016. Although the policy was still being drafted at the time of the audit, PMD has been practicing most, if not all, of the policy in its day to day operation. Because of change in personnel and other major projects during 2015 and early 2016, the draft was not finalized and signed until recently. During our review of the draft, we strengthened some aspects of the cash handling operation that will allow for more robust controls.

In regard to the recommendation to realign supervisor responsibilities to allow them to monitor the video feed, PMD has already implemented several delegations of tasks and realignments of responsibilities over the past year to ensure just that. Supervisors now have more time to monitor the feeds real-time due to the efficiencies implemented. We have also recently implemented a review mechanism of the money room video on a daily basis whereby the previous day’s footage is viewed in “fast mode” by a supervisor and any suspicious activity brought to the attention of management immediately.

We have also revised the sign-in sheet in the money room to better identify personnel who enter it. Further, management instructions have been given to require anyone entering the room to sign in and out; regardless of reason or length. And, to be sure, the money room vault door is now locked whenever personnel aren’t present inside; even if the absence is very short. Additionally, money room attendants have been outfitted with “aprons” to better safeguard the cash counting mechanism.

PMD is looking into the feasibility of having two FTEs in the money room when retrieving and counting money. However, this may present certain operational challenges in other areas. We will evaluate this option and carefully implement it to minimize operational issues.

**Responsible Party:** Rami Arafat, Adriana Chapa, Carlos Medel
ESTIMATED DATE OF COMPLETION: All recommendations have been implemented as of April 2016.

ASSESSMENT OF RESPONSE:

Management responses as presented, sufficiently address the issues identified and corrective actions are appropriate.
FINDING #4 – PARK MOBILE REVENUE
(RISK RATING = MEDIUM)

BACKGROUND:

Smart phone parking customers have the ability to make parking payments via their smart phones through a website application service called Parkmobile. This service is provided by T2 Flex System software (a subcontractor on the T2 contract) and integrates with Parking Management Division’s (PMD) parking enforcement officers hand held ticketing units, which use the T2 Flex System. When a customer pays for parking using this on-line cloud based system, the parking enforcement officer scans their license plate with a hand held unit that transmits the payee’s vehicle description information along with the meter payment start and stop time. Parkmobile parking revenue included in the audit ranged from $39,000 in December 2015 to $69,000 in March 2016.

The customer is charged a thirty-five cents ($0.35) fee for each payment transaction in addition to the City’s parking fee. The City’s portion of the parking fee charge is paid monthly to Parking Management Division less fifteen cents ($0.15) per transaction service charge and a 3% credit card service fee. The tables below illustrate parking and fee amounts for the customer and the City.

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>Median Parking Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Charges Per Parking Transaction</td>
<td>Net To City After Fee Removals</td>
</tr>
<tr>
<td>Parking Amount</td>
<td>Plus (+) Smart Mobile Transaction Fee to Customer</td>
</tr>
<tr>
<td>$2.00</td>
<td>$0.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 7</th>
<th>Minimal Parking Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Charges Per Parking Transaction</td>
<td>Net To City After Fee Removals</td>
</tr>
<tr>
<td>Parking Amount</td>
<td>Plus (+) Smart Mobile Transaction Fee to Customer</td>
</tr>
<tr>
<td>$0.25</td>
<td>$0.35</td>
</tr>
</tbody>
</table>
**FINDING:**

Audit testing and review procedures performed found the following:

- Daily transaction charges are not reported to the Parking Management T2 system and therefore, PMD has no way to verify the monthly parking payments made by Parkmobile.
- Parkmobile charges the City a 3% credit card service fee on their additional $0.35 customer usage service charge.
- Forty-two (42) zero cost parking meter charges were shown on the report with an additional fifteen cents ($0.15) service charge.
- Other small meter charges ranging from five cents ($0.05) for twenty-four (24) transactions up to eighty-three (83) ten ($0.10) and fifteen cents ($0.15) transactions were also noted resulted in no net parking revenue for the city.

**RECOMMENDATIONS:**

PMD should seek refunds for the portion of the 3% transaction fee related to the $0.35 customer usage service charge as these fees are not associated with parking fees charged by the City. In addition, reimbursement should be requested for the $0.15 transaction fees charged to zero amount parking transactions listed on the monthly statements. PMD should also reassess the minimum transaction fee that customers are allowed to charge via Parkmobile (cell phone transactions) to ensure maximum revenue generation from these types of transactions.

**PMD’S MANAGEMENT RESPONSE:**

On June 3, 2016, PMD published an RFP for a pay by phone/app vendor. When the current agreement was put in place in 2011, there were not many options available to municipalities seeking to implement this solution for customers. Due to the number of vendors in the market today, PMD is confident that the concerns raised by CTR will be addressed.

Until the RFP process is completed, PMD has taken the following steps in the interim to improve the process:

1. Configure settings in IRIS to allow communication between the pay by phone vendor and the meter back office system. The configurations will be updated by August 2016 at which time, depending on the RFP process, PMD can integrate the system with the current vendor or make preparations to integrate with the selected vendor.
2. Regarding minimum transaction fees, PMD initially considered requiring a minimum transaction fee. However, because customers will expect to pay for less than an hour,
we set up the system to allow smaller purchases knowing that we incur credit card processing fees, anticipating that the improved customer service levels justify the fees. For example, a customer may arrive downtown at 5:30 pm and have to pay for only 30 minutes at a meter in a high demand area. Requiring a minimum hour purchase could mean $2.00 versus .50 cents. Additionally, requiring a minimum fee will result in customers paying for meters outside of hours of operation.

3. PMD is reviewing the 3 percent transaction fee related to the $0.35 transaction fee and will discuss with vendor.

4. PMD will pursue fees related to zero-cost meter charges. These were isolated incidents and we estimate about .0003% of all transactions. We have reviewed years 2014-2016 (YTD) and a reimbursement of $45.10 has been requested from the vendor for the $.15 transaction fee for the credit card processing. Years 2011-2013 are being reviewed and reimbursement will be sought for those as well. The chart below details Years 2014-2015 (YTD).

<table>
<thead>
<tr>
<th>Processing Cost</th>
<th>$0.00 Parking Fee</th>
<th>$0.00</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>$19.42</td>
<td>$19.42</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>$20.06</td>
<td>$20.06</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>$5.62</td>
<td>$5.62</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>$45.10</td>
<td>$45.10</td>
</tr>
</tbody>
</table>

**RESPONSIBLE PARTY:** Maria Irshad

**ESTIMATED DATE OF COMPLETION:**

- RFP will result in direct contract with vendor to address all credit card fees by December 2016.
- Reimbursement for $.15 fee on zero dollar transactions from 2014-2016 has been initiated in the amount of $45.10. Closed out by July 31, 2016. Refunds for years 2011-2013 will be closed out by July 31, 2016 as well.
- Discussions with vendor for reimbursement of credit card fees on the $.35 transaction fee have been initiated and will be complete by October 31, 2016.

**ASSESSMENT OF RESPONSE:**

Management responses as presented, sufficiently address the issues identified. The Audit Division agrees with PMD’s commitment to seek applicable refunds and reimbursements from Parkmobile, as well as ensuring that any new contracts address the exclusion or these fees.
FINDING #5 – SMART METER BAGGING PERMITS
(RISK RATING = MEDIUM)

BACKGROUND:

Parking Management Division (PMD) allows the bagging of smart parking meters to prevent parking in specific areas for a variety of reasons including parades, special events, traffic flow/control around professional ball stadiums, and safety around street and building construction sites. A permit is purchased for bagging of those meters, resulting in a source of parking revenue for the City.

We reviewed PMD’s September 23, 2015 Bagging Permit report and selected the first 60 permits, including both smart (27) and non-smart meters (33). We judgmentally decided to include only smart meters in our test population. Additionally, we verified any smart meter observed as bagged, which included four additional meters during our review, had a current bagged permit. Of the four bagged smart meters observed, we found no current bagged permits on the September 23, 2015 permitting report.

FINDING:

We found the following exceptions during our testing of bagged meters:

- Of the 27 meters selected from the bagged meter report for testing, 8 (30%) were not bagged as required by the bagging permit.
- Bagging permits had expired for an additional four (4) bagged meters observed during the review, therefore resulting in potential loss of revenue.

RECOMMENDATION:

PMD should develop and implement a verification method to ensure smart meters are bagged and un-bagged appropriately. This will ensure that permits are executed and meters are bagged in compliance with the permit terms, the maximum parking revenue is generated from bagging permits and that parking becomes available at those meters when permits expire.

PMD’S MANAGEMENT RESPONSE:

- The 2 meters that were not bagged as required by the bagging permit were due to last minute meter bagging requests that came into the office. PMD requires submission of permit applications at least 24 hours in advance to ensure appropriate bagging, however, we do process permits with less notice frequently as a customer service initiative. The other 6 meters were not bagged as a result of Officer error.
The 4 bagged meters that had expired were a result of Compliance Officer error and lack of Supervisory oversight.

Compliance and Customer service sections of PMD have combined efforts and created a report to ensure meters are bagged and unbagged appropriately and timely.

PMD has assigned two people weekly to remove/add meter bags and this will help with streamlining of who is processing the meter bagging at any given time. They will have to sign off once the task has been completed and then the supervisor has to verify that this task is complete and sign off on the permit report sheet.

These implementations will help ensure that all meters are bagged and unbagged according to the permit issued and mitigate any loss of meter revenue.

**RESPONSIBLE PARTY:** Compliance Section

**ESTIMATED DATE OF COMPLETION:**

Policy is updated and will be effective as of 6/17/2016

Compliance team has started this process effective 6/17/2016

**ASSESSMENT OF RESPONSE:**

Management responses as presented sufficiently address the issues identified. The Audit Division agrees with PMD’s commitment to improve the parking meter bagging processes to ensure maximum parking revenue generation for the City.
FINDING #6 – EMPLOYEE AND CITY VEHICLE PARKING AGREEMENT
(RISK RATING = MEDIUM)

BACKGROUND:

The City and the Convention & Entertainment Facilities Department (now Houston First Corporation) pledged revenues from the Parking garages/facilities of the Theater District, both Tranquility Parking Garages, City Hall Annex Parking Garage, and Lots C and H on Memorial Drive to Houston First Corporation under the City of Houston Bond agreement dated July 19, 2011. The bond agreement included a lease agreement for the management and use of these parking facilities for City employees and vehicles at a rate “not less than 60% of those charged to the public for comparable use.”

Administrative Procedure 3-6, “Downtown Employee and Public Transportation” (AP 3-6), Section 7.1, states that “City employees who work downtown will be offered a parking space in one of the lots identified in Appendix I or a transit pass at no cost to the employee, with the exception of Tranquility Garage, where employees are required to pay a portion of the cost of parking. Each employee shall be responsible for all federal income tax liability that may result from their selection.” Section 8.2, states, “The City Hall Annex and 611 Walker garages are for employee parking only. City vehicles shall not be parked in these garages, and shall be parked in the designated areas in the Tranquility Garage.”

The audit included a review of the October 15, 2014 Houston First Corporation parking invoice which includes all parking lots included in the lease agreement for City employees and City-owned fleet. A review of current applicable administrative procedures for City employees and vehicle parking was also performed.

FINDING:

As a result of our review and substantive testing procedures, we determined the following:

- The full Tranquility Garage parking fee is being paid for forty-five (45) City employees by various City departments.
- A variety of City vehicles were parked in the City Hall Annex parking garage (those needing charging stations as well as those that do not) instead of the Tranquility Parking Garage as required in AP 3-6.
Rates charged for parking spaces with charging stations designated for City electric vehicles parked in the Tranquility Parking Garage were higher than rates listed in the lease agreement with Houston First Corporation.

RECOMMENDATIONS:

1. PMD should ensure compliance with guidelines in AP 3-6 that define the criteria for paid employee parking in the Tranquility parking garage.
2. PMD should recommend that AP 3-6 be revised to allow City vehicle parking at City Hall Annex.

In addition, the City should review the need to modify the lease agreement with Houston First Corporation to ensure consistency of monthly parking rates charged for the City’s electric vehicles requiring the use of charging stations.

PMD’S MANAGEMENT RESPONSE:

The Houston First Bond Covenant states that fees for parking facilities by the City or its employees will not be less than 60 percent of those charged to the general public. The Bond Covenant does not guarantee the City a certain discount rate. It merely sets a ceiling that limits how much of a discount the City may receive.

There are departments that pay the entire fee for Tranquility, generally due to the fact that these permits that are used by departments that do not have offices on site at either 611 Walker or City Hall. Floater permits are retained by departments to facilitate attendance at meetings in either of these locations. We are reviewing other instances of departments paying the full fee for daily employee parking and will review policy options with the Administration to make a determination on the practice.

Based on the language of the Bond Covenant, it was our understanding that the fleet vehicle parking agreement made between FMD and Houston First was acceptable as the spaces were reserved 24 hours in addition to requiring a network connection and maintenance from Houston First. It is worth noting also that the agreement between Houston First and FMD for the fleet vehicle parking pre dates PMD taking over the Employee Parking & Transit Program.

City vehicles were not allowed to be stored in City Hall Annex due to the parking problem it presents. Allowing City vehicles back in that garage will only contribute to
further congestion. PMD proposes increased reviews of the garage and warnings to City vehicles that are parked in CHA.

Finally, while the Bond Covenant and the City agreement with Houston First cover parking, we agree that an MOU should be in place detailing the specific rates. PMD has reached out to Houston First to initiate these discussions.

**RESPONSIBLE PARTY:** Maria Irshad

**ESTIMATED DATE OF COMPLETION:** October 2017

**ASSESSMENT OF RESPONSE:**

Management responses as presented, sufficiently address the issues identified and corrective actions are appropriate.
EXHIBIT 1

MEMO FROM DEPARTMENT OFFICIALS

ADMINISTRATION AND REGULATORY AFFAIRS DEPARTMENT
As requested, please accept this memorandum acknowledging our awareness of the Parking Management Division (PMD) Audit and the Management Responses prepared by the Parking Management Division. In addition to the management response contained in the body of the audit, PMD would like to clarify a few additional points to provide context to the Management Response.

Smart Meters with No Communication to Trigger Collections

PMD challenges the assumption that nearby parking meters are an exact proxy for the amount of revenue that should have been expected from a meter that was not collected. The demand for parking is contextual. The presence of nearby parking lots, popular businesses or venues and other geographic factors can significantly increase or decrease the demand for on-street parking. These factors are so localized that even parking meters located on opposite sides of the same street may experience substantially different demand.

Meter Inventory

PMD recognizes the importance of maintaining an up-to-date and accurate meter inventory list. PMD has already begun working with ARA’s fixed asset coordinator to affix an identification tag to each parking meter. The inventory will be maintained current within SAP and tracked through these new fixed asset tags.

We believe it is important to clarify, however, that “complete” parking meters are assigned a serial number by the manufacturer. Individual parts—such as a coin bag or the meter case—are not. Because the electronic components inside the meter are the most expensive and are the “soul” of the meter, PMD traditionally refers to these internal electronic components as “the meter” for the purposes of assigning serial and fix asset numbers. When a meter needs to have a part replaced – up to and including the external case which displays the serial number – the “meter” maintains the same serial number because it is considered the same meter.

Cash Handling Policies and Procedures

PMD agrees that cash handling policies and procedures are critical to the operation of the Division. For that reason, even before the audit began, the Division began drafting a formal cash handling policy based on the Department policy. Although our Division policy was still being finalized during the audit period, PMD had already incorporated the majority of the safeguards into its day-to-day operations and was
operating under the Departmental cash handling policy that went in effect as of November 2014. PMD has already formalized and implemented the division policy since the conclusion of the audit period.

During the audit period PMD had already instituted a daily reconciliation of the cash receipts and the documented daily pickups by the City’s armored car vendor. Supervisory staff were also already monitoring security cameras on their desktops.

To improve the process, PMD has also begun requiring that:

1. Managers review the previous day’s record of the cash room at the beginning of each work day;
2. Money room attendants wear aprons to make theft more easy to identify and more difficult to undertake;
3. All personnel sign in before entering or leaving the counting room.

In addition, the camera has been upgraded to a High-Definition model that provides a better resolution and faster refresh rate. PMD is also instituting an annual review of the division cash handling process to identify process efficiencies and further areas for improvement.

PMD is committed to exploring the feasibility of all the cash handling recommendations proposed by the Controller’s office to determine whether the marginal benefit derived from additional safeguards outweighs the implementation cost to the City. Reassigning two FTEs to monitor the money room in person, for example, may not provide much additional benefit over reviewing a video recording while diverting personnel from other critical operational functions.

**Park Mobile Revenue**

Customers have come to expect that they will be able to pay for goods and services through their smart phones. In 2011 PMD selected a vendor to provide a pay-by-app parking solution for the City of Houston. At the time, there were relatively few vendors in that market. This negatively impacted the City’s ability to negotiate pricing terms. In June 2016, PMD published a new RFP for a pay-by-app vendor. Because the market is now more competitive, PMD expects that the City can negotiate better payment terms which will resolve the concerns raised in this audit.

PMD concurs that the vendor should not be applying its 3% credit card service fee to the $.35 customer usage service charge. It is worth noting, however, that the impact of this overcharge amounts to approximately $.01 per transaction.

PMD also acknowledges that there may be instances in which customers pay less in parking fees than the City pays to process these payments. Imposing a one hour minimum purchase would result in customers paying for time they do not use as well as customers paying for meter time outside the posted hours of operation. The audit only identified 107 transactions which resulted in no net parking revenue to the City. PMD feels that the financial benefit of requiring a minimum purchase might not outweigh the negative impact on customer perceptions.

PMD challenges the determination that this finding poses a medium level risk to the City. Many of these findings are dictated by the City’s contract, which will soon be renegotiated, or are the result of a deliberate policy choice to improve the customer experience and draw customers to the app. It is important to note that the actual overcharges identified in the audit were minimal – the fees related to zero-cost meter charges, for example, have only cost the City $45.10 in total over the last three calendar years and account for approximately .0003% of all transactions. PMD will request this refund from the vendor, but the impact on the City is negligible.
Smart Meter Bagging Permits

PMD acknowledges the audit findings and has already implemented process improvements that will resolve this issue.