Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

Official Audit Report – Issued October 8, 2015

Massachusetts Bay Transportation Authority—
Controls over Parking-Lot Revenue
For the period January 1, 2013 through December 31, 2013
October 8, 2015

Mr. Frank DePaola, Interim General Manager  
Massachusetts Bay Transportation Authority  
State Transportation Building  
10 Park Plaza, Suite 3910  
Boston, MA  02116

Dear Mr. DePaola:

I am pleased to provide this performance audit of the Massachusetts Bay Transportation Authority (MBTA). This report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, January 1, 2013 through December 31, 2013. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to the MBTA for the cooperation and assistance provided to my staff during the audit.

Sincerely,

Suzanne M. Bump  
Auditor of the Commonwealth
The Massachusetts Bay Transportation Authority did not properly safeguard keys that permitted access to more than $22 million in cash collected at its parking facilities.

The MBTA lacked the necessary controls to reconcile daily parking revenue at Honor Box parking lots.
EXECUTIVE SUMMARY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor has conducted an audit of certain activities of the Massachusetts Bay Transportation Authority (MBTA) for the period January 1, 2013 through December 31, 2013. The objective of our audit was to determine whether the MBTA was properly safeguarding and accounting for all parking-lot revenue and was efficiently and effectively administering its parking-management contract.

Below is a summary of our findings and recommendations, with links to each page listed.

<table>
<thead>
<tr>
<th>Finding 1</th>
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<tbody>
<tr>
<td>MBTA could not document that its parking contractor had implemented proper controls over keys that allowed access to more than $22 million of cash collected.</td>
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<table>
<thead>
<tr>
<th>Recommendation</th>
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<tr>
<td>After our audit, the MBTA discontinued its Honor Box system (see below). However, based on the problems we identified with the safeguarding of cash previously collected through the Honor Box system, garages, and other lots, we believe that the agency needs to ensure that it establishes adequate controls over revenue collected at its garages and other lots.</td>
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<table>
<thead>
<tr>
<th>Finding 2</th>
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<tr>
<td>The MBTA did not track the number of vehicles entering and exiting Honor Box lots or document cash collected.</td>
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<th>Recommendation</th>
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<tr>
<td>The MBTA should ensure that its revenue controls include a system that allows it to accurately reconcile the number of vehicles entering and exiting each lot to the actual revenue collected daily.</td>
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**Subsequent Event**

Effective July 6, 2015, the MBTA replaced the Honor Box system with a system of pay-by-phone parking and monthly permits to eliminate the need to pay for parking with cash.
OVERVIEW OF AUDITED ENTITY

Background

The Massachusetts Bay Transportation Authority (MBTA) was established in 1964 in accordance with Chapter 161A of the Massachusetts General Laws. The MBTA serves 175 communities, providing transit alternatives to almost 4.8 million people over an area of 3,200 square miles. It is currently the fifth-largest mass-transit system in the United States as measured by ridership, serving approximately 1.3 million passengers each day. MBTA ridership and total operating revenue for fiscal year 2013 were 390,000,000 and $630,235,000, respectively. The MBTA provides service via rapid transit, commuter rail, buses, light-rail streetcars, trackless trolleys, ferries, and paratransit vehicles.

During the period December 1, 2007 through December 31, 2012, the MBTA contracted with three parking-management companies (Ampco Parking, Central Parking System of Massachusetts, and LAZ Parking Limited LLC) to maintain and operate all MBTA parking facilities. During fiscal year 2012, parking revenue collected by these companies totaled approximately $40.3 million.

On January 1, 2013, the MBTA entered into a five-year agreement with a single management company, LAZ Parking Limited LLC, to manage its 102 parking facilities, with a stated capacity of 44,727 parking spaces, for commuter-rail and rapid-transit commuters. The agreement provides for a $7.98 million annual management fee through December 31, 2018 and contains an option for two additional one-year contract extensions.

Parking Facilities

During our audit period, parking revenue was collected daily by LAZ at 81 parking facilities that used 303 Honor Boxes containing cash received for parking. These Honor Boxes contained numbered slots that corresponded to the numbered parking spaces in each lot. Patrons inserted cash into the corresponding numbered slots for their parking fees. LAZ employees removed the cash collected at each Honor Box daily and transported it to one of three LAZ cash rooms for counting and deposit.

In addition, seven MBTA parking garages have DATAPARK kiosks at their entrances and exits, where parking revenue, including cash and credit-card payments, is collected and recorded daily. The remaining 14 parking facilities are controlled by parking-lot attendants. The attendants control cash parking revenue using pre-numbered tickets.
Daily counting and reconciliation of cash collected at these parking facilities is performed by LAZ employees at three cash rooms, each of which is designated to receive only cash from certain geographically assigned parking lots. During fiscal year 2013, LAZ reported collecting $42.3 million in parking revenue.

**Pay-by-Phone Services**

During the audit period, the MBTA used the services of Parkmobile USA Inc. to collect cashless payments of parking fees via telephone at 82 of its parking facilities. This agreement between the MBTA and Parkmobile became effective May 27, 2010 and was automatically renewed each month. Each Parkmobile customer paid the MBTA a daily parking fee, of which Parkmobile received $0.25 as a sales fee and $.07 per transaction as a cost-offset fee. The fees to Parkmobile were invoiced, approved, and paid monthly by the MBTA’s Parking Division. Effective February 1, 2014, the MBTA hired Phone Inc. to provide these pay-by-phone services.

**Monthly Permit Parkers and Parking Violations**

On August 16, 2012, the MBTA and Complus Data Innovations Inc. entered into a three-year agreement that would provide three IBM-compatible PC workstations, three laser printers, and 36 handheld ticket writers. These 36 handheld devices and the Complus software provide the MBTA with digital copies of year-to-date disposal of violations, delinquent notices for outstanding violations for Massachusetts and out-of-state residents, final delinquent notices, officer and operator performance reports, monthly permit reports, audit reports, daily and monthly cash/dismissal reports, and year-to-date active scofflaw reports. In addition, the handheld devices interfaced with the Parkmobile pay-by-phone system. With Complus and Parkmobile information combined, the MBTA and LAZ were able to generate revenue utilization reports for each parking facility daily.
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Massachusetts Bay Transportation Authority (MBTA) for the period January 1, 2013 through December 31, 2013.

We conducted this performance audit in accordance with generally accepted government auditing standards. 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Conclusion</th>
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<tr>
<td>1. Are there effective revenue collection procedures at Honor Boxes to</td>
<td>No; see Finding 1</td>
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<tr>
<td>ensure that cash received at parking lots is properly accounted for</td>
<td></td>
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<tr>
<td>and safeguarded?</td>
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<td>2. Does the parking contractor have proper general controls and procedures</td>
<td>Yes</td>
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<td>related to the physical handling of cash, the security of cash rooms,</td>
<td></td>
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<td>and the integrity of contractor personnel?</td>
<td></td>
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<td>3. Does the MBTA have general controls and procedures to properly</td>
<td>No; see Finding 2</td>
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<td>oversee its parking-management agreement and parking-lot revenue?</td>
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To accomplish our objectives, we performed the following activities:

- We reviewed the MBTA’s agreement with LAZ to obtain an understanding of the contractor’s duties and responsibilities, including required procedures for the collection, depositing, safeguarding, and reporting of parking-lot revenue.
- We reviewed policies and procedures established by the MBTA to properly oversee LAZ’s duties.
- We reviewed daily revenue utilization reports prepared by the parking contractor for Honor Box and attendant lots, and we traced the revenue reported to the supporting documentation.
- We performed walkthroughs at parking facilities with parking-contractor personnel to determine whether contractual procedures over the control and handling of cash were being followed.
Audit Objectives, Scope, and Methodology

- We reviewed contractor self-audits for Honor Box activity and supporting documentation of Honor Box cash received, which is used to determine daily car counts and revenue generated.

- We reviewed the process for issuing, tracking, and receiving payment for parking violations.

- We traced parking-lot revenue to bank statements, deposits, and reconciliations as shown on the daily revenue and utilization reports prepared by LAZ and submitted to the MBTA.

- We reviewed the armored-car pickup log to ensure that deposits were being made daily.

- We traced and reviewed invoices submitted by LAZ; by the monthly parking contractor, Complus Data Innovations Inc.; and by the pay-by-phone contractor, Parkmobile USA Inc., for accuracy and completeness.

- We reviewed security features of all contractor cash rooms.

- We conducted site visits to MBTA parking lots and contractor cash rooms.

To obtain and review evidence, we used non-statistical random sampling of daily parking reports and self-audits performed by LAZ. In addition, we randomly sampled cash deposits and daily transfers of revenue to the MBTA’s designated accounts. Since we used non-statistical sampling, the results cannot be projected to the population. We also reviewed MBTA accounts-payable information for compensation payments made to LAZ and associated firms for monthly parkers and phone payments.

To assess the reliability of the MBTA’s data, we reviewed selected controls and interviewed knowledgeable agency officials. Based on that analysis, we concluded that the data used were sufficiently reliable for the background information in our report. We did not rely on computer-processed data for work related to our audit objectives. Rather, we relied on hardcopy source documents, interviews, and other non-computer-processed data as supporting documentation on which we based our conclusions.

Additionally, we gained an understanding of the internal controls that we deemed significant to our audit objectives and tested and evaluated those controls for operating effectiveness. Specifically, we performed procedures such as interviewing agency personnel, reviewing policies, analyzing records, and examining documentation supporting recorded transactions.

As previously noted, effective July 6, 2015, the MBTA is eliminating its Honor Box system and beginning to use a new payment structure that will encourage customers to use the existing pay-by-phone system as well as monthly permits. The issues disclosed in this report existed during our audit period, but the
changes being made by the MBTA in this area will mitigate the concerns detailed in this report regarding
the collection of cash at MBTA facilities.
DETAILED AUDIT FINDINGS WITH AUDITEE’S RESPONSE

1. The Massachusetts Bay Transportation Authority did not properly safeguard keys that permitted access to more than $22 million in cash collected at its parking facilities.

During our audit, the MBTA could not provide documentation that its parking contractor LAZ Parking Limited LLC had incorporated controls such as pre-numbering its keys for tracking purposes; controlling them with a formal inventory, including ensuring that lost or broken keys and locks were properly documented before being replaced; or documenting a chain of custody for the ordering, receipt, and assignment of keys and locks for specific parking facilities and personnel. As a result, the MBTA cannot be certain that its cash parking revenue is adequately protected against theft, and therefore the cash parking revenue recorded for fiscal year 2013 ($22.4 million) may not represent all cash parking revenue actually earned during these fiscal years.

Authoritative Guidance

The proper safeguarding of, access to, accounting for, and documentation of the chain of custody for keys that control cash received is critical in order to ensure the integrity of MBTA parking facilities’ cash received. The National Parking Association’s recommended best practices suggest that agencies such as the MBTA should establish proper written controls over revenue keys and locks. These controls would include an inventory including pre-numbered keys with a proper documented chain of custody, properly securing keys, and routinely auditing keys.

Reasons for Control Issues

The MBTA delegated responsibility to LAZ for ordering and receiving all revenue keys and locks that controlled cash received for its Honor Boxes, attendant lots, and parking garages, rather than ensuring that all ordering and receiving of these keys and locks was carried out by designated MBTA Parking Division employees.

Recommendation

As previously noted, after our audit, the MBTA replaced its Honor Box system with a system that includes pay-by-phone parking and monthly permits. However, based on the problems we identified with the safeguarding of cash previously collected through the Honor Box system, garages, and other lots, we
believe that the agency needs to ensure that it establishes adequate controls over revenue collected by phone and in person at its garages and other lots.

**Auditee’s Response**

*Since 2011, MBTA Parking has added technology such as electronic payment methods (pay-by-phone), electronic monthly permits, revenue control equipment in the garages, improved enforcement hardware and software and wireless credit card readers at Wellington and Oak Grove parking lots. These technologies improve operations and provide customer convenience. Future technologies planned for parking include multi-space meters at attendant lots, license plate recognition enforcement and the expansion of EZ Pass into MBTA facilities.*...

*The good news is honor box keys are no longer in use since the MBTA eliminated honor boxes on July 6, 2015. However, prior to honor box elimination, LAZ Parking would keep the honor box keys in a secure safe in their parking office. The process was to distribute honor box keys to the collectors on a daily basis and collect and inventory the keys at the end of the day. Although keys were not numbered, they were tracked daily by LAZ management. The MBTA is in agreement that LAZ’ process dealing with damaged or lost keys needs improvement. Fortunately, no revenue was ever discovered or documented to be missing. Additionally, if revenue was missing, LAZ is responsible to reimburse the MBTA for all missing revenue.*

*The MBTA has recently started tracking garage revenue control equipment keys on a monthly basis using inventory spreadsheets that list the number of keys, the names of the LAZ employees that have access to the keys and when they have access. At all other times, all keys are kept in a secure safe located in the LAZ parking office. The MBTA is in the process of creating a policy and procedures for keys that will be added as a requirement to the LAZ Parking Management contract. The new policy will include numbering keys and a broken/lost key procedure that is tracked by the MBTA. The new procedure will primarily deal with the keys used to unlock the cash boxes inside the garage parking revenue control equipment.*

**Auditor’s Reply**

Based on its response, it appears that the MBTA is taking measures to address our concerns about its internal controls over revenue collected in its garages.

2. **The MBTA lacked the necessary controls to reconcile daily parking revenue at Honor Box parking lots.**

During our audit period, the MBTA did not document the number of vehicles entering and exiting the Honor Box lots. ¹ (In contrast, the MBTA parking garages have a computerized system for recording cars entering and exiting, and the attendant parking lots use pre-numbered tickets to account for the number

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1. These lots still exist, but rather than being classified as Honor Box lots, they are now simply unattended commuter lots.
of vehicles that park in these lots.) The lack of a car count at the Honor Box lots made it impossible to verify that the amount of revenue collected was actually the amount owed by users.

In addition, there were insufficient controls over cash collected. At Honor Box lots, customers paid for parking by inserting cash into slots that corresponded to parking-space numbers. LAZ employees removed cash from the Honor Boxes daily. They photographed the contents of each box before removing the cash. The photograph was the only control available to the MBTA to document cash parking fees collected. Without an effective revenue-control system, the MBTA may not be receiving all revenue collected from its parking lots. MBTA’s internal records indicate that this revenue totaled $16.05 million in fiscal year 2013.

**Authoritative Guidance**

Industry standards for the proper recording of parking-lot use and revenue controls, such as those recommended by the National Parking Association, include adequate mechanical and electronic controls to enable the regular reconciliation of the number of vehicles entering and exiting each lot to the actual revenue collected. Systems such as a computerized or ticketing system could serve this purpose for the unattended commuter lots.

**Reasons for Control Issues**

MBTA Parking Division employees stated that a computerized or ticketing system at all Honor Box lots was not pursued because of the projected high cost of procurement, installation, and ongoing maintenance of that type of system. However, the MBTA did not provide us with documentation that it had performed a cost analysis to determine the affordability of such a system.

**Recommendation**

The MBTA should ensure that its revenue controls include a system that allows it to accurately reconcile the number of vehicles entering and exiting each lot to the actual revenue collected daily.

**Auditee’s Response**

*MBTA parking revenue control equipment counts vehicles entering and exiting our garages. Inventory of vehicles is done on a nightly basis to ensure the number of vehicles in the garages is accurate. At all times, LAZ Parking can report how many vehicles are in the parking garages.*
The commuter rail parking lots are a more difficult environment to accurately count vehicles. The majority of 81 parking lots have multiple entrances and exits so it would be challenging and costly to install equipment to count vehicles as they enter and exit. An estimate to add vehicle counting loops at entry and exit lanes is $5,000 to $17,000 per lane depending on the quality of the loops and equipment. This would also require third party back end software.

Another solution to count vehicles in the commuter rail parking lots is to increase staffing levels by 8 to 10 employees to the MBTA Parking or LAZ Parking staffs. The additional labor to physically count cars would be costly.

The MBTA is proposing a reasonable solution to satisfy [the recommendation on this issue]. The MBTA can create a process to perform random vehicle counts at commuter rail facilities. MBTA parking staff can perform random daily vehicle counts while out in the field. The daily vehicle counts would be tracked by MBTA parking employees. MBTA accounting would compare vehicle counts to daily revenue to ensure revenue expected matches the number of vehicles counted in the lots. Parking will set up a procedure that counts vehicles at each lot as frequently as possible. This procedure will require planning and time to implement but the MBTA believes this is the most cost effective solution and addresses [the recommendation].

Audit’s Reply

We cannot comment on the accuracy of MBTA’s cost estimates for installing equipment to count the number of vehicles entering and exiting its parking lots, since it did not provide us with documentation that it had performed a cost analysis to determine the affordability of such a system.

We believe that it is prudent for the MBTA to implement a system that ensures the accurate reconciliation of all vehicles entering and exiting these lots to the actual revenue collected daily. Accordingly, the MBTA Parking Division should conduct a formal cost/benefit analysis to determine exactly what would be required, and at what cost, to ensure that all vehicles entering and exiting these lots are properly recorded and that the $16 million collected annually at the lots can be properly reconciled. The MBTA should use the results of this analysis to determine the appropriate course of action to implement proper controls over revenue collection. The system of spot-checking daily lot use, as described by the MBTA, may be a useful check on the reported lot activity and associated parking revenue reported daily by LAZ to the MBTA, but it does not provide all the information necessary for a proper reconciliation of revenue collected daily at these lots.