



Central Florida Expressway Authority

2016 Toll Revenue Audit

March 10, 2016

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Executive Summary

Background

The Central Florida Expressway Authority (“the Authority”) currently owns and operates 105 miles of roadway in Orange County. The roadways include 22 miles on State Road (SR) 408 (Spessard L. Holland East-West Expressway), 23 miles on SR 528 (Martin B. Andersen Beachline Expressway), 33 miles on SR 417 (Central Florida GreeneWay), 22 miles on SR 429 (Daniel Webster Western Beltway) and five miles on SR 414 (John Land Apopka Expressway).

In accordance with the FY 2016 Internal Audit Plan, Internal Audit reviewed and tested key controls of the two primary components of Toll Revenue in the Authority’s Comprehensive Annual Financial Report: Cash Toll Collections and Electronic Toll Collections. For fiscal year ended June 30, 2015, Cash Toll Collections and Electronic Toll Collections were \$76,830,000 and \$274,097,000, respectively, for total combined revenue of \$350,927,000. Electronic toll collections comprise approximately 78% of total toll revenue.

Cash Toll Collections

The Authority operates 13 mainline toll plazas and 71 ramp toll plazas across its five major roadways. Each of the main toll plazas offer manned lanes, and most offer Automatic Coin Machines (ACM) lanes. Ramp toll plazas are not manned and cash collected at these plazas is limited to ACM lanes. The number of manned lanes and ACM lanes at each plaza vary based on traffic patterns, construction, and other factors influencing plaza operations.

The Authority engages a third party contractor, URS, to manage day-to-day operations and cash toll collections. The contractor is responsible for staffing the toll plazas, including hiring, training, and monitoring employees, all controls around the physical security of cash maintained at the plazas from the point of collection through the time of deposit, monitoring of the electronic tolling system, and the audit procedures to identify variances between tolls collected, expected revenue, and cash deposited. The third party contractor has been performing this function for the Authority since 1995 (under varying company names). The contract was rebid in 2005 and 2015 and awarded to URS. On-site management of the contract has remained greatly the same despite name and ownership changes.

Electronic Toll Collections

Customers who utilize the Authority’s roadways have the option of establishing a prepaid E-PASS account through the use of a transponder. Each time customers use a toll facility where E-PASS is accepted, an antenna at the toll plaza (Automatic Vehicle Identification, or “AVI”) reads the transponder and identifies the customer’s account. The appropriate toll is then electronically deducted from the prepaid account. The Authority has entered into interoperability agreements with other agencies that allow transponders maintained with the Florida Turnpike, Lee County, State of Georgia, and State of North Carolina to be utilized on the Authority’s roadways. In addition, the Authority has interoperability agreements that allow E-PASS customers to use transponders in certain parking facilities in the Central Florida area, including the Orlando International Airport.



Executive Summary

Electronic Toll Collections (cont.)

The day-to-day operations associated with E-PASS accounts are outsourced to a third party contractor, EGIS. The contractor is responsible for providing the personnel necessary to operate the E-PASS Customer Service Centers, including servicing customers and processing account maintenance through walk-in service centers, a call center, mail, email, fax and the E-PASS website. Operations include other back office activities and reconciliation activities.

Upcoming Developments

Geolocation Mobile Application

The Authority is currently working with a third party to develop a mobile application (“app”) to enable customer payment of tolls on its system. Visitors and customers without transponders will have the option to pay tolls electronically with the mobile app. Using geolocation technology, when the user approaches a toll booth, the app sends a notification alert to the user’s smart phone asking whether to pay the toll. If the user approves the payment, an email will be sent to the user after the toll is deducted from the user’s account.

The Authority has obtained the code for the application and based on recent testing, determined that the mobile app requires further development to remove some existing application defects. The application is currently undergoing extensive testing and rework to remove these defects. The tentative timeline to deploy the geolocation mobile app is Fall 2016.

E-PASS Mobile Application

The Authority currently has plans to develop a mobile application for customers in which customers may review current activity, manage transponders, etc. This will constitute a mobile application version of the functionality that is offered within the full E-PASS website and will likely be released after the geolocation mobile app.

Transponder Replenishment and In-Lane Sales (TRAILS)

Effective April 1, 2016, the Authority is developing a Transponder Replenishment and In-Lane Sales (TRAILS) system. Customers will be able to drive up to designated TRAILS lanes and purchase an electronic toll transponder and/or replenish an existing account. TRAILS will provide customers greater convenience to purchase or replenish a toll transponder. As this process is in development, it was not in-scope for the audit.

Toll System Replacement

The current toll system went live in 1994, and as part of the five year work plan at CFX, the toll system will be upgraded. Transcore is the prime contractor, and key components of lane and plaza assets will be replaced.

Executive Summary

Objectives

The objectives of this audit were:

1. To review and test controls that exist to verify revenue data captured at the point of origin is completely and accurately recorded to the financial statements,
2. To review and test physical safeguarding controls that exist around cash (including the use of security and surveillance, data analytics, monitoring and reporting, and counts / other reconciling activities),
3. To review and test that controls in place around processing revenue adjustments to customer accounts are operating according to policy,
4. To review appropriate monitoring and measurements are in place to review toll revenue, and
5. To review the IT general controls around supporting systems and information technology that impacts the revenue process.

Project Scope and Approach

Internal Audit evaluated key processes and controls over cash toll collections and electronic tolling collections. This included gathering information from Authority management and staff, and third party contractor management and staff within the following departments: Accounting and Finance, Operations, Information Technology, E-PASS Customer Service, and Plaza Operations. The toll revenue process is highly dependent on a number of systems; therefore, Information Technology general controls (ITGCs) around supporting systems were reviewed and tested.

ITGCs are intended to provide a foundation to support the operating effectiveness of application controls that support toll revenue collection processes and the accuracy and completeness of electronic audit evidence (e.g., system-generated reports). The systems and processes included as part of this component of the audit were selected based on the degree to which they impact or support the overall toll revenue process and include the following systems:

- **Advanced Revenue Collection System (ARCS)** – The ARCS database stores transactional data generated and transmitted by the respective toll plazas. For this database, IA tested the effectiveness of controls in place around Computer Operations (e.g., data backups, job scheduling, and batch processing).
- **Toll Revenue Information Management System (TRIMS)** – TRIMS supports customer service center operations including the maintenance of customer account information and processing of payments. For this system, IA tested the effectiveness of controls in place around logical security (i.e., access-based controls).
- **EDEN** – EDEN is the Authority's general ledger system developed by a third-party vendor, Tyler Technologies, Inc. For this application, IA tested the effectiveness of controls in place around logical security, computer operations, and change management.

After the revenue recognition process, the Authority has three monthly discount programs for its electronic toll collection customers using their E-PASS transponder on Authority roadways. For the testing period of July 1, 2015 – December 31, 2015, discounts of \$9,479,319 (unaudited) totaled 6% of gross toll revenue \$157,608,794 (unaudited) recorded over that same period. The discount programs were not in-scope for the audit.

Summary of Procedures Performed and Results

During audit testing of the key controls identified within the cash toll and electronic toll collection processes, a sample of detailed toll related data was reviewed and tested for completeness and accuracy, as applicable. The transactional data reviewed was for the period of July 1, 2015 through December 31, 2015.

Internal Audit reviewed and evaluated approximately 75 internal controls specific to cash toll collections, electronic toll collections, and the IT supporting systems. Overall, the results of this audit confirmed that numerous internal controls are in place and operating effectively and as intended. In addition, Internal Audit identified six (6) findings / opportunities that could potentially further strengthen the overall control environment. The table below provides an overview of these findings:

Process	Observation Reference	Relative Priority
1. Revenue Leakage		
a. AVI Revenue Reconciliation	1	High
b. Special Events Reimbursement	2	Medium
2. Electronic Toll Collections		
a. Plaza Activity Monitoring	3	Low
3. Cash Toll Collections		
a. Toll Attendant Performance Assessment	4	Low
4. E-PASS Back Office		
a. Video Monitoring of Counting Room	5	Low
b. Terminated Employee Building Access	6	Low

Detailed Observations

Revenue Leakage

Electronic Toll
Collections

Cash Toll Collections

E-PASS Back Office

Observation 1 – AVI Revenue Reconciliation

Relative Priority: *High*

Monthly, the Authority's Accounting & Finance department performs adjusting journal entries as part of the month-end reconciliation process to true-up the general ledger balance for total revenue earned. As part of the audit, Internal Audit identified that the December 2015 AVI revenue for the Airport Plaza was understated by \$136,083 due to an error performing the month-end reconciliation and journal entries. The December 2015 AVI revenue reconciliation was reviewed by appropriate personnel; however, the error was not detected during the review process. The error appeared to result from a recent change in assigned responsibilities within the Accounting & Finance department.

Recommendation

There is an opportunity for the Authority to improve its documentation over the revenue reconciliation process. By creating a procedural document, Authority personnel will have a set of instructions to reference when performing the reconciliation of toll revenue, and a document to leverage when roles or responsibilities change within the accounting department. The procedural document should include detailed procedures for performing and reviewing the monthly revenue reconciliation. As a leading practice, the review procedures should be performed at a level of precision to include recalculation of the month-end journal entry for mathematical accuracy and a review of the final AVI revenue balance per Eden for agreement to the TRIMS Plaza Revenue Summary report.

Management Response

Management concurs.

Management Action Plan

Accounting and Finance Department will create a desktop procedure document with detailed steps for the performer and reviewer of the month-end journal entries and reconciliations related to toll revenue.

Action Plan Owner/Due Date

Michael Carlisle, Manager of Accounting and Finance / September 30, 2016

Detailed Observations

Revenue Leakage

Electronic Toll Collections

Cash Toll Collections

E-PASS Back Office

Observation 2 – Special Events Reimbursement

Relative Priority: *Medium*

Per the contract between the Authority and URS, the third party Toll Operations Contractor, URS is responsible for loss of revenue if lanes are not staffed according to the CFX approved staffing schedule. During the audit, Internal Audit identified two instances where the Authority was not reimbursed for loss of revenue when the lane was not staffed appropriately. In both instances, the lane was placed in Special Events mode due to an employee medical emergency or illness to allow traffic to pass through the cash toll lane. The Special Events mode was appropriately recorded on the Special Events report and appropriately provided to the Authority; however, the Authority's Accounting and Finance department did not file the request for reimbursement from URS. The total amount due to the Authority was approximately \$136 for the two Special Events identified by Internal Audit. Although not a significant amount, opportunities exist to improve the process and procedures to prevent a more significant issue in the future.

Recommendation

A review of the Special Events Report should be included on the calendar/checklist of month-end procedures to ensure all Special Events are captured for billing to appropriate parties, including URS.

Management Response

Management concurs.

Management Action Plan

Accounting and Finance Department will add the review of the Special Events Report to the month-end calendar as recommended.

Action Plan Owner/Due Date

Michael Carlisle, Manager of Accounting and Finance / June 30, 2016

Detailed Observations

Revenue Leakage

Electronic Toll Collections

Cash Toll Collections

E-PASS Back Office

Observation 3 – Plaza Activity Monitoring

Relative Priority: *Low*

In accordance with the Central Florida Expressway Authority's Toll Operations Standard Operating Procedures (SOP), URS performs a review of the Plaza Activity Monitor at least every two hours to review the TRIMS system and to mitigate potential revenue loss due to equipment failure. This review is documented by the Toll Service Supervisor/Manager using a Lane Monitor Checklist. For one day tested, in six (6) of the 15 plazas reviewed, there were one or more instances where the review of the Plaza Activity Monitor was not documented within the two hour limit.

Per the contract between the Authority and URS, the third party Toll Operations Contractor, URS is responsible for loss of revenue if equipment failure is not reported to the System Hardware Maintenance Contractor within 2 hours. Therefore, the impact to the Authority if the procedure is not followed would be minimal as URS would reimburse the Authority for actual lost revenue determined by the system or an estimate of lost revenue based on historical data.

Recommendation

We recommend that the Authority and third party contractor consider eliminating the Lane Monitor Checklist as this is a non-essential report. The Lane Monitor Checklist is an internal document and functions primarily as a summary of the Plaza Activity Monitor detail. Instead, the contractor should consider a revision to their process such that the Toll Service Manager or Supervisor signs directly on the Plaza Activity Monitor sheets, which are date and time-stamped source documents and will suffice as evidence of plaza review. By eliminating the completion of a summary sheet, the Toll Service Managers or Supervisors can complete the documentation of this task more efficiently in addition to having more time to focus on other responsibilities.

Management Response

Management concurs.

Management Action Plan

URS has implemented the recommendation as of March 4, 2016.

Action Plan Owner/Due Date

Dan Goff, Project Director / Completed

Detailed Observations

Revenue Leakage

Electronic Toll Collections

Cash Toll Collections

E-PASS Back Office

Observation 4 – Toll Attendant Performance Assessment

Relative Priority: *Low*

In accordance with the Central Florida Expressway Authority's Toll Operations Standard Operating Procedures (SOP), Toll Service Managers (TSMs) monitor new hire performance via a 30-day Toll Attendant Performance Assessment (TAPA). A 60-day follow-up TAPA will be completed as needed.

Of the 20 selected Toll Service Attendants (TSAs) hired during the period July 1, 2015 through December 31, 2015, the following issues were identified:

- Fourteen (14) of the 30-day TAPAs were not completed within 30 days of the employees' hire date and were completed greater than two weeks late.
- Two (2) of the 30-day TAPAs could not be located.

If new hire performance evaluation and feedback is not being performed timely for TSAs and TSAs are not appropriately processing the various types of toll transactions, the potential likelihood of error and lost toll revenue that may not be caught timely is increased.

Recommendation

The URS Assistant Project Director recently created an Excel spreadsheet to track and monitor the status of TAPA due dates and required follow-up. We recommend that the Excel spreadsheet be provided to the appropriate TSM bi-monthly via email and that upcoming TAPA due dates be discussed during the bi-monthly Plaza Managers' meeting.

Management Response

The Toll Attendant Performance Assessment is a quality process designed as a tool to assess a TSA's knowledge of the job tasks associated with the position. The TAPA is not meant as a substitute for the semi-annual Employee Performance Evaluation process.

Continued on the following page...

Detailed Observations

Revenue Leakage

Observation 4 – Toll Attendant Performance Assessment

Relative Priority: *Low*

Management Action Plan

On February 1, 2016 URS created an Excel spreadsheet to track the due date and the completion date for TAPAs. The spreadsheet will be shared with the Plaza Managers on the 15th and 30th of each month. In addition, the information will be reviewed at the bi-monthly Plaza Managers' meeting. Action Plan has been fully implemented as of March 1, 2016.

Electronic Toll
Collections

Action Plan Owner/Due Date

Dan Goff, Project Director / Completed

Cash Toll Collections

E-PASS Back Office

Detailed Observations

Revenue Leakage

Electronic Toll Collections

Cash Toll Collections

E-PASS Back Office

Observation 5 – Video Monitoring of Counting Room

Relative Priority: *Low*

All check, cash, money order transactions received via mail are processed in the back office mailroom or counting room located at the Authority's headquarters. To allow monitoring of the processing and handling of payments, the mailroom and the counting room are under video camera surveillance.

Based on inquiry of EGIS management and Authority IT personnel, camera surveillance is not being actively monitored by either party and the camera footage is not digitally stored and available for retrieval. The IT department indicated that the camera storage system became obsolete when the Authority upgraded to the Windows 7 operating system due to compatibility issues. Management was aware of the obsolete camera system and made a business decision to not upgrade the system at the time.

Recommendation

We recommend that the Authority purchase new surveillance equipment that is compatible with its current operating system and allows for 30 days storage of surveillance data, at minimum, for retrieval as needed. We recommend that footage be recorded in digital format and maintained for a period of at least two weeks to one month based on leading practices. Additionally, the Authority should consider assigning the responsibility of periodic monitoring of the security cameras to EGIS to be performed at least weekly in order to improve monitoring of the mailroom and counting room where checks, cash, and money orders get processed.

Management Response

Management concurs.

Management Action Plan

The Authority will procure and deploy the needed equipment and EGIS will perform monitoring of the cameras at least weekly. The procurement of the system will be included in an upcoming camera installation project

Action Plan Owner/Due Date

Fred Nieves, Manager of E-PASS & Plaza Operations / December 31, 2016

Detailed Observations

Revenue Leakage

Observation 6 – Terminated Employee Building Access

Relative Priority: *Low*

EGIS employees that work in the E-PASS Call Center and Violation Enforcement Section (VES) group are issued a unique badge and passcode for accessing the building and work area. Upon termination, it is the responsibility of the department manager to collect the terminated employee's badge and notify the IT Help Desk via an online ticket system that the employee's access rights should be terminated immediately. During testing, Internal Audit identified two (2) terminated employees with active badges and building access.

Electronic Toll Collections

Recommendation

We recommend that an employee termination checklist be developed and distributed to all department managers. Department managers should complete the checklist, which should include procedures around collecting an employee's badge and notifying the Authority's IT department of the termination within a defined period of time (e.g. 3 days). The department manager should sign and date the checklist to indicate all termination procedures were completed. Additionally, the department manager should send the completed employee termination checklist to the EGIS HR Generalist or designee to sign and date the checklist as evidence of review.

Cash Toll Collections

Management Response

Management concurs.

Management Action Plan

EGIS will implement the recommendation once an HR Generalist is identified and hired.

E-PASS Back Office

Action Plan Owner/Due Date

Allie Braswell, Program Manager / December 31, 2016

Appendix: Risks Addressed

The following risks were identified and addressed by Internal Audit as part of testing the Authority's internal controls around toll revenue:

E-PASS and Accounting

- Unauthorized account adjustments/credits are made to E-PASS accounts resulting in potential lost revenue.
- E-PASS employees modify and make adjustments to their personal E-PASS accounts resulting in unauthorized adjustments and potential lost revenue.
- Non-revenue transponders are provided to customers without proper approval resulting in potential lost revenue.
- E-PASS personnel misappropriate E-PASS funds received in the mailroom or at the EPSC resulting in potential lost revenue.
- Unauthorized access to E-PASS customer account information including credit card and banking information.
- Badge access rights are not restricted from terminated employees in a timely manner resulting in theft or damage.
- Toll Revenue transactions are not accurate or recorded in the proper period.
- Revenue from interoperability agreements are not properly recorded resulting in loss of revenue.
- E-PASS transaction is cross read by the Automatic Vehicle Identification (AVI) reader in another lane.
- License plate images transmitted by the System Controller to the system are not converted properly and cannot be used resulting in lost revenue.
- Loop and/or treadle sensors malfunction and vehicle axle counts are inaccurate resulting in lost revenue.

Toll Plaza

- Toll Service Attendants (TSA) and/or Toll Service Supervisors (TSS) misappropriate toll collections resulting in lost revenue.
- Toll collections for a plaza are suspended without proper authorization or justification.
- Physical access to plaza counting room and safe room are not restricted resulting in lost revenue.
- Toll Service Attendants (TSAs) are not trained properly and/or timely resulting in inaccurate toll collection processing.
- Automatic Vehicle Identification (AVI), Manual Lane Terminal (MLT), Automatic Coin Machine (ACM), cameras, treadle and loop sensors malfunction resulting in lost revenue.
- Insufficient toll is collected for multi-axle vehicles passing through the staffed lane resulting in lost revenue.
- Transaction and financial data is lost due to equipment problems or damage resulting in misstated revenue.
- URS misappropriates (or miscalculates) toll collections and/or CFX Accounting does not properly reconcile URS's negative discrepancies resulting in lost revenue.



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