



# Follow-up Review of Airport Parking Revenues and Parking Information Systems

## Office of the County Auditor

### Follow-up Review Report

**Robert Melton, CPA, CIA, CFE, CIG**  
**County Auditor**

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**Report No. 20-11**  
**March 4, 2020**



**OFFICE OF THE COUNTY AUDITOR**

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March 4, 2020

Honorable Mayor and Board of County Commissioners

We have conducted a follow-up review of our Review of Airport Parking Revenues and Parking Information Systems (Report No. 17-11). The objective of our review was to determine the implementation status of our previous recommendations.

We conclude that of the 23 recommendations in the report, we determined that 16 were implemented and seven were partially implemented. We commend management for implementing our recommendations. The status of each of our recommendations is presented in this follow-up report.

We conducted this review in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives.

We appreciate the cooperation and assistance provided by the staff of the Broward County Aviation Division throughout our review process.

Respectfully submitted,

A handwritten signature in blue ink that reads "Bob Melton".

Bob Melton  
County Auditor

cc: Bertha Henry, County Administrator  
Andrew Meyers, County Attorney  
Monica Cepero, Deputy County Administrator  
Mark Gale, Director of Aviation Department

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# IMPLEMENTATION STATUS SUMMARY

## Implementation Status of Previous Recommendations From Follow-up Review of Airport Parking Revenues and Parking Information Systems

REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
1.	BCAD to work with SP+ and HUB to separate incompatible duties so that more than one individual is responsible for completing a process or transaction;		✓		
2.	BCAD to work with SP+ and HUB to install cash registers as required by the parking management agreement;		✓		
3.	BCAD to work with SP+ and HUB to follow County policies and procedures for accounts receivables, including write-off of uncollectible accounts;		✓		
4.	BCAD to work with SP+ and HUB to document procedures for the management of issued and unissued Proximity and DP cards to ensure that:				
	a. properly completed and authorized applications support the issuance of each Proximity and DP card; (Implemented)				
	b. issuance procedures are not adequate to preclude an employee from having more than one Proximity Card; (Not Implemented)				
	c. Effective January 15, 2020, new processes were implemented to segregate duties; (Implemented)		✓		
	d. Effective January 8, 2020, management has implemented new procedures to perform periodic reviews of Proximity Cardholders; (Implemented)				
	e. the number of DP cards issued to tenants comply with the Administrative Code; (Implemented) and				
	f. amounts due for all unauthorized cards are billed and collected. (Implemented)				
5.	BCAD to work with SP+ and HUB to develop written procedures to guide staff through day to day processes for tenant employee parking.	✓			
6.	BCAD to work with SP+ and HUB to include sales and use tax on monthly fees billed for DP cards.	✓			

REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
7.	BCAD to work with SP+ and HUB to collect sales and use tax on prior parking fees billed to tenants and remit taxes collected to the State of Florida.	✓			
8.	BCAD to work with SP+ and HUB to periodically test employee parking system access restrictions to ensure they are operational.	✓			
9.	BCAD to work with SP+ to periodically reconcile payment transactions in CARS to amounts deposited in the County's bank account.	✓			
10.	BCAD to work with SP+ record accounts receivable from parking operations in the County's financial records.	✓			
11.	BCAD to work with SP+ ensure that parking fees are collected or waived only as authorized by Chapter 39.2 of the Administrative Code.		✓		
12.	BCAD to work with SP+ and HUB to evaluate the continued suitability of the primary location for production parking information systems.		✓		
13.	BCAD to work with SP+ and HUB to ensure that appropriate procedures are in place to restrict physical access based on job responsibilities.	✓			
14.	BCAD to work with SP+ and HUB to periodically review physical access to validate that only those individuals who require access as part of their job responsibilities are authorized.	✓			
15.	BCAD to work with SP+ and HUB to ensure that application, network, and database security features comply with County information security policies.		✓		
16.	BCAD to work with SP+ and HUB to ensure that a periodic review of user access to parking applications is performed to validate that access is assigned based on job responsibilities and appropriate segregation of duties. This should include a review of group profile permissions to which employees are assigned.	✓			
17.	BCAD to work with SP+ and HUB to ensure that employees no longer requiring access to parking information systems, including terminated employees, are removed immediately	✓			
18.	BCAD to work with SP+ and HUB to ensure the use of shared passwords is restricted.	✓			
19.	BCAD to work with SP+ and HUB to ensure that change management policies and procedures are documented and that changes are tracked in the ticketing system	✓			
20.	BCAD to work with SP+ and HUB to enhance the current change management process to ensure that infrastructure changes are not authorized, performed, and tested by the same individual.	✓			

REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
21.	BCAD to enhance current disaster recovery documentation and create a comprehensive business continuity plan including the elements listed in Finding #5 above.	✓			
22.	BCAD to periodically test the plan under conditions that simulate a disaster at least annually once a comprehensive plan has been developed and approved.	✓			
23.	BCAD to document test results and continually update the plan based on the test results.	✓			

Management’s response to the prior report recommendations is included on pages 17 through 26

# INTRODUCTION

## **Scope and Methodology**

The Office of the County Auditor conducts audits of Broward County's entities, programs, activities, and contractors to provide the Board of County Commissioners, Broward County's residents, County management, and other stakeholders unbiased, timely, and relevant information for use in promoting government accountability and stewardship and improving government operations.

We conducted a follow-up review of our Review of Airport Parking Revenues and Parking Information Systems (Report No. 17-11). The objective of our review was to determine the implementation status of previous recommendations for improvement.

We conducted this review in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives.

Our follow-up review included such tests of records and other auditing procedures, as we considered necessary in the circumstances. The follow-up testing was performed for the period June 1, 2019 through September 30, 2019. However, transactions, processes, and situations reviewed were not limited by the audit period.

## **Overall Conclusion**

We conclude that of the 23 recommendations in the report, we determined that 16 were implemented and seven were partially implemented. We commend management for implementing our recommendations. The status of each of our recommendations is presented in this follow-up report.

# OPPORTUNITIES FOR IMPROVEMENT

This section reports actions taken by management on the Opportunities for Improvement in our previous review. The issues and recommendations herein are those of the original review, followed by the current status of the recommendations.

## **1. Lack of Adequate Internal Control Over Employee Parking Revenue.**

Establishing and maintaining effective internal controls in the revenue process is a prerequisite to ensuring all funds owed are collected and appropriately recorded. Good internal control of the revenue process includes adequate segregation of duties, control over collection of revenues and taxes, timely deposits, safekeeping of cash, proper recording and reconciliation of revenue, and supervisory review.

### **A. Job duties for tenant employee parking operations are not adequately segregated.**

Three employees can issue Proximity Cards, access card inventory, open and close tenant employee accounts, process card payments, perform collection activities, and write off past due amounts.

### **B. The employee parking cash handling process is manual and does not include the use of a cash register as required by the Parking Management Agreement.**

Cash is maintained in a cashbox accessible to other SP+ employees in the general office area and pre-numbered, hand-written receipts are issued for payments; however, these receipts are not adequately tracked or reconciled.

### **C. SP+ does not follow established County policy for past due accounts receivable.**

We noted that SP+ does not perform timely collection efforts and writes off uncollectible accounts without determination of collection status by the County Attorney's Office, or approval by the Board as required by County policy.

### **D. Internal controls over issued and unissued Proximity and DP cards are not adequate.**

#### *i. Management of Issued Cards*

BCAD's and SP+'s established processes require that prior to the issuance of the Proximity card or DP card, tenant employees complete an application that must be authorized by the tenant's management representative (Station Manager). We noted the following:



- ❖ There was no evidence of authorization for 5% (4 of 86) Proximity Cards and 29% (12 of 41) DP cards sampled.
- ❖ Two Proximity Cards (one current account and one past due account) were authorized for two of 20 employees sampled.
- ❖ SP+ does not periodically confirm continued eligibility of Proximity cardholders.
- ❖ BCAD issued five DP cards to two tenants in excess of maximums authorized by the Administrative Code. Administrative Code provides for up to ten cards for tenants (See Exhibit 4).
- ❖ BCAD failed to bill monthly fees for six DP cards resulting in \$5,400 of unbilled revenues.

*ii. Management of Unissued Cards*

Proximity and DP cards are documents of value to the County as they represent either parking revenue or the displacement of parking revenue and should be protected from unauthorized use. We noted that card inventory controls are not adequate:

- ❖ Inventories of unissued cards and cards returned by former cardholders are not tracked.
- ❖ Employees who issue, activate, and deactivate cards also have access to the inventory of unissued and returned cards creating a segregation of duties conflict.
- ❖ Card inventories are not periodically counted and reconciled by someone other than the card custodians. Volume 8 of the Internal Control Handbook requires that documents of value are inventoried and reconciled monthly by someone other than the custodian.

**E. SP+ has no written procedures to guide staff through day to day processes for tenant employee parking.**

SP+ does not have written procedures for employee parking operations to help ensure that transactions are processed uniformly and consistently, provide management directives, serve as a reference guide to staff, and aid in training and transitioning new employees.

**F. BCAD failed to comply with Administrative Code and Florida Statutes regarding the collection of sales taxes.**

BCAD does not bill tenants and airlines for sales and use tax on fees for DP cards.

**G. System controls restricting employees from parking outside of designated areas within Cypress Garage were not in operation for at least 3 months.**

Employees are required to enter the employee access point on the 7th floor of the Cypress Garage within 15 minutes of entering in order to park in the designated employee parking area

and exit without paying hourly and daily fees. On March 16, 2016, we tested the security access controls on level 7 of the Cypress garage and found no 15-minute restriction preventing admittance to the employee parking area. HUB repaired the controls on May 11, 2016. SP+ and HUB confirmed that the 15 minute restriction was not in place for months (undetermined) prior to our test date. During the time this system control was not in operation, employees were able to park in any airport parking garage, displacing self-parking revenue. The amount of lost self-parking revenue could not be determined.

**We recommended** the Board of County Commissioners direct the County Administrator to require BCAD to work with SP+ and HUB to:

1. Separate incompatible duties so that more than one individual is responsible for completing a process or transaction;
2. Install cash registers as required by the parking management agreement;
3. Follow County policies and procedures for accounts receivables, including write-off of uncollectible accounts;
4. Document procedures for the management of issued and unissued Proximity and DP cards to ensure that:
  - a. properly completed and authorized applications support the issuance of each Proximity and DP card;
  - b. card issuance procedures are adequate to preclude an employee from having more than one Proximity Card;
  - c. inventory and segregation of duties controls over unissued Proximity and DP cards are implemented;
  - d. periodic reviews of Proximity Cardholders to confirm continued eligibility are performed;
  - e. the number of DP cards issued to tenants comply with the Administrative Code; and
  - f. amounts due for all unauthorized cards are billed and collected.
5. Develop written procedures to guide staff through day to day processes for tenant employee parking;
6. Include sales and use tax on monthly fees billed for DP cards;
7. Collect sales and use tax on prior parking fees billed to tenants and remit taxes collected to the State of Florida; and

8. Periodically test employee parking system access restrictions to ensure they are operational.

**Implementation Status:**

1. **Partially implemented.** Management has implemented new procedures to provide additional segregation; however, the following duties of Employee Parking Clerks in the SP+ office are not adequately segregated:

- ❖ access to the inventory of the returned used Proximity Cards;
- ❖ issuance of Proximity Cards; and
- ❖ opening/closing of tenant employees' accounts in PARIS Application.

We encourage to management work with SP+ to further separate and strengthen segregation of the incompatible duties so that more than one individual has:

- A. Ability to issue Proximity Cards;
  - B. Access to Proximity Card inventory; and
  - C. Ability to open and close tenant employees accounts.
2. **Partially Implemented.** SP+ implemented cash registers in response to our recommendation, but then discontinued their use when they eliminated cash as a method of payment. SP+ currently accepts checks and credit card payments. Management has indicated that the business decision to discontinue the use of cash registers was to shorten transaction time and improve the customer experience. Management further has indicated that credit card and check payments can be currently tracked using existing report details which will be tracked easier when a new computer system is installed in the first quarter of 2020 that would allow payments to be entered directly into the parking and revenue control system. We encourage SP+ to continue the use of cash registers in order to maintain accountability.
  3. **Partially implemented.** SP+ has implemented procedures to follow-up on collections and provide outstanding receivable reports to BCAD Finance; however, write-off procedures do not comply with the County policies and procedures.

***We again recommend that management follow County policies and procedures for write-off of uncollectible accounts.***

4. **Partially implemented.** We noted the following:

a. **Implemented.**

b. **Not Implemented.** We noted one employee with two active proximity card accounts.

*We again recommend management ensure card issuance procedures are adequate to preclude an employee from having more than one Proximity Card.*

c. **Implemented.** Effective January 15, 2020 new processes were implemented to further segregate duties for DP and proximity cards.

d. **Implemented.** Effective January 8, 2020, management has implemented new processes to perform periodic reviews of proximity cardholders.

*We again recommend management perform formal periodic reviews of proximity cardholders to confirm continued eligibility.*

e. **Implemented.**

f. **Implemented.**

5. **Implemented.** However, we encourage BCAD to work with SP+ to ensure the written procedures are consistently followed.

6. **Implemented.**

7. **Implemented.**

8. **Implemented.**

**2. Lack of Adequate Oversight of Employee Parking Operations.**

**A. BCAD does not adequately reconcile employee parking payments received by SP+ and does not record accounts receivable in the County's financial records.**

BCAD records only the amounts deposited by SP+ in the County's bank account in the County's financial records; however, BCAD does not periodically reconcile payment transactions processed in the billing system used by SP+ (CARS) to amounts deposited in the County's bank account to validate that deposits are complete as recommended in Report 11-01. In addition, we noted that BCAD does not record accounts receivable in the County's financial records as required by County policy and Generally Accepted Accounting Principles.

**B. BCAD and SP+ charge or waive certain parking fees without approval by the Board of County Commissioners.**

During our review, we noted the following:

- ❖ Fees for stolen DP cards are waived by BCAD with a police report resulting in loss of revenue.
- ❖ SP+ charges a \$35 replacement fee for lost Proximity cards and waives the fee for stolen cards if the employee provides a police report.

**We recommended** the Board of County Commissioners direct the County Administrator to require BCAD to work with SP+ to:

9. Periodically reconcile payment transactions in CARS to amounts deposited in the County's bank account;
10. Record accounts receivable from parking operations in the County's financial records; and
11. Ensure that parking fees are collected or waived only as authorized by Chapter 39.2 of the Administrative Code.

**Implementation Status:**

9. **Implemented.** Effective November 30, 2019, BCAD obtains payment transaction reports from the CARS Application to facilitate reconciliation.
10. **Implemented.** Effective November 20, 2019, BCAD records accounts receivables in the County's financial records.
11. **Partially Implemented.** BCAD management, working with the County Attorney's Office, has drafted a proposed amendment to Chapter 39.2 of the Administrative Code to authorize the current practice of collecting and waiving specific fees; however, the proposed amendment has not yet been approved by the Board. Management has indicated that submission to the Board is expected in early 2020.

**3. BCAD's IT Server Rooms Lack Adequate Physical and Environmental Controls**

**A. Environmental controls are not adequate in the server room to maintain an environment suitable for valuable computer resources and data.**

Parking information systems are housed in an enclosed room in an Airport parking garage. This room does not have sufficient environmental controls to safeguard valuable computer resources including adequate temperature, humidity, and fire suppression systems.

**B. An excessive number of individuals have physical access to the server rooms housing parking information systems.**

An excessive number of employees have physical access to server rooms housing parking information systems increasing the risk of theft, modification, or accidental damage to critical parking system resources and data. At the time of our review, we noted that access was not appropriately restricted to the least number of people based on job responsibilities:

- ❖ 187 individuals had access to backup servers and databases.
- ❖ 42 individuals had access to production servers and databases.

**We recommended** the Board of County Commissioners direct the County Administrator to require BCAD to work with SP+ and HUB to:

12. Evaluate the continued suitability of the primary location for production parking information systems;
13. Ensure that appropriate procedures are in place to restrict physical access based on job responsibilities; and
14. Periodically review physical access to validate that only those individuals who require access as part of their job responsibilities are authorized.

**Implementation Status:**

12. **Partially Implemented.** BCAD management has installed a new air conditioning unit in the primary server room to improve airflow. However, due to the original building design, upgrading the remaining environmental controls is cost prohibitive. Management should evaluate the continued suitability of the primary location for production parking information systems.

13. **Implemented.**

14. **Implemented.**

**4. Lack of Compliance with County Information Technology Security Policies and Industry Best Practice Within Parking Information Systems.**

**A. Security controls in the PARIS application are not adequate to tie transactions within the application to a specific user and access is not restricted based on job responsibilities.**

Users of the PARIS application is not required to log-in to gain access to the application, and system files supporting PARIS can be modified by any user. Access is not restricted based on job

duties as required by County policy . The PARIS application does not have the functionality to enforce appropriate security controls.

**B. Security controls in the ADAPT application are not adequate to tie system administrator activity within the application to a specific user and restrict user access based on job responsibilities.**

We noted the following security weaknesses:

- ❖ HUB IT support personnel share an administrator, supervisor, and test account to manage the ADAPT application.
- ❖ Password and account lockout settings do not meet the minimum requirements set by County policy.
- ❖ User access is not appropriately restricted based on job responsibilities and appropriate segregation of duties are not enforced as required by County policy. All users have administrator access and can perform all functions.

**C. The WebPARCS application security is not managed and configured according to BCAD's policies and procedures.**

The WebPARCS application is not managed and configured according to BCAD's policies and procedures. During our review we noted the following:

- ❖ All sections of WebPARCS Access Request Form are not consistently completed as required by WebPARCS policies and procedures when requesting or modifying user access to the WebPARCS application.
- ❖ User access is not consistently implemented on the WebPARCS application as authorized by management on the access request form.
- ❖ User access reviews are not consistently performed as required by WebPARCS User Review and Access Request Procedures and County policy.
- ❖ Three of 41 employee accounts no longer requiring access to the WebPARCS application were not disabled or removed as required by County policy. One of these accounts was assigned to a terminated employee, and the other two accounts belonged to employees who changed job responsibilities and no longer required access.
- ❖ BCAD documented specific access permissions and restrictions for groups of employees in the WebPARCS Access Policy. These access permissions define what these groups of users are allowed and not allowed to do on the application. We compared the access permissions defined in the policy against the access permissions granted in the

application and noted that the WebPARCS group access permissions deviated from access permissions defined in the WebPARCS Access Policy.

**D. Minimum password requirements for the Cashier's system (FXCR) do not comply with County policy.**

Cashier passwords do not expire every 45 days as required by County Policy.

**E. Change management procedures are not documented and do not enforce appropriate segregation of duties for infrastructure changes.**

Management has implemented a process to authorize, test and document changes made to the parking applications as part of a change requested by BCAD or in support of a change made by the vendor; however, we noted the following:

- ❖ Management has not documented established change management policies or procedures related to these applications as required by Federal information system controls standards.
- ❖ Changes to parking applications are tracked manually in a separate spreadsheet and not in the ticketing system where these changes are reviewed and approved as required by federal information system controls standards.
- ❖ Change management procedures do not ensure proper segregation of duties as required by federal information system controls standards.

**F. The domain administrator account is shared by three users reducing user accountability.**

The domain administrator account has full control of the Aviation network and servers on which the parking information systems hosted by BCAD reside. This account is shared by three users; therefore, activity performed by this account cannot be tied to one individual.

**We recommended** the Board of County Commissioners direct the County Administrator to require BCAD to work with SP+ and HUB to:

15. Ensure that application, network, and database security features comply with County information security policies;
16. Ensure that a periodic review of user access to parking applications is performed to validate that access is assigned based on job responsibilities and appropriate segregation of duties. This should include a review of group profile permissions to which employees are assigned;
17. Ensure that employees no longer requiring access to parking information systems, including terminated employees, are removed immediately;



18. Ensure the use of shared passwords is restricted;
19. Ensure that change management policies and procedures are documented and that changes are tracked in the ticketing system; and
20. Enhance the current change management process to ensure that infrastructure changes are not authorized, performed, and tested by the same individual.

**Implementation Status:**

15. **Partially implemented.** Due to current system limitations the PARIS and FXCR applications do not meet County security requirements BCAD has documented these concerns with the current vendor and is seeking, through issuance of an RLI, a replacement for the parking access revenue control systems that meet all current County guidelines.

16. **Implemented.**

17. **Implemented.**

18. **Implemented.**

19. **Implemented.**

20. **Implemented.**

**5. “Contingency Planning.” Disaster Recovery and Business Continuity Plans are inadequate.**

**A. Disaster Recovery and Business Continuity Plans do not include key requirements of Federal information security standards.**

Management has documented its system backup procedures and manual processes related to parking operations in the absence of information technology systems; however, management has not developed a disaster recovery or contingency plan that includes the following Federal information security standards.

- ❖ assessment of the criticality and sensitivity of business applications through a Business Impact Analysis (BIA) or equivalent;
- ❖ documentation of resources required to support critical operations and functions;
- ❖ detailed procedures for recovery and reconstitution of the system's (infrastructure, operating systems, applications, data) original state after a disruption including system test and data validation procedures;

- ❖ documentation and management's approval of processing priorities;
- ❖ periodic training for operational and support personnel on their emergency roles and responsibilities;
- ❖ inclusion or reference to incident response plans and communication plans to be used in an emergency;
- ❖ requirements for the periodic testing, revalidation, or enhancement of recovery procedures;
- ❖ spare or backup hardware to be used in meeting system recovery time objectives defined in the BIA;
- ❖ documentation of approval by key affected groups, including senior management, information security and data center management, and program managers;
- ❖ clear assignments and responsibilities for recovery;
- ❖ identification of an alternate processing facility and the backup storage facility;
- ❖ identification critical data files;
- ❖ sufficient detail to be understood by all entity managers; and
- ❖ coordination with related plans and activities (vendor, agency wide).

**We recommended** the Board of County Commissioners direct the County Administrator to require BCAD to:

21. enhance current disaster recovery documentation and create a comprehensive business continuity plan including the elements listed in Finding #5 above;
22. periodically test the plan under conditions that simulate a disaster at least annually once a comprehensive plan has been developed and approved; and
23. document test results and continually update the plan based on the test results.

**Implementation Status:**

21. **Implemented.**
22. **Implemented.**
23. **Implemented.**

# Management's Response to Prior Report



Exhibit 2

BERTHA W. HENRY, County Administrator

115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7362 • FAX 954-357-7360

**MEMORANDUM**

**DATE:** May 26, 2017

**TO:** Mayor, Vice Mayor, and Board of County Commissioners

**FROM:** Bertha W. Henry, County Administrator

**SUBJECT:** Response to County Auditor's Review of Airport Parking Revenues and Parking Information Systems (Report 17-11)

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County Administration and the Broward County Aviation Department ("BCAD") have reviewed the March 30, 2017, Review of Airport Parking Revenues and Parking Information Systems ("Review").

The County Auditor's Office reviewed controls over parking revenues and parking information systems at the Airport for calendar year ended December 31, 2015 and assessed the status of recommendations in the Airport Parking Systems Review presented to the Board of County Commissioners on September 13, 2011.

The review evaluated revenue from all parking operations (self, valet, and employee parking). During the preliminary assessment, no significant control weaknesses over revenues from self and valet parking were noted, which in FY 2015 generated over \$42.6 million in revenue from approximately 2.7 million transactions at the Airport. As a result, this report focuses on employee parking operations, which in FY 2015 generated approximately \$1.7 million in revenue representing 3.9% of the total \$44.3 million parking operations revenue.

There are approximately 13,000 employees who have access to BCAD's employee parking. BCAD tenant employers pay for 70% of all of those employees. These employers also verify each individual's employment and access privileges every month. Currently, the remaining 30% of tenant employees that self-pay for parking access have to pay within five days from the beginning of the month or their parking privileges are revoked. All proximity cards have to be activated and in current financial status or, they will be deactivated and become useless.

Further in support of the overall access controls that are in place, BCAD has contracted with SP+ Parking to manage both the guests and employee parking operations. SP+ Parking

manages approximately 3,700 individual parking facilities in 357 cities, including 73 airport operations. SP+ Parking has extensive experience in the parking industry managing parking revenue, complying with accepted industry standards for internal controls and managing parking operations and administrative functions.

The County Auditor's Review states that 60% of recommendations (9 out of 15) made on a previously issued review on August 25, 2011, were not addressed as of September 22, 2016. BCAD staff and SP+ Parking took steps to address the recommendations from the 2011 review and assert that 11 out of the 15 recommendations have been addressed as of May 26, 2017. The remaining 4 recommendations (or 27%) from the 2011 review are in the process of being addressed.

For context and ease of reading, employee parking areas are accessed by Airlines, tenants and Airport community employees with two types of cards: Proximity cards that restrict parking to designated employee parking areas and courtesy parking cards (DP) that allow parking in any Airport garage.

Below are the responses to the findings and recommendations:

### ***Employee Parking Revenue***

#### **Finding #1: Revenue Controls- lack of adequate internal control over employee parking revenue:**

- A. Job duties for tenant employee parking operations are not adequately segregated.
- B. The employee parking cash handling process is manual and does not include the use of a cash register as required by the Parking Management Agreement.
- C. SP+ does not follow established County policy for past due accounts receivable.
- D. Internal controls over issued and unissued Proximity and DP cards are not adequate.
- E. SP+ has no written procedures to guide staff through day to day processes for tenant employee parking.
- F. BCAD failed to comply with Administrative Code and Florida Statutes regarding the collection of sales tax.
- G. System controls restricting employees from parking outside of designated areas within Cypress Garage were not in operation for at least 3 months.

### ***Recommendations***

1. Separate incompatible duties so that more than one individual is responsible for completing a process or transaction.

#### **Response:**

SP+ Parking has implemented additional procedures to more clearly segregate duties. Employees who have access to the card activation system, PARIS software, no longer have access to the billing and payment system, CARS software.

2. Install cash registers as required by the parking management agreement.

**Response:**

Agree. BCAD will provide SP+ Parking with a cash register that meets the requirements of the Parking Management Agreement. SP+ Parking has purchased a standalone cash register, which has now been in use since August 1, 2016.

3. Follow County policies and procedures for accounts receivables, including write-off of uncollectible accounts.

**Response:**

BCAD Finance and SP+ Parking will coordinate the proper accounting for employee parking services and the disposition of uncollectible accounts. SP+ Parking will provide BCAD Finance the details for recording accounts receivable on a quarterly basis. SP+ Parking will also coordinate with BCAD Finance quarterly reviews of uncollectible accounts which will be processed in accordance with Broward County policies.

4. Document procedures for the management of issued and unissued Proximity and DP cards to ensure that:
  - a. properly completed and authorized applications support the issuance of each Proximity and DP card;
  - b. card issuance procedures are adequate to preclude an employee from having more than one Proximity Card;
  - c. inventory and segregation of duties controls over unissued Proximity and DP cards are implemented;
  - d. periodic reviews of Proximity Cardholders to confirm continued eligibility are performed;
  - e. the number of DP cards issued to tenants comply with the Administrative Code; and
  - f. Amounts due for all unauthorized cards are billed and collected.

**Response:**

Staff agreed with the recommendations. BCAD has coordinated with SP+ Parking and has implemented and completed a series of policies and procedures that have addressed each of the recommendations listed above. BCAD's current procedures confirm corporate tenants' employees' parking eligibility every month and DP cardholders are confirmed once per year.

5. Develop written procedures to guide staff through day to day processes for tenant employee parking.

**Response:**

SP+ Parking has formulated an operating plan that was developed to specifically address certain FLL employee parking systems additional procedures. This plan was finalized and implemented on April 25, 2016.

6. Include sales and use tax on monthly fees billed for DP cards.

**Response:**

Staff agreed with the recommendation. As of June 2016, sales tax was added to DP parking card invoices.

7. Collect sales and use tax on prior parking fees billed to tenants and remit taxes collected to the State of Florida; and

**Response:**

Staff agrees with the recommendation. Sales and use taxes on all prior invoiced tenant parking fees have been billed to the appropriate customer accounts as of May 2017. The collection of the sales and use taxes amount to approximately \$8,239 for the 5-year period from 2012 through 2016.

8. Periodically test employee parking system access restrictions to ensure they are operational.

**Response:**

Staff agrees with the recommendation. BCAD is acquiring new access control hardware and software as a part of relocating FLL employee parking to the former economy parking lot. These systems will be tested on a routine basis.

**Finding #2: Operations Controls- lack of adequate oversight of employee parking operations**

- A. BCAD does not adequately reconcile employee parking payments received by SP+ and does not record accounts receivable in the County's financial records.
- B. BCAD and SP+ charge or waive certain parking fees without approval by the Board of County Commissioners.

***Recommendations***

9. Periodically reconcile payment transactions in CARS to amounts deposited in the County's bank account.

**Response:**

Cash receipts, checks and employee credit card payments are reconciled to the CARS system and bank deposits by SP+ Parking on a daily shift basis. This information is periodically reviewed by BCAD to ensure revenue is properly recorded.

BCAD will reconcile a monthly detail report from the CARS system to the bank deposits and daily transaction reports received by SP+ Parking.

10. Record accounts receivable from parking operations in the County's financial records; and

**Response:**

Staff agrees with the recommendation. BCAD will use the data contained in the CARS accounts receivable report as the basis to record employee parking accounts receivable.

11. Ensure that parking fees are collected or waived only as authorized by Chapter 39.2 of the Administrative Code.

**Response:**

Agree. BCAD's practice has been to waive the \$35 replacement fee for stolen Proximity or DP cards if a police report is provided and charge a \$35 replacement fee for lost Proximity cards. BCAD will recommend amendments to Chapter 39.2 in the Administrative Code to align these practices with the guidelines for employee parking fees that should be invoiced (e.g. stolen cards). On an annual basis, approximately 20 stolen Proximity or DP cards' replacement fees are waived, totaling \$700. When a Proximity or DP card is reported as stolen, it is revoked and therefore, cannot be used, and is not counted towards an outstanding receivable.

***Parking Information Systems***

**Finding #3: Physical and environmental controls- BCAD's IT server rooms lack adequate physical and environmental controls**

- A. Environmental controls are not adequate in the server room to maintain an environment suitable for valuable computer resources and data.
- B. An excessive number of individuals have physical access to the server rooms housing parking information systems.

***Recommendations***

12. Evaluate the continued suitability of the primary location for production parking information systems;

**Response:**

Agree. BCAD has a project to upgrade the environmental conditions of this room, which will enhance fire, water, and temperature conditions. This project is scheduled to begin in October 2017.



13. Ensure that appropriate procedures are in place to restrict physical access based on job responsibilities; and
14. Periodically review physical access to validate that only those individuals who require access as part of their job responsibilities are authorized.

**Response to No. 13 and No. 14:**

Physical access to these rooms is currently audited annually by BCAD's independent external audit firm, Crowe Horwath. Additionally, BCAD will verify physical access requirements to this area on a quarterly basis.

**Finding #4: Information Security Controls- lack of compliance with County information technology security policies and industry best practice within parking information systems:**

- A. Security controls in the PARIS application are not adequate to tie transactions within the application to a specific user and access is not restricted based on job responsibilities.
- B. Security controls in the ADAPT application are not adequate to tie system administrator activity within the application to a specific user and restrict user access based on job responsibilities.
- C. The WebPARCS application security is not managed and configured according to BCAD's policies and procedures.
- D. Minimum password requirements for the Cashier's system (FXCR) do not comply with County policy.
- E. Change management procedures are not documented and do not enforce appropriate segregation of duties for infrastructure changes.
- F. The domain administrator account is shared by three users reducing user accountability.

***Recommendations***

15. Ensure that application, network, and database security features comply with County information security policies.

**Response:**

Staff agrees with the recommendation. BCAD Information Systems (IS) Staff is coordinating with HUB to clarify and revise BCAD's current security policy to define the levels of security access in ADAPT.

16. Ensure that a periodic review of user access to parking applications is performed to validate that access is assigned based on job responsibilities and appropriate segregation of duties. This should include a review of group profile permissions to which employees are assigned.

**Response:**

Staff agrees with the recommendation. BCAD Information Systems (IS) staff is coordinating with HUB to define the access authorization process, access profiles and to perform quarterly reviews.

17. Ensure that employees no longer requiring access to parking information systems, including terminated employees, are removed immediately.

**Response:**

Staff agrees with the recommendation. BCAD IS staff will include this evaluation as a part of the quarterly reviews.

18. Ensure the use of shared passwords is restricted;

**Response:**

BCAD IS staff use unique accounts for domain administrator access to the system. The built-in "Administrator" account is not shared or used by BCAD IS staff. This account is only used in emergencies and the password is known by limited BCAD IS staff and stored in a locked safe in case of emergency.

19. Ensure that change management policies and procedures are documented and that changes are tracked in the ticketing system; and
20. Enhance the current change management process to ensure that infrastructure changes are not authorized, performed and tested by the same individual.

**Response to No. 19 and No. 20:**

Staff agrees with the recommendation. BCAD IS staff is reviewing and revising the change management process with HUB as necessary.

**Finding #5: Contingency Planning- Disaster Recovery and Business Continuity Plans are inadequate.**

- A. Disaster Recovery and Business Continuity Plans do not include key requirements of Federal information security standards.

***Recommendations***

21. Enhance current disaster recovery documentation and create a comprehensive business continuity plan including the elements listed in Finding #5 above;
22. Periodically test the plan under conditions that simulate a disaster at least annually once a comprehensive plan has been developed and approved; and
23. Document test results and continually update the plan based on the test results.

**Response to No. 21, No. 22 and No. 23:**

Agree. The BCAD IS Division is coordinating with SP+ Parking, HUB and BCAD Operations Division to develop a comprehensive business continuity plan. This process will include performing a business impact analysis, reviewing resource allocations and enhancing existing documentation and procedures. Once the plan is implemented, BCAD will annually test the plan under conditions that simulate a disaster and document the results. This plan will become part of the BCAD Continuity of Operations Plan (COOP) and will be regularly updated along with the other BCAD COOP plans.

cc: Kathie-Ann Ulett, Acting County Auditor  
Joni Armstrong Coffey, County Attorney