

August 26, 2013

# RE: PFC Application No. 13-11-C-00-JAX

### Jacksonville Aviation Authority's Notice of Intent to Apply for Authority to Impose and Use a Passenger Facility Charge for Certain Projects at Jacksonville International Airport

The Jacksonville Aviation Authority (Authority or JAA) has determined the need to submit to the Federal Aviation Administration (FAA) a new application to impose and use a passenger facility charge (PFC) at Jacksonville International Airport (Airport or JAX). PFC proceeds will be used to fund eligible project costs for certain projects at the Airport. The Authority is posting this public notice as part of the PFC application process under 14 CFR § 158.24. As part of this process, the Authority is providing the public with the following information regarding the proposed PFC Application No. 13-11-C-00-JAX:

# Description of/justification for each new project pursuant to Section 158.24(b)(1)(i) and Section 158.24(b)(1)(ii)

A description of and justification for each of the projects being included in new PFC Application No. 10-10-C-00-JAX is provided in Attachment A.

# <u>PFC level, estimated total PFC revenue to be used for each project, proposed charge effective date, estimated charge expiration date, and estimated total PFC revenue pursuant to Section 158.24(b)(1)(iii through vii)</u>

The Authority will seek authority for a PFC with the following characteristics:

- ★ PFC level: A four dollar and fifty cent (\$4.50) charge on passengers enplaned at the Airport.
- ★ The total PFC revenue to be used for each project is provided in Attachment A.
- Proposed charge effective date: November 1, 2024 (which reflects the estimated charge expiration date for approved PFC Application No. 11-10-C-00-JAX).

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- ★ Estimated charge expiration date: August 1, 2025 (or until collected revenues plus interest thereon equal the allowable costs of the approved projects, as permitted by regulation).
- ★ Estimated total PFC revenue under this application: \$12,755,994.

#### Authority point of contact pursuant to Section 158.24(b)(1)(viii)

As required under 14 CFR § 158.24, the Authority will be accepting public comments on the proposed PFC Application No. 13-11-C-00-JAX up to 30 days after the August 26, 2013 date of posting this public notice on our internet website (i.e., up to September 26, 2013). Any comments should be sent to Todd Lindner, Jacksonville Aviation Authority, 14201 Pecan Park Road, Jacksonville, FL 32218. If there are any questions regarding this proposed PFC application, Mr. Lindner may also be reached at 904/741-2228 or at todd.lindner@flyjacksonville.com.

#### ATTACHMENT A

#### Section 158.23(a)(1). Description of Projects

#### 1. Baggage Handling System Recapitalization/Optimization

Project Amount:	\$25,000,000
<b>Other Funding Sources:</b>	<sup>1</sup> \$22,500,000
PFC-Eligible Project Costs:	\$2,500,000
PFC Financing & Interest Costs:	\$0
PFC PAYGO:	\$2,500,000
PFC Collection Level:	\$4.50
Start Date:	August 2012
End Date:	October 2014
<sup>1</sup> Other Funding Sources includes \$22.5 million dollars	distributed through an Other

<sup>1</sup>Other Funding Sources includes \$22.5 million dollars distributed through an Other Transaction Agreement through the Transportation Security Administration.

**Description.** The Baggage Handling System (BHS) at Jacksonville International Airport (JIA) was one of the first integrated, in-line baggage screening systems to be commissioned in the US on January 1, 2003. In 2006 the core of the system was reconfigured from a single central matrix consisting of five Explosive Detection System (EDS) machines to a decentralized, dual matrix configuration containing three machines each. While the 2006 reconfiguration greatly improved the efficiency and reliability of the system, certain segments of the system were largely untouched and the work was conducted to meet now outdated TSA standards.

JIA has been notified by the Transportation Security Administration (TSA) that its system has been designated to undergo "recapitalization" (replacement of the original EDS machines and ancillary work) at a cost to be 100% funded by TSA. TSA has also indicated that additional funding will be made available for system "optimization" at approximately 90% participation. The recapitalization project will include the replacement of the three CTX9000 machines (400 bph) positioned in the South Matrix and the three CTX9000 machines positioned in the North Matrix with the CTX-9800 machines (680 bph).

**Project Need/Justification.** TSA has communicated to JIA in a letter dated May 11, 2012 that the existing CTX9000 EDS machines are nearing the end of useful life. The conveyors and control systems that feed the screening matrices (ticket counter, curbside), as well as those needed for sortation and delivery to the airline make-up devices, are now ten years old. While much of the conveyor systems are still serviceable, the control systems are outdated, difficult to maintain, and in need of replacement. In addition, certain aspects of the overall system operation should be upgraded in order to meet the current (PGDS v4.1) operating standards and preserve and enhance safety through compliance with Part 1544.

#### 2. Closed Circuit Television (CCTV) Replacement

Project Amount:	\$3,500,000
<b>Other Funding Sources:</b>	\$490,000
PFC-Eligible Project Costs:	\$3,010,000
PFC Financing & Interest Costs:	\$0
PFC PAYGO:	\$3,010,000
PFC Collection Level:	\$4.50
Start Date:	October 2013
End Date:	October 2015

**Description.** This project will include the design and installation of a new Closed Circuit Television (CCTV) and video system to be used in the public areas of the JIA passenger terminal, concourses, Secure Identification Area (SIDA) and parking facilities to prevent the unauthorized intrusion of unidentified individuals into the Aircraft Operations Area (AOA). Additionally, CCTV is relied upon to monitor the movement of persons exiting buildings and vehicular roadways and other landside locations onto the AOA. The existing system was installed in 1998 and includes 220 fixed cameras and 124 pan-tilt-zoom (PTZ) cameras for a total of 344. The existing system is based on Bosch analog cameras at a resolution of 704 x 480 (4CIF) at 30 frames per second, which are transported to an encoder, which converts the image to digital before storing the data on a network storage device (SAN Array). It has been determined some portals and specific areas of the terminal, concourses and parking areas are not viewable via CCTV. Additionally, when a door alarm occurs, the existing system will not allow the pre-positioning of PTZs or call-up for alarm viewing of local cameras. Therefore, by the time the correct camera is called up, the alarm event is often over and the situation cannot be assessed.

To address these issues and expand the viewing extents a new digital CCTV video management system will be incorporated. The proposed system will be expandable and based on an internet protocol (IP) platform. The system will include the use of approximately 600 cameras and concentrate on the use of fixed cameras, which are smaller and less expensive to maintain. It is estimated 516 cameras (86%) will be needed to prevent the unauthorized intrusion of unidentified individuals onto the AOA. The remaining 84 cameras (14%) will be applied to the parking structure to support local law enforcement functions. Therefore, 86% of the project is eligible for PFC funding.

**Project Need/Justification.** The existing CCTV system is 15-years old and is nearing the end of its useful life. Additionally, the current system provides no expansion capacity in the field to support additional cameras. The current CCTV system is not reliable and not user friendly. When alarms are received, the call-up of video is a manual process. If the camera is a fixed type camera, then the recorded video can be reviewed, but as a separate application, which takes additional time to call-up and retrieve the appropriate video. By the time the incident is assessed by this process, a significant amount of time has elapsed. This could result in a larger security event and compromise compliance with Part 1542 as compared to a security event addressed with a system integrated to provide the needed information in a timely manner.

#### 3. Yankee & Dixie Clipper Pavement & Drainage Rehabilitation

Project Amount:	\$2,000,000
Other Funding Sources:	<sup>2</sup> \$1,500,000
PFC-Eligible Project Costs:	\$500,000
PFC Financing & Interest Costs:	\$0
PFC PAYGO:	\$500,000
PFC Collection Level:	\$3.00
Start Date:	November 2012
End Date:	October 2014
<sup>2</sup> Other Funding Sources includes \$1,500,000 in AIP 3-	-12-0035-052-2013.

**Description.** The project will include the design and rehabilitation of the pavements and localized drainage infrastructure associated with Yankee Clipper Road and Dixie Clipper Road, which are the primary access and egress transportation routes serving the JIA passenger terminal. Both roads are composed of asphalt. The project area associated with Dixie Clipper extends east from the southern end of the terminal to the intersection of Dixie Clipper and Pecan Park Road and includes approximately 2,200-linear feet (L.F.) of pavement. The project area associated with Yankee Clipper extends west from the intersection of Yankee Clipper and Pecan Park Road to the northern end of the passenger terminal and includes approximately 2,100-L.F. of pavement. Pavement associated with both (Yankee and Dixie Clipper) roadway sections were constructed in 1989 and have undergone no rehabilitation. Current Pavement Condition Index (PCI) ratings for roadway sections of Dixie Clipper within the project area range from 66 to 70 with approximately 56% of the reparation evidenced by load related distresses. Pavement Condition Index (PCI) ratings for roadway sections for roadway sections of Yankee Clipper within the project area is 58 with approximately 64% of the rehab needs evidenced by load related distresses.

To rectify the issues on Dixie Clipper, the project will include the milling and replacement of the asphalt pavement surfaces and implementing improvements to address drainage deficiencies. Drainage improvements will include silt buildup removal from pavement edge and in-pavement drainage inlet repair. For Yankee Clipper, the project will involve complete removal and replacement of approximately 700-L.F. of pavement located in the center of the project area. The remaining pavement located in the project area associated with Yankee Clipper will receive milling and asphalt overlay. Additionally, drainage improvements will be made to drainage inlets in order to prevent future damage resulting from standing water.

**Project Need/Justification.** Yankee Clipper Road and Dixie Clipper Road are the primary access and egress transportation routes serving the JIA passenger terminal. The rehabilitation of these roads is necessary in order to ensure direct access to the JIA terminal facilities is preserved. Based on deterioration rates outlined in *Pavement Management for Airports, Roads and Parking Lots*, rehabilitation is now recommended. Further delay will result in exponential deterioration and significant increases in rehabilitation costs. Yankee and Dixie Clipper Roads are located on land owned by the Jacksonville Aviation Authority (JAA) and are for the exclusive use of airport patrons.

4. Infrastructure Back Bone and Network Upgrade

Project Amount:	\$1,500,000	
Other Funding Sources:	\$150,000	
PFC-Eligible Project Costs:	\$1,350,000	
PFC Financing & Interest Costs:	\$0	
PFC PAYGO:	\$1,350,000	
PFC Collection Level:	\$3.00	
Start Date:	<b>July 2013</b>	
End Date:	October 2014	

**Description.** Airport Security Systems including access control and Closed Circuit Television (CCTV) at Jacksonville International Airport (JAX) are dependent upon fiber optic cabling and related Information Technology (IT) infrastructure. The existing IT infrastructure in place does not provide robust level of service necessary to support the organization's security systems. To ensure the IT capabilities are in place to provide the level of IT service needed by the organization and its stakeholders, a complete overhaul of the JIA fiber optics backbone will be conducted by creating a survivable ring that diversifies communications along two different routes. In addition, it will upgrade the existing JIA data network to an enterprise level, high-availability network to support future CCTV and highspeed operations.

Provided below is an analysis of the applicability of the infrastructure backbone and the different beneficiaries. Through this process it was determined 90% of the infrastructure backbone project is eligible to be funded with PFC funds.

Airport Entity	<u>Ratio of Use or</u> Applicability	Percent PFC Eligible
CCTV	55%	100%
Access Control	20%	100%
FIDS, GIDS & BIDS	10%	100%
JAX Operations	5%	0%
Passenger Wireless Services	5%	100%
Air Carrier Wireless Services	3%	0%
Other Tenant Wireless Services	2%	0%
Total	100%	90%

**Project Need/Justification.** Rehabilitation of the fiber-optic's backbone and upgrade of the network serving JIA is needed in order to support the equipment and software necessary for complying with the security requirements outlined in Part 1542.

#### 5. Landside Pavement Rehabilitation

Project Amount:	\$1,267,830
Other Funding Sources:	<sup>3</sup> \$728,288
PFC-Eligible Project Costs:	\$539,542
PFC Financing & Interest Costs:	\$0
PFC PAYGO:	\$539,542
PFC Collection Level:	\$3.00
Start Date:	November 2012
End Date:	<b>March 2013</b>
<sup>3</sup> Other Funding Sources includes \$410,110 in JAA Funds through AIP 3-12-0035-050-2012.	and \$318,178 distributed

**Description.** The Design and Rehabilitation of Landside Pavement includes sections of multiple roadways, which provide varying levels of access to the passenger terminal serving Jacksonville International Airport. Recommendations for roadway improvements were determined through a Landside Pavement Evaluation conducted in January 2012. Provided below is a listing of the roadways associated with this project and eligibility status as determined by FAA and documented in the Plans and Specification Approval letter dated May 24, 2012 (Revised January 08, 2013, Plans and Specification Approval).

#### Eligibile Roadways

- Dixie Clipper Road Section A (Term Lower Egress)
- Pecan Park Avenue (Sections A & C)
- Yankee Clipper Road Section A (Term Lower)
- Yankee Clipper Road Section A-1 (TermUpper)

#### Ineligible Roadways

- Air Cargo Lot Section A
- Thomas Imeson Avenue Section A
- Parking Access Road Section D
- Surface Parking Lot Section A
- Toll Plaza Section C
- Delivery Service Road

#### Dixie Clipper Road – Section A (Terminal Lower Egress)

Through the pavement evaluation it was determined Dixie Clipper Road – Section A has a Pavement Condition Index of 14. Dixie Clipper Road -Section A extends from the exit of the parking garage to the merge of other egress lanes providing the primary means of exiting the JIA premise and includes an area of approximately 239 square-yards of pavement. This transition includes a significant grade change requiring modification. The pavement section was last rehabilitated in December 1999. Distresses associated with Section A included load related alligator cracking and severe rutting. At this location, there is a stop sign prior to the merge with the other egress lanes, which is causing a significant amount of point load. Distresses of this magnitude require complete reconstruction to the pavement section. In order to prevent the severity of pavement failures associated with this pavement section, the asphalt will be replaced with concrete pavement 8" in depth during reconstruction.

#### Pecan Park – (Sections A & C)

Pecan Park Section A includes the area where Yankee Clipper and Pecan Park Road connect to the southwest. Pecan Park Section A was last rehabilitated in December 1999 and includes an area of approximately 400 square-yards. This pavement section has a Pavement Condition Index of 14 and displays various failing patches, alligator cracking, and evidence of the previous overlay is losing its bond to the pavement underneath. In addition, vehicles are leaving the pavement surface and driving on the grass shoulder causing damaged pavement edges. Rehabilitation of Section A will include milling and replacing the existing surface. Additionally, the rehabilitation will include widening the Section by two (2') and applying curb and gutter to eliminate vehicles from leaving the pavement.

Pecan Park Section C contains an area of approximately 500 square-yards and includes that portion of Pecan Park Road, which ties into Dixie Clipper Drive. Section C has a Pavement Condition Index of 57. This portion of Pecan Park Road has an area of rutting and failing pavement, which consists of approximately 150 square-yards. This area is located near the intersection of Dixie Clipper Drive. This area will be reconstructed with milling and resurfacing.

# <u>Yankee Clipper Road – (Sections A (Terminal Lower Level-Outside Lane) & A-1 (Terminal Lower Level-Inside Lane)</u>

Yankee Clipper Section A is located in the bus and taxi lane in front of the terminal passenger pick up area. The section of roadway has a Pavement Condition Index of 64 and exhibits several standing water issues, curb and gutter damage, pavement scars from removed reflectors and old markings, failing patches, pavement cracking, and rutting at the exit. Yankee Clipper Section A was last rehabilitated in December 1999. This section of roadway ranks at the top of the list for rehabilitation needs because of location and use. To address the issues, a majority of this section of roadway will be milled and resurfaced. At the end of the roadway section where rutting and previous patching are evident, the area will be reconstructed with concrete.

Yankee Clipper Section A-1 is located in the passenger pick up lane, in front of the terminal under the passenger drop-off bridge. Yankee Clipper Section A-1 has a Pavement Condition Index of 63. This section of roadway was last rehabilitated in December 1999. This area is positioned under an overpass and was not designed to handle heavy rainfall. However, viewed and identified on a site visit was standing water and pavement distresses caused by standing water. Therefore, prior to completing any pavement rehabilitation in this section the drainage issues will be addressed. The standing water has resulted in isolated areas of rutting and alligator cracking. Following completion of the repairs to the drainage system, the pavement will be milled and surfaced. Additionally, the pavement grades will be adjusted in order to control the flow of water.

Table 1-5 provided below reflects the PFC and AIP eligibility as determined by FAA and reflected in the Plans and Specification Approval letter dated May 24, 2012 (Revised January 08, 2013, Plans and Specification Approval).

# Table 1-5Landside Pavement RehabilitationPFC/AIP Eligibility

Line Item	Cost	%Eligible	JAA	FAA-AIP <sup>1</sup>	PFC
Design & Bid	\$195,021.00	78.20%	\$42,514.58	\$0.00	\$152,506.42
Re-Bid	\$6,178.00	78.20%	\$1,346.80	\$0.00	\$4,831.20
General (Mobilization)	\$71,948.25	69.69%	\$21,807.51	\$0.00	\$50,140.74
Force Account	\$45,955.15	69.69%	\$13,929.01	\$0.00	\$32,026.14
Yankee & Dixie Clipper	\$430,578.44	100.00%	\$0.00	\$318,178	\$112,400.44
Air Cargo Lot	\$149,860.50	0.00%	\$149,860.50	\$0.00	\$0.00
Delivery Road	\$42,980.53	0.00%	\$42,980.53	\$0.00	\$0.00
Parking Access Drive	\$28,917.88	0.00%	\$28,917.88	\$0.00	\$0.00
Pecan Park Road	\$66,688.96	100.00%	\$0.00	\$0.00	\$66,688.96
Toll Plaza	\$24,373.03	0.00%	\$24,373.03	\$0.00	\$0.00
Imeson Rd/Clarion Loop	\$22,964.28	0.00%	\$22,964.28	\$0.00	\$0.00
Surface Parkig Lot (I,II,III)	\$35,688.76	0.00%	\$35,688.76	\$0.00	\$0.00
Surface Parkig Lot (IV,V,VI)	\$25,727.26	0.00%	\$25,727.26	\$0.00	\$0.00
Replace Downspouts and Piping	\$120,948.33	100.00%	\$0.00	\$0.00	\$120,948.33
Totals	\$1,267,830.37	68.00%	\$410,110.14	\$318,178.00	\$539,542.23

<sup>1</sup>AIP dollars received as part of 3-12-0035-050-2012

**Project Need/Justification.** The pavement associated with the aforementioned roadway links have outlived their useful life. The PCI associated with each of the eligible roadway links are less than "Satisfactory" and in some cases "Failing". The Jacksonville Aviation Authority (JAA) is dependent upon these roadways to accommodate passengers arriving and departing the terminal complex.

#### 6. Perimeter/Wildlife Fencing

Project Amount:	\$893,806
Other Funding Sources:	<sup>4</sup> \$670,354
PFC-Eligible Project Costs:	\$223,452
PFC Financing & Interest Costs:	
PFC PAYGO:	\$223,452
PFC Collection Level:	\$3.00
Start Date:	August 2012
End Date:	<b>July 2013</b>
<sup>4</sup> Other Funding Sources includes \$670,354 in AIP Discretional part of AIP 3-12-0035-050-2012	ry Funds received as

**Description.** At Jacksonville International Airport (JAX), there are currently two different types of fences, which enclose the airport property. One fence line is located on or in very close proximity to the airport's property line. This fence line is serving as a security fence. Maintaining this fence line has proven to be difficult as it is not feasible to clear away vegetation and tree growth from the un-secured side (or side of fence not under the control or

ownership of JAA) of the fence line. The second line of fence is located closer to the active airfield pavements and is serving as a wildlife fence to prevent wildlife from interfering with airport operations. This fence line does not meet current FAA's standards of either wildlife or security fencing. Additionally, the existing fence does not meet Transportation Security Administration (TSA) standards.

To enhance security and prevent the incursion of wildlife onto the Aircraft Operations Area, the JAA has undertaken a project to install one new fence line that meets both FAA standards for wildlife control along with security. The project will consist of removing and replacing existing 6-foot security fence with 8-foot and 10-foot security fencing. The fencing project will initiate in the northeast quadrant of the airfield near the approach end of Runway 26 at Pecan Park Road and extend southwest along the northern perimeter of the airfield before wrapping around the approach end of Runway 8 and terminating at the intersection of Pace Road where the new fence will join the existing wildlife/security fence. This portion of the project will also include replacing two nominal portions of fencing located along Cole Flyer Road near the Pecan Park Road airfield entrance. This portion of the project will include replacing a total of 706-linear feet of fencing.

**Project Need/Justification.** The Perimeter/Wildlife Fencing project is necessary in order to ensure the safety of airport operations, flight crews and passengers by reducing the potential risk of wildlife strikes by aircraft and increasing security vigilance as directed by Part 1542. In accordance with Title 14 Code of Federal Regulations Part 139.337, a Wildlife Hazard Management Plan (WHMP) for JAX was approved by FAA June 28, 2012 and incorporated into the Airport Certification Manual (ACM). The WHMP recommends the implementation of wildlife and security fencing in accordance with FAA standards and burying the base of the fence 8- to 24-inches below the surface and maintain the base of gates at a height lower than six inches above ground level. In accordance with the recommendations of the WHMP, the fence will be buried a depth ranging from eight (8-) to 24-inches along with making the recommended height and fabric modifications.

#### 7. ARFF Vehicle (Crash-18) Replacement

Project Amount:	\$800,000
<b>Other Funding Sources:</b>	\$0.00
<b>PFC-Eligible Project Costs:</b>	\$800,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$800,000
PFC Collection Level:	\$4.50
Start Date:	February 2015
End Date:	<b>March 2015</b>

**Description.** This project will consist of purchasing an Aircraft Rescue and Fire Fighting (ARFF) vehicle to replace Crash-18 as required by FAR Part 139.317, in order to provide emergency services and associated rescue equipment to the airport in the event of an accident

or incident. Crash-18 is a 2005 Oshkosh Striker, which has a water capacity of 3,000-gallons, 600-gallons of AFFF and 500 gallons dry chemical.

Replacement of the Crash-18 vehicle is planned for FY2015 and included in the Jacksonville Aviation Authority (JAA) Capital Improvement Program (CIP). The replacement vehicle will be an Oshkosh and have a water tank with a useable capacity of 3,000 gallons of water, a 420-gallon reservoir for AFFF, water pump, roof turret, two water/foam hand lines and a high volume, low attack (HVLA) bumper turret.

**Project Need/Justification.** This new ARFF vehicle is required in order to replace ARFF equipment, which in 2015 will have outlived its useful life. Additionally, the replacement ARFF vehicle is necessary in order to maintain the airport's ARFF Index D capabilities, which ensures the preservation and enhancement of the safety of aircraft operations.

#### 8. Upgrade Security Perimeter Road

Project Amount:	\$750,000
<b>Other Funding Sources:</b>	\$0.00
PFC-Eligible Project Costs:	\$750,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$750,000
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	May 2014

Description. The Jacksonville International Airport (JAX) has 41,000 linear feet of wildlife/security fence line encompassing the facility. Federal Aviation Regulation Parts 139 and 1542 require this fence line is inspected twice daily to check for signs of wildlife intrusion, damage, security breaches and conditions resulting in a compromise of security. These inspections are carried out in a vehicle typically travelling on a security perimeter road placed adjacent to the airport's wildlife/security fence. The security perimeter road associated with the JIA fence line is intermittent. For that portion of fence line extending southwest from Pecan Park Road on the north side of the airfield near the approach end of Runway 26 to the approach end of Runway 8 before intersecting with Pace Road (adjacent to the wildlife/security fence also included in this application), currently no proper security perimeter road exists and a dirt path is used. This area is plagued with washouts, saturation issues and other terrain deficiencies. To address this issue, a security perimeter road composed of aggregate measuring six-inches (nominal) in depth and approximately 21,411linear feet in length will be developed along the wildlife/security fence. The new road will initiate at the intersection of Pecan Park Road to the north and extend southwest along the northern edge of the airfield, and terminate near the intersection of Pace Road.

**Project Need/Justification.** The construction of the Security Perimeter Road is necessary in order to enhance safety through the provision of an aggregate throughway to allow JAA to comply with FAR 139 and 1542 inspection requirements.

#### 9. Roadway Signage and Message Boards Rehab

Project Amount:	\$600,000
<b>Other Funding Sources:</b>	\$0.00
<b>PFC-Eligible Project Costs:</b>	\$600,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$600,000
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	May 2014

**Description.** The Roadway Signage and Message Boards project will consist of rehabilitating four such signs and message boards at Jacksonville International Airport (JAX). Airport Road, which splits into Yankee Clipper Road (access) and Dixie Clipper Road (egress), serves as the primary arrival and departure route for JAX. The purpose of these signs is to provide directional and emergency information to arriving and departing JAX patrons. Of the four message board signs to be rehabilitated, one is located along Yankee Clipper Road (arriving patrons), while a second similar sign and message board is located along Dixie Clipper Road (departing patrons). These signs were installed in 2000 and have outlived their useful life. Both of these signs will be replaced with Light Emitting Diode (LED) message boards each measuring approximately eight-feet vertical and 10-feet horizontal.

The remaining two message boards to undergo rehabilitation are located at the vertex of the split of Yankee Clipper and Dixie Clipper Road from Airport Road. These two signs are inserts into a larger ground based structure, which includes the sign indicating patron's arrival at JAX. These two signs were installed in 2000 and have outlived their useful life. These sign inserts will be replaced with LED message boards each measuring approximately 10-feet vertical and 12-feet horizontal.

**Project Need/Justification.** The existing sign boards are 13-years old and are becoming extremely difficult to maintain as a result of the unavailability of parts and the antiquity of the signs. These signs have outlived their useful life. This project is necessary in order to provide a reliable means of communicating traffic, parking and directional information to passengers arriving and departing the airport in automobiles.

#### **10.** Passenger Wireless and Infrastructure

Project Amount:		\$300,000	
<b>Other Funding Sources:</b>		\$0.00	
PFC-Eligible Project Costs:		\$300,000	
PFC Financing & Interest Costs:			
PFC PAYGO:		\$300,000	
PFC Collection Level:		\$3.00	
Start Date:	0	October 2013	
End Date:		May 2014	
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**Description.** JAA currently owns a common wireless data network as an extension to their operational network. Wireless coverage includes the Jacksonville International Airport (JAX) Passenger Terminal, Concourses, and exterior curbs. The JAA wireless service is currently free to the traveling public. The communication bandwidth is limited and connectivity becomes spotty upon increase of demand on the service. Current network equipment was installed in 1998 and is at the end of its life cycle, which is evidenced by consistent single points of failure. This project will expand the passenger Wi-Fi capability in order to increase bandwidth and accommodate higher data needs, as well as an ever-increasing number of wireless devices. This will be accomplished through the installation of additional fiber to accommodate the bandwidth demand requirements and Wi-Fi access points and necessary connectivity and cabling to communicate with the corp network.

**Project Need/Justification.** The existing Wi-Fi network equipment is 15-years-old and has reached the end of its useful life. Additionally, the existing system is not capable of meeting the Wi-Fi demands of the 21<sup>st</sup> century traveler as a result of the technological advances made since the existing system's inception. The proposed system will allow passengers Wi-Fi capabilities expected by today's flying community.

#### **11. Terminal Infrastructure Enhancements**

Project Amount:	\$518,000
<b>Other Funding Sources:</b>	\$0.00
PFC-Eligible Project Costs:	\$518,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$518,000
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	May 2014

**Description.** The Jacksonville International Airport (JAX) passenger complex consists of passenger arrival and departure curbs, passenger-ticketing terminal (terminal upper level), baggage claim facilities (terminal lower level), passenger information booth (terminal lower level), the pre-security courtyard, passenger security screening and Concourse 'A' and 'C'. Concourses 'A' and 'C' were demolished and reconstructed. Concourse 'A' was completed April 25, 2008 and Concourse 'C' was completed October 30, 2008. A new signage system was installed as part of the Concourse 'A' and 'C' project. The remaining elements of the JAX passenger complex were not part of the Design and Construction of Concourses 'A' and 'C' Expansion project. As a result, directional signage and other finishes throughout the terminal complex are inconsistent with those associated with the Concourse 'A' and 'C' project.

The Terminal Infrastructure Enhancements project will include the addition of new location and directional signage and other finishes throughout the terminal complex to provide consistency with those signage elements and finishes found in the reconstructed concourses. Areas primarily impacted will include the Ticketing Area, Baggage Claim Area and Curbside. In addition to signage, this project will also include upgrading the lower level passenger information booth and associated passenger convenience amenities and improvements.

**Project Need/Justification.** This project is needed in order to continue to allow JAX to provide the necessary capacity to meet the forecasted passenger demand of 4 million enplaned passengers and improve passenger flow, safety and security by providing clear direction to arriving and departing passengers. The existing signage and finishes placed in the terminal complex were not designed to facilitate the movement of the level of existing or forecast passenger demand experienced daily at JAX. If the existing terminal signage components are not addressed, additional congestion may result from the lack of direction received from the existing way-finding components.

#### 12. New Data Center

Project Amount:	\$500,000
<b>Other Funding Sources:</b>	<sup>6</sup> \$200,000
PFC-Eligible Project Costs:	\$300,000
PFC Financing & Interest Costs:	,
PFC PAYGO:	\$300,000
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	September 2014
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<sup>6</sup>Other Funding Sources include \$200,000 in JAA Funds.

**Description.** The Jacksonville International Airport (JAX) maintains a single data center. The existing data center measures 40.75-feet in length and 18.5-feet in width and is located in the lower level of the airport terminal. The purpose of the data center is to provide a means to consolidate computer systems and associated components, such as telecommunications equipment, storage systems, and system head-ends/servers. The existing data center is not adequately cooled or powered and lacks adequate fire suppression. The dependency of JAX on a single data center, which provides no redundancy, is a threat to the airports' operation. Under the current configuration, should JAX experience an event that disrupts the existing Data Center, all communications, vital safety/security systems, enterprise systems, and passenger operation systems will cease to function for an extended period of time (Information Technology and Emergency Management professionals indicate at least two weeks) until a temporary workaround setup can be deployed.

Data centers are often categorized based on the specific "tier level" of the facility. The Uptime Institute developed a tiered classification approach that addresses the need for a common benchmarking standard and rates a data center's ability to support uninterrupted operations. Based upon Information Technology (IT) and security infrastructure provided at similar sized medium hub airports and recommendations of the Jacksonville Aviation Authority (JAA) IT and Security Master Plan, it is recommended the JAA current data center be upgraded from Tier I+ (single point of failure) to Tier II+ (Redundant) facility.

In order to address these issues, a new data center will be created to distribute communication and system equipment between two diversified locations in order to provide redundancy for all systems. To establish the new data center, an existing space measuring 26.6-feet in length and 24.6-feet in width has been identified in the Jacksonville Aviation Authority (JAA) Administration Building. Build-out of the data center will require the installation of a fiber loop, which will include the installation of duct banks to provide the necessary connectivity with the primary data center located in the terminal. Establishment of the new data center will also include the installation of an Uninterrupted Power Supply (UPS), server racks, network switches, virtual firewalls and a power distribution unit. Data storage will be accomplished through the installation of two chassis based servers, each maintaining the capacity of eight server blades. Four server blades will be installed initially in each server allowing capacity necessary to facilitate future data storage needs. To address environmental needs, air conditioning units will be installed to provide in-row cooling. Additionally, a Sapphire Fire Suppression System will be integrated to alleviate further damage in the event of a fire.

The existing data center located in the lower level of the terminal will be upgraded and reconfigured to eliminate all non-standard facilities (e.g. restroom) and provide proper cooling, ventilation, fire suppression and storage capacity. Cooling improvements will include the installation of air conditioning units to provide in-row cooling. Also, a Sapphire Fire Suppression System will be installed. For data storage needs, two – eight blade capacity chassis based server units will be installed and initially incorporate four server blades.

Through an analysis of this project, it was determined approximately 60% of the storage and operational functions of the new data center and modifications to the existing data center will be attributed to addressing compliance with 49 CFR 1542 and meeting TSA requirements. As previously discussed, the existing data center and new data center will each receive two – eight blade capacity chassis based server units along with the necessary hardware and fiber to facilitate the operation of each. Initially, each chassis based server unit will be installed with four server blades for a total of 16 server blades (eight server blades in the existing data center).

Through a review of the operational functionality and the data storage and hardware requirements of each, an analysis was conducted to determine eligibility. The operational function of the JAX data center is to provide the data storage capacity to meet the operational requirements of the CCTV system, access control system, JAX Operations Division functions and JAX Administrative and Management functions. Through this analysis it was determined the data storage capacity of approximately 2.0 server blades (approximately 50% of the four server blades in each server unit) and the associated data transmitting (hardware and fiber) capabilities is necessary to facilitate the operation of the CCTV system. Similarly, it was determined the data storage capacity of approximately 0.4 server blades (approximately 10% of the four server blades in each server unit) and the required data transmitting (hardware and fiber) capabilities is necessary to facilities is necessary to facilitate the operations of the certex data transmitting (hardware and fiber) capabilities is necessary to facilitate the operations and JAX Administrative and Management functions require the data storage and transmitting capabilities of approximately 0.4 (approximately 10%) and 1.2 (approximately 30%) server blades respectively. Therefore, it was concluded approximately 60% of the storage and operational

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functions of the new data center and modifications to the existing data center will be eligible as a result of being attributed to addressing compliance with 49 CFR 1542 and meeting TSA requirements.

<b>Data Center Operational Function</b>	Percentage of Use	<u>PFC</u> <u>Eligibility</u> <u>Percentage</u>
CCTV Storage	50%	100%
Access Control	10%	100%
JAX Operations	10%	0%
JAX Administrative & Management	30%	0%
Total	100%	60%

**Project Need/Justification.** The provision of a redundant data center is necessary to enhance and preserve safety at JAX. The redundant data center supports the Airport Security Plan approved by Transportation Security Administration (TSA). Additionally, the new data center project is needed to enhance compliance with 49 CFR §1542 – Contingency Measures.

Currently, a single data center is provided at JAX in the lower level of the passenger terminal complex. In the event of a hurricane or other catastrophic event, no back-up solution is in place. The redundancy provided by a back-up data center would allow access to Closed Circuit Television (CCTV) data, access control data and other security information. This project will support TSA and the local law enforcement function.

#### **13. Information Display System Server Upgrade**

Project Amount:	\$500,000
<b>Other Funding Sources:</b>	\$0
PFC-Eligible Project Costs:	\$500,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$500,000
<b>PFC Collection Level:</b>	\$3.00
Start Date:	November 2013
End Date:	February 2015

**Description.** Installation of the computer servers supporting the Information Display System (IDS) serving Jacksonville International Airport (JAX) were installed in 1991. As compared to the typical modern servers, these units are comprised of two-rack mounted personal computers. Connectivity is provided through VGA cables and switch which allows for translation from VGA to Ethernet. These servers have outlived their useful life and are in need of replacement.

To rectify these issues, the system will be upgraded with new servers and cabling to eliminate VGA and incorporate Ethernet technology.

**Project Need/Justification.** The existing IDS serving JAX is experiencing significant maintenance issues as a result of the old servers consistently locking. These servers are no longer serviceable as replacement parts are no longer available. Upgrading the servers is necessary in order to provide a reliable means of communicating relevant flight, baggage claim and safety information to passengers and avoiding confusion and congestion.

#### 14. ARFF Crash Vehicle Replacement

Project Amount:	\$250,000
Other Funding Sources:	\$0
PFC-Eligible Project Costs:	\$250,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$250,000
PFC Collection Level:	\$4.50
Start Date:	<b>March 2014</b>
End Date:	<b>June 2014</b>

**Description.** This project includes the purchase of a Airport Rescue and Fire Fighting (ARFF) Crash Vehicle, as required by FAR Part 139.317. The vehicle will be purchased in order to provide emergency services and associated rescue equipment to the airport in the event of an accident or incident. This vehicle will be purchased in Fiscal Year 2014 and replace a 2002 Ford F-550. The 2002 Ford F-550 has reached the end of its useful life and has begun to experience significant maintenance deficiencies. The replacement vehicle will function as a Quick Response Combination Agent Vehicle (CAV). The replacement vehicle will have the capability of storing 450 – pounds of Purple-K (PPK) and 100 gallons of premix foam.

**Project Need/Justification.** This new ARFF vehicle is required in order to replace ARFF equipment, which has outlived its useful life. Additionally, the replacement ARFF vehicle is necessary in order to maintain the airport's ARFF Index D capabilities, which ensures the preservation and enhancement of the safety of aircraft operations.

#### 15. Terminal Canopy Rehabilitation – Departures Level

Project Amount:	\$250,000
<b>Other Funding Sources:</b>	\$0
<b>PFC-Eligible Project Costs:</b>	\$250,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$250,000
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	August 2014

**Description.** The canopy associated with the departures level (upper level) of the terminal and positioned on the landside to provide passengers' protection from the weather elements was constructed in 1989. Since that time, the canopy structure has not undergone any significant rehabilitation. As a result of weather conditions and normal ware, the attachment assemblies holding the canopy fabric in place have begun to corrode. To address this issue, the canopy structure will be detached from the terminal building and the attachment assemblies replaced.

**Project Need/Justification.** The attachment assemblies holding the departures level canopy in place are 24-years of age. As a result of corrosion associated with the attachment assemblies, the potential exists for the canopy to become unstable. Rehabilitation of the departure level canopy is needed in order to preserve and enhance safety of the passenger terminal.

#### 16. Purchase Airfield Sweeper

Project Amount:	\$190,000
<b>Other Funding Sources:</b>	\$0
PFC-Eligible Project Costs:	\$190,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$190,000
PFC Collection Level:	\$3.00
Start Date:	November 2013
End Date:	<b>March 2014</b>

**Description.** The Jacksonville International Airport (JAX) currently employees the use of two pavement sweepers to maintain the removal of foreign object debris (FOD) from the aircraft movement surfaces. The current sweepers include a 1987 Elgin Sweeper and a 2006 Elgin Crosswind J Plus FX Street Sweeper. The 1987 Elgin has outlived the piece of equipment's useful life and is interfering with airfield operations as a result of equipment maintenance issues. To address this issue, the Jacksonville Aviation Authority (JAA) will purchase a 2012 Elgin Street Sweeper.

**Project Need/Justification.** The 1987 Elgin Sweeper operated at JAX is 26-years of age and has outlived its useful life. The sweeper is necessary in order to control foreign object debris (FOD) on the surface of the Aircraft Operations Area (AOA) and preserve the level of safety on the airfield. JAX accommodates approximately 96,000 annual operations. Therefore, in accordance with FAA Order 5100.38C, paragraph 541(g), since annual traffic exceeds 40,000 aircraft operations, JAX meets the eligibility requirements for the purchase and operation of a second sweeper.

#### 17. Terminal Security Intermodal Flow Study

Project Amount:	\$100,000
<b>Other Funding Sources:</b>	\$0
<b>PFC-Eligible Project Costs:</b>	\$100,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$100,000
PFC Collection Level:	\$3.00
Start Date:	November 2013
End Date:	November 2014

**Description.** The completion of terminal (security and landside) rehabilitation in 2003 and reconstruction of Concourses 'A' and 'C' in 2010 influenced the manner in which arriving and departing passengers transition between the ground vehicular mode of transportation and the air carrier mode of transportation. This is primarily due to changes in passenger flow through the complex as a result of the altered location of amenities, changes in security screening and other passenger conveniences. Because of the modified movement of passengers, the security checkpoint is experiencing congestion and abnormal delays. To determine the most optimal location and layout of the security screening facility to meet passenger demand, a terminal security flow study will be conducted to analyze the procedures applied by passengers transferring from the ground transportation mode to the air transportation mode of transportation.

**Project Need/Justification.** Completion of this project is necessary to alleviate congestion at the security checkpoint and enhance the movement of passengers through the terminal complex. Additionally, this project is need in order to support TSA functions at the screening check point.

#### 18. Access Control Upgrade

Project Amount:	\$75,000
<b>Other Funding Sources:</b>	\$0
<b>PFC-Eligible Project Costs:</b>	\$75,000
PFC Financing & Interest Costs:	
PFC PAYGO:	\$75,000
PFC Collection Level:	\$3.00
Start Date:	November 2013
End Date:	January 2015

**Description.** The existing Access Control System (ACS) at Jacksonville International Airport (JAX) is deployed within the Main Terminal, Concourses, and public spaces as documented in the Airport Security Program (ASP). However, there are inconsistencies in the operation of individual portals that are creating confusion among ACS users and causing false alarms. The ACS application at JAX is Software House C-Cure 800. The C-Cure 800 platform will soon become a legacy product and is not a viable long-term solution for the

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Airport. No official End-of-Life statement has been released by Software House and support for the C-Cure 800 continues. However, it has been determined technical support for the C-Cure 800 will cease in the short-term and become obsolete. To address the obsolescence associated with the C-Cure 800 and rectify issues associated with the false alarms, the ACS system will be upgraded to C-Cure 9000 and the door hardware will be rehabilitated to provide the necessary computerized door controls.

**Project Need/Justification.** The C-Cure 800 is at the end of its useful life. Upgrade of the ACS at JAX is necessary in order to preserve and enhance security compliance with 49 CFR §1542. Additionally, this project will prevent the unauthorized intrusion of individuals to AOA.

# ATTACHMENT B

# **Financial Summary**

# Table 1

Status of PFC Authority

	EXISTING (	as amended)	PROP	OSED			Remaining	Remaining
Application	Approved for Collection	Approved for Use	Approved for Collection	Approved for Use	Collections 3/31/2013	Expenditures 3/31/2013	Authority to Collect	Authority to Use
93-01-C-00-JAX	\$11,541,949	\$3,271,655			\$11,541,949	\$3,271,655	\$0	\$0
96-02-C-00/03-JAX	19,643,843	11,201,945			19,643,843	11,201,944	0	0
97-03-U-00/01/02-JAX	0	11,697,734			0	11,697,733	0	0
99-04-C-00-01-JAX	4,342,861	4,342,861			4,342,861	4,342,861	0	0
00-05-C-00/01-JAX	3,814,930	3,814,930			3,814,930	3,814,930	0	0
01-06-U-00-JAX	0	5,014,458			0	5,014,458	0	0
01-07-C-00-JAX	0	0			0	0	0	0
03-08-C-00-JAX	65,221,541	65,221,541			65,221,541	65,221,541	0	0
06-09-00/01-JAX	234,003,597	234,003,597			71,407,402	59,145,729	162,596,195	174,857,868
11-10-C-00-JAX	11,352,575	11,352,575			0	6,686,927	11,352,575	4,665,648
Totals	\$349,921,296	\$349,921,296			\$175,972,526	\$170,397,778	\$173,948,770	\$179,523,516
13-11-C-00-JAX	0	0	12,755,994	12,755,994	0	0	12,755,994	12,755,994
Total Authorized if Approved			\$362,677,290	\$362,677,290	\$175,972,526	\$170,397,778	\$186,704,764	\$192,279,510

Source: Jacksonville Aviation Authority

#### Table 2

**Project Funding** 

			Gross Cost Funding Sources					
PFC Proj.	Project Name	Gross Cost	AIP Ent & Disc	FDOT & Other Funding	Authority Funds	Non- PFC GARBs	PFC-Eligible Project Costs	PFC Finance & Interest Cost
1	HBS Optimization <sup>1</sup>	\$25,000,000		\$22,500,000			\$2,500,000	
2	CCTV Replacement	\$3,500,000			\$490,000		\$3,010,000	
3	Yankee & Dixie Clipper Pavement & Drainage Rehab <sup>2</sup>	\$2,000,000	\$1,500,000				\$500,000	
4	Infrastructure Backbone & Network Upgrade	\$1,500,000			\$150,000		\$1,350,000	
5	Landside Pavement Rehab <sup>3</sup>	\$1,267,830	\$318,178		\$410,110		\$539,542	
6	Perimeter/Wildlife Fencing <sup>4</sup>	\$893,806	\$670,354				\$223,452	
7	ARFF Vehicle (Crash-18) Replacement	\$800,000					\$800,000	
8	Upgrade Security Perimeter Road	\$750,000					\$750,000	
9	Roadway Signage and Message Boards Rehab	\$600,000					\$600,000	
10	Passenger Wifi & Infrastructure	\$300,000					\$300,000	
11	Terminal Infrastructure Enhancements	\$518,000					\$518,000	
12	New Data Center	\$500,000			\$200,000		\$300,000	
13	Info Display Sys Server Upgrade (FIDs, GIDs & BIDs)	\$500,000					\$500,000	
14	ARFF Crash Vehicle Replacement	\$250,000					\$250,000	
15	Terminal Canopy Rehab - Departures Level	\$250,000					\$250,000	
16	Purchase Airfield Sweeper	\$190,000					\$190,000	
17	Terminal Security Intermodal Flow Study	\$100,000					\$100,000	
18	Access Control Upgrade	\$75,000					\$75,000	
	Total	\$38,994,636	\$2,488,532	\$22,500,000	\$1,388,675	\$0	\$12,755,994	\$0

<sup>1</sup>\$22.5 million is proceeds from an Other Transaction Agreement distributed through the Transportation Security Administration.
 <sup>2</sup>AIP funds include \$1.5 million in entitlement funds requested in the 3-12-0035-052-2013 AIP application.
 <sup>3</sup>AIP funds received as entitlement funds received in 3-12-0035-050-2012

Source: Jacksonville Aviation Authority

<sup>4</sup>*AIP funds received as discretionary funds received in 3-12-0035-050-2012* 

#### Table 3

PFC Revenue Collection Projections

	Through 10/31/2024	2024 (Nov-Dec)	2025 (Jan-Jul)*
PFC Revenue - Beginning Balance		\$349,921,296	\$352,456,338
Enplanements** PFC Enplanements	2,887,538 2,887,292	577,508 577,458	2,328,433 2,328,235
NET PFC CHARGE		\$4.39	\$4.39
PFC Revenue Investment Earnings - PFC Fund		\$2,535,042	\$10,220,952
TOTAL PFC REVENUE RECEIVED CUMULATIVE PFC REVENUE RECEIVED	\$349,921,296 \$349,921,296	\$2,535,042 \$352,456,338	\$10,220,953 \$362,677,291
PFC Revenue Approved for Collection PFC Application #1 through #10 Plus PFC Application #13-11-C-00-JAX	\$349,921,296	\$362,677,291	\$362,677,291

\* July 27, 2025

\*\*Enplanements based on APO TAF Issued January 2013