



May 6, 2015

Re: Public Notice of Opportunity to Comment on the Jacksonville Aviation Authority's Passenger Facility Charge Application for Jacksonville International Airport

The Jacksonville Aviation Authority (Authority or JAA) intends to submit a Passenger Facility Charge (PFC) application for Jacksonville International Airport (Airport or JAX) to the Federal Aviation Administration (FAA). The Authority is posting this public notice as part of the PFC Application process under 14 CFR § 158.24. The Authority will be accepting public comments on the proposed new PFC Application through June 4, 2015. As part of this process, the following information is being provided: (1) project descriptions and project justifications, (2) PFC collection level, proposed charge effective date, estimated PFC expiration date, and estimated total PFC revenue, and (3) Authority point of contact.

1. PROJECT DESCRIPTIONS/JUSTIFICATIONS

A description of and justification for each of the projects being included in PFC Application No. 15-11-C-00-JAX is provided in Attachment A.

2. PFC LEVEL, PROPOSED CHARGE EFFECTIVE DATE, ESTIMATED CHARGE EXPIRATION DATE, AND ESTIMATED TOTAL PFC REVENUE

- a. **PFC level:** \$4.50 per eligible enplaned passenger.
- b. **Estimated charge effective date for the PFC Application:** November 1, 2024, which reflects the estimated charge expiration date for PFC Application No. 11-10-C-00-JAX.
- c. **Estimated charge expiration date for the PFC Application:** August 1, 2026 (or until collected revenues plus interest thereon equal the allowable costs of the approved projects, as permitted by regulation).
- d. **Estimated total PFC revenue to be collected:** \$18,709,805.

3. AUTHORITY POINT OF CONTACT

As required under 14 CFR § 158.24, the Authority will be accepting public comments on the proposed PFC Application No. 15-11-C-00-JAX up to 30 days after this May 6, 2015 date of posting this public notice on our website (i.e., up to June 4, 2015). Any public

comments should be sent to Todd Lindner, Jacksonville Aviation Authority, 14201 Pecan Park Road, Jacksonville, Florida 32218. If there are any questions regarding this proposed PFC Application No. 15-11-C-00-JAX, Mr. Lindner can also be reached at 904-741-2228 or at todd.lindner@flyjacksonville.com.

ATTACHMENT A

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

1. Hold Baggage System Recapitalization/Optimization

Project Amount:	\$20,000,000
Other Funding Sources:	¹\$18,000,000
PFC PAYGO:	\$2,000,000
PFC Collection Level:	\$4.50
Start Date:	October 2012
End Date:	September 2015

¹Other Funding Sources includes \$18.0 million dollars distributed through an Other Transaction Agreement through the Transportation Security Administration.

Description. The Hold Baggage System (HBS) at the Airport was one of the first integrated, in-line baggage screening systems to be commissioned in the U.S. 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 (North Matrix and South Matrix) each containing three machines for a total of six. 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.

JAA 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). TSA has also indicated that additional funding will be made available for system “optimization”, with overall projects estimated at approximately 90% TSA participation. The recapitalization project will include the replacement of the three CTX9000 machines (400 bags per hour [bph]) positioned in the North Matrix and the three CTX9000 machines positioned in the South Matrix with the more technologically advanced CTX9800 machines (680 bph). These replacement machines will increase the hourly screening capacity at the Airport by approximately 70 percent.

Project Need/Justification. Improvements to the HBS at the Airport have been specifically prescribed by the TSA. 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 10 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 to meet the current (PGDS v4.1) operating standards.

2. Closed Circuit Television (CCTV) Replacement

Project Amount:	\$4,000,000
Other Funding Sources:	\$560,000
PFC PAYGO:	\$3,440,000
PFC Collection Level:	\$4.50
Start Date:	October 2014
End Date:	January 2016

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 CCTV 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 (CCTV) is based on Bosch analog cameras at a resolution of 704 x 480 (4CIF) at 30 frames per second, which are transported to communication rooms over twisted pair data cabling by the use of video baluns. In the communication room the signals are encoded to IP streams by Bosch VIP X1600 video encoders. The IP streams are recorded locally on Bosch DVA series iSCSI Network Attached Storage (NAS). Live and recorded views are streamed over a Security VLAN to CCTV workstations.

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 has been determined 516 cameras (86%) will be needed to prevent the unauthorized intrusion of unidentified individuals into unauthorized areas including 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. Since May 2013, four of the video storage arrays have failed completely. The cameras which are deployed and in operation are analog, as opposed to digital. As a result, the quality of the video captured is only adequate to identify faces, features or characteristics necessary to provide positive identification approximately 20% of the time. Modifying a camera's zoom setting results in the surrounding area not receiving proper monitoring and eliminates the possibility of recording activity. The CCTV Replacement project will replace the more expensive analog cameras with the less costly high definition IP cameras, which will allow digital zooming while maintaining coverage of the intended area.

When door alarms are received, the call-up of video is a manual process. The systems (door alarms and video) are autonomous and not linked in any way. The recorded video can be reviewed, but as a separate application, which takes additional time to call-up and retrieve the appropriate video to review the door alarm. 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:	\$1,173,345
Other Funding Sources:	²\$880,009
PFC PAYGO:	\$293,336
PFC Collection Level:	\$3.00
Start Date:	October 2013
End Date:	June 2014

²Other Funding Sources includes \$880,009 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 Jacksonville International Airport (JAX) passenger terminal. Additionally, Yankee Clipper Road and Dixie Clipper Roads are the only direct ground access and egress routes serving JAX. Yankee Clipper Road and Dixie Clipper Roads are located on property owned and controlled by the Jacksonville Aviation Authority and connected to Airport Road, which is the nearest public access facility or point of sufficient capacity. The rehabilitation of Yankee and Dixie Clipper Roads is being conducted for the exclusive use of airport patrons and airport employees.

In January 2012, a Landside Pavement Evaluation was completed to determine PCI values and document the condition of landside roadways at JAX (A copy of this study in its entirety can be found on the Airport’s website www.flyjax.com). Both Yankee and Dixie Clipper 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.

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. Pavement associated with both Yankee and Dixie Clipper roadway sections were constructed in 1989 and have not undergone any 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. PCI ratings for roadway sections of Yankee Clipper within the project area is 58 with approximately 64% of the rehab needs evidenced by load related distresses.

The current condition of Yankee and Dixie Clipper Roads is resulting in significant congestion and at times unsafe driving conditions as a result of airport patrons and airport employees navigating away from the problem areas. Because of the level of deterioration associated with certain sections of Yankee and Dixie Clipper Roads, drivers systematically alter course by changing lanes and avoiding use of that portion of the lane. Based on JAA internal evaluation, traffic backs-up approximately one-mile during peak travel hours for inbound traffic (accessing JIA) on Yankee Clipper, creating a delay of approximately three minutes. Likewise, for outbound traffic (exiting JIA) on Dixie Clipper, traffic backs-up approximately one-quarter mile, creating a delay of approximately one-minute.

Consideration has been given to cost feasibility and the potential of delaying the project. However, once the pavement has reached or passed the critical point, deterioration accelerates. As documented in the Landside Pavement Evaluation, continuing to allow this pavement to deteriorate will result in an exponential increase in costs.

4. Infrastructure Backbone and Network Upgrade

Project Amount:	\$2,400,000
Other Funding Sources:	\$240,000
PFC PAYGO:	\$2,160,000
PFC Collection Level:	\$3.00
Start Date:	June 2013
End Date:	September 2015

Description. Airport Security Systems including access control and Closed Circuit Television (CCTV) at Jacksonville International Airport (Airport) are dependent upon fiber optic cabling and related Information Technology (IT) infrastructure. A complete overhaul of the Airport’s fiber optics backbone will be conducted by creating a survivable fiber-optic ring that diversifies communications along two different routes. In addition, it will upgrade the existing Airport data network to an enterprise level, high-availability network to support future CCTV and high-speed operations.

Provided below is an analysis of the applicability of the infrastructure backbone and the different beneficiaries, as discussed with and estimated by the IT Department. Through this process, it was determined that 90% of the infrastructure backbone project is eligible to be funded with PFC funds.

<u>Airport Entity</u>	<u>Ratio of Use or Applicability</u>	<u>Percent PFC Eligible</u>
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. The existing IT infrastructure backbone fiber-optic cable in place does not provide the robust level of service necessary to support the Airport's security systems. To ensure the IT capabilities are in place to provide the level of security necessary for the Airport, a complete overhaul of the JIA fiber optics backbone is required.

5. Landside Pavement Rehabilitation

Project Amount:	\$1,267,830
Other Funding Sources:	³\$728,288
PFC PAYGO:	\$539,542
PFC Collection Level:	\$3.00
Start Date:	November 2012
End Date:	October 2013

³Other Funding Sources includes \$410,110 in JAA Funds and \$318,178 distributed through AIP 3-12-0035-050-2012.

Description. The Landside Pavement Rehab project includes sections of multiple roadways that 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 (A copy of this study in its entirety can be found on the Airport's website www.flyjax.com). 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.

Eligible

Dixie Clipper-Sec A (Lower Egress)
Pecan Park – Sec. A & C
Yankee Clipper-Sec A-(Lower Access)
Yankee Clipper-Sec A-1 (Upper Access)

Ineligible

Air Cargo Lot - Sec. A
Thomas Imeson Avenue-Sec. A
Parking Access Road-Sec. D
Surface Parking Lot-Sec. A
Toll Plaza - Sec. 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 (PCI) 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 PCI 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 feet (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 that ties into Dixie Clipper Drive. Section C has a PCI 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 and will be reconstructed with milling and resurfacing.

Yankee Clipper Road – Sections A (Terminal Lower Level) & A-1 (Terminal Upper Level)

Yankee Clipper Section A is located in the bus and taxi lane in front of the terminal passenger pick up area. This section of roadway has a PCI 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 PCI 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, which had resulted from a rusted and leaking downspout system located above the overpass. Therefore, prior to completing any pavement rehabilitation in this section the downspout system will be repaired. The standing water has resulted in isolated areas of rutting and alligator cracking. Following completion of the repairs to the downspout 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 provided below shows a breakdown of the project eligibility.

Line Item	Cost	%Eligib	JAA	FAA- AIP ¹	PFC
Design & Bid	\$195,021	78.20%	\$42,514	\$0	\$152,506
Re-Bid	\$6,178	78.20%	\$1,346	\$0	\$4,831
General (Mobilization)	\$71,948	69.69%	\$21,807	\$0	\$50,140
Force Account	\$45,955	69.69%	\$13,929	\$0	\$32,026
Yankee & Dixie Clipper	\$430,578	100.00%	\$0	\$318,178	\$112,400
Air Cargo Lot	\$149,860	0.00%	\$149,860	\$0	\$0
Delivery Road	\$42,980	0.00%	\$42,980	\$0	\$0
Parking Access Drive	\$28,917	0.00%	\$28,917	\$0	\$0
Pecan Park Road	\$66,688	100.00%	\$0	\$0	\$66,688
Toll Plaza	\$24,373	0.00%	\$24,373	\$0	\$0
Imeson Rd/Clarion Loop	\$22,964	0.00%	\$22,964	\$0	\$0
Surface Parking Lot (I,II,III)	\$35,688	0.00%	\$35,688	\$0	\$0
Surface Parking Lot (IV,V,VI)	\$25,727	0.00%	\$25,727	\$0	\$0
Replace Downspouts & Piping	\$120,948	100.00%	\$0	\$0	\$120,948
Totals	\$1,267,830	68.00%	\$410,110	\$318,178	\$539,542

¹AIP dollars received as part of 3-12-0035-050-2012

Project Need/Justification. The pavement associated with the aforementioned roadway links has outlived its 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. The possibility of delaying the rehabilitation to these roadway links was given consideration. However, once the pavement has reached or passed the critical point, deterioration accelerates. As documented in the Landside Pavement Evaluation, continuing to allow this pavement to deteriorate will result in an exponential increase in costs.

6. North Perimeter/Wildlife Fencing

Project Amount:	\$872,616
Other Funding Sources:	⁴\$654,462
PFC PAYGO:	\$218,154
PFC Collection Level:	\$4.50
Start Date:	August 2012
End Date:	August 2014

⁴Other Funding Sources includes \$654,462 in AIP Discretionary Funds received as part of AIP 3-12-0035-050-2012

Description. At Jacksonville International Airport (JAX), there are currently two different types of fences which enclose 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.

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 include the replacement of 21,411-linear feet of fencing. Additionally, 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.

In accordance with FAA Order 5100.38c, Section 5, Paragraph 542, A, the Perimeter Security/Wildlife Fencing is included in the Airport Security Program and supported by the TSA. Additionally, the fencing project is a recommendation contained in the approved Wildlife Hazard Management Plan and required to meet Part 1542 compliance standards.

7. ARFF Vehicle (Crash-18) Replacement

Project Amount:	\$614,313
Other Funding Sources:	\$0
PFC PAYGO:	\$614,313
PFC Collection Level:	\$4.50
Start Date:	May 2015
End Date:	June 2015

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 in accordance with FAR §139.317 and ensures the preservation and enhancement of air safety at the Airport.

8. Upgrade Security Perimeter Road

Project Amount:	\$1,010,040
Other Funding Sources:	\$0
PFC PAYGO:	\$1,010,040
PFC Collection Level:	\$4.50
Start Date:	January 2014
End Date:	March 2015

Description. 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 access road placed adjacent to the airport's wildlife/security fence. The security access 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 access 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 21,411-linear 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 Access Road is necessary in order to enhance safety and security through the provision of an aggregate thoroughway to allow JAX to comply with FAR 139 and 1542 inspection requirements. Currently no infrastructure is in place to accommodate or support any means by which to access the areas necessary to conduct the required inspections. The inspections are currently be carried out on foot or in some cases using an All-Terrain Vehicle (ATV). Choosing not to upgrade the existing security access path with an aggregate material will reduce, and in some areas eliminate the JAX staff’s ability to fulfill the federal inspection standards outlined in FAR Part 139 and 1542.

9. Roadway Signage Rehabilitation

Project Amount:	\$600,000
Other Funding Sources:	\$0
PFC PAYGO:	\$600,000
PFC Collection Level:	\$3.00
Start Date:	July 2014
End Date:	September 2015

Description. The Roadway Signage Rehabilitation project will consist of rehabilitating 26 directional roadway signs at Jacksonville International Airport (JAX). The signs are located on Yankee Clipper Road (access) and Dixie Clipper Road (egress), which serve as the primary arrival and departure route for JAX passengers and patrons. The purpose of these signs is to provide directional and emergency information to arriving and departing JAX patrons. The signs were installed in 2000 and have never been rehabilitated. Rehabilitation of the signs will include reinforcing the structural integrity of the sign foundations and replacing the actual sign panels.

Project Need/Justification. The existing directional road signs are 14-years old and are becoming extremely difficult to maintain as a result of weakening metal structure foundations and weathered fabric. These signs have outlived their useful lives. This project is necessary in order to provide a reliable means of communicating directional information to passengers arriving and departing the Airport in automobiles.

10. Passenger Wifi and Infrastructure

Project Amount:	\$300,000
Other Funding Sources:	\$160,000
PFC PAYGO:	\$140,000
PFC Collection Level:	\$3.00
Start Date:	June 2015
End Date:	November 2015

Description. JAA currently owns a common wireless data network, which serves as an extension to the Airport’s utility network. The wireless data network is a complement to the JAX public address system and provides passengers communications capabilities. Wireless coverage includes the terminal, concourses, and exterior curbs and is currently free to the traveling public. The existing wireless system is composed of fiber-optic cabling and 25 Wi-Fi access points. This project will expand the passenger Wi-Fi capability in order to accommodate higher data needs, as well as provide for an ever-increasing number of wireless devices. This will be accomplished through the installation of additional fiber with greater capacity to accommodate the bandwidth demand requirements. Additionally, this will be accomplished by increasing the number of Wi-Fi access points and necessary connectivity and cabling from 25 to 40.

Project Need/Justification. The existing Wi-Fi network equipment is 15-years-old and is not capable of meeting the Wi-Fi demands of the 21st century traveler as a result of the technological advances made since the existing system’s inception. 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. Communication bandwidth associated with the existing fiber-optic cabling is limited and connectivity becomes “spotty” upon increase of demand on the service. The reduced ability to achieve connectivity is also a result of a lack of the number Wi-Fi access points to meet the existing demand. This project will expand the passenger Wi-Fi capability in order to accommodate higher data needs, as well as provide for an ever-increasing number of wireless devices, which will allow passengers Wi-Fi capabilities expected by today’s air travelers.

11. Terminal Infrastructure Enhancements

Project Amount:	\$518,000
Other Funding Sources:	\$0
PFC PAYGO:	\$518,000
PFC Collection Level:	\$3.00
Start Date:	May 2015
End Date:	November 2015

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. As a result of the differing signage methodology, passengers are relying in some cases on unreliable means for directional purposes. 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. Incorporating the proposed signage methodology will allow for the flow and movement of passengers in the manner necessary to accommodate future demand.

12. New Data Center/Rehab of Existing Data Center

Project Amount:	\$3,800,000
Other Funding Sources:	⁶\$1,520,000
PFC PAYGO:	\$2,280,000
PFC Collection Level:	\$3.00
Start Date:	March 2014
End Date:	March 2015

⁶Other Funding Sources include \$1,520,000 in JAA Funds.

Description. 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.

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's 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 and eight server blades in the new 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 facilitate the operation of the access control system. Likewise, it was determined JAX 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 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.

<u>Data Center Operational Function</u>	<u>Percentage of Use</u>	<u>PFC Eligibility 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 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 Airport’s 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. The provision of a redundant data center is necessary to enhance and preserve security 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*.

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
Other Funding Sources: \$0
PFC PAYGO: \$500,000
PFC Collection Level: \$3.00
Start Date: October 2015
End Date: January 2016

Description. 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. The system will replace VGA with Ethernet technology by upgrading to new servers and cabling.

Project Need/Justification. The existing IDS serving JAX are experiencing significant maintenance issues as a result of the old servers consistently locking. Consistent outages resulting from the failing server systems are causing passengers to arrive late at gates and in some isolated cases miss flights. These servers have outlived their useful life and 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.

14. ARFF Crash Vehicle Replacement

Project Amount:	\$250,000
Other Funding Sources:	\$0
PFC PAYGO:	\$250,000
PFC Collection Level:	\$4.50
Start Date:	September 2014
End Date:	October 2014

Description. This project includes the purchase of an Airport Rescue and Fire Fighting (ARFF) Crash Combination Agent Vehicle (CAV), 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 2000 Ford F-550. 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 pre-mix foam.

Project Need/Justification. This new ARFF vehicle is required in order to replace ARFF equipment. The new vehicle will replace a 2000 Ford F-550, which has reached the end of its useful life and begun to experience significant maintenance deficiencies. Additionally, the replacement ARFF vehicle is necessary in order to maintain the airport’s ARFF Index D capabilities in accordance with FAR §139.317 and ensures the preservation and enhancement of air safety at the Airport.

15. Terminal Canopy Rehabilitation – Departures Level

Project Amount:	\$250,000
Other Funding Sources:	\$0
PFC PAYGO:	\$250,000
PFC Collection Level:	\$3.00
Start Date:	October 2014
End Date:	March 2015

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. 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 and not function as intended for the movement of passengers and baggage.

16. Purchase Airfield Sweeper

Project Amount:	\$190,000
Other Funding Sources:	\$0
PFC PAYGO:	\$190,000
PFC Collection Level:	\$4.50
Start Date:	June 2013
End Date:	August 2014

Description. 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 Jacksonville Aviation Authority (JAA) will purchase a 2012 Elgin Street Sweeper to replace the 1987 Elgin Sweeper, which has a history of equipment maintenance issues.

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 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
Other Funding Sources:	\$0
PFC PAYGO:	\$100,000
PFC Collection Level:	\$3.00
Start Date:	August 2013
End Date:	November 2014

Description. The completion of terminal rehabilitation (security and landside) in 2003 and the 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 using the public-corridors available at Jacksonville International Airport. This is primarily due to (1) changes in passenger flow through the complex as a result of the altered location of amenities and (2) changes in security screening. Additionally, the advent of “Pre-Check” and “Managed Inclusion” has resulted in the alteration of the means by which passengers enter and proceed through the security screening process. To determine the most optimal location and layout of the security screening facility to meet passenger demand, a Terminal Security Intermodal 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 considering the need to proceed through security screening.

Project Need/Justification. Because of the modified movement of passengers, the security checkpoint is experiencing congestion and abnormal delays. If alterations to the manner in which passengers enter the security screening process are not made more efficient, delay will become exponential resulting in delay to air carrier operations. The Terminal Security Intermodal Flow Study will identify a method and configuration which will allow operations at Jacksonville International Airport to accommodate the movement of passengers without undue delay and allow for the incorporation of TSA’s “Pre-Check” and “Managed Inclusion” queuing and screening methods.

18. Access Control Upgrade

Project Amount:	\$725,000
Other Funding Sources:	\$0
PFC PAYGO:	\$725,000
PFC Collection Level:	\$4.50
Start Date:	November 2014
End Date:	December 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 is the platform system responsible for generating the inconsistencies, false alarms and causing confusion among the security staff managing the ACS. Software House has acknowledged the C-Cure 800 System will soon become a legacy product and is not a viable long-term solution for the Airport. It has been determined that technical support for the C-Cure 800 will cease in the short-term and become obsolete.

To address the planned 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. Operation of the C-Cure 800 ACS platform at JAX to provide access control security is resulting in consistent false alarms and system failures. Maintenance and upkeep for the ACS is provided by Software House. Software House has acknowledged service for the system is being discontinued. Continuing to use this system without the capabilities necessary to address the technical shortcomings will result in a level of access control security below that required by Part 1542 standards. In order to achieve the level of access control security necessary to meet Part 1542 compliance, the C-Cure 800 platform will be replaced with the C-Cure 9000 platform.

19. Purchase and Install P.A. & Emergency Notification System

Project Amount:	\$500,000
Other Funding Sources:	\$0
PFC PAYGO:	\$500,000
PFC Collection Level:	\$3.00
Start Date:	October 2014
End Date:	February 2015

Description. The Purchase and Install Public Address (PA) System and Emergency Notification System project includes replacing the existing PA System and establishing an Emergency Notification System to allow all flight, baggage, and gate information display screens (FIDs, BIDs and GIDs) to be converted into screens displaying emergency notification information.

The existing PA system consists of fragments from two systems merged into one. The PA system serving the passenger terminal (ticketing, baggage claim, bag make-up, and courtyard) is an analog system installed in 1992 and last upgraded in 2008. The PA system serving the Passenger Concourses A and C is a digital system, which was installed in 2008-2009. Purchase of the system will require the purchase of a server and necessary software in addition to amplifiers and required audio equipment. While installation will require some new circuitry, the existing cabling and speakers will continue to serve the new system. While the existing cabling and speakers will be able to continue to be used.

Currently no system is in place to provide any form of visual emergency notification. The emergency notification system to be purchased and installed will be a digital system integrating all FIDs, BIDs and GIDs screens. Therefore, in the event of an emergency, all FIDs, BIDs and GIDs screens will have the ability to be converted into screens providing emergency notification and passenger directions. The system will require the purchase of a server and software. Installation will require additional circuitry. Cabling required to facilitate the installation is in place and will accommodate the proposed system.

Project Need/Justification. The existing PA system consists of fragments from two systems merged into one. Because of the lack of system integration, technical support is not available. Additionally, maintenance and upkeep costs are exceeding the cost of purchasing, installing, and maintaining a new system. To address this issue, a new digital system will be purchased and installed, which will integrate the terminal and concourse systems.

20. Southwest/Northeast Perimeter/Wildlife Fencing

Project Amount:	\$736,620
Other Funding Sources:	\$0
PFC PAYGO:	\$736,620
PFC Collection Level:	\$4.50
Start Date:	October 2015
End Date:	June 2016

Description. The Southwest/Northeast Perimeter Fence Replacement project at Jacksonville International Airport (JAX) will include the replacement of fencing along the southwest and northeast perimeter of the JAX airfield. Additionally, the project will include the replacement of portions of fencing located near the passenger terminal and air cargo facilities.

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 at the southern perimeter of the Florida Air National Guard lease line located on the southwestern portion of the airfield and extend southeast to Pecan Park Road. This portion of the project will include replacing approximately 8,600-linear feet of fence and two gates along the airfield perimeter. The other major project element will include replacement of approximately 6,300-linear feet of fencing located immediately adjacent to Taxiway B and extending to the east-northeast, which constitutes the replacement of approximately 6,300-linear feet of fence. Also, this element of the project will include replacing three gates. Other portions of the project will include replacing fence fabric at four locations near the air cargo and passenger terminal facilities.

Project Need/Justification. The Southwest/Northeast Perimeter Fence Replacement project is necessary in order to eliminate weaknesses in the current security perimeter fencing identified in the April 2014 Vulnerability and Needs Assessment. These weaknesses include excessive play in the fence fabric, large gaps at the bottom of the gates, rusted and/or broken gates and fence poles, and compromising of the five-foot clear zone.

21. Design and Construct Emergency Operations Center (EOC)

Project Amount:	\$1,600,000
Other Funding Sources:	\$0
PFC PAYGO:	\$1,600,000
PFC Collection Level:	\$4.50
Start Date:	December 2015
End Date:	May 2016

Description. Jacksonville International Airport (JAX) does not currently have an Emergency Operations Center (EOC) facility. To accommodate the EOC functions, a room located in the basement of the terminal has been outfitted with the basic communication and video necessities. On a day-to-day basis, this room is dedicated to fulfilling JAX’s training activities. While the space is in a setting conducive to facilitating training activities, the location does not meet the criteria necessary for managing an emergency (i.e. hurricane, terminal fire, terrorist activity, bomb threat) occurring within the passenger terminal or concourses. Additionally, the room is grossly under-equipped relative to available fiber, circuitry, video, redundant electrical source, and communication capabilities necessary to adequately manage an emergency. The improper location and inadequately equipped characteristics of the quasi-EOC were realized on October 1, 2013 when a bomb threat in the JIA terminal complex at the Security Screening Checkpoint forced an immediate evacuation of the Airport facilities, including the terminal and passenger concourses. As a result of the incident, the area associated with the quasi-EOC was forced to be evacuated as well. Therefore, JAX Operations Staff, airline representatives, police, and the

Federal Bureau of Investigation (FBI) were unable to manage the emergency in an organized and integrated manner, which manifested confusion and the lack of coordination, resulting in the inability to properly manage the dissemination of information.

To address this issue, the Jacksonville Aviation Authority (JAA) will design and construct an EOC within an existing space in the JAA Administrative Building located on the campus of JAA in close proximity to the passenger terminal complex. The space identified measures 33-feet in length by 16-feet in width and is located on the third floor of the Administration Building. By virtue of location, the space is secured through the application of existing access control measures and only accessible by 'badging' in and out. The EOC will not be co-located with the Airport Operations Control Center and will only include those facilities and equipment directly necessary for managing emergencies and major incidents. Because of the proposed location of the EOC within the existing JAA Administration Building, the design and construction of additional elements such as kitchenettes, bathrooms or dormitories will not be necessary.

Project Need/Justification. The existing location and capabilities of the area associated with emergency operation functions at JAX compromises safety and security by preventing the ability of responding agencies to carry-out an organized, coordinated, and integrated approach to managing a major incident or emergency. The proposed EOC location will allow for the establishment of a central point of coordination and data collection and dissemination, while maintaining simple yet secured access. The proposed EOC will be appropriately equipped with the necessary fiber, communication, and video capabilities to meet the management needs of responding agencies.

22. PFC Implementation Costs

Project Amount:	\$44,800
Other Funding Sources:	\$0
PFC PAYGO:	\$44,800
PFC Collection Level:	\$3.00
Start Date:	May 2014
End Date:	October 2016

Description. Includes professional fees for services rendered from the Airport's consultant in developing and submitting this PFC application, including the notification to the airlines following approval of this notification.

Project Need/Justification. This application is necessary to provide funding for projects needed for preserving or enhancing safety, security, and/or capacity at JAX. The cost estimate includes reviews of several drafts with the FAA on a local, regional, and DC Headquarters level, as well as preparing responses and supplemental material from these reviews.