



March 4, 2020

PALM BEACH COUNTY DEPARTMENT OF AIRPORTS

**PROPOSED PASSENGER FACILITY CHARGE APPLICATION NO. 20-17-C-00-PBI TO THE
FAA TO IMPOSE AND USE A PFC AT PALM BEACH INTERNATIONAL AIRPORT**

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT

The Palm Beach County Department of Airports (the County) has determined the need to submit to the Federal Aviation Administration (FAA) a Notice to impose a Passenger Facility Charge (PFC) at Palm Beach International Airport (the Airport) and to concurrently use PFC revenue at the Airport. The County has issued this public notice as part of the PFC application process as per Title 14 Code of Regulation (CFR) Part 158.24 *Notice and Opportunity for Public Comment*.

Comment Period: The County will accept public comments on the proposed PFC Application No. 20-17-C-00-PBI (PFC #17) up to thirty (30) days after the date of posting this public notice. As such, comments must be received on or before Friday, April 3, 2020.

County Point of Contact: Comments may be mailed to Mr. Gary M. Sypek, Director of Planning, Palm Beach County Department of Airports, 846 Palm Beach International Airport, West Palm Beach, FL 33406 or e-mailed at gsypek@pbia.org.

The following information is provided in accordance with 14 CFR 158.24(b)(1):

The County will seek authority from the FAA to use PFCs with the following characteristics:

PFC Level: A four dollar and fifty cent (\$4.50) charge on passengers enplaned at the Airport.

Charge Effective Date: June 1, 2021 (which reflects the estimated charge expiration date for approved PFC Application No. 19-16-C-00-PBI).

Estimated Charge Expiration Date: Collections for the five projects to be included in PFC #17 are estimated to be 11 months based on 1.0 percent annual growth in enplanements and a 90 percent collection rate on enplaned passengers. Thus, the charge expiration date is estimated to be July 1, 2022 (or until collected PFC revenue plus interest thereon equals the allowable cost of the approved projects, as permitted by regulation).

Estimated Total PFC Impose and Use Revenue: \$39,495,868

846 PALM BEACH INTERNATIONAL AIRPORT
West Palm Beach, Florida 33406-1470
(561) 471-7400 FAX: (561) 471-7427 www.pbia.org

Projects for which the County is seeking Impose and Use Authority:

1. PBI Terminal Escalator Rehabilitation and Replacement

Project Description: This project funds for the assessment, design, bidding, construction administration, and construction for the replacement and rehabilitation of 14 escalators within the Palm Beach International (Airport) Terminal facility. All 14 escalators are within the Airport terminal facility; eleven will be replaced, and three will be rehabilitated.

Escalators requiring replacement, work includes replacement of all existing escalator components and leaving the existing trusses in place. Component replacement includes control and annunciators, escalator brakes, skirt gaps, demarcation inserts, emergency stop buttons and alarms, pit stop switches, reversal stop devices, step demarcation lights, step up thrust device, handrail speed monitoring devices, missing step devices, handrail entry devise, comb impact devices, broke step-chain device, skirt brushes, deck guards, and yellow comb segments. At certain locations work will also include repairs to walls, flooring, and building features around those escalator work areas.

Escalators requiring rehabilitation work includes but not limited to the addition of safety features, such as handrail speed monitoring devices, updates to skirt panel exposed surfaces, and skip deflectors.

Project Justification: Thirteen of the proposed escalators were installed in the years ranging from 1987 through 1998, with the exception of one installed in 2005. According to the Airport Improvement Program (AIP) Handbook, the minimum criterion for escalator equipment is 10 years. All the referenced escalators have exceeded the minimum useful life requirement of 10 years, therefore justifying rehabilitation or replacement.

Replacement and rehabilitation of the 14 public use escalators is necessary to address ongoing maintenance required due to frequent outages and to address the existing safety functions which are not meeting current Standards and Codes. Additionally, the existing electrical panels require replacement due to the age of current panels and will be phased with each escalator.

2. PBI 400Hz System & Associated Infrastructure Improvements

Project Description: This project funds for the planning, design, construction administration, commissioning, and construction to replace the 400Hz central electrical system supporting the Airport's 28 loading bridges. The updated equipment will include a point-of-use 400Hz power system whereby a 400Hz unit will be mounted to each of the 28 existing loading bridges between Concourse B and C (13 in Concourse B and 15 located in Concourse C). The project also includes the installation of supporting electrical infrastructure, the demolition of the existing 400Hz system, and additional architectural, mechanical and fire protection system improvements in order to facilitate the overall improvements associated with this project.

The point of use electrical infrastructure installation requires the following equipment: new switchboards, two new redundant feeder conduit and conductors originating from the associated existing substation, disconnect switch and mounting pedestal at each loading bridge to provide local disconnection means and to facilitate the conversion of the fixed conduit system to the existing loading bridge cable management system, and multi conductor power cable along the existing loading bridge cable management system to provide power to the point of use units. In addition, modifications to the existing substation will be required to allow for the installation of two new drawout circuit breakers, new conduit and conductor systems.

The Airport currently converts 60Hz power to 400Hz power in system plants located in dedicated electrical rooms in both Concourse B and C. After the conversion the 400Hz power is distributed to the aircraft via 400Hz gate connection boxes at each loading bridge that provide either 120V or 28V power to the aircraft. However, the 400Hz solid state converters are over 30 years old and replacement parts are difficult to obtain as these units have been discontinued and are no longer supported by the manufacturer.

Project Justification: The Airport's existing 400Hz was installed in 1987 during the Terminal Expansion project. Since that time the 400Hz system has remained largely unchanged except for the converters. The original 400Hz system utilized rotary (vertical) style 400Hz generators that were eventually replaced with solid-state converters in the late 1990s. Airport maintenance staff have stated that replacement parts for the existing solid-state converters are difficult to obtain, as these units have been discontinued and are no longer supported by the manufacturer. In addition, the electrical distribution systems upstream and downstream of the 400Hz converters are over 32 years old and have reached end of their useful life. According to FAA AIP Handbook, the minimum useful life criterion for equipment is 10 years. With the existing system being over 30 years old this project justifies replacement.

3. PBI Concourse B Expansion

Project Description: This project includes the planning, design, bidding, construction management and construction for the Concourse B expansion project. The expansion provides for an additional 24,200 square feet of holdroom space, 13,200 square feet of concession space, 5,500 square feet of concession and holdroom overflow seating, 900 square feet of additional restrooms space on the concourse level and 2,500 square feet of concession storage of the arrivals level (apron level) and sufficient gate spacing for aircraft which serve the Airport.

Concourse B was constructed in 1987. This two-level structure supports both domestic and international operations via 13 contact gates. Concourse B expansion will provide an additional 29,350 square feet on the concourse level, which provides for larger holdrooms, more passenger circulation, additional restroom facilities, more concession areas and seating, and two new elevators. The concourse expansion provides a significant increase in holdroom sizes located at the end of the pier. The additional 5,377 square feet is being added now to support the addition of two new gates to be included within the next 10 years to avoid operational disruptions later. The future addition of the two new gates will provide for 2,688 square feet of holdroom space for each gate. In addition to this dedicated holdroom space, the expansion provides space for approximately 5,500 square feet of concession seating, which is located in the center portion of concourse pier expansion, that will supplement holdroom seating during peak activity. The expanded Concourse B pier will allow for sufficient aircraft spacing for aircraft utilizing these gates. Aircraft positioning is based on aircraft with 175 or more seats.

The project also includes construction and expansion of four areas of concessions space totaling 13,200 square feet. Concessions space is not eligible for PFC funding. Additionally, 900 square feet of restroom space will be constructed to meet the additional space requirements.

Project Justification: As air carriers have increased the size of aircraft utilizing gates on Concourse B, holdrooms have become overcrowded, reducing the level of service (LOS) for passengers using this concourse. Air carrier's frequent usage of aircraft with more than 179 seats have exceeded the existing holdroom capacity and strained circulation through certain sections of Concourse B. Use of these larger

aircraft has increased seat capacity from air carriers serving Concourse B from CY 2014 through CY 2018 by 47 percent.

Concourse B is 51,657 square feet of which 6,408 square feet are concession areas, 2,002 square feet are restrooms, 935 square feet are stairwells, service space, and mechanical rooms, and 32,405 square feet are holdroom areas. There are 13 gates servicing Concourse B which equates to approximately 2,450 square feet of holdroom space per gate. However, holdroom space is not equally disbursed within Concourse B based on the existing gate layout and physical constraints.

It was identified in the 2018 PBI Master Plan Update (MPU) that six (6) of the 13 holdrooms met the 150-design seat capacity square foot requirements; the remaining seven (7) were deficient largely due to gate locations and physical constraints. Additionally, the 2018 PBI MPU provided an analysis for 200-design seat holdroom capacity, to reflect the trend of larger aircraft, which indicated that 11 of the 13 holdrooms were deficient in size.

Concourse B Holdroom areas are described below:

Gate B1

The Gate B1 holdroom is 2,630 square feet located on the east side of the Concourse B pier. Gate B1 is owned by the Airport and primarily used by Allegiant. As per the 2018 PBI Master Plan Update gate holdroom requirements based on narrowbody 150-seat aircraft, 2,000 square feet is required to maintain an Optimum LOS. As aircraft sizes increase from 150 to 200-seat aircraft 2,700 square feet is required to maintain an Optimum LOS.

Gates B3/B5/B7

Gates B3/B5/B7 holdrooms total 7,485 square feet located on the east side of Concourse B pier. Gates B3/B5 and Gate B7 are separated by approximately 2,000 square feet of concession and storage space. Gates B3 and B5 are preferential use gates assigned to Southwest. Gate B7 is owned by the Airport. Gate B7 is used by both American and United. As per the 2018 PBI MPU gate holdroom requirements based on narrowbody 150-seat aircraft, 6,000 square feet is required to maintain an Optimum LOS. As aircraft sizes increase from 150 to 200-seat aircraft, 8,000 square feet is required to maintain an Optimum LOS. The largest aircraft Southwest operated in 2019 was a B 737-Max 8 with a seat capacity of 175 but the most frequently utilized aircraft is the B 737-700 with a seat capacity of 143. There are currently no issues with the holdrooms for these two gates, but as Southwest increases aircraft sizes and frequency this can pose some future issues.

The largest aircraft United and American operates is a B-737-900 with a 179-seat capacity and A-321 with a 187-seat capacity respectively. At certain periods of the day this area does become congested depending on aircraft size.

Gates B6/B8/B9/B10/B11/B12/B14

Gates B6/B8/B9/B10/B12/B14 holdrooms total 13,220 square feet located at the end the Concourse B pier. Gates B9, B11, B12, and B10 are preferential use gates assigned to American. Gates B6 is a preferential use gate assigned to United. Gates B8 and B14 are Airport owned and used by Air Canada (B8) and American (B14/B8) as overflow gates. As per the 2018 PBI MPU gate holdroom requirements based on

narrowbody 150-seat aircraft, 14,000 square feet is required to maintain an Optimum LOS. As aircraft sizes increase from 150 to 200-seat aircraft, 24,000 square feet is required to maintain an Optimum LOS. The largest aircraft utilized by the air carriers for these gates are A-321 seat capacity 187, B-737-900 seat capacity 179, and B-737 Max8 seat capacity 169.

Gates B2/B4

Gates B2/B4 holdrooms total 9,070 square feet located on the west side of Concourse B pier. Gate B4 is a preferential use gate assigned to United. Gate B2 is owned by the Airport. As per the 2018 PBI MPU gate holdroom requirements based on narrowbody 150-seat aircraft, 4,000 square feet is required to maintain an Optimum LOS. As aircraft sizes increase from 150 to 200-seat aircraft 5,400 square feet is required to maintain an Optimum LOS.

In summary, Concourse B gates B1, B2, B3, B4, B5, and B7, generally have sufficient holdroom space to support narrowbody aircraft operations of 150 seats except for the end of the Concourse B pier where seven (7) gates B6, B8, B9, B10, B12, and B14 are located. The relocation of the existing concession area in the center of the Concourse B pier area would still not allow for the needed holdroom and public circulation space to support larger aircraft. These areas become congested and significantly decrease the LOS when gates are in use at the same time.

As aircraft sizes continue to increase to match demand, relocation of gates will not correct congestion. If the current holdrooms are expanded to meet the Optimum LOS requirements will require these areas to extend further into the public circulation areas of the concourse which further exacerbates congestion and passenger throughput. Additionally, as indicated in the 2018 PBI MPU passenger circulation based on a 25-foot central corridor is already deficient by 17,000 square feet. A physical expansion is necessary to meet demand and to provide the square foot capacity in the concourse that is needed to support the modern narrow body aircraft fleets commonly using the Concourse B gates.

Two Additional Gates

As previously mentioned, the additional holdroom space will also meet the requirements of two additional gates. The need for two additional gates was determined by the 2018 PBI MPU. The Airport's master plan evaluated the capacity of the terminal and determined a need for two additional domestic gates to accommodate the forecast activity of 4.4 million enplaned passengers by 2035. As described in more detail in the 2018 PBI MPU, one contact gate is required for each peak hour operation. Peak hour commercial aircraft operations are projected to increase from 20 in 2015 to 30 operations by 2035. The Airport's current terminal building includes 28 contact gates.

The construction of holdroom space associated with the two new gates will take place concurrently with the remainder of the Concourse B expansion to allow for efficiencies in cost and to minimize downtime due to construction. The expanded footprint of the Concourse B expansion allows space for nine gates, an increase from the existing seven gates, without altering the original shape of the Concourse. Passenger loading bridges will not be affixed to the two new gates until demand dictates.

4. PBI Concourse B Ramp Expansion

Project Description: As a component of the Concourse B Expansion (Project 17.03 in this PFC application), the associated apron around Concourse B will require expansion. This project includes the expansion of the existing Concourse B apron by 16,665 yards to accommodate the aircraft spacing necessary for the expanded Concourse B footprint. Also included within this project is the necessary site work for 4,055 square yards of pavement beneath the covered area of the concourse expansion to accommodate ground support equipment (GSE) parking. Building-mounted apron lighting and re-striping are also included within this project as enabling components.

Project Justification: The expansion of the apron is a necessary component of the Concourse B expansion. The Concourse B Apron was instilled in 1988 and consist of both portland cement concrete (PCC) and asphalt concrete (AC). The PCC is placed in the area of the gates to support the static weight of gated aircraft, while the AC is the area of the taxilanes and vehicle service roads. According to FAA AIP Handbook, the minimum useful life criterion for AC and PCC pavements is 10 years and 20 years respectively. Although there are no reported critical distresses on either surface the project will require portions of these pavements to be demolished. The concourse expansion will create a larger footprint and move existing gate positions further northwest, which relocates these gates in the existing AC portion of the ramp that were not originally designed to support the static aircraft loads of today’s fleet mix. The new configuration of the Concourse B expansion ramp will also reconfigure taxilanes and vehicle services roads.

5. PBI PFC Development and Implementation Assistance

Project Description: This project includes direct costs associated with the development and implementation of the County’s application to impose and use PFC revenue for the projects listed in this application, including business and financial consultant services in accordance with Part 158.3.

Project Justification: Retaining a PFC consultant helps ensure PFC applications are filed according to the rules and regulations determined by the FAA. This project is eligible in accordance with Part 158.3, “allowable cost” as explained in that section’s preamble.

Funding Sources:

PROJECTS PROPOSED FOR PFC 20-17-C-00-PBI

Pro No.	Project Title	PFC Level	PFC Revenue Requested	
			Pay-Go	Total PFC
1	PBI Escalator Replacement and Rehabilitation	\$4.50	\$ 8,265,899	\$ 8,265,899
2	PBI 400Hz System and Associated Infrastructure Improvements	\$4.50	\$ 7,844,969	\$ 7,844,969
3	PBI Concourse B Expansion	\$4.50	\$ 18,244,000	\$ 18,244,000
4	PBI Concourse B Ramp Expansion	\$4.50	\$ 5,092,000	\$ 5,092,000
5	PBI PFC Administrative Costs	\$4.50	\$ 49,000	\$ 49,000
Totals			\$ 39,495,868	\$ 39,495,868