

#### April 20, 2016

# Notice of Proposed PFC Application #1 to Air Carriers serving Lincoln Airport

The Airport Authority of the City of Lincoln, Nebraska hereby provides notice, in accordance with 14CFR 158.23 of the Passenger Facility Charge regulation, of a consultation meeting with the air carriers serving the Lincoln Airport (LNK). This meeting is intended to discuss as required by the PFC regulation, the submission of a new PFC application (impose and use) to the FAA for implementation of Passenger Facility Charge authority at LNK. The legislation requires airline notification of potential PFC funded projects 30 to 45 days prior to the PFC meeting. In addition, the legislation requires that information on the program be conveyed to the airlines and that the airlines respond to the Airport, in writing, acknowledging receipt of the required notice.

In accordance with Federal Aviation Regulation 49 CFR Part 158.37 Passenger Facility Charges, the Airport Authority of the City of Lincoln, Nebraska will hold a consultation meeting with air carriers on Monday, May 23, 2016 at 1:00 pm local time, regarding the proposed application. The meeting will be held in the Lincoln Airport – Board Room, located on the second floor of the passenger terminal building at 2400 W. Adams St., Lincoln, Nebraska, 68524. Any air carrier wishing to participate by telephone must contact the Airport at least 48 hours prior to the meeting time in order to make arrangements.

The Authority plans to implement the maximum PFC allowable of \$4.50 per enplaned passenger. We anticipate collection to begin on November 1, 2016, with a total revenue impact of \$5,411,638. The PFC expiration date for these projects is estimated to be November 1, 2025. Future PFC projects will likely extend the expiration date.

The projects described on the following pages are the proposed projects for PFC funding. We look forward to discussing in detail, these projects at our air carrier consultation meeting on May 23, 2016.

Thank you for serving the Lincoln Airport.

Sincerely,

David Haring

**Executive Director** 

cc: Sheila Bridges, AIP/PFC Program Manager, ACE-610B, FAA Central Region

# Lincoln Airport Proposed Passenger Facility Charge Application #1 Project Descriptions

#### 1.01 Runway 14/32 and Taxiway A Surface Treatment

This project included the application of a sealcoat to Runway 14/32 and Taxiway A. The project included the repair of pavement cracks, application of EB44A sealcoat material and the application of necessary pavement markings. This included approximately 210,036 square yards of pavement.

This project was necessary to extend the useful life of these asphaltic airport pavements. Runway 14/32 was originally constructed in 1942 and had received various extensions and rehabilitations over the years. By addressing cracking and surface defects and through the application of the sealcoat, the Airport can ensure the pavement will meet or exceed its anticipated useful life. It will also lower the FOD risk for the Airport.

The total cost of this project is \$325,948. The FAA provided funding under AIP federal grant #34 in the amount of \$309,651. PFCs are anticipated to provide the local match of \$16,297. This project started in July 2006 and was completed in March 2009.

### 1.02 Install Runway 14/32 Sensors

This project included the installation of new runway surface sensors and radio links to provide pavement surface condition information to Operations snow staff. This system included the SCAN webserver hardware and software, Remote Processing Unit (RPU) hardware, RPU data radios and a Server Data Radio Kit to transmit the data to Airport Operations.

This project was necessary to increase safety and provide critical pavement information to assist in winter operations. The information provided by the surface sensor systems is critical to managing pavement conditions in low and inclement weather conditions. The system provides the Snow Desk with information including subsoil temperatures, pavement temperatures, current weather conditions and the freezing point of the material on the pavement surface so that appropriate decisions can be made about the application of resources to maintain the operational surfaces in a safe condition. The previous runway surface sensors were installed in 1991 and rehabilitated in 1997. From 2003 on, the system began deteriorating and failed to provide information from all available sensors. The SCAN system is incorporated into the Airport's Snow and Ice Control Plan.

The total cost of this project is \$24,632. The FAA provided funding under AIP federal grant #34 in the amount of \$23,400. PFCs are anticipated to provide the local match of \$1,232. This project started in July 2006 and was completed in March 2009.

#### 1.03 Improve Airfield Service Roads

This project included the application of a sealcoat to the Terminal Loop Service Road and South Delta Service Road. This project also included the repair of cracks and joint seals and the application of necessary pavement markings. This included approximately 19,442 square yards of pavement.

This project was necessary to extend the useful life of these airfield service roads. These roads were originally constructed in 1995 and 1996. By addressing cracking and surface defects and through the application of the sealcoat, the Airport can ensure the pavement will meet or exceed its anticipated useful life. As these roads are inside the AOA, it will also lower the FOD risk for the Airport. These interior service roads are provided to separate vehicular traffic from aircraft movement areas.

The total cost of this project is \$28,343. The FAA provided funding under AIP federal grant #34 in the amount of \$26,926. PFCs are anticipated to provide the local match of \$1,417. This project started in July 2006 and was completed in March 2009.

#### 1.04 Rehabilitate and Modify Terminal Building

This project included rehabilitation of certain areas of the terminal building. Specifically, it included the rehabilitation of the skywalk connecting the parking garage to the terminal building. This included the installation of a new glazing/framing system to replace leaking skywalk glazing. Additionally, it included the rehabilitation of the public restrooms on the first floor, upgrades to the public restrooms on the second floor, replacement of the public address system, and new HVAC equipment including second floor variable air volume (VAV) units and new variable frequency drive (VFD)-cooling towers.

This project was necessary to address leaks in the skywalk in order to provide safe passenger access to the terminal building. The new HVAC equipment was necessary to replace inoperable and inefficient equipment. The restrooms rehabilitations and upgrades were necessary to address aging facilities and meet the needs of passengers and the public. Collectively, this project improved the movement and comfort of passengers and baggage through the Terminal Building.

The total cost of this project is \$1,158,143. The FAA provided funding under AIP federal grant #34 in the amount of \$1,052,986. PFCs are anticipated to provide the local match of \$55,420. Local funds totaling \$49,737 covered the ineligible costs on this project. This project started in July 2006 and was completed in March 2009.

#### 1.05 Update Airport Master Plan

This project included an update to the Airport Master Plan. The project included an examination of future demand, capacity, requirements, and alternatives and updated the master plan to guide future development at the Airport. This included planning meetings and coordination among the

Airport Authority, the Nebraska Department of Aeronautics and the FAA.

The Airport's previous master plan was completed in 1999. Since then, much of the short-term capital improvements had been completed. The master plan update was needed to re-evaluate long range direction of the Airport so that improvements required in the short term do not restrict the airport's long term viability. Activity forecasts needed to be updated so that emphasis in the CIP could be shifted as necessary to meet safety and security needs and changes in demand. The project resulted in an updated organized direction for airport development and examination of current airport design standards. The master plan provided guidance to the Airport Authority, the Nebraska Department of Aeronautics and the FAA in prioritizing capital improvement needs and establishing the program for meeting those needs.

The total cost of this project is \$406,754. The FAA provided funding under AIP federal grant #35 in the amount of \$386,416. PFCs are anticipated to provide the local match of \$20,338. This project started in June 2006 and was completed in November 2011.

#### 1.06 Improve Runway Safety Area 18/36

This project included design and construction of improvements to the runway safety area through the relocation of the existing localizer antenna from a location 710' south of Runway 36 threshold to a location 1,010' south of Runway 36 threshold and outside of the RSA. The work included earthwork and foundation of the new localizer building antenna and obstruction lights, removal and relocation of the building, antenna and obstruction lights, all necessary electrical work to serve the new location and the flight check. This project also included the regrading of the Runway 36 safety area.

This project was necessary to enhance safety by removing objects not required by function from the runway safety area.

The total cost of this project is \$368,033. The FAA provided funding under AIP federal grant #36 in the amount of \$349,631. PFCs are anticipated to provide the local match of \$18,402. This project started in July 2006 and was completed in May 2009.

#### 1.07 Improve Airport Drainage

This project included the design and construction necessary to improve airport drainage at ten sites identified at the airport. This project included the regrading and reshaping of drainage areas to their original lines and grades. It also included improvements to drainage structures under airfield pavements and the installation of flow line protection to reduce future drainage area erosion. Construction efforts included such things as earthwork, concrete pavement, joint and crack repairs, low flow liners, erosion control inlets and storm sewer lines.

This project was necessary to improve the drainage of stormwater through the airfield thereby increasing safety and protection of airfield infrastructure. This project addressed erosion and

silting problems that had developed over the decades since the construction of the Airport. This included addressing areas where flows had increased or changed due to various airport development.

The total cost of this project is \$786,316. The FAA provided funding under AIP federal grant #37 in the amount of \$747,000. State funds provided \$9,793 of the required local match. PFCs are anticipated to provide the remaining local match of \$29,523. This project started in June 2008 and was completed in November 2009.

## 1.08 Security Enhancements

This project included a number of security enhancements at the Airport including the following: improvements to the perimeter security fence; addition of access control and security cameras to the west side of the airport; expansion of the existing fiber network; an updated communications center telephone dispatching system; an updated security training system; and new electronic fingerprint scanning equipment.

This project was necessary to enhance security at the Airport. Specifically, the improvements to the perimeter security fence provide an additional deterrence to unauthorized access over the fence. The additional access control on the west side of the airport improves the control and monitoring of those utilizing those access points and remotely monitor those locations. The dispatching system improves the ability to dispatch security personnel where needed around the Airport. The updated training system provides consistent and standardized training and testing of all personnel operating within secured areas of the airport and provides a database of training records. New electronic fingerprint scanning technology provides a more accurate and timely means of obtaining and submitting fingerprint records to federal agencies for the required criminal history records checks and security threat assessments. All of these enhancements were necessary for the Airport to meet its requirements under CFR 1542.

The total cost of this project is \$875,354. The FAA provided funding under AIP federal grant #38 in the amount of \$820,525. PFCs are anticipated to provide the local match of \$43,186. Local funds totaling \$11,643 funded the ineligible costs. This project started in June 2008 and was completed in January 2010.

# 1.09 Install Apron Lighting (Replace Terminal Ramp Lighting)

This project includes design and construction necessary for the replacement of the existing terminal ramp lighting. Specifically, the project included the installation of new metal halide lighting including new wiring circuits, and new fixtures with the ability to be lowered. The construction included the removal and replacement of PCC pavement, new fixtures, electrical wiring, pull boxes, transformers and circuit breakers.

This project was necessary to improve the color and quality of the lighting on the terminal ramp. This improvement provides better lighting for those working around the aircraft, improves safety

by improving how the ramp lighting is maintained, and provides better visibility of closed circuit cameras providing security for the terminal ramp. The existing lighting was original to the construction of the Terminal Building in 1974, and had reached the end of its useful life. Deteriorated electrical wiring inside the poles was also creating a safety hazard.

The total cost of this project is \$430,527. The FAA provided funding under AIP federal grant #39 in the amount of \$399,698. PFCs are anticipated to provide the local match of \$21,037. Local funds totaling \$9,792 funded the ineligible costs. This project started in May 2008 and was completed in July 2009.

### **1.10** Extend Runway 17/35

This project includes the design and construction of the extension of Runway 17/35 through the following means: removal of the runway displaced threshold, relocation of the 4-box PAPI, relocation of the ODALS, modifying and narrowing Taxiway A from 75' to 50' to meet design standards, installation of enhanced taxiway centerline, installation of surface painted holding position signs, and the relocation of the terminal service road out of the runway safety area.

This project was necessary to reduce the potential for pilots lining up and landing on Taxiway A by improving the ability to distinguish Runway 35 from the parallel Taxiway A, thereby enhancing safety at the Airport.

The total cost of this project is \$2,512,602. The FAA provided funding under AIP federal grants #40 and #41 in the amount of \$2,371,701. PFCs are anticipated to provide the local match of \$124,826. Local funds totaling \$16,075 covered the ineligible costs on this project. This project started in April 2009 and was completed in January 2010.

# 1.11 Construct Taxiway C (Connector Between Taxiway E and D) and Rehabilitate Taxiway B (Remove Hold Apron)

This project includes the design and construction of a Taxiway C Connector between Taxiways E and D as well as the removal of the Taxiway B run-up area. The Taxiway C construction work included site preparation, removal of existing lighting and signage, placement of aggregate base and subgrade, placement of approximately 3,500 square yards of 9" P-501 PCC pavement, erosion control, pavement markings, lighting, signage and conduit, and storm sewer. The Taxiway B rehabilitation included the removal of approximately 6,300 cubic yards of pavement, removal of existing lighting and signage, joint and crack repairs, pavement markings, erosion control and installation of new edge lights, signage and associated electrical work.

The construction of the Taxiway C connector eliminated the taxi operations on Delta-Echo from passing through the runway safety area for Runway 14 thus enhancing safety on the airfield. The removal of the Taxiway B run-up area reduced the potential of FOD and aircraft damage on that taxiway.

The total cost of this project is \$1,406,808. The FAA provided funding under AIP federal grants #42 in the amount of \$1,336,468. PFCs are anticipated to provide the local match of \$70,340. This project started in August 2010 and was completed in June 2012.

#### 1.12 Acquire Emergency Generator (for SRE Facility)

This project includes the acquisition of a new emergency generator package and automatic transfer switch serving the snow removal equipment facility and snow desk. This project consisted of a 200KW Generator System with a Cummins diesel rated at 364 hp. This also included all of the necessary transfer switches, circuit breaker panels, control panels, enclosures and fuel tanks required to make the system fully operational.

This project was necessary to assure uninterrupted, continuous electrical power supply and immediately restore power to the facility in the event of a utility failure, in order to allow the snow removal operations to continue effectively and safely. The likelihood of such a failure is increased during inclement weather, particularly snow and ice events, when the operation of the SRE equipment facility and snow desk are most critical. This project replaced the generator provided with the original construction of the building in the late 1970's which was no longer reliable.

The total cost of this project is \$224,506. The FAA provided funding under AIP federal grants #43 in the amount of \$207,771. PFCs are anticipated to provide the local match of \$10,935. Local funds totaling \$5,800 covered the ineligible costs on this project. This project started in June 2010 and was completed in March 2011.

#### 1.13 Install Runway Sensors, Runway 18/36

This project includes the installation of runway sensors on Runway 18/36. This included the replacement/upgrade of existing surface sensor system with new system utilizing active pavement sensors, passive pavement sensors, and cellular based communication technology. Twelve surface sensors were installed; three were active sensors and nine were passive sensors. A subsurface temperature probe was installed to measure ground temps below grade. The necessary hardware for each of the three Remote Processing Units (RPU's) was installed to collect data from all of the sensors. At one of the RPU locations, atmospheric instruments were installed which gather weather data including air temperature, pressure, wind speed and direction, humidity, rate and type of precipitation and visibility. A cellular data radio was installed to relays all of the data supplied by the system to web portal accessible to airport employees regardless of location.

This project was necessary to provide more reliable, higher quality pavement surface information in a more accessible format to assist in the snow removal decision making process. The system provides the Snow Desk with information including subsoil temperatures, pavement temperatures, current weather conditions and the freezing point of the material on the pavement surface so that appropriate decisions can be made about the application of resources to maintain

the operational surfaces in a safe condition. The previous runway surface sensors were installed in 1982, rehabilitated in 1997, but had reached the end of their useful life and replacement sensors were no longer available due to the system's age. The system is incorporated into the Airport's Snow and Ice Control Plan.

The total cost of this project is \$355,459. The FAA provided funding under AIP federal grant #45 in the amount of \$299,890. PFCs are anticipated to provide the local match of \$15,784. Local funds totaling \$39,785 covered the ineligible costs on this project. This project started in April 2014 and was completed in November 2014.

### 1.14 Rehabilitate Taxiway Lights and Signs

This project includes the design and construction of the installation of new LED powered airfield guidance signs and taxiway lights. This project updated all of the airfield guidance signs and taxiway lights which had not previously been upgraded under AIP Projects 40, 41 and 42 (proposed PFC Projects #1.10 and 1.11). Specifically, the work included new edge lighting, guidance signage, distance remaining markers, power supplies, the removal of old lights and signs, pavement removal and placement, erosion control, electrical cables, ducts, handholes, and necessary electrical components. This project also reconfigured the holding positions signs from the taxiway lighting circuit to the runway lighting circuit as required by AC 150/5340-18F.

The taxiway lighting circuits were installed in the mid to late 1980's and the airfield signage was installed in 1992. The signs and lights were beyond their useful life and replacement parts were becoming increasingly difficult and expensive to obtain. This project was necessary to improve the brightness and visibility of airfield lighting elements, and create a consistent look across the airfield, matching other replaced elements. This project also improved safety by reducing pavement closure times through the significant reduction in the need for maintenance personnel to be in the active airfield replacing or maintaining the lighting and signage.

The total cost of this project is \$2,295,948. The FAA provided funding under AIP federal grant #45 in the amount of \$2,179,488. PFCs are anticipated to provide the local match of \$114,710. Local funds totaling \$1,750 covered the ineligible costs on this project. This project started in June 2011 and was completed in July 2012.

#### 1.15 Rehabilitate Apron

This project includes the design and rehabilitation of the terminal apron. This project was achieved through a combination of partial depth patching and full depth replacement construction. Specifically, the project included the removal and replacement of approximately 23,000 square yards of 14" P-501 PCC pavement, subgrade and base course, repair of existing concrete joints, route and seal of existing concrete cracks, erosion control, pavement markings, and subdrain pipe. This project also included rehabilitation of selected pavements on Taxiway J and the Taxiway G/E intersection. That work included the removal and replacement of approximately 1,400 square yards of 14" P-501 PCC pavement.

This project was necessary to extend pavement life, reduce maintenance and incidence of FOD, reduced impact on ramp operations and increase safety. This pavement was originally constructed in 1973-1974 with some rehabilitation work done in 1995. A terminal ramp study completed in January 2011 reflected a PCI rating of poor and very poor. The pavement was suffering from cracked panels, joint and corner failures, spalling, delamination, and some aggregate reactivity. Due to extremely hot weather conditions, expansion of Taxiway E pushing against Taxiway G caused pavement to buckle and fail, making the taxiways unusable. Taxiway J experienced a large scale settlement over an existing storm sewer, rendering that taxiway unusable as well.

The total cost of this project is \$3,515,834. The FAA provided funding under AIP federal grants #44 and #46 in the amount of \$3,164,251. PFCs are anticipated to provide the local match of \$351,583. This project started in July 2012 and was completed in January 2014.

#### 1.16 Acquire Snow Removal Equipment

This project includes the acquisition of four pieces of snow removal equipment.

First is the purchase of a MacQueen Runway Broom. The base is a 2012 Oshkosh H Series Chassis with a 385 HP Cummins engine. It is equipped with a 20' FMD HP3 Runway Broom.

Second is the purchase of a M-B Companies MB5 Multi-Tasking Broom-Plow Combination. This is a 2013 M-B Mid-Mount Broom Chassis with a 475 HP diesel engine. The attached implements include a 22' front-mounted plow and a 20' mid-mounted broom. The broom engine is rated at 385 HP.

Next is the purchase of a 2011 John Deere 444K Front End Loader and 2013 Wausau Model WRP 15 Ramp Plow. The unit is powered by a 4.5L engine and is equipped with a 2.0 cubic yard excavating coupler bucket. The plow is a 15' ramp plow with carbide cutting edges.

Last is the purchase of a 2003 Terra Gator Model 8144 Agricultural Sprayer. The unit is powered by a John Deere 6081H, 300HP diesel engine and IIF-3R Terra Shift transmission with 4-wheel drive, a 2,000 gallon stainless steel tank, an 80' retractable Benson Boom II Liquid Spray Boom System. This sprayer is used to apply liquid deicer to the runway and airfield pavements. It replaced the Airport's 1985 sprayer which was undersized and no longer reliable.

This project was necessary to improve the efficiency and reliability of snow removal efforts as required by Part 139. The equipment purchases comply with the airport's requirements as calculated in accordance with AC 150/5220-20.

The total cost of this project is \$1,481,704. The FAA provided funding under AIP federal grants #47 and #49 in the amount of \$1,076,184 for the broom and combination plow. PFCs are anticipated to provide the local match of \$119,577. Local funds totaling \$12,318 covered the ineligible costs on this project. PFCs are also anticipated to provide the funds for the front end

loader and plow as well as the sprayer purchased with local funds totaling \$273,425. Total PFCs requested for these four pieces of equipment is \$393,002. This project started in February 2010 and was completed in September 2013.

#### 1.17 Rehabilitate Runway 18/36

This project includes the design and rehabilitation of Runway 18/36. This included an asphalt mill and overlay of the outer 50' of both sides of the runway and select portland cement concrete panel replacement in the keel section. This runway is approximately 12,900' long and 200' wide. Specifically, this project included approximately 22,456 tons of bituminous surface course, 6,265 tons of bituminous base course, 3,105 square yards of concrete full panel removal and replacement, 10,160 square feet of concrete panel partial depth pavement repair, cleaning and sealing of existing joints and cracks, sawcut grooving and pavement markings.

This project was necessary to extend the pavement life to match the anticipated life of the keel section, to reduce FOD potential and to reduce ongoing maintenance. This runway was originally constructed in 1954 with an extension constructed in 1956, bringing the runway to its current dimensions. In 1991, the 100' keel section of 8,600' of the runway which was constructed with a flexible bituminous pavement was reconstructed with 15" PCC/6" CTB. At that time the outer 50' of asphalt was milled and overlaid. At the time of this project, the asphalt was again at the end of its useful life and was suffering from various types of cracking, raveling and shoving, and patching. Repairs to cracked PCC sections of pavement were also required.

The total cost of this project is \$5,959,610. The FAA provided funding under AIP federal grants #48 and #50 in the amount of \$5,363,649. PFCs are anticipated to provide the local match of \$595,961. This project started in June 2014 and was completed in March 2015.

#### 1.18 Rehabilitate Runway 14/32 (including Taxiways K, N & P)

This project includes the design and rehabilitation of Runway 14/32 and Taxiways K, N and P. This project included the application of a sealcoat to Runway 14/32 and the adjoining portions of Taxiways K, N & P. The project also included the repair of pavement cracks, the application of GSB-88 emulsified asphalt sealcoat with polymer and the application of necessary pavement markings. This included approximately 206,929 square yards of pavement.

This project was necessary to extend the pavement life. These pavements were constructed in 1942 and had previously been rehabilitated in 2001 with a follow-up sealcoat done in 2006. By addressing cracking and surface defects and through the application of the sealcoat, the Airport can ensure the pavement will meet or exceed its anticipated useful life. It will also lower the FOD risk for the Airport.

The total cost of this project is estimated to be \$802,000. The FAA provided funding under AIP federal grant #51 in the amount of \$721,800. PFCs are anticipated to provide the local match of \$80,200. This project started in June 2015 and was complete in September 2015.

# 1.19 Runway 18/36 Lighting Rehabilitation

This project includes the design and rehabilitation of the runway lighting system for Runway 18/36. This will include a complete reconstruction of the lighting system including circuit wiring, edge lighting, transformers, power supplies, the removal of old lights and signs, pavement removal and placement, erosion control, electrical cables, ducts, handholes, and necessary electrical components.

The lighting system on Runway 18/36 was installed in 1991 and is far beyond its reasonable life expectancy. Given the age and condition of the system, it requires significant maintenance effort that includes regular works inside the Runway Safety Area, to investigate, analyze, and repair problems. Megohm readings of the circuit have been steadily decreasing, to the point that it is not unusual to get megohms readings of zero during regular testing. This indicates a breakdown of the insulation along circuit wiring and a breakdown of transformer insulation at each of the individual lights. Additionally, the current light spacing does not meet current FAA design standards and so the entire system will need to be reconstructed to meet these specifications.

The total cost of this project is estimated to be \$2,200,000. The FAA is anticipated to provide funding under the 2016 AIP federal grant in the amount of \$1,980,000. PFCs are anticipated to provide the local match of \$220,000. This project is expected to start in September 2016 and be completed in August 2017.

#### 1.20 Taxilane Construction

This project includes the design and construction of approximately 24,839 square yards of portland cement concrete taxilane pavement. 12,920 square yards represents the pavement of taxilanes providing aircraft access to the general aviation facilities. The remaining pavement represents ineligible pavement 27' from the face of hangars serving Group I aircraft. This project also included the necessary earthwork and stormwater utilities. The project also included other ineligible elements of work.

This project was necessary to preserve capacity by providing access to aircraft utilizing these facilities.

The total cost of this project was \$4,051,142 funded with 100% local funds. PFCs are anticipated to reimburse \$801,094 of these local funds for eligible pavement costs. PFCs are also anticipated to provide the eligible share of associated financing and interest costs on this project in the amount of \$524,822. Total PFCs requested total \$1,325,916. Local funds totaling \$3,250,048 covered the ineligible costs on this project. This project started in April 2012 and was completed in May 2013.

#### 1.21 Terminal Building Rehabilitation

This project included the planning, design and rehabilitation of various areas of the passenger terminal building. Specifically, the project included the replacement of 2 HVAC chillers and 3 boilers serving the passenger terminal building. The chillers are water cooled, centrifugal Daikin Chillers with magnetic bearings and dual mounted compressors. The boiler installation consisted of two Bryan high efficiency condensing flexible water tube boilers rated for 2 million BTU's each. Also installed was one Aldrich horizontal firetube boiler rated at 3.5 million BTU's and capable of running on diesel in the event of an emergency. The project also included the improvement of terminal lighting by retrofitting the existing fixtures with LED lighting modules with 50,000 MTBF (Mean Time Before Failure) operating life. The terminal windows were replaced from single pane to triple pane windows. Finally the project included the reconstruction of sidewalks at the terminal building.

This project was necessary to extend the useful life of the terminal building and preserve capacity. The boilers were original to the terminal building construction in 1974 and had exceeded their useful life. The chillers were installed in 1996. Despite annual cleaning and maintenance as well as water treatment programs to extend the lives of the systems, they have become increasingly expensive to maintain and inefficient to operate. The Airport conducted a study in 2011 to recommend the best options for addressing these systems.

The existing lighting was original to the building, with most of the fixtures being very old, inefficient and obsolete T-12 fluorescents. All of the lighting in the public spaces is far above the finished floor elevation and requires specialized equipment to lift personnel and materials, sometimes to heights of over 35', to replace lights. This project reduced the risk to passengers and employees by reducing operations to replace lighting. The Department of Energy began a phase-out of these fixtures in 2012, and parts such as ballasts and bulbs for the old fixtures will be increasing difficult and expensive to acquire in the future.

The architecture of the terminal building is such that a majority of the passenger spaces utilize full-height glass as exterior walls. The old, existing single pane glass means that in the summer spaces can become locally very warm due to solar gain and in the winter can become very cold due to heat loss from conduction through the window to the outside. This project was undertaken to increased comfort to the public and passengers. The double pane windows also provide for reduced noise levels inside the building from outside noise.

The sidewalks were constructed in 1986. Due to the location and slope of the surrounding terrain, one area of sidewalk had been an ongoing slip/fall hazard due to ice buildup in the winter. The only way to effectively eliminate the problem was to completely reconstruct it and the surrounding grade so that runoff water could be intercepted by a new storm drain between the roadway and the sidewalk. Both the longitudinal and transverse grades of the sidewalk were also reduced to reduce the potential for slips and falls and so improved the safety of passengers.

The total cost of this project is \$1,780,782. PFCs are anticipated to reimburse \$996,235 of local funds temporarily used to fund the PFC eligible work. PFCs are also anticipated to provide the eligible share of associated financing and interest costs on this project in the amount of

\$640,553. Total PFCs requested for this project total \$1,636,788. Local funds totaling \$784,547 covered the ineligible costs on this project. This project started in May 2014 and was completed in December 2015.

#### 1.22 Terminal Loop Road Rehabilitation

This project included the rehabilitation of the terminal loop road. Specifically, this included the cleaning and sealing of joints and cracks, application of a surface treatment (sealcoat), limited full depth and partial depth pavement repairs, and the application of pavement markings. This project also included the replacement of the associated street lighting. The loop road is a two lane road constructed of asphalt and approximately 1.2 miles in length.

This project was necessary to extend the useful life of the terminal loop road. This road was originally constructed in 1974 and received its last full rehabilitation in 1998. By addressing cracking and surface defects and through the application of the sealcoat, the Airport can ensure the pavement will meet or exceed its anticipated useful life.

The total cost of this project is \$189,741 to be funded 100% with PFCs. PFCs are anticipated to reimburse the local funds which were used to interim fund this project. This project started in September 2010 and was completed in August 2011.

#### 1.23 PFC Administration Costs

PFC-eligible general formation costs included in this PFC project are the necessary expenditures to prepare the new PFC application. Also included are eligible ongoing administrative costs, amendments and closeout for this PFC application. Development associated with the approved projects in this application will preserve and enhance capacity, safety and security at the Airport. The total cost of this project is \$75,000. PFCs are anticipated to provide 100% funding for this project. This project started in February 2016 and will be complete in October 2025.

Airline	Contact	Address	City	State	Zip
Endeavor Air Inc	Ryan Gumm	7500 Airline Dr	Minneapolis	MN	55450
ExpressJet Airlines Inc	Alexandria Marren	100 Hartsfield Centre Parkway, Ste 700	Atlanta	GA	30354
Republic Airlines	Bryan Bedford	8909 Purdue Rd, Ste 300	Indianapolis	IN	46268
SkyWest Airlines	Michael Thompson	444 South River Road	St. George	UT	84790
United Airlines, Inc	Oscar Munoz	233 South Wacker Dr	Chicago	IL	60606
Delta Air Lines	Richard Anderson	Box 20706, Hartsfield-Atlanta Int'l Airport	Atlanta	GA	30320
Trans States Airlines, Inc	Hulas Kanodia	11495 Navaid Rd, Ste 340	Bridgeton	MO	63044