## CITY OF KILLEEN KILLEEN-FORT HOOD REGIONAL AIRPORT

## PASSENGER FACILITY CHARGE PROJECT DESCRIPTIONS

#### **GRK APPLICATION 11**

#### Project 1. Rehabilitate Taxiway B-Design

The project is the design for the rehabilitation of Taxiway B and associated taxiway connectors to the runway and public aprons, the addition of shoulders to the taxiway to provide primary surface stabilization, electrical upgrades to the lighting, signage, and drainage improvements. The project was initiated to meet the planning timing requirement to compete for a potential supplementary discretionary grant; therefore, to fund the project, the Airport acquired a loan to initiate the project design. The financial allocation for this project includes only the interest accrued on the loan, which is an allowable cost for the passenger facility charge program and will reimburse the airport's operational account.

Financial Allocation:

PFC	AIP	TOTAL
\$13,151	\$0	\$13,151

## Project 2. Rehabilitate Terminal Building–Replace Baggage Make-Up Unit

The objective of this project is to design, bid, procure, and install a new baggage make-up unit (BMU) and associated supporting equipment to replace the existing marginally operable BMU system and fully integrate it with the existing baggage handling system components.

The project includes all conveyors from the airline ticket counters to the TSA screening area, all outbound conveyors feeding the baggage make-up unit, replacement of the existing baggage diverter with a new baggage drop chute, a new baggage carousel, new motor control panels, and security doors required for the system.

The project is to replace the original baggage make-up system installed when the Airport was constructed. The existing system is sixteen (16) years old, has an extraordinarily high rate of failure requiring increasing maintenance efforts and costs to keep the system operational. The new system will decrease maintenance, fix bag jam and stoppage issues, reduce system down time, decrease costs, and increase system and personnel efficiency.

This section of the baggage handling system (BHS) was not included in the terminal and BHS improvement project completed in 2013. Parts replacements are costly (most must come from overseas suppliers), and internal repairs (e.g., welding of the structure to repair metal fatigue failures) is becoming non-productive as the metal is so thin it is difficult to weld. By replacing the failing make-up unit system, the Airport anticipates increased operational efficiency and effectiveness, decreased down time, and decreased annual maintenance costs. The new section will have fewer maintenance and repair requirements, thus allowing time and financial commitments to be utilized on other aspects of the facility. Following installation of the new equipment, maintenance commitments are

anticipated to be supported by the manufacturer whilst under warranty. The availability of OEM parts and experienced system maintenance technicians is expected to reduce the cost of parts and labor. The upgraded equipment is expected to eliminate or significantly reduce baggage jams, thereby increasing airport and airline operational efficiency, capability, and capacity, and reducing/eliminating airline conflicts and schedule delays. With a documented history of limited commercial support for parts, increasing failures necessitating creative maintenance solutions to keep the system in operation, the paucity of parts and maintenance support, the high maintenance costs incurred to sustain the system, and the increasing down times of the system when parts or systems fail, an upgrade to the system is prudent.

<b>Financial Allocatio</b>	n:	
PFC	AIP	TOTAL
\$1,150,000	\$1,150,000	\$2,300,000

# Project 3. Miscellaneous Building–Construct Hangar - Project Deleted.

#### Project 4. Rehabilitate Runway–Pavement Maintenance

The bituminous pavement is showing signs of deterioration on the surface course and has areas along the cold joint that are separating and propagating cracks. The most recent pavement condition survey/evaluation completed in April 2019 identified the runway PCI in the 70-80 range (satisfactory) and the runway shoulders at a PCI of 65 (fair). The evaluation identified longitudinal and transverse cracks on the pavements, surface unraveling with loss of large aggregate, rutting, joint spall failures, and large areas of weathering.

Routine preventative maintenance and minor repair of the pavements will cost significantly less than full reconstruction or full rehabilitation of the pavement, and will prevent the need for a full reconstruction of the pavement in the near future. Typical pavement maintenance, which includes any regular or recurring work necessary to preserve existing airport facilities in good condition, will consist of routine cleaning, filling, and or sealing of longitudinal and transverse cracks; grading pavement edges; maintaining pavement drainage systems; patching pavement; rubber removal; and remarking pavement areas.

This preventative work will significantly reduce maintenance and repair costs, save capital costs which may result from pavement failures, and provide savings in operations and maintenance costs which will directly contribute toward long-term economic stability and self-sufficiency for the Airport. The eligibility of pavement maintenance under 49 USC § 47102(3)(H) for runways, taxiways and aprons for nonhub primary airports is allowable and is supported in FAA Order 5100.38D. This project is consistent with the master plan, is supported by the airport layout plan, and will ensure a safe, fully functional runway, as well as extending the useful life of the runway.

Financial Allocation:

PFC	AIP	TOTAL
\$10,000	\$90,000	\$100,000

## Project 5. Rehabilitate Taxiway–Pavement Maintenance

Taxiway B, the parallel taxiway supporting Runway 15-33, is sixteen (16) years old and has never been rehabilitated or reconstructed since initial construction. Despite routine preventative maintenance, the bituminous pavement is showing signs of deterioration on the surface course and has areas along the cold joint that are separating and propagating cracks. The most recent pavement condition survey/evaluation completed in April 2019 identified the taxiway PCI in the 60s, identified longitudinal and transverse cracks on the pavements, surface unraveling, depressions in the pavements, and areas of minor spalling.

Routine preventative maintenance and minor repair of the pavements will cost significantly less than full reconstruction or full rehabilitation of the pavement, and will prevent the need for a full reconstruction of the pavement in the near future. Typical pavement maintenance, which includes any regular or recurring work necessary to preserve existing airport facilities in good condition, will consist of routine cleaning, filling, and or sealing of longitudinal and transverse cracks; grading pavement edges; maintaining pavement drainage systems; patching pavement; marking removal; and remarking pavement areas.

This preventative work will significantly reduce maintenance and repair costs, save capital costs which may result from pavement failures, and provide savings in operations and maintenance costs which will directly contribute toward long-term economic stability and self-sufficiency for the Airport. The eligibility of pavement maintenance under 49 USC § 47102(3)(H) for runways, taxiways and aprons for nonhub primary airports is allowable and is supported in FAA Order 5100.38D. This project is consistent with the master plan, is supported by the airport layout plan, and will ensure a safe, fully functional taxiway, as well as extending the useful life of the taxiway.

Financial Allocation:

PFC	AIP	TOTAL
\$10,000	\$90,000	\$100,000

# Project 6. Install Apron Lighting

The objective of this project is to design, bid, procure, and install state-of-the-art LED apron lights with associated infrastructure and software to replace the existing components. The existing apron lighting is sixteen (16) years old and operates using 1000W metal halide bulbs which are very inefficient and consume an inordinate amount of energy. Upgrading the existing fixtures to state-of-the-art controls and energy-efficient LED fixtures will significantly reduce energy consumption, require minimal maintenance and repair (conserving both staff time and costs), and will allow maintenance assets to be deployed and utilized on other aspects of the Airport.

Initial studies for the apron lighting upgrade show LED lighting will increase the light footprint and provide higher lumens for the apron area without increasing the number of light poles. This increase in the light area will provide a safer operating environment for airline and Airport employees during night and times of low visibility conditions, increase airline and Airport operational efficiency and effectiveness, and increase airfield and apron security. The new LED lights will decrease light pollution to surrounding area (helping to meet Dark Skies initiatives), decrease glare for pilots operating on the airfield and apron,

decrease glare for ATC operators, increase energy savings, lower service costs, and provide an increased product service life over the existing conventional lighting.

Financial Allocation	on:	
PFC	AIP	TOTAL
\$10,000	\$90,000	\$100,000

### **Project 7. Install Perimeter Fencing and Access Gates**

The objective of this project is to replace failing perimeter fencing and access gates. The existing fencing is more than sixteen (16) years old and has maintenance issues which result in safety and security problems. Preventative maintenance has kept the fence system operating at a minimal level, however, maintenance actions have significantly increased and repairs are becoming more costly due to the age and availability of system components.

New fence and associated gate components will relieve the maintenance issues as well as provide for safety of the airfield per 14 CFR 139 and security of the airfield per 49 CFR 1542. These areas of fencing will require closed circuit cameras for safety monitoring and both closed circuit cameras and access control to meet Transportation Security Administration (TSA) security requirements. This project will also include the replacement of electronic locking devices and automated gates per the approved Airport Security Program.

The objective of the project is to provide a safe and secure Airport operating environment per federal guidelines, and an operational fence system which will reduce maintenance costs, permit Airport resources to be utilized for other Airport maintenance needs, and meet the requirements of both 14 CFR 139 and 49 CFR 1542.

Financial Allocation:

PFC	AIP	TOTAL
\$20,000	\$180,000	\$200,000

#### **Project 8. Administration Expenses**

This element comprises PFC eligible costs associated with the application. It includes application development, potential amendment, and close-out costs; legal fees; advertising fees; independent fee estimates; sponsor costs; audit, and other project-associated fees. Administrative support costs associated with preparation of PFC applications, maintenance of PFC records and close out costs are eligible for use of PFC revenue per 14 CFR 158.13(b). An annual audit of PFC records by an accredited independent public accountant is required per 14 CFR Part 158.67(c).

<b>Financial Alloc</b>	cation:	
PFC	AIP	TOTAL
\$50,000	\$0	\$50,000