



August 23, 2017

Notice and Opportunity to Comment on Proposed Passenger Facility Charge (PFC) Application

The City of Fresno Airports Department (Department) intends to file with the Federal Aviation Administration (FAA) a PFC application, to provide funding for projects at the Fresno Yosemite International Airport (FAT or the Airport), as summarized in the table below.

This notice is being published to provide any interested person with notice of the proposed application and an opportunity to comment, as required by Part 158 of the Code of Federal Regulations (14 CFR Part 158), "Passenger Facility Charges" (effective June 28, 1991).

As required by 14 CFR Section 158.24, this notice has been posted on FAT's web site. Any member of the public may file comments on the proposed application until September 21, 2017. All comments and any requests for additional information about the proposed application and projects should be submitted to the address listed below under "**NOTICE**". 14 CFR Part 158 is the final rule that implements Sections 9110 and 9111 of the Aviation Safety and Capacity Expansion Act of 1990, passed by the U.S. Congress in November 1990, and subsequently amended. The legislation requires that the Airport provide public notice and an opportunity to comment on any proposed new PFC application. The following paragraphs provide the information required under Section 158.24 for the public notice.

PFC Level, Effective Date, and Total Projected PFC Revenue

FAT is requesting \$13,504,839 of PFC collection authority (impose and use) for 38 projects, which are listed in Table 1. The proposed collection rate is \$4.50 per enplaned passenger for each of the proposed projects, which is the current collection rate. The proposed charge effective date is April 1, 2021 and the estimated charge expiration date is December 1, 2024.

Descriptions of Projects

The information for the project proposed for the new PFC application is contained in the remaining pages of this Notice. Any interested person may obtain more detailed justification by submitting a request to the address listed below:

NOTICE:

Pursuant to Section 158.24(c)(i) of the Federal Aviation Regulations, any interested person desiring to submit comments, must submit comments to the address below within 30 days of the posting of this notice, or no later than September 22, 2017.

Mr. Kevin Meikle
Director of Aviation, City of Fresno Airports Department
4995 East Clinton Way, Fresno CA 93727

TABLE 1
LIST OF PROJECTS FOR PFC APPLICATION

Project #	Project Title	Proposed PFC Level	Total Cost	PFC Funding	AIP Grants	Airport Revenue
3.01	Replace/Upgrade Terminal HVAC Systems	\$4.50	\$1,620,000	\$1,255,790	\$0	\$364,210
3.02	Replace/Upgrade Terminal Facilities	\$4.50	2,710,000	2,420,650	0	289,350
3.03	Passenger Boarding Bridge Modifications	\$4.50	500,000	500,000	0	0
3.04	Powered Boarding Bridges at Ground Level Gates	\$4.50	1,200,000	1,200,000	0	0
3.05	Airfield Lighting System Upgrades	\$4.50	300,000	28,020	271,980	0
3.06	Airfield Perimeter Fencing Upgrades (Phase 1)	\$4.50	920,000	920,000	0	0
3.07	FAA Airfield Infrastructure	\$4.50	2,162,135	583,596	1,431,103	147,436
3.08	Master Plan Update	\$4.50	1,515,629	141,560	1,374,069	0
3.09	Commercial Aviation Apron Lighting Upgrade	\$4.50	300,000	300,000	0	0
3.10	Access Control and CCTV Upgrade	\$4.50	300,000	300,000	0	0
3.11	PFC Administration Costs	\$4.50	213,482	213,482	0	0
Subtotal "new" projects			\$11,741,246	\$7,863,098	\$3,077,152	\$800,996
Completed projects for which Airport is seeking PFC reimbursement for AIP "local match"						
3.12	Terminal Renovations	\$4.50	1,090,724	94,095	846,857	149,772
3.13	Security Access Control Badging System Upgrade	\$4.50	288,325	28,833	259,492	0
3.14	Airfield Guidance Signs Upgrade	\$4.50	538,227	29,567	508,660	0
3.15	Rehabilitate Airfield Lighting System	\$4.50	1,444,615	144,461	1,300,154	0
3.16	Rehabilitate Airfield Lighting Computer Control System	\$4.50	539,389	53,939	485,450	0
3.17	Displace Runway 29R Threshold	\$4.50	188,366	18,837	169,529	0
3.18	Taxiway A Rehab	\$4.50	2,279,801	227,980	2,051,821	0
3.19	Runway 29R Rehab	\$4.50	7,564,927	670,964	6,893,963	0
3.20	Rehab/Construct Taxiway B3/C3 Phase 1	\$4.50	157,580	15,758	141,822	0
3.21	Master Drainage Plan	\$4.50	134,779	13,478	121,301	0
3.22	Environmental Assessment & Related Environmental Work	\$4.50	1,167,143	116,714	1,050,429	0
3.23	Rehab Taxiways B6, B9, B10-C10, B12-C12	\$4.50	7,294,468	364,724	6,929,744	0
3.24	Terminal/Concourse Expansion, Phase 2 (Design and Construct)	\$4.50	9,219,563	470,258	8,287,428	461,877
3.25	Acquire Aircraft Rescue and Fire Fighting (ARFF) Vehicle	\$4.50	725,032	36,253	688,779	0
3.26	Airport Master Plan Update	\$4.50	444,444	44,444	400,000	0
3.27	Upgrade Access Control System	\$4.50	1,411,108	141,111	1,269,997	0
3.28	Purchase Two (2) Security Vehicles	\$4.50	144,888	14,489	130,399	0
3.29	ARFF Station Improvements	\$4.50	100,020	5,001	95,019	0
3.30	Rehabilitate Service Road	\$4.50	217,652	10,883	206,769	0
3.31	Remark Runway 11L-29R	\$4.50	161,138	8,057	153,081	0
3.32	Terminal Security Checkpoint Improvements (Design and Contract)	\$4.50	4,370,209	250,287	4,094,322	25,600
3.33	Sustainability Pilot Program	\$4.50	157,895	7,895	150,000	0
3.34	Air Cargo (Phases 1 - 4)	\$4.50	11,424,302	1,142,430	10,281,872	0
3.35	Part 150 Noise Compatibility Program, Real Property Acquisition	\$4.50	2,038,134	203,814	1,834,320	0
3.36	Part 150 Noise Compatibility Program Update	\$4.50	567,990	56,799	511,191	0
3.37	Part 150 Noise Compatibility Program, Noise Mitigation	\$4.50	17,604,371	1,464,114	16,140,257	0
3.38	Wildlife Hazard Plan	\$4.50	131,116	6,556	124,560	0
Subtotal - Projects seeking PFCs for AIP "local match"			\$71,406,206	\$5,641,741	\$65,127,216	\$637,249
Totals			\$83,147,452	\$13,504,839	\$68,204,368	\$1,438,245

DESCRIPTIONS OF PROJECTS

Project 3.01: Replace/Upgrade Terminal HVAC Systems

This project involves the replacement and upgrade of components of the terminal HVAC system. The work performed under this project will consist of the following three elements:

1. Replacing the existing cooling systems servicing three data centers within the passenger terminal;
2. Rebuilding the chillers that support the Terminal HVAC system; and
3. Replacing the boilers that support the Terminal HVAC system.

Upgrades to these critical components of the HVAC system are needed to provide adequate cooling and heating in the terminal, to support the current and anticipated future growth in passenger activity.

All passenger terminal gates at FAT are leased on a common use basis. This project is not intended to address competition issues, but to restore, replace or upgrade facilities that serve all passengers.

Element 1: Replace Cooling Systems Servicing Three Data Centers Within Terminal

This element of the project will replace the existing cooling systems servicing each of the data centers with larger units as required to support the current conditions and accommodate future growth. The data centers are located in Rooms C166 and C104 (which house the Airport's safety and security servers), and the Communications Room (main point of entry, or MPOE for telecommunications), located in the basement.

The rooms that store the Airport's computer servers and equipment (Rooms C166 and C104) were not designed to house such equipment and therefore are not equipped with the proper cooling systems to maintain a safe temperature for the equipment. The Communications Room in the basement was not originally planned to house computerized telecommunications equipment, and therefore is not serviced by a cooling system. The new cooling systems are designed to provide 100% redundancy and will be connected to the Terminal Energy Management System (EMS) but will operate independently of the Terminal HVAC system.

The servers in Room C166 store entry and exit information from the Airport Access Control System (Airport Operations Area (AOA) vehicle gates, terminal boarding gates, secure areas of terminal, etc.). The servers also store CCTV camera recordings for the interior Airport building, parking, vehicle entry/exit gates, and AOA. Room C166 also houses Airport Access Control system panels, CCTV system, video controllers to the monitor displays in the Airport Public Safety Communications Center, battery backups for all equipment in the room, access control routers and switches, CCTV switches, and Airport and airline public announcement and paging system. The current cooling system in room C166 is a single five-ton capacity condenser unit and blower unit. This system will be replaced with dual

eight-ton capacity, ground mounted condenser units and dual 3750 cfm, attic mounted blower units. The project will also include new ductwork, and new refrigerant lines.

Room C104 houses Airport Access Control system panels, media workstation and video encoder for a video wall display in the Airport lobby, wireless LAN controller for public and non-public Wi-Fi, VPI server switches and router, the VoIP Emergency system, and uninterruptable power supplies for all equipment in Room 104. Room C104 is currently cooled by the terminal HVAC system, which is inadequate for maintaining a safe operating temperature for the equipment housed in the room. The new cooling system for this room will include dual three-ton capacity, roof mounted condenser units and dual 713 cfm, wall mounted blower units.

The MPOE room does not currently have a cooling system. The MPOE is the main point of entry for outside telephone and communication services and AT&T fiber lines and switches. In addition, the room includes an HVAC system controller and panel, the firewall for public Wi-Fi, pass-through routers and switches for CCTV data, and the city of Fresno internal network switches and routers. The room will also house expanded CCTV data infrastructure and components. The new system will include dual three-ton capacity, roof mounted condenser units and dual 713 cfm, wall mounted blower units.

As air service and passenger traffic has grown at FAT in recent years, technology support needs have also grown to meet the information, safety and security needs of the Airport. None of the rooms being considered were initially designed as data centers, and therefore, do not have dedicated cooling systems sufficient to deal with the high temperatures generated by the servers and other computer equipment. As a result of ever increasing reliance on technology and the high temperatures generated by the equipment, the Airport has experienced numerous shut downs of critical systems. The shut downs require emergency measures to restore and protect the IT services.

Additionally, the fire suppression system in each of the rooms will be modified to provide upgraded fire protection appropriate for telecommunication and information technology centers. Currently, each room uses a water based fire suppression system which was installed in 2002 as part of the Concourse Expansion Project. A water based fire suppression system is not optimal for rooms that house electrical equipment because in the case of a fire, the equipment can become damaged not only by the fire but by the water to extinguish the fire. A new system that is designed specifically for electrical and communication rooms, such as dry-suppression, will be installed. The existing water system will be removed. As part of the new systems, control panels connected to the overall building fire suppression system will be installed in each room. In the case of an emergency, the new system will not damage the equipment and the servers' information will remain recoverable.

Element 2: Terminal Chiller Rebuild

Two chillers (Chiller #1 and Chiller #2) are used to chill water distributed to heat exchangers throughout the terminal building providing the cooling component of the Terminal HVAC System. This element of the project will reimburse the Airport for the cost of rebuilding Chiller #1 in February 2016, and the planned rebuild of Chiller #2, scheduled for 2017.

The two chillers were placed in service in 2001, with a recommended service life for each chiller of 50,000 hours. To date, Chiller #1 has logged 69,000 hours, and is therefore past the end of its useful life. Chiller #2 had reached 66,500 hours of service when it was rebuilt in February 2016. Prior to the rebuild of Chiller #2, the Airport had undertaken numerous temporary repairs due to breakdowns. Since February 2016, the Airport has expended \$85,000 in repair costs for Chiller #1, which is approximately the cost to rebuild the chiller. Therefore, it is not cost effective for the Airport to continue to incur repair expenses for Chiller #1.

Due to the size and location of the chillers, the Airport has determined that rebuilding the chillers is the more cost effective than removing the chillers and replacing them. With a chiller rebuild, the body of the units are inspected and retained in place with all of the functional parts, seals and gaskets being replaced. The rebuild provides “like new” chillers with an anticipated life similar to new units without the expense of removing the units from the building.

Element 3: Terminal Boiler Replacement

This element of the project includes the design and installation of a new system to replace the existing 10 boilers used to heat water that is distributed to heat exchangers throughout the terminal building providing the heating component of the Terminal HVAC System. The ten existing boiler units, which were placed in service in 2001, have become increasingly unreliable, are past their useful life, and replacement parts are no longer available. After numerous breakdowns, four of the boilers are now completely out of service. Two of the boilers that are out of service have been out of service for two years and the other two boilers have been out of service for one year. The remaining six boilers have been pushed to capacity during the cold season.

In order to provide reliable heating in the terminal, the boilers need to be replaced with a new boiler system. This project will evaluate the terminal heating requirements and design a new boiler heating system using current energy efficient technology. A mechanical engineering design consultant will determine what type of boiler heating system will be the most cost effective and efficient, to meet current and future needs. The work will incorporate upgrades to the Terminal Energy Management System. The design will include analysis of alternative boiler concepts, bidding plans and specifications, bid support, construction documents, and construction cost estimates. Construction will include removal of boiler system and associated piping and pumps.

Project 3.02: Replace/Upgrade Terminal Facilities

This project consists of the following six elements that will upgrade facilities in the terminal:

1. Terminal public restroom renovation and addition of one family restroom;
2. Terminal ticketing and baggage claim walkway remodel;
3. Terminal 2nd floor LED lighting (construction);

4. Terminal public address system upgrade;
5. Terminal ticket counter monitor upgrade/replacement; and
6. Terminal Lobby Reroof

All passenger terminal gates at FAT are leased on a common use basis. There are currently no constraints on competition at FAT. This project is not intended to address competition issues, but to restore and replace facilities that serve all passengers.

Element 1: Terminal Public Restroom Renovation and Addition of One Family Restroom

The passenger terminal contains eleven (11) public restrooms, including one (1) family restroom. Eight (8) of the public restrooms are located post-security and three (3) are located pre-security, including the one family restroom. This element of the project will renovate all eleven existing public restrooms, and will add one (1) family restroom post-security. As a result, the total number of public restrooms will increase from 11 to 12 (increasing the number of family restrooms from one to two). The renovation of the existing restrooms will include all new surfaces along with new fixtures and accessories.

The restrooms located in the original portion of the terminal have not been renovated since 1994 or 1995. The restrooms located in the newer portion of the terminal date to 2003. Passenger traffic at FAT has increased significantly in the intervening years, resulting in more intense use of the restrooms. The airline transition to larger aircraft this past year has increased passenger traffic during FAT's peak hours. The 2016 TAF indicates that enplanements will continue recent growth, adding 13 percent, or approximately 100,000 more enplanements over the next five years. The significant problems related to the existing public restrooms are as follows:

1. The restrooms are not fully compliant with current building codes and accessibility requirements.
2. Many of the restroom fixtures and mechanisms, such as the automatic sink faucets, soap dispensers, and toilet flushing mechanisms, are battery operated. The batteries must be replaced frequently, which takes maintenance staff time and also requires "down time" for the restrooms while the batteries are being replaced – thereby reducing the overall restroom capacity.
3. The only existing family restroom is located pre-security. There is no family restroom located post-security.

The issues identified above will become more problematic as the number of passengers moving through the terminal continues to increase at FAT.

The restrooms will receive all new efficient plumbing fixtures, stall partitions, lighting, countertops, flooring, wall materials, ceiling materials, finishes and restroom accessories (paper towel dispensers, toilet paper dispensers, sharps disposal receptacles, mirrors, trash

cans, grab bars, coat hooks, soap dispensers, sanitary napkin dispensers/receptacles, toilet seat cover dispensers, diaper changing stations, air hand driers, shelving, etc.). This project will address the problems listed above as follows:

1. All existing restrooms will be upgraded, and the new family restroom will be designed, to comply with the 2013 California Building Code, which is based on the 2012 International Building Code that was adopted by the city of Fresno and is aligned with the ADA requirements.
2. All restroom fixtures and mechanisms will be upgraded to contain automatic functions hard-wired into the electrical systems, thereby eliminating all battery-operated mechanisms. This will eliminate the need for battery replacements, which will save maintenance staff time and will reduce “down time” for the restrooms.
3. The addition of a family restroom in the post-security area of the terminal will increase the overall restroom capacity of the terminal, and provide greater and more convenient restroom access for families.

Element 2: Terminal Ticketing and Baggage Claim Walkway Remodel (construction)

This project represents the last phase of an overall terminal modernization and remodeling effort, which included the remodeling and upgrade of the lobby and baggage claim areas, completed in 2008. That project included the installation of new baggage claim conveyors, upgrades to surface finishes, and the remodeling of the ticket counters in the lobby. However, that project did not include any work on the walkway between the lobby and the baggage claim area. Therefore, the wall and ceiling elements in the walkway are not consistent with the rest of the terminal. This project element will include the following:

1. Replace all the wall laminates and tiled surfaces in the walkway and the entrance area to baggage claim, with new finishes that match the rest of the terminal. The replacements will include approximately 1,600 square feet of wall laminate and 2,200 square feet of tile.
2. Install LED lighting to replace the existing eight (8) can lights. Additional new lighting may also be installed.

Element 3, Terminal 2nd floor LED Lighting (construction)

The passenger terminal contains 12 passenger gates. Six of the 12 passenger gates are located in the upper level concourse, which opened when the Concourse Expansion project was completed in 2003. The upper level concourse contains 102 individual lighting fixtures that were installed in the ceiling in 2003. Due to age and accumulated wear and tear, the lighting fixtures and the lamps have begun to fail. The only way to access the fixtures and lamps for repair and replacement is through the use of a specific man-lift capable of reaching the ceiling. This man-lift must be used to avoid overloading the second floor or exceeding the capacity of the hoist used to place the man-lift on to the second floor. During the time periods these repair and replacement efforts are undertaken, portions of the upper level concourse must be closed to the public to provide the workers with unrestricted access to the fixtures and lamps, without endangering the safety of the passengers.

This project will involve the complete replacement of the existing lighting system for the upper level concourse. All of the existing lighting fixtures and lamps will be replaced with LED up-lighting. Approximately 30 LED units will be installed and will be accessed at floor level for maintenance and provide a modern, more efficient approach to lighting the passenger gate hold common space. New conduit runs and electrical enclosures will be installed. In addition, the lighting control system will be evaluated to determine if replacement is required.

Element 4, Terminal Public-Address System Upgrade

Major components of the public-address system utilized in the passenger terminal are at the end of their useful life. The system provides flight and boarding announcements; safety, security and TSA information; and general communication throughout the Terminal. Elements of the existing analog system are no longer available or supported by the original equipment manufacturer. The system was installed in 2000. In order to ensure continued reliable communication in the Terminal, the public-address system must be upgraded.

The upgrade will include new amplifiers, controllers, microphones and monitors. Existing optical fiber and copper cabling and speakers throughout the terminal will be supplemented with additional cabling and speakers as required.

Element 5, Terminal Ticket Counter Monitor Replacement/Upgrade

This element will replace 16 monitors located above the common use ticketing counter. The units were installed in 2003 to provide flight information, as well as TSA, FAA, Airport and other Airline messaging to the public. Over time the picture quality on the existing monitors has deteriorated and has become hard for the passengers to read. It has become increasingly difficult to find identical replacement units. In an effort to maintain visual and operational consistency throughout the common use ticketing area, all of the monitors will be upgraded with readily available, larger, more efficient, LED units.

Element 6, Terminal Lobby Reroof

This project provides a new thermoplastic single ply membrane roof system for the passenger terminal lobby and ticketing area. Areas covered by the proposed project include common use airline ticketing, queuing and baggage processing (12,794), airline offices (2,160 sq. ft.), airport information desk (294 sq. ft.), various concessions and tenant exclusive space (9,087 sq. ft.), terminal conference room (1,340 sq. ft.), exterior walkways (9,950 sq. ft.) and pre-security public circulation area (21,125 sq. ft.).

The existing modified asphalt multi-layer roofing, installed in 2001, is showing signs of imminent failure. The project will remove and replace 56,750 square feet of asphalt roofing with a new white thermoplastic polyolefin single-ply membrane roofing system. The upgrade will include new roof insulation, flashing and trim. This durable system will remedy existing and potential roof failures, requires minimal maintenance and will provide enhanced

energy savings through its improved solar reflectivity and additional insulation. The entire installation will be warranted for a minimum of 15 years.

Project 3.03: Passenger Boarding Bridge Modifications

The passenger terminal contains 12 passenger gates. Six of the 12 passenger gates are located in the upper level concourse, which opened when the Concourse Expansion project was completed in 2002. The six passenger gates in the upper level concourse have powered passenger boarding bridges (PBBs). The system that controls operation of the PBBs, referred to as Human-Machine Interface (HMI), is at the end of its useful life and the software is no longer supported by the manufacturer.

The six powered PBBs were manufactured by Jetway now known as JBT Aerotech, Inc. (JBT). Elements of the HMI controllers used on the PBBs have increasingly required repair or replacement and are no longer available from JBT or other manufacturers. In order to keep the PBBs operational, Airport maintenance personnel have had to locate and purchase used HMI parts from other airports that no longer use this system. It is becoming more difficult and time consuming for FAT maintenance personnel to find replacement parts. In addition, the PBBs have been experiencing software errors making it difficult for airline personnel to safely and dependably operate the PBBs. This proprietary software is no longer supported by JBT and new HMI operating software is not compatible with the existing HMI hardware.

The project includes replacing the HMI controllers and software on all six bridges, using current versions that are maintained and supported by the manufacturer. The HMI hardware and software upgrades are necessary to ensure the continued safe operation of the PBBs during passenger enplaning and deplaning, and to improve functionality of the PBBs.

All passenger terminal gates at FAT are leased on a common use basis. This project is not intended to address competition issues, but to restore and replace facilities that serve all passengers.

Project 3.04: Powered Boarding Bridges at Ground Level Gates

FAT utilizes powered passenger boarding bridges (PBB) at the six passenger gates in the upper level Terminal Concourse. The remaining gates, located at ground level, require passengers to exit the building and walk across the apron to board the airplane using a portable passenger boarding stairway. This ground boarding system presents numerous safety and security concerns while being inconvenient and uncomfortable for passengers during inclement weather.

The project will provide a new, fully enclosed and air conditioned, PBB capable of serving two ground level Passenger Gates. The PBB will supply conditioned air and potable water to the aircraft. The Project also includes interior modifications to the passenger waiting area to accommodate the new PBB.

All passenger terminal gates at FAT are leased on a common use basis. This project is not intended to address competition issues. This project is intended to provide improved customer service and safety to passengers currently using ground level boarding replace technology that serves passengers.

Project 3.05: Airfield Lighting System Upgrades

The system that controls operation of the runway and taxiway lights at FAT, referred to as the Airfield Lighting Control and Monitoring System (ALCMS), is at the end of its useful life. Elements of the system are no longer available or supported by the original equipment manufacturer and not compatible with new replacement technology. The system was installed in 2004. In order to ensure continued safe and reliable operation of the airfield lighting a full upgrade of the ALCMS is required.

The project includes upgrading 22 constant current regulators with digital controllers, redundant Ethernet communication to the upgraded ALCMS, replacing the Air Traffic Control Tower and Vault computers, new uninterruptible power supplies, new Ethernet switches and upgraded monitoring, alarm & reporting software.

Project 3.06: Airfield Perimeter Fencing Upgrades

FAA and TSA guidelines require Airports to continually review Airfield and Terminal security measures. Several elements have been identified that will enhance the safety and security of Airport employees and the flying public. The upgrades are intended to comply with current FAA design standards or best practices. They are not necessarily required by 49 CFR Part 1542.

The project will upgrade the entire perimeter fence to eight-foot (8') minimum height plus three strands of barbed wire or other climbing deterrent. The fence will be installed on a concrete strip with hold down hooks to prevent burrowing/crawling under the fence. The project is being planned in accordance with applicable FAA Advisory Circulars, including the following:

1. FAA Advisory Circular 150/5360-13, *Planning and Design Guidelines for Airport Terminal Facilities*, chapter 8, section D (Security Fencing).
2. FAA Advisory Circular 150/5370-10, *Standards for Specifying Construction of Airports*.

The project will include new vehicle and personnel gates. The gates to be installed in this project will be electronically access controlled from the security communication center and monitored with CCTV. The project includes the electronic access control devices and CCTV cameras. Intrusion detection systems and additional cameras will be installed throughout the facility.

The gates involved in this project are separate from the gates that will be replaced as part of the Project #10, Access Control and CCTV Upgrades. This project is supported by the TSA as required under 49 USC §1542.

Project 3.07: FAA Airfield Infrastructure

The City of Fresno recently completed the congressionally mandated Runway Safety Area (RSA) improvements at FAT. Concurrent with design of the project, the FAA Power Systems Group designed and programmed Electrical Line Distribution (ELD) system upgrades for FAT. A portion of the ELD work was required to be completed during the RSA project AIP Project Nos. 3-06-0087-65, 68, 71 and 72). Specifically, ELD system infrastructure needed to be removed and relocated to accommodate the RSA improvements. In order to provide a fully functioning ELD system, it was also necessary to replace components adjacent to, but not within the precise footprint of the RSA work. At the request of, and in cooperation with, the Power Services Group of the FAA this work was completed by the Airport at its own expense as part of the RSA work. Therefore, the upgrades installed in this project are owned by the Airport.

The project provided FAA NAVAID electrical infrastructure upgrades including demolition of specified ELD infrastructure, new concrete encased and direct bore Multi-way duct-banks with power and communication cabling, new Sectionalizer Switches for Localizer and Glide Slope, new transformers and relocation of FAA transformers, installation of surge suppressors, new raceways and cabling to the ATCT power center and to the ATCT 4th Floor Communication Center.

This work would ordinarily be undertaken by the Power Services Group using funds from the FAA's facilities and equipment (F & E) appropriation either directly or by contract. However, F & E funding for the ELD work was not available when the RSA project was carried out. The Power Services Group agreed to have the Airport proceed with the work as part of the RSA project, to avoid disruption to FAT operations that would occur if the project were undertaken at a later date once F & E funding became available. Completion of the ELD system upgrades during the RSA project also reduced costs by avoiding the expense of demolishing and replacing pavement that would have been incurred if the ELD upgrade were deferred until F & E funding became available.

Following is a comparison of the costs incurred for the ELD upgrade work performed concurrently with the Runway 11R-29L RSA project, and an estimate of the (higher) costs that would have been incurred had the ELD upgrade work been deferred until F & E funding became available:

Actual cost incurred for ELD upgrade (as part of RSA project): \$2,162,135
Estimated cost for ELD upgrade at later date: \$2,421,039
Estimated cost savings: \$258,904

If the Airport had not proceeded with the ELD upgrade work concurrently with the RSA project, but had instead deferred the work until F & E funding had become available, F & E

funding would have had to pay for the entire cost of the ELD upgrade work at that later date, estimated at \$2,421,039.

The Airport is requesting PFC funds to cover the portion of the actual cost of the ELD upgrade that has not been considered an allowable cost by the FAA for AIP funding, as follows:

Actual cost incurred for ELD upgrade (concurrent with RSA project): \$2,162,135

AIP grant funding: \$1,499,612

Local match associated with AIP grant funding (5%): \$78,927

Portion disallowed for AIP funding (PFC request): \$583,596

The Airport originally sought reimbursement for the work through the AIP grants listed above. The FAA determined that the costs were not allowable in an AIP grant because grant funding would be an impermissible augmentation of the FAA's F & E budget. Because PFCs are local, not federal funds, the augmentation issue does not arise (Draft Order 5500.1A, 4.2.3.2). The Airport's expectation was to be reimbursed by the FAA. Repeated reimbursement requests have not been supported by the FAA - the Airport is therefore seeking PFC funding.

Project 3.08: Master Plan Update

The current FAT Master Plan and ALP were last updated in 2006. The FAT Master Plan Update will evaluate current conditions and forecast future aviation needs for the City of Fresno and the surrounding region, provide vision for the next 20 years of development, and a projection for the timing of major airfield and non-airfield projects. The updated FAT Master Plan will guide comprehensive development to properly serve the forecast needs of the airport and maximize the economic viability, operational efficiency, social and environmental responsibility of the Airport. This project will reimburse the local match of the AIP grant funding the Master Plan.

Project 3.09: Commercial Aviation Apron Lighting Upgrade

Lighting at various locations on the commercial aviation apron is inadequate and inefficient. The existing system does not meet required lumen levels and creates shadows necessitating the use of temporary light towers to help illuminate the area. This project will provide for design, bidding and upgrade of the existing ramp lighting.

The upgrade will involve the replacement of approximately 60 existing multi vapor quartz metal halide fixtures with energy efficient LED units servicing the North, East and West Aprons. The new LED lighting will increase light levels throughout the ramp area providing a safer more uniform environment for aircraft maneuvering, boarding, servicing, baggage handling and other ramp operations while significantly reducing energy consumption.

Project 3.10: Access Control and CCTV Upgrade

This project will support Airport Public Safety Office (APSO) efforts to improve airfield security. The upgrades will install electronic access control and closed circuit television (CCTV) cameras at 10 existing powered vehicle gates and 5 existing pedestrian gates that provide access to the airport operations area (AOA) for general aviation, air cargo and airport operations. When the upgrades are completed, the gates will only be activated by personnel with a current APSO issued airport security badge. The CCTV cameras will provide real-time monitoring by public safety personnel along with 24/7 digital recording of activity at each gate. Additional digital storage capacity for CCTV video images will also be added to our central archiving system. The gates involved in this project are separate from the gates that will be replaced as part of the Project #6, Airfield Perimeter Fencing Upgrades – Phase 1.

Project 3.11: PFC Administration Costs

This project will provide funding for the preparation of this PFC application, and PFC reporting compliance and monitoring for the next three (3) years. Airports has invested staff time and incurred consulting costs to prepare this PFC application. Moving forward, staff time will be dedicated to the administration of the PFC program that includes projects to be funded on a pay-as-you-go basis. Under this project, Airports will seek reimbursement for eligible costs. The estimated break down of project costs is presented on the following page.

Project 3.12: Terminal Renovations

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project involved renovations for the existing terminal facility, including the terminal building, concourse and baggage claim. The construction involved renovating and bringing up to current code the buildings' interior ceilings, electrical systems, telephone and public address systems, fire system, and roof system. The work also included airport directional and information signage and asbestos abatement as required for construction. New building code requirements that came into effect since the building was constructed made the improvements necessary.

Project 3.13: Security Access Control and Badging System Upgrade – Design and Construction

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project included the replacement of all field panels and host hardware/software. All terminal and gate card readers were standardized with proximity-keypad card readers. Re-badging was necessary to convert from current magnetic-stripe photo-I.D. to proximity style card. The rebadging costs were not included in the scope of the project.

The upgrade was required to assure continued compliance with 49 CFR Part 1542 requirements, and to ensure year 2000 compliance. In addition, the existing system reached capacity and was no longer adequately supported by the manufacturer. The

upgrade also assured that the existing access control system was compatible with the expanded terminal, concourse and baggage claim.

Project 3.14: Airfield Guidance Signs Upgrade

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project included replacement of the existing Airfield Guidance Sign System, installation of new touchdown zone lights, installation of new runway threshold lights, and remarking of the east half of Runway 29R and coordination with the FAA installation of new approach landing system equipment. The project included upgrades necessary to support the installation of an FAA-funded Category III Instrument Landing System (ILS).

The upgrade was required to comply with FAA AC 150/5340-18. Due to decrease in illumination since the signs were installed, FAA requested that the signs be replaced. To achieve the required consistent sign system and to alleviate adverse impacts on regulators and computer-monitoring equipment of airport lighting, the Airport elected to upgrade all of the runway / taxiway guidance signs to current specifications in one phase.

Project 3.15: Rehabilitate Airfield Lighting System, Including Electrical Vault and Emergency Generator (Design and Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was for the design and construction of the rehabilitation of the Airfield Lighting System. The existing electrical vault no longer served the needs of the Airport adequately. The existing vault was too small and did not provide the minimum safety work areas around the regulators. Also, the electrical equipment was obsolete, the emergency generators were non-operative, and there was no capacity for future growth. The project included the design of new electrical vault building including new regulators and new emergency generators. The existing vault was demolished once the new vault was on line.

Specific tasks included:

- Evaluation of Airfield Lighting, including
 - Duct System – The existing duct system was observed and tested to assist in determining the existing condition of these ducts.
 - Cable System – The existing cables were observed and tested to determine adequacy of the cabling system.
 - Lights – Runway and taxiway lights and signs were examined and tested to determine condition and adequacy of the fixtures
 - Electrical Vault – Evaluated the potential for adding new regulators for the planned replacement of the electrical vault (Project #14)
- Development of Rehabilitation and Reconstruction Proposals, for the duct system, the cable system and lights, including:
 - Evaluation of adequacy of existing equipment and systems
 - Recommendations for replacement scope, materials and methods
 - Determined location and requirements for new systems
 - Evaluated existing sign systems and consider using a separate 5.5 amp sign circuit

- New System Lighting System Evaluation, including:
 - Evaluation of need, extent and type of new taxiway centerline lighting systems
 - Evaluation of need, extent and type of new SMGCS lighting systems.
 - Evaluation and forecast of possible future requirements for additional lighting and control and of the advisability of providing duct and other equipment to accommodate possible future requirements.
- Programming of Lighting Rehabilitation and Expansion, including:
 - Preparation of construction cost estimates for each proposed rehabilitation or expansion project.
 - Preparation of a tentative schedule for implementing each rehabilitation or expansion project.

The new airfield electrical vault is double the size of the prior vault with all new equipment to accommodate all airfield lighting requirements. Provisions were made for future additions to airfield lighting, including centerline lights for all taxiways, Surface Movement Ground Control System equipment, and other unanticipated lighting features. The new vault includes a new transformer, all new regulators, control cable from the tower, two emergency generators, switchgears, storage, and a work area for the electricians.

Project 3.16: Rehabilitate Airfield Lighting Computer Control System (Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided for the installation of an Airport Lighting Remote Control System in the control tower, airfield electrical vault and maintenance shop at FAT. Reconfiguration of existing circuits and replacement of bad conductors was also included in the project. The existing lighting control system was removed once the new system was accepted.

Project 3.17: Displace Runway 29R Threshold, Including Lighting and Marking (Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided for the displacement of the Runway 29R threshold in conjunction with the FAA installation of a CAT III ILS. The work included the installation and relocation of touchdown zone lights, runway end lights and marking of the runway to match the new threshold. New cabling was installed as necessary for the new fixtures.

Project 3.18: Taxiway A Rehabilitation (Design and Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was for the design and construction of the rehabilitation of Taxiway A. Taxiway A was 35 feet wide and was in a state of incipient failure. This taxiway was reconstructed to a width of 50 feet and was designed to accommodate the forecast traffic, including DC-9 type aircraft. No paved shoulders were constructed, and standard marking was placed on the pavements.

New taxiway edge lights, including low-wattage lights, light bases, duct and cable were installed. New or existing regulators were utilized. The project included an evaluation of the potential requirement for centerline lighting and if centerline lighting is to be installed in the future, then the conduit and light bases with steel covers were designed in the project.

Project 3.19: Runway 29R Rehabilitation, (Design and Construction) Phases 1 – 3

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The existing porous friction course (PFC) on primary runway 11L-29R is failing, as evidenced by the raveling in the traffic areas. Constant sweeping and oversight is necessary. Pavement evaluation tests also indicated the need for an overlay within the next 10 years. The project would remove the PFC, overlay as much of the runway as possible and groove the new pavement surface to provide an anti-hydroplaning surface. A four-inch (4") asphalt overlay called for in the Pavement Management Study was placed after the PFC was removed by grinding.

To provide a good bond and correct existing cracks in the pavement the pavement surface after grinding was heater remixed and an asphalt rejuvenating agent was added. The total length of the runway was grooved. Standard marking was applied and new 35-foot wide paved shoulders were constructed on each side of the runway.

The runway lighting system was rehabilitated. New duct, light bases and low wattage lights were installed for the runway edge lighting. The existing centerline and touchdown zone lights were left in place and adjusted to grade as necessary. The existing cable was removed, the duct mandated and any damaged sections were repaired/replaced, and new low-wattage fixtures, new transformers, and new cable were installed. New home run cable was installed for the edge lights, centerline lights, and touchdown zone lights. Existing signs were adjusted to grade as necessary.

There was no change in drainage. Existing utilities affected by the work were protected or rehabilitated as necessary. Adequate transitions were constructed to all affected cross taxiways and the BAK unit.

Project 3.20: Rehabilitate/Construct Taxiways B3/C3 Phase 1 (Design)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. A new taxiway was constructed between Taxiway B and Taxiway C tying both runways, and the existing abandoned taxiways in this area were removed. The new taxiway was designed for Airplane Group IV. The taxiway was constructed 75 feet wide with 35-foot wide shoulders on each side of the taxiway. Flexible pavement sections were incorporated. Standard taxiway marking was applied. Lighting of this taxiway consists of new low wattage edge lights in new light bases and underground duct with new cable tying into regulators. New signs were installed as required. Provision was made for future centerline lights and SMGCS systems. These provisions included the installation of duct and light bases with steel covers. Drainage was evaluated and adequate piping was installed to accommodate the future drainage of these sections of the Airport.

Project 3.21: Master Drainage Plan

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project developed the Airport Master Drainage Plan. The Airport did not have a comprehensive airport drainage plan. As airport and air cargo development increased it became increasingly more important to address this issue. Land development and airport improvements impact drainage requirements had to be analyzed as a whole and not independently. This plan assisted the Airport in identifying its growth requirements and prioritizing future airfield drainage projects. Once the Master Drainage Plan was complete, future airfield development projects could be planned to incorporate the planned drainage elements.

Project 3.22: Environmental Assessment and Related Environmental Work

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The project produced the necessary environmental documents required for completion of the Airport Master Plan. The Airport had not had a Master Plan update, in its entirety, for over 20 years. This effort assisted the Airport in recognizing its growth requirements, financial capabilities and environmental issues. It also prioritized projects through the next decade. Lengthening of runways, purchase of land, increased service, both passenger and air cargo, security issues and new commercial development were all reviewed as part of the study. The study also coordinated the update of the Airport Land Use and Environs Plan, City of Fresno General Plan, City of Clovis General Plan, and various Community Plans.

Project 3.23: Rehabilitate Taxiways B6, B9, B10-C10, B12-C12

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was to design and construct the rehabilitation of specific taxiways based on the existing pavement management plan at FAT. The taxiways were widened, strengthened and realigned if necessary to provide a safer path of travel. New electrical ducts, conductors, lighting and regulators were installed. Elements from the storm drainage master plan were incorporated into the design. For SMGCS designated taxiways, the required infrastructure was installed in anticipation of a future project to complete the system. The plans and specifications were completed and the project was bid out. The bids were rejected due to high bids. The project was repackaged in a scaled down format with fewer taxiways included and favorable bids were received.

Project 3.24: Terminal/Concourse Expansion, Phase 2 (Design and Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project involved the expansion and rehabilitation of the Baggage Claim, Ticketing Lobby, and Baggage Make-up Areas in several phases. The design included expanding the Baggage Claim area by 100 feet to the north, by 4,200 square feet, and increasing the two bag belts with a total of 100 new linear feet of carousel. The baggage claim had not been expanded since 2001, and was unable to accommodate more than one large aircraft arrival at a time. Baggage wait times were

extremely long, as all bags could not be placed on the small conveyors at one time. The Ticket Lobby entryway vestibules were relocated to the outside of the existing lobby and the existing space was reconfigured to further increase capacity to serve passengers in the existing space. New window shades and electrical and mechanical infrastructure were provided along with new ticket counters to serve the increased number of passengers who could be accommodated in the lobby area. Baggage areas were expanded and rehabilitated to comply with federal law requiring inspection of each piece of checked baggage. The FAA and TSA had identified that all airports needed some type of explosion detection equipment. The equipment referred to as "CTX" is large and required special design and construction of baggage systems to maximize its use. The design of the ticketing and baggage make-up areas was required to meet the needs of the mandated TSA CTX equipment.

Project 3.25: Acquire Aircraft Rescue and Fire Fighting (ARFF) Vehicle

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was for the purchase of a new ARFF vehicle and related equipment. The vehicle replaced an existing ARFF vehicle which reached the end of its useful life. The specifications for this project were prepared by Airport staff with guidance of AC 150/5220-10, Guide Specification for Water/Foam Aircraft Rescue and Fire Fighting Vehicles and were approved by the FAA. The project was put out to bid and the bid process was stopped when it became evident there were a number of issues that needed clarification. The specifications were then modified and the project re-bid. Two bids under the engineer's estimate were received and the project was awarded.

Project 3.26: Airport Master Plan Update

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project involved the preparation of a document that will assist with future expansion of the Airport and ensure compatible development of land within the Airport's sphere of influence. The project resulted in a better understanding of the Airport and its role in the City's development. Planned Airport expansion were understood and incorporated into larger City plans. The project included a review of existing plans affecting the Airport's sphere of influence; determination of what type of expansion the Airport would undertake in the future; preparation of alternative plans; review and discussion of the impacts to the Airport and surrounding areas; and public hearings were held.

Project 3.27: Upgrade Access Control System

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The existing Access Control System (ACS) was several years old and needed to be updated to comply with new FAA 107.207 Standards as well as the recommended ACS functions. This project also enabled the inclusion of key Airport perimeter gates into the ACS, to provide greater control of access and better security for the Airport.

Project 3.28: Purchase Two (2) Security Vehicles

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The vehicles were required to meet the FAA enhanced patrol requirements and the updates to the Airport Security Plan.

Project 3.29: ARFF Station Improvements

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The current ARFF station was originally constructed in 1962 and had not had any upgrades, modifications or code improvements since that time. The station was in need of upgrades to be brought into compliance with current building codes. Lighting, electrical, mechanical and plumbing systems were all brought up to current code levels. In addition, the station was retrofitted with windows and doors to improve the habitability. The general layout of the station was also modified to increase the functionality of the working and habitable areas of the station.

Project 3.30: Rehabilitate Service Road

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The scope included the design and rehabilitation of several portions of the Airport service road. The road had deteriorated to the point of being a safety hazard to vehicles that use it. The most distressed areas were identified and were treated.

Project 3.31: Remark Runway 11L-29R

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided the remarking of Runway 11L-29R threshold to comply with Advisory Circular 150/5340-1J. The project was designed, bid and constructed prior to the deadline for compliance, which was January 1, 2008.

Project 3.32: Terminal Security Checkpoint Improvements (Design and Construction)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. The Terminal Security Checkpoint work included expanding to the east approximately thirty-three feet (33'), adding 3,702 square feet of space, and extensive interior rehabilitation of the existing footprint to match the expanded area; thus providing one new enlarged area. This project resulted in easier and more efficient passenger throughput, as it expanded the number of lanes from two to three with the ability to expand to four in the future. Additional CCTV cameras were added and signage was increased to aid passengers. Electrical capacity was enhanced to accommodate current and future screening equipment. This expansion provided space for more efficient check-in, circulation, quick security checkpoint review; thus, increasing capacity of passengers screened. The grants reimbursed the Airport for the design and construction of this project.

Project 3.33: Sustainability Pilot Program

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was to collect data to identify the Airport's environmental footprint, and to provide alternatives to improve sustainability of operations and reduction of environmental impacts. FAT was one of ten airports chose for this pilot project by the FAA.

Project 3.34: Air Cargo (Phases 1 – 4)

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project involved the design and construction of a new air cargo taxiway and access taxilanes to the designated air cargo area on the north side of the Airport. The taxiways were linked by a taxilane at the edge of the air cargo ramp running perpendicular to the air cargo taxiways. The project also included the design and construction of aircraft aprons and associated drainage to the designated air cargo area. The project was phased according to the availability of funding.

Project 3.35: Part 150 Noise Compatibility Program, Real Property Acquisition

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided for the acquisition of 11 residential properties and one commercial property as part of the Airports approved Part 150 Noise Compatibility program (LU-1). The property acquisition element focused on structures for which sound attenuation was unsuitable.

The 11 residential properties were located on Shields Avenue, between Chestnut and Winery. The commercial property consisted of approximately 53.7 acres located on Shields Avenue east of Chestnut. All properties were located in the 70-74 Ldn contour.

Project costs included property acquisition, demolition and removal of existing structures, and relocation assistance.

Project 3.36: Part 150 Noise Compatibility Program Update

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided for an update to the Airport's Part 150 Noise Compatibility Program (NCP). Updated noise exposure maps (NEM) and an update to the NCP were produced. All procedures required by 14 CFR Part 150 to produce the updated NEMs and NCP were followed.

Project 3.37: Part 150 Noise Compatibility Program, Noise Mitigation

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project provided for acoustical treatment of one school – Viking Elementary School – located in the 65-69 Ldn noise contour.

Specific acoustical treatment measures applied conformed to the requirements of the AIP Handbook, Order 5100.38 and 14 CFR Part 150. This project was identified as LU-3 in FAT's approved NCP.

This project also provided for the sound attenuation of 674 homes in the 65-70 CNEL noise contour and the 70-74 Ldn noise contour. Per the NCP, sound attenuation measures included, as necessary, structural modifications including replacement of exterior windows and doors, additional insulation, baffles and other sound attenuation measures to reduce interior noise levels. Eligible residential property owners were required to accept an avigation easement in order to participate in the program.

Project 3.38: Wildlife Hazard Plan

This is a completed project. PFCs will be used to reimburse FAT funds previously spent for the local AIP matching share of project costs. This project was to assess the existing wildlife hazard at FAT and develop a plan for mitigating any outstanding issues identified. In 2010 the FAA identified airports nationwide that would be required to conduct a Wildlife Hazard Assessment (WHA), and it published the list of airports in Certalert 09-10, "Wildlife Hazard Assessments in Accordance with Part 139 Requirements." The Certalert identified FAT as an airport that would be required to conduct a WHA because air carrier aircraft had experienced multiple wildlife strikes at FAT. Therefore, FAT conducted a WHA during the 12-month period from December 2011 to November 2012. The WHA was conducted under the direction of a FAA-qualified wildlife biologist in accordance with FAA Advisory Circular 150/5200-36A, "Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports." The qualified wildlife biologist's primary responsibilities throughout the Assessment were to:

- Provide information on the wildlife attractants that have been identified on or near the Airport;
- Identify wildlife management techniques; and
- Prioritize appropriate mitigation measures.

FAT submitted a WHA report to the FAA in May 2013 that summarized the results of its 12-month WHA study. The FAA Administrator approved the report in September 2013 and determined that a Wildlife Hazard Management Plan (WHMP) would be needed for FAT in accordance with FAR Part 139.337(e). The results of the 2013 WHA provided the scientific basis for the development and implementation of a WHMP. The objective of the WHMP was to provide a well-defined set of policies, goals, and standards to be implemented to reduce wildlife hazards. In addition, it presented habitat modification measures and wildlife control procedures to reduce the potential for strikes between wildlife and aircraft operating at FAT. The WHMP included the following components to fulfill the legal requirements set forth in FAR Part 139.337(e):

- Persons who have authority and responsibility for implementing the plan; and

- Resources to be provided by the airport operator/certificate holder for implementation of the plan.