August 4, 2021

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

Milwaukee County's Milwaukee Mitchell International Airport (the Airport or MKE) intends to file a new PFC application (PFC #18) with the Federal Aviation Administration (the FAA) to provide funding for thirty-five (35) new projects at the Airport.

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 MKE's website. Any member of the public may file comments on the proposed application until September 7, 2021. 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.

THE PFC LEVEL, EFFECTIVE DATE, AND TOTAL PROJECTED PFC REVENUE

The Airport intends to submit the PFC #18 application at the rate of $4.50 per enplaned passenger. The proposed effective date for the new application is June 1, 2026, and the estimated charge expiration date of the proposed application and the Airport's PFC program is now projected to be August 1, 2027, if the new application is approved. Total additional PFC revenues of $17,690,302 will be collected under PFC #18.

DESCRIPTION OF PROJECTS

Table 1 summarizes the proposed PFC #18 projects and the proposed PFC collection amount required.

Table 1
Summary of Proposed PFC Project Funding
PFC Application #18

PFC No.	Project Name	Project Cost	Federal Funds[1]	Other Funds[2]	Requested PFC Amount[3]
18.01	Runway 7L-25R Resurface	$ 1,258,224	$ 943,668	$ 157,278	157,278
18.02	Runway 7L-25R Resurface	539,239	404,429	67,405	67,405
18.03	ADS-B Squitter Transponders	514,710	386,032	64,339	64,339
18.04	Runway 13-31 Pavement Resurface	1,794,269	1,345,945	224,162	224,162
18.05	Runway 13-31 Groove Runway	245,042	183,538	30,752	30,752
18.06	Runway 7R-25L, Txy B Partial Replacement of Pavement	862,658	657,375	97,981	107,302
18.07	Txy B Shoulder and Lighting, South Apron Pavement Replacement	2,226,310	1,669,732	278,289	278,289
18.08	West Apron Pavement Replacement	225,000	-	180,000	45,000
18.09	Replacement of Airfield Guidance Signs	246,600	177,237	38,290	31,074
18.10	Txy E Lighting System rehab, Rwy 19R, 1L & 7R PAPIs replacement	340,544	244,755	53,663	42,126
18.11	Txy A and M Lighting Replacement	333,737	250,303	41,717	41,717
18.12	Rwy 7L-25R cabling and lighting replacement	302,619	226,965	37,827	37,827
18.13	Taxiway Re-cabling and Re-lighting	524,851	393,638	65,606	65,606
18.14	Taxy F (Rwy 13-31 to Txy E) Reconstruction	2,221,548	1,666,161	277,693	277,693
18.15	GRE Apron Concrete Panel Replacement	470,907	-	376,726	94,181
18.16	Sustainability Management Plan	398,310	298,733	49,789	49,789
18.17	Physical Access Control Sys Study and Design	363,797	-	-	363,797
18.18	Physical Access Control Sys Construction	5,398,941	-	-	5,398,941
18.19	Rwy 19L-1R, 13-31 and Txy S & Y Re-lighting	778,069	564,000	119,944	94,125
18.20	Txy A2, B, D, and V Modifications	832,059	624,044	104,007	104,007
18.21	Firehouse (ARFF) Addition	1,321,616	991,212	165,202	165,202
18.22	Firehouse (ARFF) Addition	1,231,386	-	1,231,386	-
18.23	Firehouse (ARFF) Addition	2,326,196	1,744,647	290,775	290,775
18.24	Jet Bridge Preplacement 2017	1,522,869	-	-	1,522,869
18.25	Jet Bridge Preplacement 2018	909,414	-	-	909,414
18.26	Jet Bridge Preplacement 2019	2,580,743	-	-	2,580,743
18.27	Howell Tunnel Rehabilitation	2,494,158	1,870,618	311,770	311,770
18.28	Howell Tunnel Management - Study	81,808	-	-	81,808
18.29	Airfield Drainage Improvements - Study	108,986	-	87,189	21,797
18.30	Snow Removal Equipment (SRE) Replacement	1,985,000	-	-	1,985,000
18.31	Airport Master Plan Update	2,583,111	1,937,333	322,889	322,889
18.32	PFC Administration Costs	300,000	-	-	300,000
18.33	Txy E (Rwy 7L-25R to Txy F) and Txy F (Txy E to Rwy 1L-19R) Pavement Replacement	3,407,410	2,555,557	425,926	425,926
18.34	Taxiway A Extension	11,786,960	10,840,220	473,370	473,370
18.35	Rwy 7R-25L Pavement Rehabilitation	10,600,000	9,153,344	723,328	723,328
	PFC Project Totals	**$ 63,117,092**	**$ 39,129,486**	**$ 6,297,303**	**$ 17,690,302**

The information for the proposed projects for the PFC #18 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 no later than September 7, 2021.

James Martin
Deputy Airport Director, Finance & Administration
Milwaukee County Airport Division
5300 S. Howell Ave.
Milwaukee, WI 53207
jmartin@mitchellairport.com

PROJECT INFORMATION

PFC PROJECT 18.01

Project Title: Runway 7L-25R Resurface

Application Type: Impose and Use

Project Description:
The alignment of Runway 7L-25R was constructed in 1996 and extended on its east end in 1998. Currently, the runway dimensions are 4,800' x 100'. Various repairs and rehabilitation have been performed since its construction including sealcoating, crack routing and sealing, and base repair with surface patching. This project proposes to resurface the entire Runway 7L-25R with a 4" depth mill and grooved asphalt overlay including some areas of base repair, installation of a reflective crack relief system, pavement edge restoration and pavement marking.

Project Justification:
Runway 7L-25R is a secondary runway that serves general aviation and non-turbojet commercial operations. Originally constructed in 1996, the bituminous asphalt pavement has reached the end of its useful life of 20 years. While the surface has been maintained overall throughout its life certain isolated areas have deteriorated, as evidenced by a Pavement Condition Index (PCI) as low as 24 (serious) included in the 2013 Wisconsin Pavement Management Report, Applied Pavement Technologies, Inc.. Additional surface anomalies have caused the runway profile to fall out of tolerance with respect to FAA design standards, and has the potential to cause aircraft operating on this surface to lose directional control. Maintenance-type repairs such as crack routing and sealing can no longer provide adequate rehabilitation of the runway surface in order to meet Part 139 standards.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 157,278
State Grants	$ 157,278
AIP Funds	$ 943,668
Total Project Funding	$ 1,258,224

PFC PROJECT 18.02

Project Title: Runway 7L-25R Resurface

Application Type: Impose and Use

Project Description:
The alignment of Runway 7L-25R was constructed in 1996 and extended on its east end in 1998. Currently, the runway dimensions are 4,800' x 100'. Various repairs and rehabilitation have been performed since its construction including sealcoating, crack routing and sealing, and base repair with surface patching. This project proposes to resurface the entire Runway 7L-25R with a 4" depth mill and grooved asphalt overlay including some areas of base repair, installation of a reflective crack relief system, pavement edge restoration and pavement marking.

Project Justification:
Runway 7L-25R is a secondary runway that serves general aviation and non-turbojet commercial operations. Originally constructed in 1996, the bituminous asphalt pavement has reached the end of its useful life of 20 years. While the surface has been maintained overall throughout its life certain isolated areas have deteriorated, as evidenced by a Pavement Condition Index (PCI) as low as 24 (serious) included in the 2013 Wisconsin Pavement Management Report, Applied Pavement Technologies, Inc.. Additional surface anomalies have caused the runway profile to fall out of tolerance with respect to FAA design standards, and has the potential to cause aircraft operating on this surface to lose directional control. Maintenance-type repairs such as crack routing and sealing can no longer provide adequate rehabilitation of the runway surface in order to meet Part 139 standards.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 67,405
State Grants	$ 67,405
AIP Funds	$ 404,429
Total Project Funding	$ 539,239

PFC PROJECT 18.03

Project Title: ADS-B Squitter Transponders

Application Type: Impose and Use

Project Description:
The project is the purchase and installation of 76 squitter transponders on various airfield vehicles and equipment. These transponders allow the Operation Control Center, management, and the FAA Control Tower to see exactly where the airport's equipment is while on runways and taxiways for safety. This is especially significant during snow operations or when the airport has low visibility, if the tower cannot see runways or taxiways during these events.

Project Justification:
Squitters are transponders installed in airport vehicles for tracking vehicle location on the airfield utilizing the FAA's Automatic Dependent Surveillance-Broadcast (ADS-B) system, which is a proven technology. ADS-B is a crucial component of the nation's Next-Generation Air Transportation System (NextGen), and its implementation over the next 20 years will turn the NextGen vision into a reality. With ADS-B, both pilots and controllers can see radar-like displays of traffic. The displays update in real time and do not degrade with distance or terrain. The ADS-B system will change the nation's air traffic control system from one that relies on radar technology to a system that uses precise location data from the global satellite network. The installation of squitters in the Airport's ground vehicles will take advantage of the ADS-B system to give controllers accurate real-time information on the location of the ground vehicles during snow events and other periods of low visibility.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 64,339
State Grants	$ 64,339
AIP Funds	$ 386,032
Total Project Funding	$ 514,710

PFC PROJECT 18.04

Project Title: Runway 13-31 Pavement Resurface

Application Type: Impose and Use

Project Description:
This project consists of the replacement of pavement on Runway 13-31. Project elements include replacement of deteriorated airfield concrete pavement joint materials.

Project Justification:
This project is part of a program to address airfield pavement deficiencies through rehabilitation and replacement. All runway and taxiway pavements identified in this project have Pavement Condition Indices (PCI's) that recommend that a level of attention be administered to maintain appropriate conditions for safe aircraft operations. Typically, pavements with a PCI between 55-70 require major rehabilitation, and pavements below 55 may warrant complete reconstruction. PCI for Runway 13-31 = 15-58 (poor-to-fair condition).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 224,162
State Grants	$ 224,162
AIP Funds	$ 1,345,945
Total Project Funding	$ 1,794,269

PFC PROJECT 18.05

Project Title: Runway 13-31 Groove Runway

Application Type: Impose and Use

Project Description:
This project consists of the replacement of existing spalled concrete joints, full-depth panel replacement of heavily spalled concrete pavement and asphalt shoulder crack fill and seal-coating of Runway 13-31 pavement.

Project Justification:
This project is part of a program to address airfield pavement deficiencies through rehabilitation and replacement. All runway and taxiway pavements identified in this project have Pavement Condition Indices (PCI's) that recommend that a level of attention be administered to maintain appropriate conditions for safe aircraft operations. Typically, pavements with a PCI between 55-70 require major rehabilitation, and pavements below 55 may warrant complete reconstruction. PCI for Runway 13-31 = 15-58 (poor-to-fair condition).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 30,752
State Grants	$ 30,752
AIP Funds	$ 183,538
Total Project Funding	$ 245,042

PFC PROJECT 18.06

Project Title: Runway 7R-25L, Taxiway B Partial Replacement of Pavement

Application Type: Impose and Use

Project Description:
The first area involves the replacement of 28 concrete panels (approximately 10,740 square feet) on Runway 7R. The second area includes the reconstruction of approximately 43,800 square feet of the asphalt/concrete shoulders on Taxiway B. The taxiway edge lighting on Taxiway B will be replaced with new elevated LED fixtures (33 fixtures total). Taxiway B shoulders from Taxiway A1 to Taxiway P are included in the project.

Project Justification:
This project is part of a program to address airfield pavement deficiencies through rehabilitation and replacement. All runway and taxiway pavements identified in this project have Pavement Condition Indices (PCI's) that recommend that a level of attention be administered to maintain appropriate conditions for safe aircraft operations. Typically, pavements with a PCI between 55-70 require major rehabilitation, and pavements below 55 may warrant complete reconstruction. Shoulder pavements addressed in this project do not have measured PCI values, but typically show several signs of distress or failure, and have had previous maintenance work such as patching and/or crack sealing. A summary of PCI for the various pavements is as follows: Runway 7R: PCI = 53 (poor). Taxiway B Shoulders (Phase 1): Shoulder pavements do not have PCI values.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 107,302
State Grants	$ 97,981
AIP Funds	$ 657,375
Total Project Funding	$ 862,658

PFC PROJECT 18.07

Project Title: Taxiway B Shoulder and Lighting, South Apron Pavement Replacement

Application Type: Impose and Use

Project Description:
The work under this phase will consist of milling/replacement of approximately 151,000 square feet of existing asphalt shoulders with hot mix asphalt (HMA) overlay on Runway 1L/19R. Items ancillary to the project are elevated runway removal/ replacement and minor landscaping for proper grading and erosion control. Multiple phasing will be required. 2016 Phase - The phase includes removal and replacement of approximately 35,800 square feet (72 panels) of 14 and 16-inch concrete panels with imbedded mesh on Taxiway R. In addition, approximately 457,500 square feet of milling/replacement of asphalt shoulders with hot mix asphalt (HMA) overlay on Taxiway R & K. Items ancillary to the project are 2 elevated/in-pavement runway and 53 taxiway light removal/ replacement and minor landscaping for proper grading and erosion control. Taxiway B shoulders from Taxiway R to Taxiway D are included in the project.

Project Justification:
This project is part of a program to address airfield pavement deficiencies through rehabilitation and replacement. All runway and taxiway pavements identified in this project have Pavement Condition Indices (PCI's) that recommend that a level of attention be administered to maintain appropriate conditions for safe aircraft operations. Typically, pavements with a PCI between 55-70 require major rehabilitation, and pavements below 55 may warrant complete reconstruction. Shoulder pavements addressed in this project do not have measured PCI values, but typically show several signs of distress or failure, and have had previous maintenance work such as patching and/or crack sealing. A summary of PCI for the various pavements is as follows: South Apron: PCI = 63 (fair); Taxiway R: PCI = 25-58 (poor-to-fair condition) Taxiway B Shoulders (Phase 2): Shoulder pavements do not have PCI values.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 278,289
State Grants	$ 278,289
AIP Funds	$ 1,669,732
Total Project Funding	$ 2,226,310

PFC PROJECT 18.08

Project Title: West Apron Pavement Replacement

Application Type: Impose and Use

Project Description:
This project consists of the rehabilitation of a portion of the west aircraft apron at MKE. Rehabilitation includes concrete removal/replacement, concrete patching, partial depth joint replacement, and joint rout and reseal. Project includes 1,340 square yards of concrete pavement rehabilitation.

Project Justification:
This project is part of a program to address airfield pavement deficiencies through rehabilitation or replacement. Pavements identified in this project have a Pavement Condition Index (PCI) of 56 (fair condition), which indicates a level of attention be administered to maintain appropriate conditions for safe aircraft operations. Typically, pavements with a PCI between 55-70 require major rehabilitation, and pavements below 55 may warrant complete reconstruction. Pavements addressed in this project show several signs of distress or failure, and have had maintenance work such as patching and/or crack sealing.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 45,000
State Grants	$ 180,000
Total Project Funding	$ 225,000

PFC PROJECT 18.09

Project Title: Replacement of Airfield Guidance Signs

Application Type: Impose and Use

Project Description:
Replacement of approximately 17 airfield guidance signs at various locations.

Project Justification:
Increased airline traffic has prompted a renewed nation-wide vigilance of aviation safety. Accordingly, there has been an increasing need to add more safety related features and aids on the nation's commercial airports runways and taxiways. In many of the last several years MKE has received directives from the FAA to make these additions in a strict timely manner, often as soon as possible or within months of when the directive was issued. These directives have come in several forms including FAA "Call to Action" Runway Action Team initiatives, FAA Airport Certification Safety Recommendations, FAA Airports District Office notices, and new FAA Advisory Circulars. Additionally, some proactive measures have been formulated by MKE in advance of directives anticipated from the FAA. The required added features have typically included new airfield pavement markings, added or changed guidance signage, and changes to or additional airfield lighting.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 31,074
State Grants	$ 38,290
AIP Funds	$ 177,237
Total Project Funding	$ 246,600

PFC PROJECT 18.10

Project Title: Taxiway E Lighting System Rehab, Runway 19R-1L & 7R PAPI's Replacement

Application Type: Impose and Use

Project Description:
Taxiway E edge lighting cable replacement (approximately 25,000 linear feet); Taxiways C, D, F, H & K cabling, and lighting replacement (approximately 15,100 linear feet of cabling and 384 light fixtures & bases); Runways 7R, 19R & 1L Precision Approach Path Indicator (PAPI) light replacement.

Project Justification:
The age of the existing lighting systems addressed in this project varies from 19 to 24 years old. The amount of required maintenance on the older lighting systems has increased to the point of needing replacement. Tracking of electrical insulation resistance measurements on the circuits over time can indicate degradation of the integrity of the electrical circuit. Recent measurements of these particular electrical circuits indicate a range of 3 to 35 megaohms and trending down. Generally, when insulation resistance measurements are trending down in a short period of time, action needs to be taken to address the deteriorating resistance and protect the lighting system.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 42,126
State Grants	$ 53,663
AIP Funds	$ 244,755
Total Project Funding	$ 340,544

PFC PROJECT 18.11

Project Title: Taxiway A and M Lighting Replacement

Application Type: Impose and Use

Project Description:
Taxiways A & M edge lighting replacement (approximately 210 light fixtures & bases); Airfield guidance sign replacement at various locations (approximately 5 signs).

Project Justification:
The age of the existing lighting systems addressed in this project varies from 19 to 24 years old. The amount of required maintenance on the older lighting systems has increased to the point of needing replacement. Tracking of electrical insulation resistance measurements on the circuits over time can indicate degradation of the integrity of the electrical circuit. Recent measurements of these particular electrical circuits indicate a range of 3 to 35 megaohms and trending down. Generally, when insulation resistance measurements are trending down in a short period of time, action needs to be taken to address the deteriorating resistance and protect the lighting system.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 41,717
State Grants	$ 41,717
AIP Funds	$ 250,303
Total Project Funding	$ 333,737

PFC PROJECT 18.12

Project Title: Runway 7L-25R Cabling and Lighting Replacement

Application Type: Impose and Use

Project Description:
Runway 7L-25R edge lighting replacement (approximately 59 runway edge lights utilizing existing bases and cabling)

Project Justification:
At several locations throughout the airfield the existing airfield lighting and cabling are deteriorating beyond their useful life and are in need of replacement. For this project, the location is Runway 7L-25R. Regular testing by the airport's electricians measure the insulation resistance in the airfield cabling which can decrease with the age of the cabling. The electricians have identified several locations with low insulation resistance and in need of replacement. Additionally, these locations have older incandescent lighting that will be replaced with new more efficient and reliable LED lighting. The function of these runways and taxiways is critical to the safe and efficient operation of the airport. Lighting that is out of service for maintenance reasons results in the taxiway being out of service during night time and low-visibility conditions, severely limiting the available taxiing routes for aircraft.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 37,827
State Grants	$ 37,827
AIP Funds	$ 226,965
Total Project Funding	$ 302,619

PFC PROJECT 18.13

Project Title: Taxiway Re-cabling and Re-lighting

Application Type: Impose and Use

Project Description:
The scope of work includes complete replacement of the taxiway edge light systems of Taxiways C, D, D1, F, F1, H and K. The work includes approximately 30,200 linear feet of new cabling, 382 LED taxiway edge lights with isolation transformers, 17 airfield guidance signs and the replacement of 4 constant current regulators.

Project Justification:
At several locations throughout the airfield the existing airfield lighting and cabling are deteriorating beyond their useful lives and are in need of replacement. For this project, those locations include Taxiways C, D, D1, F, F1, F2 H & K. Regular testing by the airport's electricians measure the insulation resistance in the airfield cabling which can decrease with the age of the cabling. The electricians have identified several taxiway locations with low insulation resistance and in need of replacement. Additionally, these locations have older incandescent lighting that will be replaced with new more efficient and reliable LED lighting. The function of these taxiways is critical to the safe and efficient operation of the airport. Lighting that is out of service for maintenance reasons results in the taxiway being out of service during night time and low-visibility conditions, severely limiting the available taxiing routes for aircraft.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 65,606
State Grants	$ 65,607
AIP Funds	$ 393,638
Total Project Funding	$ 524,851

PFC PROJECT 18.14

Project Title: Taxiway F (Rwy 13-31 to Txy E) Reconstruction

Application Type: Impose and Use

Project Description:
The segment of Taxiway F between Runway 13-31 and Taxiway E currently consists of 10.5 inches of asphalt over a 7" aggregate base course. The Taxiway F segment being reconstructed is approximately 1,530 feet long by 75 feet in width, totaling 12,750 square yards, not including shoulders. The taxiway is planned to be completely reconstructed with a new aggregate sub-base, a 6" concrete base course and an 18" concrete surface course. The reconstruction will also include approximately 52,600 square feet of new asphalt shoulder pavement and new taxiway edge lighting (27 fixtures total). This project includes both the design and construction phases of the Taxiway F reconstruction.

Project Justification:
The current Taxiway F (between Runway 13-31 and Taxiway Z) was constructed in 1950, resurfaced in 1985 and seal-coated in 2001, and has deteriorated significantly as a result of its heavy use for access between the West Ramp, the North FBO Apron and Runway 19R-1L. The most recent pavement condition inspection report (from 2016) indicates pavement condition index (PCI) values between 14 and 21 (serious condition) for this taxiway, which is below minimum service levels and identifies this taxiway as in need of full reconstruction. The upgraded edge lighting provides a greater degree of safety through enhanced visibility of the newer LED-type lighting.

This taxiway serves as a vital link between the West Apron and the approach of Runway 19R. The taxiway also serves a major fixed base operator (FBO) at MKE, and connects the taxiing aircraft from the FBO to the rest of the airfield. Not reconstructing this taxiway would eventually result in its deterioration to the point of not complying with FAR Part 139 airfield pavement standards, at which time the pavement would be closed to aircraft. The impact of such a closure would be severe to the operations at MKE, and would substantially limit the availability of FBO services – and hence the utility of MKE to Airport users.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 277,693
State Grants	$ 277,694
AIP Funds	$ 1,666,161
Total Project Funding	$ 2,221,548

PFC PROJECT 18.15

Project Title: GRE Apron Concrete Panel Replacement

Application Type: Impose and Use

Project Description:
This project consists of the removal and replacement of selected areas of concrete pavement in the apron of the Ground Runup Enclosure (GRE) structure. The area to be replaced is 200 feet x 125 feet, totaling 2,778 square yards. Project includes removal, base prep, new concrete pavement, and joint sealing.

Project Justification:
Many of the 25' square concrete apron panels are experiencing surface scaling and edge spalls with interior panel cracking. The continued scaling and spall of the pavement create an increasing risk of loose concrete within the GRE that could be ingested into the engines during run-up. Such ingestion could result in significant and costly damage to the engines. When aircraft use the facility for engine testing, the resulting noise is attenuated by 50%. Having this facility available when needed makes a significant contribution to the reduction of noise to the surrounding community. Without replacement of the affected panels, the facility may need to be closed which would result in the need to perform the engine run-ups outside of the controlled environment and thus impacting the surrounding community. The pavement had a Pavement Condition Index (PCI) score of 47 (poor condition).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 94,181
State Grants	$ 376,726
Total Project Funding	$ 470,907

PFC PROJECT 18.16

Project Title: Sustainability Management Plan

Application Type: Impose and Use

Project Description:
The project includes the drafting of a planning document that would become the Sustainability Management Plan (SMP) at MKE. The plan would include, but not be limited to sustainability baseline assessment, sustainability goals and objectives, identification and evaluation of sustainability initiatives, performance targets, plan implementation and monitoring program, the SMP document, and establishment of ongoing annual reporting.

Project Justification:
The FAA strongly encourages the development of a SMP at all airports to incorporate and integrate sustainability into the airport's long-range planning. The indicated goal and outcome of a SMP is to "achieve [the airport's] planning and operational objectives while reducing environmental impacts, achieving environmental benefits, and improving relationships with local communities". There are many benefits of airport sustainability planning, including reduced energy consumption, reduced noise impacts, reduced hazardous and solid waste generation, reduced greenhouse gas emissions, improved water quality, improved community relations, and cost savings.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 49,789
State Grants	$ 49,789
AIP Funds	$ 298,733
Total Project Funding	$ 398,310

PFC PROJECT 18.17

Project Title: Physical Access Control System Study and Design

Application Type: Impose and Use

Project Description:
The physical access control system is a computer-based network of door and gate control hardware and software. Its purpose is to limit access to regulated areas of the Airport to only those individuals who have been properly credentialed to be in such areas. This project consists of the selection and retention of a consultant to conduct an assessment of the entire airport and produce a feasibility study for options to upgrade the physical access control system. The project also includes the selection and retention of a design team for the recommended option for the system. Using the recommended option from the study, the design team will produce preliminary and final system schematics, bid documents, specifications, and construction cost estimates for an upgraded system.

Project Justification:
The existing physical access control system at MKE is over fifteen (15) years old, and is becoming functionally obsolete and cost prohibitive to maintain. As technology advances, older systems cannot continue to fulfill their intended purpose. Physical access control is a federal requirement at MKE under 14 CFR) Part 139 and 49 CFR Part 1542, §1542.207, and is the responsibility of the airport operator. The longer the existing access control systems remain in service the greater the risk of partial or complete system failure due to obsolescence and use of unsupported software. Additionally, older computer-based systems are more vulnerable to cyber-security threats. This project is supported by the Transportation Security Administration (TSA).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 363,797
Total Project Funding	$ 363,797

PFC PROJECT 18.18

Project Title: Physical Access Control System Construction

Application Type: Impose and Use

Project Description:
This project entails the procurement and construction of the physical access control system upgrade for the Airport based on final design specifications. The scope includes construction costs, construction management, construction oversight, testing, commissioning, record document production and close-out. The physical access control system is a computer-based network of door and gate control hardware and software. Its purpose is to limit access to regulated areas of the Airport to only those individuals who have been properly credentialed to be in such areas. Major cost elements to this project are: Access Control Panels (ACP), Door Devices, Vehicle Gate Devices, Conduit & Cabling, Access Control Software & Configuration/Testing.

Project Justification:
The existing physical access control system at MKE is over fifteen (15) years old, and is becoming functionally obsolete and cost prohibitive to maintain. As technology advances, older systems cannot continue to fulfill their intended purpose. Physical access control is a federal requirement at MKE under 14 CFR Part 139 and 49 CFR Part 1542, §1542.207, and is the responsibility of the airport operator. The longer the existing access control systems remain in service the greater the risk of partial or complete system failure due to obsolescence and use of unsupported software. Additionally, older computer-based systems are more vulnerable to cyber-security threats. This project is supported by the Transportation Security Administration (TSA).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 5,398,941
Total Project Funding	$ 5,398,941

PFC PROJECT 18.19

Project Title: Runway 19L-1R, 13-31 and Txy S & Y Re-lighting

Application Type: Impose and Use

Project Description:
The scope of work includes the replacement of the medium intensity runway edge lighting systems for Runways 13-31 and 19L-1R. Work includes the installation of approximately 9,200 linear feet of PVC conduit, approximately 36,200 linear feet of new cabling and approximately 100 new light fixtures with bases. Both edge lighting systems will be LED-type fixtures. Scope of this project also includes the replacement of the taxiway edge lighting systems for Taxiways S & Y. Work includes replacement of approximately 12,000 linear feet of cable, approximately 144 light fixtures with bases and isolation transformers. In addition, conduit raceways will be reused where possible. Minor landscaping will be included as needed for erosion control and proper grading.

Project Justification:
The age of the existing lighting systems addressed in this project varies from 19 to 24 years old. The amount of required maintenance on the older lighting systems has increased to the point of needing replacement. Tracking of electrical insulation resistance measurements on the circuits over time can indicate degradation of the integrity of the electrical circuit. Recent measurements of these particular electrical circuits indicate a range of 3 to 35 megaohms and trending down. Generally, when insulation resistance measurements are trending down in a short period of time, action needs to be taken to address the deteriorating resistance and protect the lighting system.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 94,125
State Grants	$ 119,944
AIP Funds	$ 564,000
Total Project Funding	$ 778,069

PFC PROJECT 18.20

Project Title: Taxiway A2, B, D, and V Modifications

Application Type: Impose and Use

Project Description:
The project consists of the removal of taxiway pavement, grading, base course, concrete pavement, bituminous shoulder pavement, lighting, cabling, site restoration and pavement marking installation. The areas to be addressed are the Taxiway D-Taxiway B- and Taxiway V intersection, and the Taxiway A-Taxiway P-Taxiway B-Taxiway A2 intersections. Approximately 9,500 square yards of pavement will be removed in this project in order to modify the remaining taxiway geometry. There will be approximately 19,700 square feet of new asphalt shoulder pavement, 14 taxiway edge lights, 2 runway edge lights and approximately 1,400 linear feet of lighting cable installed as part of this project.

Project Justification:
FAA Advisory Circular 150/5300-13 Airport Design contains the FAA's standards and recommendations for airport design. In 2012 this Advisory Circular was re-issued with new standards for airfield taxiway and runway pavement geometry. Because of this significant change, many locations of existing airfield pavement at the Airport no longer met design standards. Through the Airport ALP Update project, several locations were identified as having one or multiple issues of compliance with the design standards. This project addresses two of those locations.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 104,007
State Grants	$ 104,008
AIP Funds	$ 624,044
Total Project Funding	$ 832,059

PFC PROJECT 18.21

Project Title: Firehouse (ARFF) Addition

Application Type: Impose and Use

Project Description:
The project consists of a 6,900sf addition and 3,630sf renovation of the existing living/sleeping quarters to the MKE Airport Rescue and Fire Fighting (ARFF) Facility. Ancillary items include utility relocation, temporary housing, and landscaping. The PFC funding for this project is only for those building elements that are eligible, based on an eligibility determination by the FAA Airports District office dated 9/18/2017. The building elements determined by FAA to be ineligible are not included within the scope of the project as defined for PFC purposes.

Project Justification:
Construction of the existing Airport ARFF facility was completed in 1980. Except for the addition of one vehicle bay since 1980 there have been very little improvements made to the building, and it remains substantially as originally constructed. Currently, for lack of space at the ARFF facility, the fire chief and five deputy chiefs maintain their offices remotely (in the former Air Force Reserve fire station). Among other deficiencies the sleeping quarters, locker facilities, training room and exercise room do not meet current FAA design standards as outlined in FAA Advisory Circular 150/5210-15A - Aircraft Rescue and Firefighting Station Building Design.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 165,202
State Grants	$ 165,202
AIP Funds	$ 991,212
Total Project Funding	$ 1,321,616

PFC PROJECT 18.22

Project Title: Firehouse (ARFF) Addition

Application Type: Impose and Use

Project Description:
The project consists of a 6,900sf addition and 3,630sf renovation of the existing living/sleeping quarters to the MKE Airport Rescue and Fire Fighting (ARFF) Facility. Ancillary items include utility relocation, temporary housing, and landscaping. The PFC funding for this project is only for those building elements that are eligible, based on an eligibility determination by the FAA Airports District office dated 9/18/2017. The building elements determined by FAA to be ineligible are not included within the scope of the project as defined for PFC purposes.

Project Justification:
Construction of the existing Airport ARFF facility was completed in 1980. Except for the addition of one vehicle bay since 1980 there have been very little improvements made to the building, and it remains substantially as originally constructed. Currently, for lack of space at the ARFF facility, the fire chief and five deputy chiefs maintain their offices remotely (in the former Air Force Reserve fire station). Among other deficiencies the sleeping quarters, locker facilities, training room and exercise room do not meet current FAA design standards as outlined in FAA Advisory Circular 150/5210-15A - Aircraft Rescue and Firefighting Station Building Design.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 0
AIP Grants	$ 1,231,386
Total Project Funding	$ 1,231,386

PFC PROJECT 18.23

Project Title: Firehouse (ARFF) Addition

Application Type: Impose and Use

Project Description:
The project consists of a 6,900sf addition and 3,630sf renovation of the existing living/sleeping quarters to the MKE Airport Rescue and Fire Fighting (ARFF) Facility. Ancillary items include utility relocation, temporary housing, and landscaping. The PFC funding for this project is only for those building elements that are eligible, based on an eligibility determination by the FAA Airports District office dated 9/18/2017. The building elements determined by FAA to be ineligible are not included within the scope of the project as defined for PFC purposes.

Project Justification:
Construction of the existing Airport ARFF facility was completed in 1980. Except for the addition of one vehicle bay since 1980 there have been very little improvements made to the building, and it remains substantially as originally constructed. Currently, for lack of space at the ARFF facility, the fire chief and five deputy chiefs maintain their offices remotely (in the former Air Force Reserve fire station). Among other deficiencies the sleeping quarters, locker facilities, training room and exercise room do not meet current FAA design standards as outlined in FAA Advisory Circular 150/5210-15A - Aircraft Rescue and Firefighting Station Building Design.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 290,775
State Grants	$ 290,774
AIP Funds	$ 1,744,647
Total Project Funding	$ 2,326,196

PFC PROJECT 18.24

Project Title: Jet Bridge Preplacement 2017

Application Type: Impose and Use

Project Description:
Removal and replacement of seven Passenger Loading Bridges (PLBs) at the Airport. Scope of the project includes the purchase and installation of PLBs, electrical and security improvements at each PLB location and concrete foundation work as needed per location. The seven PLBs range in age from 29 years to 35 years. New PLB will have operational functions per established MKE standards for this equipment. The schedule for PLB replacement is as follows: 2017: Gates D44, D42 & D36, 2018: Gate D35, 2019: Gates D39, D48 & D45.

There are currently no constraints on competition at MKE. This project is intended to preserve the safety of passengers by updating aged equipment. However, the removal and replacement of PLBs will provide enhanced opportunities for competition by enabling the use of additional gates by carriers operating at or seeking to start service at MKE. With the closure of E concourse, we have 36 operational gates before the project and 37 operational gates after the project.

Project Justification:
All of the PLBs at MKE are owned by Milwaukee County and collectively serve over 7 million passengers per year. A condition assessment of all PLBs was completed in 2017, and a replacement plan developed from the information gathered from the assessment. PLBs at or beyond their useful life are recommended to be replaced to maintain safe, reliable and efficient operation. The PLBs to be replaced range in age from 29 years to 35 years. There are also some gates at MKE that currently do not have PLBs due to past use of ground boarding operations. Safe and reliable PLB functionality is essential to efficient gate operations. This project will add a PLB to one such gate (D-35).

There are currently no constraints on competition at MKE. This project is intended to preserve the safety of passengers by updating aged equipment. However, the removal and replacement of PLBs will provide enhanced opportunities for competition by enabling the use of additional gates by carriers operating at or seeking to start service at MKE. Gate D-35, which is currently non-functional due to past ground-use boarding will become available for concourse boarding under this project.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 1,522,869
Total Project Funding	$ 1,522,869

PFC PROJECT 18.25

Project Title: Jet Bridge Preplacement 2018

Application Type: Impose and Use

Project Description:
Removal and replacement of seven Passenger Loading Bridges (PLBs) at the Airport. Scope of the project includes the purchase and installation of PLBs, electrical and security improvements at each PLB location and concrete foundation work as needed per location. The seven PLBs range in age from 29 years to 35 years. New PLB will have operational functions per established MKE standards for this equipment. The schedule for PLB replacement is as follows: 2017: Gates D44, D42 & D36, 2018: Gate D35, 2019: Gates D39, D48 & D45.

There are currently no constraints on competition at MKE. This project is intended to preserve the safety of passengers by updating aged equipment. However, the removal and replacement of PLBs will provide enhanced opportunities for competition by enabling the use of additional gates by carriers operating at or seeking to start service at MKE. With the closure of E concourse, we have 36 operational gates before the project and 37 operational gates after the project.

Project Justification:
All of the PLBs at MKE are owned by Milwaukee County and collectively serve over 7 million passengers per year. A condition assessment of all PLBs was completed in 2017, and a replacement plan developed from the information gathered from the assessment. PLBs at or beyond their useful life are recommended to be replaced to maintain safe, reliable and efficient operation. The PLBs to be replaced range in age from 29 years to 35 years. There are also some gates at MKE that currently do not have PLBs due to past use of ground boarding operations. Safe and reliable PLB functionality is essential to efficient gate operations. This project will add a PLB to one such gate (D-35).

There are currently no constraints on competition at MKE. This project is intended to preserve the safety of passengers by updating aged equipment. However, the removal and replacement of PLBs will provide enhanced opportunities for competition by enabling the use of additional gates by carriers operating at or seeking to start service at MKE. Gate D-35, which is currently non-functional due to past ground-use boarding will become available for concourse boarding under this project.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 909,414
Total Project Funding	$ 909,414

PFC PROJECT 18.26

Project Title: Jet Bridge Preplacement 2019

Application Type: Impose and Use

Project Description:
Removal and replacement of seven Passenger Loading Bridges (PLBs) at the Airport. Scope of the project includes the purchase and installation of PLBs, electrical and security improvements at each PLB location and concrete foundation work as needed per location. The seven PLBs range in age from 29 years to 35 years. New PLB will have operational functions per established MKE standards for this equipment. The schedule for PLB replacement is as follows: 2017: Gates D44, D42 & D36, 2018: Gate D35, 2019: Gates D39, D48 & D45.

There are currently no constraints on competition at MKE. This project is intended to preserve the safety of passengers by updating aged equipment. However, the removal and replacement of PLBs will provide enhanced opportunities for competition by enabling the use of additional gates by carriers operating at or seeking to start service at MKE. With the closure of E concourse, we have 36 operational gates before the project and 37 operational gates after the project.

Project Justification:
All of the PLBs at MKE are owned by Milwaukee County and collectively serve over 7 million passengers per year. A condition assessment of all PLBs was completed in 2017, and a replacement plan developed from the information gathered from the assessment. PLBs at or beyond their useful life are recommended to be replaced to maintain safe, reliable and efficient operation. The PLBs to be replaced range in age from 29 years to 35 years. There are also some gates at MKE that currently do not have PLBs due to past use of ground boarding operations. Safe and reliable PLB functionality is essential to efficient gate operations. This project will add a PLB to one such gate (D-35).

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 2,580,743
Total Project Funding	$ 2,580,743

PFC PROJECT 18.27

Project Title: Howell Tunnel Rehabilitation

Application Type: Impose and Use

Project Description:
This project consists of a major concrete structure rehabilitation of the Howell Ave. Tunnel Structure. The work includes design, concrete surface repair, expansion joint rehabilitation, concrete protective surface treatment, concrete staining, mill & overlay of asphalt pavement over the top of the tunnel, rehabilitation of electrical and ventilation systems within the tunnel structure, door replacement and providing an alternate electrical power source for the ventilation system.

Project Justification:
The Howell Ave. Roadway Tunnel Structure supports Runway 7R-25L and Taxiway A over S. Howell Ave. (State Trunk Highway 38) and was originally constructed in 1964. Based on a 2017 structural inspection and evaluation, a major rehabilitation of the concrete structure is recommended within the next two years to provide another 20 years of reliable service at the current load rating. The report further states that if the major rehabilitation is not implemented within the next two years, the structure will continue to deteriorate to a point where safety and serviceability could become issues for both airport and roadway traffic, and the aircraft loading capacity of the structure may be compromised.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 311,770
Grant Funds	$ 311,770
AIP Funds	$ 1,870,618
Total Project Funding	$ 2,494,158

PFC PROJECT 18.28

Project Title: Howell Tunnel Management - Study

Application Type: Impose and Use

Project Description:
Project consists of a structural inspection and assessment of the Howell Ave. Tunnel Structure. The assessment will contain recommended actions to rehabilitate the structure to maximize its useful life.

Project Justification:
The Howell Ave. Roadway Tunnel Structure supports Runway 7R-25L and Taxiway A over S. Howell Ave. (STH 38) and was originally constructed in 1964. Minor repair and maintenance have been performed on the structure throughout its life. A thorough structural assessment by a qualified structural engineering firm needs to be conducted in order to address any major existing problems not addressed by normal maintenance, recommend actions to extend the life of the structure and to begin the planning for its ultimate replacement.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 81,808
Total Project Funding	$ 81,808

PFC PROJECT 18.29

Project Title: Airfield Drainage Improvements - Study

Application Type: Impose and Use

Project Description:
Project consists of an inspection and condition assessment of the airfield drainage infrastructure including inlet structures, storm sewer piping, outfall structures and surface grading near the inlets. Data from the assessment will be compiled in a report for the purpose of guiding the decisions for storm water drainage improvements projects. Recommendations from this study will be incorporated into the project scopes for airfield pavement rehabilitation and replacement projects. This project was funded by an SAP grant.

Project Justification:
Much of the airfield drainage and storm sewer infrastructure is 60 years old or more. Many of the original storm sewer pipes are Corrugated Metal Pipe (CMP), which has a design life of approximately 40 years. There have been isolated locations where storm sewer pipe has collapsed, requiring immediate repairs. Without a comprehensive inspection and assessment of the existing storm drainage system, planning for replacement becomes impossible. Repair of failed storm drainage system components is reactionary, and inefficient.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 21,797
State Grants	$ 87,189
Total Project Funding	$ 108,986

PFC PROJECT 18.30

Project Title: Snow Removal Equipment (SRE) Replacement

Application Type: Impose and Use

Project Description:
This project is to replace four pieces of airfield SRE, as follows:
Piece 1: Rotary Plow -- Class VI high-speed, two-stage, front-mounted rotary plow attached to a carrier vehicle capable of casting 5,000 tons of snow per hour that will be used for priority 1 pavement. Estimated replacement cost is $875,000. The current unit was purchased in 1990 and will be de-commissioned.
Piece 2: Sweeper -- High -speed, front-mounted broom attached to a carrier vehicle that will be used for priority 1 pavement. Estimated replacement cost is $750,000. The current unit was purchased in 2001 and will be de-commissioned.
Piece 3: Hopper/Spreader -- 8-yard dump-truck carrier vehicle with a slip in type spreader for sand and solid de-icing chemicals. The current unit was purchased in 2002 and will be de-commissioned. Estimated replacement cost is $180,000.
Piece 4: Hopper/Spreader -- 8-yard dump-truck carrier vehicle with a slip in type spreader for sand and solid de-icing chemicals. The current unit was purchased in 2009 and will be de-commissioned. Estimated replacement cost is $180,000.

Project Justification:
In order to maintain the airport's standard clear time, the Airport needs to replace an aging snow removal fleet. The Airport will be replacing four (4) pieces of equipment from the aging fleet (1 Rotary Plow, 1 Sweeper and 2 Hopper/Spreaders). The SRE units being replaced range in age from 10 years to 19 years. They have reached the end of their useful life, require frequent maintenance, and are unreliable. The replacement of these pieces of equipment will comply with allowable snow removal equipment for our airport as calculated using the Advisory Circular, and as reflected in our current snow and ice control plan (SICP). These pieces of equipment will be used on priority 1 pavement at the airport.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 1,985,000
Total Project Funding	$ 1,985,000

PFC PROJECT 18.31

Project Title: Airport Master Plan Update

Application Type: Impose and Use

Project Description:
This project involves the update of the Airport Master Plan for MKE in accordance with the requirements of the FAA. This project will also update the existing Airport Layout Plan. The Master Plan study effort will include the elements specified in section 202.b of FAA Advisory Circular (AC) 150/5070-6B, Airport Master Plans as follows: Preplanning; Public Involvement; Environmental Considerations; Existing Conditions; Aviation Forecasts; Facility Requirements; Alternatives Development and Evaluation; Airport Layout Plans; Facilities Implementation Plan; and Financial Feasibility Analysis. The master planning effort will produce the deliverables specified in section 204 of that AC as follows: a Technical Report; a Summary Report; an Airport Layout Plan Drawing Set; a Webpage; and A Public Information Kit.

Project Justification:
This project will update the 2009 Master Plan for the Airport that is more than 10 years old. Given the significant changes in the aviation industry and at MKE since the last master plan, this project is necessary to provide a strategic framework to guide future airport development at MKE.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 322,889
State Grants	$ 322,889
AIP Funds	$ 1,937,333
Total Project Funding	$ 2,583,111

PFC PROJECT 18.32

Project Title: PFC Administration Costs

Application Type: Impose and Use

Project Description:
This project will provide funding for PFC reporting compliance and auditing expenses and the development of PFC applications and amendments. Estimated expenses include $200,000 for consultant services, $40,000 for audit services and $60,000 for airport staff time as related to the preparation, maintenance and review of PFC applications and amendments.

Project Justification:
MKE is required by FAA regulations to prepare quarterly reports of PFC receipts, interest earnings and expenditures and to prepare an annual audit of the PFC fund. In addition, MKE utilizes the services of a consultant to assist in preparation and review of applications and amendments before submission of applications.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 300,000
Total Project Funding	$ 300,000

PFC PROJECT 18.33

Project Title: Txy E (Rwy 7L-25R to Txy F) and Txy F (Txy E to Rwy 1L-19R) Pavement Replacement

Application Type: Impose and Use

Project Description:
Remove and replace Taxiway E, north of Taxiway F1. Remove and replace Taxiway F between Taxiway Z and Runway 19R. Approximately 10,140sq. yards of pavement will be replaced with new concrete pavement. This includes new shoulders, edge lighting modifications consisting of 35 new light bases 4,800 feet of new cabling, replacement and repair of 4 airfield guidance signs, installation of 12 in-pavement runway guard lights, and storm sewer modifications to meet permit requirements. This estimate assumes removal of existing concrete and bond breaker and using underlying concrete as a base course.

Project Justification:
All airfield pavements at MKE were inspected and evaluated in 2016 by the Wisconsin Department of Transportation Bureau of Aeronautics, with a subsequent report issued describing the current pavement conditions. Taxiways E and F were identified in the report as having a Pavement Condition Index range of 38-47 (very poor – poor condition), which indicates the level of distress warranting consideration of pavement rehabilitation. The type of concrete pavement distress noted in the report were corner breaks, joint spalling, high-severity joint seal damage, surface pop-outs and a high number of patches. If left untreated, the pavement surface will continue to deteriorate, requiring more maintenance and raising the potential for pavement break-up and ingestion of small pieces of broken pavement into aircraft engines.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 425,926
State Grants	$ 425,926
AIP Funds	$ 2,555,557
Total Project Funding	$ 3,407,410

PFC PROJECT 18.34

Project Title: Taxiway A Extension

Application Type: Impose and Use

Project Description:
This project consists of planning, design and construction of a 2,150 ft. extension of Taxiway A from Taxiway E to Taxiway N. 26,500 sq. yards of pavement will be added to the Taxiway. Work consists of grading and excavation, placement of granular base and concrete pavement, bituminous shoulder pavement, airfield lighting and signage, pavement markings and turf restoration adjacent to the new pavement. Project includes the removal of Taxiway M from Runway 1L-19R to Taxiway N, and the modification of the runway exit taxiway at the current location of Taxiway M. Additional lighting associated with this project includes approximately 135 taxiway edge lights with bases, 2,100 feet of cable and 8 airfield guidance signs. Estimated Cost Detail: Planning & Design: $1,080,194, Construction (total): $10,072,067, Lighting: $707,900, Removal of Txy M: $705,000.

Project Justification:
Federal Aviation Administration (FAA) Advisory Circular 150/5300-13A "Airfield Design" was issued in 2012 and contains revised airfield pavement geometric standards and best practices for pavement layout for the purpose of improving airfield safety. In response to the new design standards, Milwaukee County conducted an Airfield Compliance Analysis in 2014 that identified specific areas of the airfield at MKE that do not meet or partially meet the updated FAA design standards. One of the areas identified as a particularly high risk is the Taxiway M intersection with Runway 1L-19R. This particular intersection has also been designated a "Hot Spot" on the current FAA Airport Diagram due to historic operational problems in this area. Areas designated as Hot Spots should be addressed as soon as practical. A result of the 2014 Compliance Analysis is an updated Airport Layout Plan (ALP) that depicts corrected pavement geometry in this location. The extension of Taxiway A, and the subsequent elimination of Taxiway M eliminates the Hot Spot, while maintaining operational efficiency for the use of both main air carrier runways at MKE.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 473,370
State Grants	$ 473,370
AIP Funds	$ 10,840,220
Total Project Funding	$ 11,786,960

PFC PROJECT 18.35

Project Title: Runway 7R-25L Pavement Rehabilitation

Application Type: Impose and Use

Project Description:
This project consists of concrete pavement rehabilitation of Runway 7R-25L. This runway is 150' wide by 8,300 feet long and is one of two primary runways serving commercial air service at MKE. Concrete pavement rehabilitation involves spall repair, partial and full depth replacement, full panel replacement and joint sealing at various locations along the entire length of this runway.

Project Justification:
The existing concrete pavement on Runway 7R-25L was originally installed in phases from 1975 through 1978, with numerous spot repairs and patches since that time. A pavement condition assessment conducted in 2016 resulted in measured Pavement Condition Index (PCI) values for this runway ranging from 41 to 55 (poor to fair condition). This range of values is consistent with the recommended remedy of pavement rehabilitation per FAA Advisory Circular 150/5380-7B Airport Pavement Management Program, which contains recommended guidelines and procedures for the maintenance, repair and replacement of airport pavements. Runway 7R-25L is the second most heavily used runway for aircraft operations at MKE.

Project Funding:	**Amount**
Pay-As-You-Go PFCs	$ 723,328
State Grants	$ 723,328
AIP Funds	$ 9,153,344
Total Project Funding	$10,600,000