Public Notice – Passenger Facility Charge PFC Application No. 8 Charlotte Douglas International Airport

Effective: February 22, 2019

Pursuant to 49 CFR Part 158.24, the city of Charlotte ("City"), owner and operator of the Charlotte Douglas International Airport ("Airport"), hereby provides public notice ("Public Notice") of the City's intention to file its Passenger Facility Charge Application ("PFC") No. 8 with the Federal Aviation Administration ("FAA") to fund, in whole, or, in part, certain eligible improvements at the Airport.

As required by Part 158.24(a)(1) the following information is included in this Public Notice:

(i) Descriptions of the projects;
(ii) A brief justification of the need for the projects;
(iii) The PFC level for each project;
(iv) The estimated total PFC revenue for each project;
(v) The proposed charge effective date for the application;
(vi) The estimated charge expiration date for the application;
(vii) The estimated total PFC revenue that will be used to finance the projects; and
(viii) The name of and contact information for the person within the public agency to whom comments should be sent.

The City proposes to undertake this program of capital improvements and to fund them with PFCs on a PAYGO and debt leveraged basis. The City is applying to the FAA for the authority to impose and use PFC revenue to pay the PFC eligible cost of the proposed project work elements ("PWEs").

The City proposes to impose a $3.00 PFC to pay the PFC eligible costs of the PWEs. The proposed Charge Effective Date for PFC Application Number 8 will be concurrent with the charge expiration date of PFC Application Number 6 (and PFC Application Number 7 which is the "Use" Application for PFC Number 6) which is currently defined as July 1, 2036 (legal Charge Expiration Date). The City is also amending PFC Application No. 1, PFC Application No. 2, PFC Application No. 3 and PFC Application No. 4. Taking each of these actions in to consideration, the City estimates that the charge expiration date for PFC Application No. 8 is February 1, 2049.

In summary, the City estimates using $2,137,096,244 in PFC revenue to fund certain PFC eligible costs of the projects to be included in PFC Application Number 8. Of this amount, the City estimates using $198,203,617 in PFC revenue on a PAYGO basis and using 1,938,892,627 in PFC revenue on a debt leveraged basis, which includes $834,503,793 of PFC eligible debt proceeds and 1,104,388,834 of estimated debt financing costs and interest costs. Combined with the estimated PFC revenues to be collected pursuant to approved PFC Applications Number 1, Number 2, Number 3, Number 4, Number 5, Number 6 (and Number 7) as proposed to be amended ($1,399,121,100), the total amount of Impose and Use authority for the City's PFC program would be $2,794,354,193.

The following sets forth the PWEs included in PFC Application No. 8, including a description of the projects, justification for the projects and the estimated total PFC revenue the City will use for each project.

I. PROJECT DESCRIPTIONS, OBJECTIVES AND JUSTIFICATIONS

PROJECT TITLE:
PWE 8.1 TERMINAL LOBBY EXPANSION

PROJECT DESCRIPTION: This project will include Phase II Design and the construction phase of the Terminal Lobby Expansion Project (the Design Phase I was approved in PFC Application No. 6 (PWE 6.10). The expansion will include all four levels of the terminal lobby to the north and west to provide additional public circulation space in the main lobby area, baggage claim lobby area, security check point areas and airline ticket counter queuing areas, as well as associated mechanical and support areas all comprising approximately 192,279 square feet. Approximately 210,400 square feet will also be included with this project for renovation and a new main terminal roof repair will be undertaken. A terminal canopy over an eight-lane roadway system (approved in PFC Application No. 5, PWE 5.17) and two pedestrian skybridges will be included as part of the expansion. This project also includes the construction of a new central energy plant ("CEP") which will supply all utilities to the Terminal Building. This will be a single level 32,770 square foot building and will be located on a portion of the existing Daily North Parking Lot.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system by providing additional public circulation space in the main lobby area, baggage claim area, security check point areas, airline ticket counter queuing area, terminal roadway pedestrian crossing areas as well as associated mechanical and support areas.

PROJECT JUSTIFICATION: As identified in the Airport Capacity Enhance Plan, the terminal lobby is currently inadequate, and expansion is required. The existing terminal building was built in 1982 and there were 1,400,460 origin and destination passenger enplanements. In 2016, the airport served 6,278,308 origin and destination enplanements. The main lobby, baggage claim and security checkpoint areas comprise approximately 146,000 square feet and cannot adequately process the increased passengers efficiently, causing long passenger processing lines, and inadequate meeter/greeter space.

The origin and destination passengers at CLT have increased 4.7 percent annually on average over the past 20 years at the airport. In 2016, origin and destination passengers accounted for 11.1 percent of all passengers (InterVISTAS, 2018).

The eight-lane roadway system is currently being constructed (approved PFC Application No. 5, PWE 5.17) because the existing roadway was insufficient and operated at 95 percent capacity. The roadway project will allow the Airport to grow to the projected 9 MAOP by 2035 and support the amount of passenger related vehicular and pedestrian traffic in front of the terminal. PWE 5.17 was also required to allow for the expansion of the terminal lobby as described in this PWE. Once the new roadway system is complete, the existing lanes can be demolished; providing necessary space to all for the terminal lobby expansion. A full justification for the roadway project is in the City's PFC Application No. 5 (PWE 5.17)

The two sky bridges included in the Terminal Lobby Expansion will provide passenger related pedestrian ingress/egress to and from the terminal building which is required to eliminate the need for pedestrians to cross eight lanes of vehicular traffic.

The utility systems (HVAC; chillers, boilers, electrical, water, and more) need to be relocated from their current location (inside the Terminal Building). As situated, maintenance or the replacement of equipment is severely restricted as there is insufficient space to perform the work and there is insufficient room to expand these areas in their current location. Removing these systems to a dedicated facility outside the main Terminal Building will alleviate these conditions.

FINANCING PLAN

Project Cost:	$585,400,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
RAC CFC:	$35,000,000
PFC PAYGO:	$0
PFC Bonds:	$386,877,003
Non-PFC Bonds:	$163,522,997
PFC Financing & Interest	$511,996.045
Est. % PFC Est.	72.07%
Total Est. PFC Amount	**$898,873,048**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	10/09/17
Project End Date:	03/21/25

PROJECT TITLE:
PWE 8.2 CONCOURSE A EXPANSION PHASE II DESIGN & CONSTRUCTION

PROJECT DESCRIPTION: This project will include Phase II design and the construction of Concourse A Expansion project (Phase I was approved in PFC Application No. 6 (PWE 6.4)). Phase II will construct a 3-level pier of approximately 194,184 square feet and will include 10 passenger boarding gates, holdrooms, public restrooms, circulation areas with moving sidewalks, concession areas, a baggage conveyor system and other support areas. Approximately 77 percent of the total project is PFC eligible.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system by adding nine additional passenger boarding gates and related holdrooms, passenger circulation areas, restrooms, concession and office areas and support and mechanical areas, all required to meet existing and near-term projects capacity demand.

PROJECT JUSTIFICATION: The Concourse A Expansion Phase II Design & Construction project is necessary due to the historical and projected growth in airline and passenger activity at CLT and will enhance capacity by adding 10 gates and 194,184 square feet of passenger concourse and related areas which will provide the additional capacity.

A forecast was completed in April 2018 and approved as part of the Environmental Impact Statement identified a compound average annual growth rate of 2.4 percent through 2020 and a compound average annual growth rate of 1.7 percent thereafter. (TransSolutions, 2018).

A gate analysis was completed as part of the Environmental Assessment that is currently underway for this project. There is a lack of capacity on the taxiways to simultaneously accommodate aircraft circulation, queueing to the departure runways and holding of aircraft that do not have an available gate upon landing. A minimum of 11 additional gates (124 total including existing Concourse A North Expansion Phase I recently completed in July 2018) are needed to maintain higher afternoon, evening, and night inter-gate time. (Landrum & Brown)

FINANCING PLAN

Project Cost:	$205,500,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$0
PFC Bonds:	$158,337,750
Non-PFC Bonds:	$47,162,250
PFC Financing & Interest	$209,545,414
% PFC Est.	77.05%
Total Est. PFC Amount	**$367,883,164**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/15/18
Project End Date:	04/30/22

PROJECT TITLE:
PWE 8.3 CONCOURSE A HOLDROOM EXPANSION

PROJECT DESCRIPTION: This project will include the design for and expansion of the existing holdroom, concession and circulation space on the north and south portions of Concourse A at gates A4 and A5. Concourse A is currently 64,800 square feet. This project will create approximately 5,320 square feet of additional passenger holdroom and tenant space to support Delta Airlines and American Airlines aircraft fleet mix. The City operates 13 gates from this concourse. The expansion space attributable to Gates A4 and A5 will be assigned on a preferential basis and is set forth below.

Gate A4 Holdroom	879 sq. ft.
Gate A5 Holdroom	3,054 sq. ft.
Total	3,933 sq. ft.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system by expanding the passenger holdroom areas at gates A4 and A5 which are inadequate for the volume of passenger traffic on Concourse A.

PROJECT JUSTIFICATION: Since opening in 1994, enplanements generated by aircraft operating from Concourse A have continually increased and are expected to continue to increase. The Airport Cooperative Research Program (ACRP) Report 55: Passenger Level of Service and Spatial Planning for Airport Terminals provides guidance to follow when determining the size of holdrooms. Their guidance is based on the type of aircraft, load factor, number of podiums, number of bridges, and accounts for seated versus standing. The airlines using these gates have aircraft varying in size up to ADG IV.

Additional holdroom space is recommended to support this size aircraft.

FINANCING PLAN

Project Cost:	$7,300,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$4,745,000
PFC Bonds:	$0
Non-PFC Bonds:	$2,555,000
PFC Financing & Interest	$0
% PFC Est.	65%
Total Est. PFC Amount	**$4,745,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	09/04/2018
Project End Date:	11/09/2019

PROJECT TITLE:
PWE 8.4 CONCOURSE E PHASE 8 - AMENDED

PROJECT DESCRIPTION: This project includes the design and construction of an expansion of existing holdroom and circulation space on the northern and eastern ends of Concourse E. Concourse E is currently 152,735 square feet. This project will create an estimated 63,000 additional square feet of passenger holdrooms, public circulation, tenant and mechanical and support space on the north and east ends of Concourse E. The City operates three gates from this Concourse and American Airlines uses the remaining gates on a preferential assignment under the Airline Use and Lease Agreement which became effective on July 1, 2016.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system by providing more passenger holdroom area to north and east end of Concourse E which are inadequate for the volume of passenger traffic on Concourse E.

PROJECT JUSTIFICATION: Since opening in 2002 enplanements generated by aircraft operating from Concourse E have continually increased and are expected to continue to increase. Enplanement growth on Concourse E has increased from approximately 1.2 million in 2002 to an estimated 6.2 million in 2018, an average annual growth rate of 10.8 percent.

Currently, Concourse E has 35 access doors to the AOA, providing access to 42 aircraft parking positions. Twenty-four (24) of the gates do not have adequate holdroom capacity or passenger boarding bridges. The associated aircraft positions are located on remote hardstand parking positions which require passengers to walk through an active aircraft ramp area and board at ramp level. Passengers using these gates are required to be marshalled and escorted to the aircraft and may be exposed to inclement weather conditions. This project will construct approximately 18,600 square feet of additional airline holdroom space and 18,700 square feet of public circulation space on the boarding level of Concourse E. This space provides expanded passenger holdroom and circulation areas, as well as the installation of passenger boarding bridges which will enable the covered enplanement and deplanement of passengers to all parking positions on the north and east ends of Concourse E. An ancillary benefit to this project is the net gain of one additional aircraft parking position on Concourse E.

Furthermore, based on an analysis of concession space requirements by the Airport's master food and beverage and retail concessionaires, available concession and concession storage space is dramatically undersized given the number of passengers using Concourse E. According to a sample taken by Leigh Fisher, large hub airports average about 13.7 square feet of concession space for every 1,000 enplanements. CLT falls far below this industry average at approximately 6.5 square feet of concession space for every 1,000 enplanements. When analyzing E Concourse discretely, the lack of concession space is even more apparent, given a ratio of 3.7 square feet of concession space per 1,000 enplanements.

FINANCING PLAN

Project Cost:	$47,660,250
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$0
PFC Bonds:	$37,270,316
Non-PFC Bonds:	$10,389,935
PFC Financing & Interest	$49,323,826
% PFC Est.	78.20%
Total Est. PFC Amount	**$86,594,142**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	10/30/2017
Project End Date:	03/26/2021

PROJECT TITLE:
PWE 8.5 REGIONAL BOARDING RAMPS

PROJECT DESCRIPTION: Concourse E is currently configured with 48 gates, 18 of those are equipped with jet bridges and 13 new jet bridges are scheduled to be installed by 2015. This project will procure 24 new common use aircraft boarding ramps to be installed on the remaining gates of Concourse E that are unable to be equipped with jet bridges due to space restrictions. The boarding ramps are fixed to the terminal ramp designed for a "drive in – pushback" operation.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system. This project enhances capacity by equipping 11 gates with passenger boarding ramps that would otherwise require passengers to utilize the aircraft air stairs. The boarding ramps ensure ADA compliance and provide passengers a safe alternative on gates that can't be installed with jet bridges due to space restrictions. The boarding ramps will accommodate a range of aircraft currently serving the Airport and those aircraft that might serve the Airport in the near future. Currently, passengers which in turn will reduce the amount of time aircraft utilize the gate and the boarding area.

PROJECT JUSTIFICATION: This project will provide alternative passenger boarding devices for gates on Concourse E which are not loading bridge compatible. Equipping additional gates with boarding ramps will enhance capacity by allowing passengers to board the aircraft faster, thereby reducing the amount of time aircraft utilize the gate and the boarding area. Concourse E gates are common use gates and operated by the City of Charlotte and available to any airline operating at the Airport.

FINANCING PLAN

Project Cost:	$8,400,000
Grants:	$0
PFC PAYGO	$8,400,000
PFC Bonds	$0
Non-PFC Bonds	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC amount	$8,400,000

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/01/20
Project End Date:	01/01/21

PROJECT TITLE:

PWE 8.6 CUSTOMS AND BORDER PROTECTION EXPANSION & RENOVATION – DESIGN ONLY

PROJECT DESCRIPTION: Customs and Border Patrol (CBP) is located beneath Concourse D and comprises of 115,000 square feet. This project is the design phase for the renovation and expansion to provide additional space for passport control, baggage frontage, and will be configured to comply with the latest for CBP Airport Technical Design Standard (ATDS) for Baggage First Processing.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and for the national air transportation system by providing the space necessary to process an estimated 1,744,000 passengers and their baggage entering the country through customs in 2019.

PROJECT JUSTIFICATION: The FIS area was originally designed in 2000 for a passenger processing rate of 1,000 passengers per one hour. From 2002-2016, international passenger growth has increased 8.1 percent annually on average. In 2016, international flights accounted for 6.9 percent of all traffic at Charlotte (InterVISTAS, 2018).

In 2017, CBP updated their ATDS which provided comprehensive and detailed guidance on the process and standards to be followed in developing the program of requirements and design documents for FIS facilities. This document was established to assist airports design their facilities to accommodate the processing of international passengers along with guidance for regulatory compliance.

The expansion is necessary to accommodate the recheck area with the Terminal Lobby Expansion PWE 8.1 and make the necessary modifications required to comply with CBP standards. The area dedicated for passport control processing is significantly undersized. There is a need for additional capacity for baggage frontage required to accommodate baggage presentation and baggage claim. The existing structure is limited causing unnecessary passenger congestion.

FINANCING PLAN

Project Cost:	$7,000,000
Grants:	$0
PFC PAYGO:	$3,500,000
PFC Bonds:	$0
Non-PFC Bonds:	$3,500,000
PFC Financing & Interest	$0
% PFC Est.	50%
Total Est. PFC Amount	**$3,500,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	05/16/2019
Project End Date:	01/31/2020

PROJECT TITLE:
PWE 8.7 NORTH EAT & RELOCATIONS – DESIGN & CONSTRUCTION

PROJECT DESCRIPTION: This project will design and construct a North End-Around Taxiway (EAT) of Runway 18C/36C. Construction of the North EAT will require the following connected actions: FAA Navigational Aids relocations, Old Dowd Rd Relocation, and Airport Overlook Relocation.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance safety and capacity at the Airport and for the national air transportation system. The North EAT will provide a taxi route around the approach end of Runway 18C. This will eliminate the need to taxi aircraft across an active runway and increase airfield safety.

PROJECT JUSTIFICATION: The North EAT & Relocations project is required to provide a taxi route around the approach end of Runway 18C which will eliminate the need to taxi aircraft across an active runway and increase airfield safety. The change in design from the 2016 approved ALP is based off the RSAT action item to reduce runway crossings and runway incursions. The ALP is being updated and the Airport is currently working with the FAA on the design standards.

Ramp congestion occurs due to the lack of ramp space available. CLT is driven by the banking characteristics of the airline hub operations at the airport. Of the 18 daily banks, nine are arrival banks with heavy demand for gates in advance of each departure bank. If the ramp is full of waiting aircraft, additional arriving flights will wait on taxiways which in turn affects arrival taxi-in times. When experiencing any delay, this initiates a domino effect that results in a rolling increase in delay over time until the next bank begins. Runway 18R/36L manages 51.9 percent of all arriving traffic in a northbound operation and 50.3 percent in a southbound operation. Per the Capacity Delay Analysis and Airfield Modeling Technical Memorandum completed in July 2018, the average taxi-in time was 10.6 minutes in 2016 and is expected to increase to 13.4 minutes by 2028 (TransSolutions, 2018). As the demand increases, there is a need to address the existing infrastructure.

Table: Average Airspace Delay and Taxi Times (in minutes)

Operational Configuration	Year	Arrival		Departure
		Average Airspace Delay	Average Taxi-In Time	Average Taxi-Out Time
South Flow VMC	2016	2.2	10.3	13.6
	2028	3.3	12.8	13.4
	2033	4.5	15.4	14.8
South Flow IMC	2016	4.3	12.4	17.7
	2028	7.3	15.2	17.9
	2033	12.6	15.4	23.4
North Flow VMC	2016	3.8	10.2	14.8
	2028	7.8	13.9	14.6
	2033	10.9	14.9	15.4
North Flow IMC	2016	3.9	11.1	18.6
	2028	8.6	12.3	23.2
	2033	12.0	12.5	26.6
Annualized Average	**2016**	**3.2**	**10.6**	**15.0**
	2028	**5.8**	**13.4**	**15.3**
	2033	**8.3**	**14.9**	**17.1**

Note: Annualized average is based on annualized average use of each operational configuration (see Section 3.4)
Source: TransSolutions, LLC; *Simmod PLUS!*

FINANCING PLAN

Project Cost:	$253,139,000
AIP Grants Future:	$62,284,750
PFC PAYGO:	$50,000,000
PFC Bonds:	$139,854,250
Non-PFC Bonds:	$0
PFC Financing & Interest	$185,084,206
% PFC Est.	100%
Total Est. PFC Amount	**$374,938,456**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	04/01/2018
Project End Date:	12/26/2024

PROJECT TITLE:
PWE 8.8 DEICE PAD, TWY F EXTENSION & TWY SCF – DESIGN & CONSTRUCTION

PROJECT DESCRIPTION: This project includes the design and construction of a dedicated deicing pad, an extension of Taxiway F and a south cross-field taxiway. Taxiway F will be lengthened 3,000 feet to the approach end of Runway 36C to provide access to the deice pad. The deicing pad will be 1.3 million square feet and will accommodate five aircraft. The new south cross-field taxiway will provide a connection from the deice pad to the approach of Runway 36R. This will provide efficient aircraft flow across the airfield during time-sensitive deicing operations.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve capacity at the Airport and for the national air transportation system by providing expanded simultaneous deicing for five aircraft. The Airport's current layout and infrastructure does not provide a dedicated area for deicing. Having a centralized location for the deicing operation and the cross-field taxiway will allow aircraft to traverse to either the center or east runway in a timely manner.

PROJECT JUSTIFICATION: The Airport does not have a dedicated deicing pad. The two current deicing operations occur on Runway 5/23 and the South Cargo ramp area. The South Cargo ramp is only available for deicing when the cargo carriers are not operating. Because of this, there are insufficient deicing areas to accommodate the air craft operations at the airport. In addition, the geographic location limits the usage of those pads to those aircraft departing on Runway 36R. If aircraft were departing Runway 36C from this pad, this would require ATC to hold traffic as they would go against the flow of traffic and cause delay for aircraft being deicing on Runway 5/23. Using Runway 5/23 for deicing operation creates substantial congestion to the air carrier ramp as aircraft are queued on the ramp, Taxiway F, and Taxiway M. This operation provides five deice pads that can accommodate two aircraft on the west pad, two on the center pad, and an ADG II on the east pad. The operation on the east pad brings significant safety concerns with its proximity to the intersecting and operating runway. This operation immediately reduces the ramp efficiency by 30 percent.

FINANCING PLAN

Project Cost:	$200,219,300
AIP Grants Future:	$50,054,825
AIP Grants Future:	$0
PFC PAYGO:	$50,000,000
PFC Bonds:	$100,164,475
Non-PFC Bonds:	$0
PFC Financing & Interest	$132,558,448
% PFC Est.	100%
Total Est. PFC Amount	**$282,722,923**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	11/27/2018
Project End Date:	12/25/2023

PROJECT TITLE:
PWE 8.9 TAXIWAY M REHABILITATION – DESIGN & CONSTRUCTION

PROJECT DESCRIPTION: This project includes the design and construction of a full width replacement of the concrete pavement, asphalt shoulders, lighting systems, etc. Taxiway M West Rehabilitation extends from Taxiway B to Taxiway E and is 1,895 feet. There is approximately 190,000 square feet of Concrete in need of full depth replacement. This pavement is 30 years old and has reached its useful service life. For the areas of Taxiway F that adjoin Taxiway M, the Airport intends to complete selective slab replacements for 45 slabs with PCI values ranging from 22-38. The 2016 Pavement Management Plan (PMP) confirms severe deterioration of the concrete pavement. This project includes planning and design professional fees, geotechnical analysis, construction costs, project inspection and materials testing.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve capacity at the airport and for the national air transportation system by rehabbing and extending the useful life of this taxiway.

PROJECT JUSTIFICATION: The pavement on Taxiway M is 30 years old and has reached its useful service life. This taxiway has had numerous spot repairs over the past few years and the PMP displayed the area-weight pavement condition index (AWPCI) as 49. The reconstruction is necessary for one homogenous piece of pavement that will extend the overall useful life of the pavement. There is evidence of poor subsurface drainage and poor transverse loading transfer. Cost estimate is thought to be total project costs, including planning and design professional fees, geotechnical analysis, construction costs, project inspection and materials testing.

FINANCING PLAN

Project Cost:	$16,143,660
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$16,143,660
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	$16,143,660

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	04/10/2018
Project End Date:	12/30/2019

PROJECT TITLE:
PWE 8.10 WEST RAMP EXPANSION PHASE II & FUEL STATION

PROJECT DESCRIPTION: This project will provide for the design and construction of additional aircraft ramp that will accommodate Concourse A Expansion – Phase II (PWE 8.3). The dimensions of the ramp expansion are 1,300 feet by 580 (approximately 754,000 square feet) feet and will include 18 - inch concrete on top of 6 inches of cement treated base. Non-PFC elements associated with this project include a GSE Fuel Station and West Lavatory Improvements, the square footage for which are not included with this project and the costs of which are not being requested for PFC approval.

This phase of the west ramp expansion includes reconfiguring taxilanes/taxiways on the end of existing Concourse A to meet FAA design standards and to allow for the bidirectional flow which will be made possible by the construction of dual taxi lanes from Taxiway E14 to the north end of Taxiway E. This phase will also provide aircraft ramp area necessary for aircraft to operate on the expanded Concourse A and additional ramp to provide increased aircraft queuing area.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance capacity at the Airport and the national air transportation system by providing additional Aircraft Operational Area to accommodate dual aircraft taxilanes, to provide the necessary aircraft parking capacity for the expanded Concourse A and to provide increased aircraft queuing capacity.

PROJECT JUSTIFICATION: The West Ramp Expansion Phase II & Fuel Station is required to provide additional aircraft parking capacity to accommodate the expansion of Concourse A which will provide additional gates required to alleviate current gate capacity demand constraints. Increased aircraft queuing capacity as well as additional Aircraft Operational Area with dual aircraft taxilanes will also achieved. This project will also provide additional aircraft operational area to accommodate dual aircraft taxilanes to provide the necessary aircraft parking capacity for the expanded Concourse A and to provide increased aircraft queuing capacity.

This project is integral to and will be constructed in conjunction with the Concourse A Expansion – Phase II which was identified in the ACEP.
to

FINANCING PLAN

Project Cost:	$40,100,000
AIP Grants Future:	$26,625,000
PFC PAYGO:	$8,875,000
PFC Bonds:	$0
Non-PFC Bonds:	$4,600,000
PFC Financing & Interest	$0
% PFC Est.	88.53%

Total Est. PFC Amount **$8,875,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	06/26/2018
Project End Date:	07/02/2021

PROJECT TITLE:
PWE 8.11 RUNWAY 18L/36R REHABILITATION & TAXIWAY C7 REMOVAL

PROJECT DESCRIPTION: This project will include a three-inch mill and overlay asphalt portions of Runway 18L/36R and associated taxiway stubs. This is approximately 1,233,021 square feet of asphalt to be rehabilitated. This project will also include the removal of Taxiway C7 as its grade is out of compliance for the Runway Safety Area (RSA).

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will preserve safety at the airport and for the national air transportation system by rehabbing the asphalt portion of Runway 18L/36R.

PROJECT JUSTIFICATION: The PMP completed in 2016 identified several areas of Runway 18L/36R and associated taxiways to be in fair, poor, and very poor condition.

<u>Runway 18L/36R north of Runway 5/23</u>
The western outer third of this runway was last constructed in 2000 with a PCI value of 62. The center portion of this runway was last constructed in 1999 with a PCI value of 63. The eastern outer third of this runway was last constructed in 2002 with a PCI value of 63. Based on the forecasted section pavement condition rating in the PMP, this runway's PCI values are to range from 55-56 in 2019 which is consistent with the amount of FOD the pavement is currently producing.

<u>Runway 18L/36R south of Runway 5/23</u>
The western outer third of this runway was last constructed in 1998 with a PCI value of 55. The eastern outer third of this runway was constructed in 2001 with a PCI value of 54. The forecasted pavement conditions of these sections are to range between 50-51 PCI. PWE 6.17 Runway 18L Rehabilitation included a six inch mill and replacement of the asphalt portions of the center keel south of Runway 5/23 in 2015.

<u>Associated Taxiway Stubs</u>
Several taxiways stubs have been identified to be rehabbed based on their age and PCI values. They are the following:

- Taxiway C3 was constructed in 2001 with a PCI value of 41
- Taxiway C5 was constructed in 1986 with a PCI value of 47
- Taxiway C8 was constructed in 1989 with a PCI value of 33
- Taxiway C9 was constructed in 1999 with a PCI value of 30
- A portion of Taxiway C11 was constructed in 1997 with a PCI value of 46
- A portion of Taxiway C12 was constructed in 2004 with a PCI value of 36
- Taxiway D3 was constructed in 1998 with a PCI value of 40
- Taxiway D4 was constructed in 1995 with a PCI value of 53
- Taxiway D5 was constructed in 1988 with a PCI value of 42
- Taxiway R between Runway 18L and Taxiway D was constructed in 1991 and has a PCI value of 33
- Taxiway D6 was constructed in 1994 with a PCI value of 1994
- Taxiway D7 was constructed in 1992 with a PCI value of 37

Depending on the operation, Runway 18L/36R manages anywhere between 35.7-52.6 percent of all arriving and departing traffic at the Airport. The current condition of the pavement is heavily creating FOD and was identified as a discrepancy during the 2018 FAA Part 139 Inspection. Compliance letter attached.

Taxiway C7 was constructed in 1995 as a high-speed exit and federally funded. In the recent Part 139 inspection, it was determined the grade of the taxiway is out of compliance for RSA standards. After completing a survey of the taxiway, the only two options to be in compliance included the demolition or the reconstruction of the taxiway. Due to the low frequency of use of Taxiway C7, it was the Airport's decision that demolition would be the most feasible option. At the request of the FAA Engineer and Airport Districts Office, this taxiway must meet the regulatory standards by the next construction cycle (Summer 2019).

FINANCING PLAN

Project Cost:	$14,000,000
AIP Grants Future:	$2,000,000
AIP Grants:	$0
PFC PAYGO:	$0
PFC Bonds:	$12,000,000
Non-Bonds:	$0
PFC Financing & Interest	$15,880,894
% PFC Est.	100%
Total Est. PFC Amount	**$27,880,894**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	06/20/2018
Project End Date:	01/04/2020

PROJECT TITLE:
PWE 8.12 RUNWAY 18R/36L RSA GRADING

PROJECT DESCRIPTION: This project included approximately 1,000,000 square feet of grading in the grass areas of runway safety areas for 18R/36L which has experienced significant erosion over the past seven years since the construction of the third parallel runway.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve safety at the airport and for the national air transportation system. This will be accomplished by maintaining and improving the runway safety area for Runway 18R/36L.

PROJECT JUSTIFICATION: During 2016 Part 139 inspection, it was identified that the grass areas of the RSA on the north and south of Runway 18R36L were out of compliance with AC 150/5300-12A Airport Design and 14 CFR Park 139.303 Safety Areas. This project corrected the grading of the RSA.

FINANCING PLAN

Project Cost:	$1,259,487
AIP Grants Existing:	$944,615
AIP Grants Future:	$0
PFC PAYGO:	$314,872
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$314,872**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/16/2018
Project End Date:	06/29/2018

PROJECT TITLE:
PWE 8.13 TAXIWAY SIGN REPLACEMENT

PROJECT DESCRIPTION: This project included the replacement of 260 A-frame style signs located on the airfield with LED signs. The LED signs are larger in size requiring a new sign box and concrete base to support the sign. After evaluation, most of concrete bases will have to be extended to support the sign infrastructure. For the concrete pads that do not have to be extended, this will only require a new sign box. As part of this replacement, the Airport will be implementing a safety initiative identified with the Runway Safety Action Team. The A-frame signs that have to be replaced at the approach and departure ends of the runways will change to have positive location for all taxiway entrances onto a runway.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve safety at the airport and for the national transportation system by replacing airfield guidance signs and creating positive location on the airfield for all runways.

PROJECT JUSTIFICATION: The original a-frame signs were installed in the 1990s and had exceeded their minimum useful life and require replacement.

During the 2016 Runway Safety Action Team (RSAT) meeting, this project was identified as an action item to follow FAA Engineering Brief 89 of providing positive location on the airfield. The RSAT recommendation was to provide positive location of taxiways at all entrances to a runway. This safety initiative would increase situational awareness on the airfield. The RSAT recommendation was to provide positive location of taxiways entrances to a runway. The signs adding a "1" do not require the sign base extension. The signs on the north end of the runways will require sign base extension as the nomenclature will be extended two additional characters.

FINANCING PLAN

Project Cost:	$2,000,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$2,000,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	$2,000,000

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/16/2018
Project End Date:	06/29/2018

PROJECT TITLE:
PWE 8.14 RAMP, TAXIWWAY & RUNWAY IMPROVEMENTS

PROJECT DESCRIPTION: This project includes replacement of 166 concrete slabs on the terminal ramp and airfield. The scope of work for this project includes items related to removal and full-depth replacement of approximately 12,000 square yards of 15" Portland Cement Concrete for each specified slab, cement-treated base course repair, recycled concrete aggregated base course and minimal undercut excavation of wet subgrade material. Incidental work includes joint sawing and joint sealing.

Terminal Ramp	154 slabs
Taxiways	10 slabs
Runways	2 slabs
Total	166 slabs

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve capacity at the airport and for the national air transportation system. This will be accomplished by repairing and/or replacing select areas of concrete and asphalt.

PROJECT JUSTIFICATION: CLT has approximately 1,400 air carrier operations per day which places significant stress on the pavement. After the Pavement Management Plan (PMP) was completed in 2016, the Pavement Maintenance Program was implemented to demonstrate how the Airport would manage the pavement. As part of this program, a visual survey was completed, and the selected slabs have experienced failure and are cracked and broken. As a result, there were no PCI measurements performed on the 166 slabs that will be replaced.

The 154 slabs identified on the terminal ramp have been in place since 1982. its original installation. The location for most of the terminal slabs are on the taxilanes. If these slabs are not repaired the terminal ramp would be confined to a single taxi lane around the concourses, significantly impacting the operation. During arrival and departure peaks, the airport's ramp is severely congested. Continued taxi over these slabs could impair directional control of aircraft and produce loose aggregate.

Taxiway C has two slabs located at the south end of Taxiway C near the approach of Runway 36R on the taxiway centerline. Taxiway C is used for 36R departures, and this portion of the taxiway experiences 40.9 percent of departing traffic (TransSolutions, 2018). This portion of the concrete was constructed in May 1993 and has exceeded its useful life.

A single slab was identified on Taxiway D south of D3 located on the centerline. This section was constructed in January 2014.

The two slabs identified on Taxiway N are located on the centerline. In a north bound operation, this taxiway receives 51.9 percent of all arriving traffic as it is the connecting taxiway for Runway 36L. This taxiway was constructed October 2009 and failure to replace the slab will result in a taxiway closure and capacity delays.

The five slabs identified on Taxiway E are mostly located on the centerline for E3, E4, E12, and E13. Depending on the operation, Runway 18C/36C manages up to 69.6 percent of all departing and arriving traffic (TransSolutions, 2018). These sections were constructed June 1979 and have exceeded their useful life.

The two slabs identified on Runway 5/23 are located at the touchdown point of the runway. Not addressing these slabs would ultimately result in pavement failure causing closure of the runway and lower arrival rates. In a southbound operation, Runway 23 manages 28.2 percent of landing traffic (TransSolutions, 2018). This section was constructed in July 1989 and exceeded its useful life.

FINANCING PLAN

Project Cost:	$5,950,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$5,950,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$5,950,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	07/01/2016
Project End Date:	06/30/2021

PROJECT TITLE:
PWE 6.15 TRENCH DRAIN REPLACEMENTS – CONCOURSE A, B & C

PROJECT DESCRIPTION: This project will remove and replace select segments of existing trench drains located on the air carrier ramp between A, B and C concourses. This project will include materials, equipment, labor, design and quality control to replace 1,500 linear feet of trench drain.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve safety by replacing the existing trench drains serving the air carrier ramp to prevent ponding and FOD.

PROJECT JUSTIFICATION: The selected segments of trench drains have been in place since their original installation in 1982 and have served beyond their structural life. These drains are in poor condition and failing in multiple areas. Without replacing the trench drains, the only solution is to use a metal plate to cover the failing portions meaning they will not properly drain water from the ramp. Failure to replace the drains will cause major impacts to air carrier operations due to ponding water causing the surrounding pavement to deteriorate at a faster rate. In addition, a failing trench drain is failure in the pavement which is a violation of FAR Part 139.305: Paved Areas. The adjoining pavement to the trench drain is collapsing producing foreign object debris (FOD) on the air carrier ramp.

FINANCING PLAN

Project Cost:	$2,800,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$2,800,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Tota Est. PFC Amount	**$2,800,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	03/01/2020
Project End Date:	11/30/2020

PROJECT TITLE:
PWE 8.16 EIS PHASE II

PROJECT DESCRIPTION: This project is a continuation of PWE 6.13 EIS for Master Plan Projects – Phase I, which completed Work Orders 1, 2 and a portion of Work Order 3. The Environmental Impact Statement (EIS) evaluates the near term (5 years) proposed capacity enhancement projects recommended by the Airport's Master Plan Update Phase I which focused on airfield and terminal capacity enhancement needs which are included on the resulting Airport Layout Plan. The EIS will examine the effects of the planned development and explore alternatives to ensure any impacts are mitigated. Tasks in this phase include a portion of Work Order #3 and Work Order 4. These efforts will include the establishment of procedures for the EIS process, estimating the costs of conducting the EIS, data collection, the initial technical work on the Purpose and Need and Analysis of Alternatives. There are five remaining steps remaining in the EIS prior to the FAA issuing its Record of Decision:

1. Analyze Environmental Impact: this will evaluate the potential direct, indirect and cumulative impacts of the proposed projects and alternatives.

2. Identify Mitigation: this will identify measures to avoid, minimize or mitigate any potential significant impact.

3. Publish Draft EIS: the draft EIS will identify and describe the proposed project, its purpose and need, alternatives, and affected environment. It will document the environmental impact analysis and mitigation measures.

4. Public Review Period: Once the draft EIS is published a Notice of Availability will be posted in the Federal Register for a period of 45 days, notifying interested parties of the availability of the draft EIS. This task also includes a Public Hearing to receive questions and comments allowing the public to learn about and discuss the proposed projects with experts.

5. Publish Final EIS: Once the above tasks are complete, the Final EIS will be published acknowledging public and agency comments and identifying the preferred alternatives This document will also present the final evaluation of potential impacts and mitigation measures.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will enhance capacity at the airport and for the national air transportation system by undertaking the required environmental determinations necessary to complete the numerous capacity enhancement projects included in the Master Plan Update Phase I and ALP.

PROJECT JUSTIFICATION: The Airport's Master Plan Update Phase I identified numerous projects for the airfield and terminal to enhance capacity. Federal laws and regulations require the federal government to evaluate the effects of its actions on the environment and to consider alternative courses of action. Pursuant to the National Environmental Policy Act of 1969 (NEPA) an Environmental Impact Statement (EIS) must be prepared for certain proposed capacity enhancement projects included in the Master Plan Update Phase I and depicted on the ALP. Completion of this project will document and publish the final EIS as required, to evaluate connected actions and cumulative impacts and identify necessary mitigation actions. The Airport

will not include detailed analysis and evaluation for any projects that will not be started within 5 years of the EIS being completed.

FINANCING PLAN

Project Cost:	$4,000,000
AIP Grants Existing:	$3,000,000
AIP Grants Future:	$0
PFC PAYGO:	$1,000,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Es.t PFC Amount	**$1,000,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	06/02/2018
Project End Date:	05/31/2020

PROJECT TITLE:
PWE 8.17 PERIMETER FENCE UPGRADE

PROJECT DESCRIPTION: This project will replace and upgrade 40,000 linear feet of the AOA fence to prevent wildlife intrusions. The existing fence is six feet in height with a concertina wire and this project will upgrade the height of the fence to ten feet with anti-burrow fabric.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This project is eligible pursuant to 158.15(a)(1) and will enhance safety at the airport and for the national air transportation system by reducing wildlife hazards at the airport.

PROJECT JUSTIFICATION: Nearly 70 percent of the fence is the original fence that has been in place since its original installation since the 1980s. This portion of the fence is in poor condition with rusting and bowing in several places. See attachments. The remaining 30 percent of the fence associated with the third parallel runway construction and has been in place for 8-9 years.

The airport has experienced significant wildlife issues as animals are able to easily scale over or dig under the fence for access to the AOA. The Airport's geographic location is prone to deer and coyotes as identified in our Wildlife Hazard Management Program (WHMP). The Airport's 2016 WHMP details the recommended actions (Wildlife Population Management Project List and Habitat Modification Project List) that should be taken to minimize wildlife hazards, one of which is modifying the perimeter fence. Specifically, "**Perimeter Fence Modification** -The airport will replace or modify the perimeter fence to more effectively exclude large mammals from accessing the airfield." These modifications will include a minimum height increase to 10 feet total and adding a barrier to prevent digging. These modifications will be in accordance with the specifications found in the latest version of FAA Advisory Circular 150/5370-l0G *(Standards for Specifying Construction of Airports)*, Part 8, Item F-163 and FAA Cert Alert 04-16. The WHMP was approved by the FAA in September 2016.

FINANCING PLAN

Project Cost:	$8,000,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$8,000,000
PFC Bonds:	$0
Non-PFC Bonds	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$8,000,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	08/04/2019
Project End Date:	04/26/2020

PROJECT TITLE:
PWE 8.18 REHABILITATE RWY 18L/36 HIRLS AND CABLE

PROJECT DESCRIPTION: This project will replace the circuits on Runway 36R/18L that serve the edge lights and signs. During this replacement, the circuits for the signs and edge lights will be sectioned in different conduit to reduce burnout of both circuits.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: preserve safety at the airport and for the national air transportation system by adequately lighting the runway for arriving and departing aircraft.

PROJECT JUSTIFICATION: This project would replace the existing circuits tied to the 86 edge lights and 91 navigational signs. By separating the circuits for the signs from the edge lights, this will reduce dual burnout if they were on the same conduit. The original circuits were put in place in with the edge lights and signs in the 1990s and have met their useful lives. This provides efficiency for maintenance when addressing issues. This type of installation is recommended per AC 150/5340-30H: Design and Installation Details for Airport Visual Aids as this will reduce downtime and repair costs when the underground circuits require maintenance.

FINANCING PLAN

Project Cost:	$642,650
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$642,650
PFC Bonds:	$0
Non-PFC Bonds	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$642,650**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	05/15/2019
Project End Date:	12/31/2019

PROJECT TITLE:
PWE 8.19 RUNWAY 18C/36C JOINT SEAL REPLACEMENT

PROJECT DESCRIPTION: The project will remove and replace the failing joint seals over the full length of Runway 18C/36C and Taxiway E connectors comprising of 218,000 linear feet. By the time this project gets underway, the joint seal will have reached the end of their useful lives (at least seven years per AIP Handbook).

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: preserve capacity at the airport and for the national air transportation system by extending the useful life of Runway 18C/36C and Taxiway E connectors.

PROJECT JUSTIFICATION: The joint seals are reaching the end of their useful life. The removal and replacement of the Runway 18C/36C and Taxiway E connectors joint seals are necessary to preserve the useful life of the runway. Joint sealing prevents entry of water and other non-compressible substances into the pavement. When proper joint sealing is performed when needed, the life cycle costs of the pavement structure can be reduced. One of the major factors in achieving optimum pavement performance is to properly reseal pavement joints and cracks when required. Paragraph 3-13 and Table 3-8 of the AIP Handbook, FAA Order 5100.38D, states the minimum useful life of concrete joint replacement is at least seven years of age and this will have elapsed by the time this project is underway in 2019.

FINANCING PLAN

Project Cost:	$3,000,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$3,000,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$3,000,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	02/01/2019
Project End Date:	03/30/2019

PROJECT TITLE:
PWE 8.20 FOURTH PARALLEL RUNWAY DESIGN

PROJECT DESCRIPTION: This is the design of the Fourth Parallel Runway. This runway is to be located approximately 1,450 feet west of Runway 18C/36C and between the existing Runways 18R/36L and 18C/36C. It will include two end around taxiways and the relocation of portions of West Boulevard and Old Dowd Road. This Fourth Parallel Runway is anticipated to be 150 feet wide and 12,000 feet long making it CLT's longest runway.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will enhance capacity at the airport and for the national air transportation system. This will be accomplished by providing the airfield infrastructure necessary to meet the near term and long term demand at the airport.

PROJECT JUSTIFICATION: The Fourth Parallel Runway design is required to The Airport is a large hub airport as defined by the FAA and is American Airlines east coast hub. In 2017 there were 553,812 aircraft movements on the airport ranking the Airport 6th nation-wide and 7th world-wide in operations. As a key connecting passenger hub in the national air transportation system, the Airport must provide sufficient airfield capacity necessary to accommodate demand resulting from successive "banks" of high density arriving and departing aircraft.

FINANCING PLAN

Project Cost:	$36,000,000
AIP Grants Existing:	$0
AIP Grants Future:	$18,000,000
PFC PAYGO:	$18,000,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$18,000,000
% PFC Est.	100%
Total Est. PFC Amount	**$18,000,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	06/14/2019
Project End Date:	06/28/2021

PROJECT TITLE:
PWE 8.21 FBO RAMP REHABILITATION

PROJECT DESCRIPTION: This project rehabilitated 88,598 square yards of GA ramp area adjacent to multiple GA facilities. This included three concrete pads (8,800 square yards) for aircraft parking, four-inch mill and overlay for the areas adjacent to the concrete pads (21,604 square yards) and two-inch asphalt mill for the remaining portions (58,194 square yards).

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(1) and will preserve capacity by maintaining the life of the general aviation/FBO ramp.

PROJECT JUSTIFICATION: The GA ramp for the FBO was originally constructed in 1983 and exhibited severe pavement deterioration. This project was its first rehabilitation.

FINANCING PLAN

Project Cost:	$5,085,741
AIP Grants Existing:	$3,814,306
AIP Grants Future:	$0
PFC PAYGO:	$1,271,435
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est/ PFC. Amount	**$1,271,435**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/01/2016
Project End Date:	08/01/2017

PROJECT TITLE:
PWE 8.22 SECURITY ENHANCEMENT UPGRADES

PROJECT DESCRIPTION: This project will upgrade the existing security access hardware and software and provide new surveillance coverage of certain public areas. The Airport needs to upgrade its video management system and associated servers to strengthen these access control systems. These systems are integral for managing risks associated with threat detection, emergency response, and restricted access control. Systems and equipment will occur in two areas:

Video Management System
This project includes the acquisition and installation of 720 cameras throughout the Airport campus. Of these, 366 of these cameras are replacements and the remaining 354 are new locations that were identified to improve safety and security.
Access Control Badge Readers
This project will replace 150 Intelli-Key system locks across the Airport campus with access control badge readers.

A graphic for the project is provided in the Air Carrier Consultation Presentation.

PROJECT OBJECTIVE: This PWE is eligible pursuant to 158.15(a)(2) and will preserve security at the airport by providing the necessary monitoring technology and hardware.

PROJECT JUSTIFICATION: These system enhancements are necessary to maintain proper access control and visual monitoring systems. Several elements of the Video Management System have exceeded its useful life. The existing 366 analog cameras are 8- 12 years of age and are to be replaced and upgraded with digital cameras. The analog surveillance image quality is poor and provides difficulty in identifying people or objects. The 354 new camera locations were areas that had limited or no view available. The new camera installation areas include the atrium, ticket level public side, baggage level public side, vehicle commercial lane, basement, PWE 5.15 Terminal Curbfront Roadway, PWE 8.5 Concourse E Expansion Phase 8 Amended, etc. With this system upgrade, the servers must be upgraded to manage the new and updated equipment.

The replacement of the legacy key locks with the Access Control Badge readers will allow for positive identification of each employee as they traverse the Airport. With insider threat increasing, it is critical to be able to track an employee's badge history. With the current setup, if a gate or door was left unlocked, the Intelli-key system does not have the ability to display the last person to access the gate or door. The original key lock system was implemented in 1999 and has met their useful lives.

FINANCING PLAN

Project Cost:	$13,281,000
AIP Grants Existing:	$0
AIP Grants Future:	$0
PFC PAYGO:	$13,281,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$13,281,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	07/01/2019
Project End Date:	06/30/2021

PROJECT TITLE:

PWE 8.23 PFC APPLICATION DEVELOPMENT

PROJECT DESCRIPTION: This project will provide for the development and completion of the PFC application process for PFC Application Number 8. Costs expected to be incurred by the Airport include consulting services covering the preparation of the appropriate documentation including the PFC project detailed financial plan (Attachment A), the air carrier consultation information packages, FAA informal review information packages, the ultimate PFC Application document for submittal to the FAA and notification to air carriers of FAA approval of PFC Application Number 8 as mandated by Part 158.43 and to begin collecting PFC's.

PROJECT OBJECTIVE: Projects resulting from this project will maintain and/or increase the safety, security and/or capacity and/or will reduce noise impacts resulting from aircraft operations.

PROJECT JUSTIFICATION: As defined in 14 CFR Part 158.3, PFC allowable cost includes the reasonable and necessary cost of carrying out an approved project, including costs incurred prior to and subsequent to the approval to impose a PFC (processing of the required air carrier notice letter of FAA approval of PFC Application Number 6 and to begin collecting PFCs as mandated by Part 158.43).

FINANCING PLAN

Project Cost:	$280,000
AIP Grants Existing:	$0
AIP Grants Future"	$0
PFC PAYGO:	$280,000
PFC Bonds:	$0
Non-PFC Bonds:	$0
PFC Financing & Interest	$0
% PFC Est.	100%
Total Est. PFC Amount	**$280,000**

ESTIMATED PROJECT IMPLEMENTATION AND COMPLETION DATES

Project Start Date:	01/01/2018
Project End Date:	06/01/2019

II. DETAILED FINANCIAL PLAN

The City proposes to undertake this program of capital improvements and to fund them with PFCs on a PAYGO debt leveraged basis. The City is applying to the FAA for the authority to impose and use PFC revenue to pay the PFC eligible cost of the proposed project work elements ("PWEs").

The City proposes to impose a $3.00 PFC to pay the PFC eligible costs of the PWEs. The proposed charge effective date for PFC Application Number 8 will be concurrent with the Charge Expiration Date of PFC Application Number 6 which is currently estimated to be July 1, 2036. Accordingly, for the purpose of this Public Notice, the Charge Effective Date for PFC Application Number 8 is estimated to be July 1, 2036. The City is also amending PFC Application No. 1, PFC Application No. 2, PFC Application No. 3 and PFC Application No. 4. Taking each of these actions in to consideration, the City estimates that the charge expiration date for PFC Application No. 8 is February 1, 2049.

In summary, the City estimates using $2,137,096,244 in PFC revenue to fund certain PFC eligible costs of the projects to be included in PFC Application Number 8. Of this amount, the City estimates using $198,203,617 in PFC revenue on a PAYGO basis and using 1,938,892,627 in PFC revenue on a debt leveraged basis, which includes $834,503,793 of PFC eligible debt proceeds and 1,104,388,834 of estimated debt financing costs and interest costs. Combined with the estimated PFC revenues to be collected pursuant to approved PFC Applications Number 1, Number 2, Number 3, Number 4, Number 5, Number 6 (and Number 7) as proposed to be amended ($1,399,121,100), the total amount of Impose and Use authority for the City's PFC program would be $2,794,354,193.

The public is invited to provide written comment or request additional information through March 26, 2019 by writing:

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