FLORIDA DEPARTMENT OF TRANSPORTATION | **AVIATION OFFICE**

2021

Statewide Airfield Pavement Management Program

Airport Pavement Evaluation Report

X01 - Everglades Airpark | *District 1*

FDOT

FLP

OFFICE OF FREIGHT, LOGISTICS & PASSENGER OPERATIONS

Florida Department of Transportation

Statewide Airfield Pavement Management Program

Airport Pavement Evaluation Report

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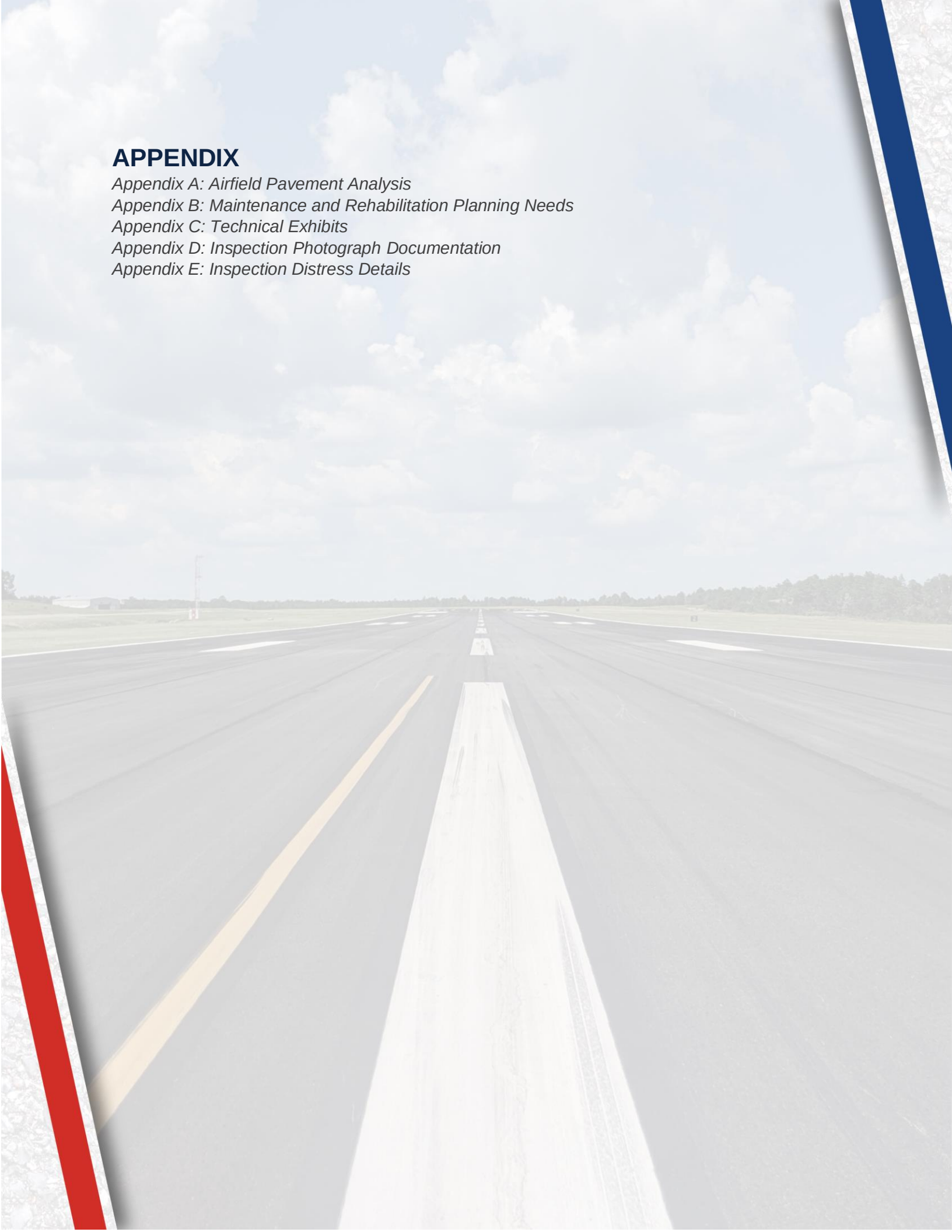

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Executive Summary

Program Background

The FDOT Aviation Office (AO) has a mission to provide a safe and secure air transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of our environment and communities. As part of ongoing efforts in fulfilling this mission, the Aviation Office is executing a System Update to the Statewide Airfield Pavement Management Program (SAPMP). This work is to be completed from fiscal year 2020 through fiscal year 2021. The scope of the SAPMP encompasses 95 public-use airport facilities distributed throughout the seven (7) participating FDOT Districts. Everglades Airpark's System Update results are presented in this report and can be utilized by FDOT and the Federal Aviation Administration (FAA) to identify, prioritize, and schedule pavement maintenance, repair, and major rehabilitation projects.

Pavement condition was assessed utilizing the pavement condition index (PCI) methodology as defined in FAA Advisory Circular 150/5380-7B "Airport Pavement Management Program (PMP)" using the procedures documented in ASTM D5340-12 **"**Standard Test Method for Airport Pavement Condition Index Surveys".

The PCI methodology provides a means for systematically assessing pavement condition and provides an indication of the degree of maintenance, repair, rehabilitation, or reconstruction efforts required to sustain functional pavement conditions. Pavement deterioration, in accordance with ASTM D5340-12, is characterized in terms of distinct distress types, distress severity levels, and quantity of distress. This information is utilized to calculate a PCI value ranging from 0 to 100, which provides an indication of the overall condition of the pavement, with "100" indicating a pavement in new condition and "0" indicating a failed pavement section as graphically depicted in **Figure E.1**.

Figure E.1: PCI Rating

Color	Range	Condition Rating
	86-100	Good
	71-85	Satisfactory
	56-70	Fair
	41-55	Poor
	26-40	Very Poor
	11-25	Serious
	0-10	Failed

Current Pavement Conditions

In September 2020, approximately 200 thousand square feet of pavement was assessed as part of the airside pavement network PCI survey at Everglades Airpark (X01). In general, airfield pavements at X01 are in Fair condition with an area-weighted PCI of 56. The area-weighted average PCI values of the runways, taxiways, and aprons are 40, 70, and 77, respectively. **Figure E.2** and **Table E.1** summarize the current PCI values for X01.

Figure E.2: Latest Condition Summary – Branch-Level

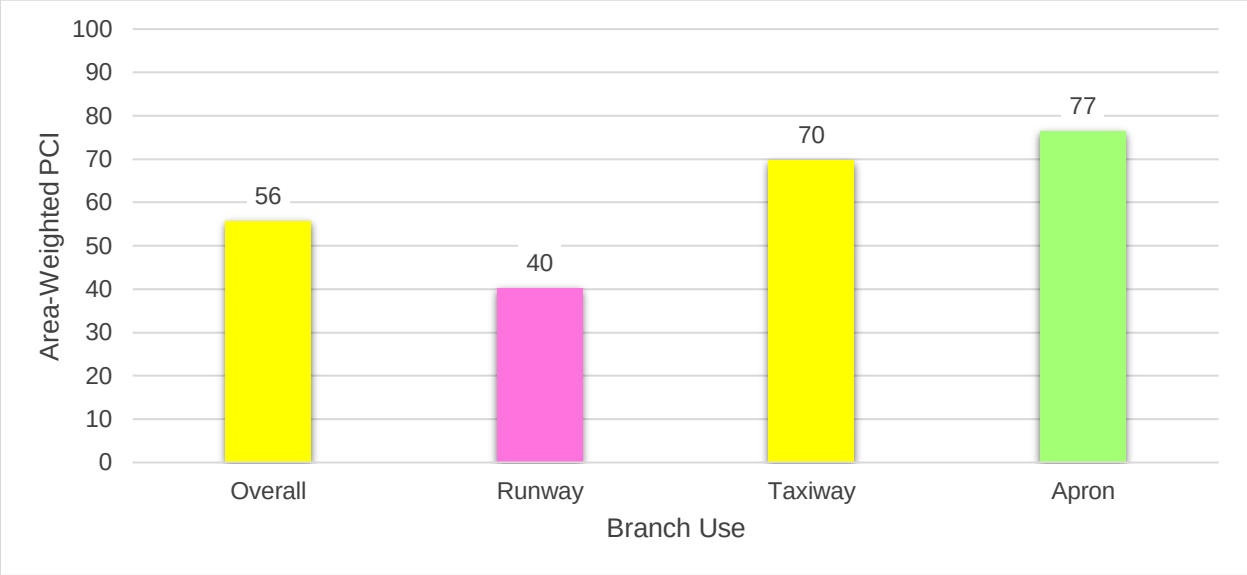


Table E.1: Pavement Condition Index Summary (Current PCI Survey) – Section Level

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
X01	RW 15-33	Runway	6105	32,850	48	Poor
X01	RW 15-33	Runway	6110	61,150	32	Very Poor
X01	RW 15-33	Runway	6115	26,300	50	Poor
X01	TW A	Taxiway	105	18,850	70	Fair
X01	TW A	Taxiway	110	33,525	66	Fair
X01	TW A	Taxiway	115	3,886	64	Fair
X01	TW A	Taxiway	125	2,214	52	Poor
X01	TW A	Taxiway	130	12,060	86	Good
X01	TW CONN	Taxiway	205	5,409	70	Fair
X01	TW CONN	Taxiway	305	2,700	62	Fair
X01	TW CONN	Taxiway	310	5,521	70	Fair
X01	AP	Apron	4105	12,400	76	Satisfactory
X01	AP	Apron	4110	12,546	81	Satisfactory
X01	AP RU 15	Apron	5105	3,500	69	Fair
X01	AP RU 33	Apron	5110	4,663	72	Satisfactory

Forecasted Pavement Conditions

Table E.2 provides section-level details for PCI forecasts. Pavement condition forecasts should be used for planning purposes only, as actual condition of sections is subject to the sensitivities in changes of traffic and maintenance frequency.

The estimation of forecasted PCI values gives no assurance of future pavement conditions as PCI values represent an engineering estimation to be used as a planning tool. Forecasted PCI data should not be the sole metric for determining the year in which a project should be planned. Design-level planning should be undertaken by the responsible engineer prior to the development of airfield design plans.

Table E.2: Forecasted PCI Values 2021-2030 – Section-Level

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI									
				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
X01	RW 15-33	6105	48	48	48	47	46	46	45	45	44	44	43
X01	RW 15-33	6110	32	32	31	30	29	28	27	26	25	24	24
X01	RW 15-33	6115	50	50	49	49	48	48	47	47	46	46	45
X01	TW A	105	70	70	68	67	66	65	64	63	62	62	61
X01	TW A	110	66	66	65	64	63	62	61	60	60	59	58
X01	TW A	115	64	64	63	62	61	60	60	59	58	58	57
X01	TW A	125	52	52	52	51	51	50	50	50	49	49	48
X01	TW A	130	86	85	83	81	80	78	76	75	73	72	71
X01	TW CONN	205	70	70	68	67	66	65	64	63	62	62	61
X01	TW CONN	305	62	62	61	60	60	59	58	58	57	56	56
X01	TW CONN	310	70	70	68	67	66	65	64	63	62	62	61
X01	AP	4105	76	75	73	72	70	69	67	66	65	63	62
X01	AP	4110	81	80	78	76	75	73	71	70	68	67	65
X01	AP RU 15	5105	69	68	67	65	64	63	62	60	59	58	57
X01	AP RU 33	5110	72	71	70	68	67	65	64	63	62	60	59

Major Rehabilitation Planning 2021-2030

Localized maintenance and repair policies identified within this report are categorized as preventive or stopgap based on FDOT SAPMP and FAA maintenance policies and recommendations. Major rehabilitation is identified within the FDOT SAPMP as a major construction activity that results in a reset of a pavement section's PCI to a value of 100. Major rehabilitation activities can include mill and Asphalt Concrete (AC) overlay, Portland cement concrete (PCC) pavement repair and slab replacement, and full-depth reconstruction. It is recommended that the Airport use this report as a planning tool for future project development and prioritization. Localized maintenance, repair, and major rehabilitation recommendations should be considered as planning-level only. Final localized maintenance, repair, and major rehabilitation recommendations are subject to change based on Airport prioritization and further design-level evaluations.

Based on FAA Order 5100.38D Change 1 Airport Improvement Program (AIP) Handbook (February 26, 2019), a substantial update to the FDOT SAPMP policy on identifying major

rehabilitation work has been incorporated in this System Update. In previous System Updates, major rehabilitation had been identified for pavement sections below a PCI Value of 65; based on the thresholds identified by the FAA in the AIP Handbook, major rehabilitation will be identified for pavement sections below a PCI value of 70.

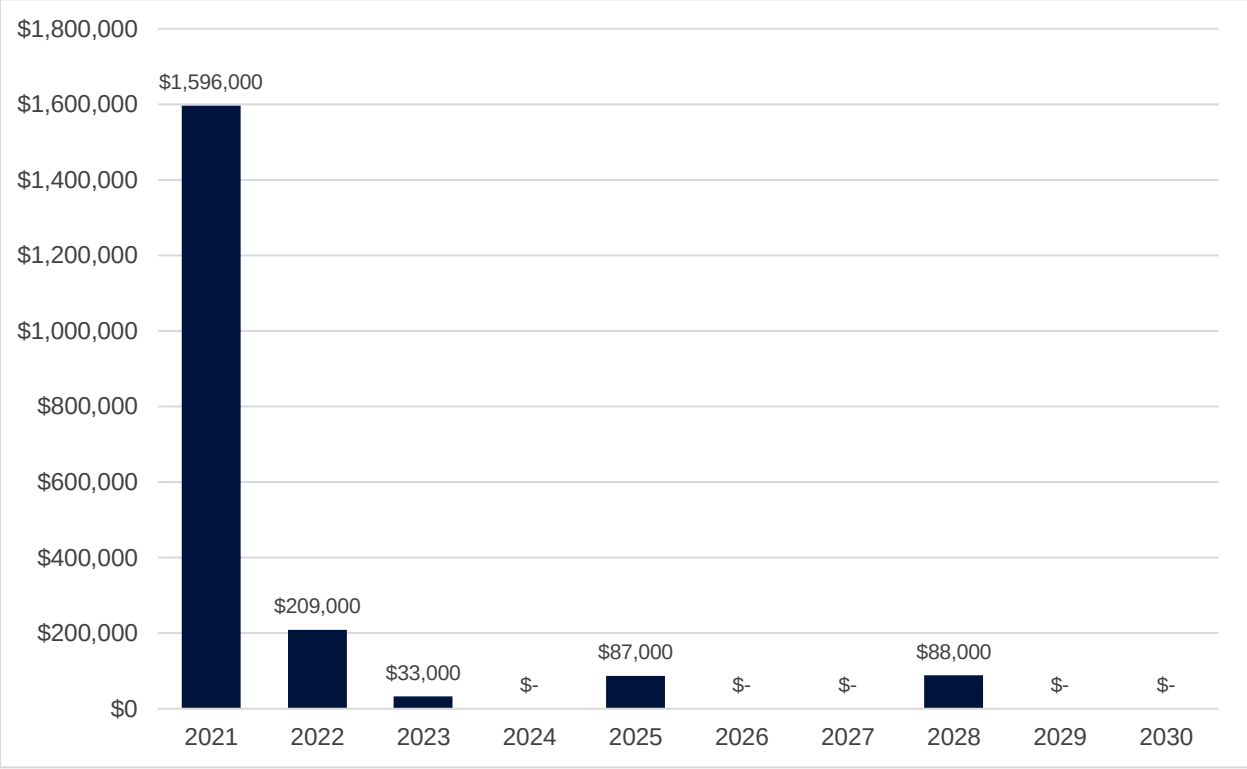
The results of the maintenance, repair, and major rehabilitation analysis identified approximately $2.01M in major rehabilitation needs for the 10-year forecast period. Year 1 major needs are $1.60M and localized maintenance needs for Year 1 are $0.01M.

Table E.3: Major Rehabilitation Planning 2021-2030

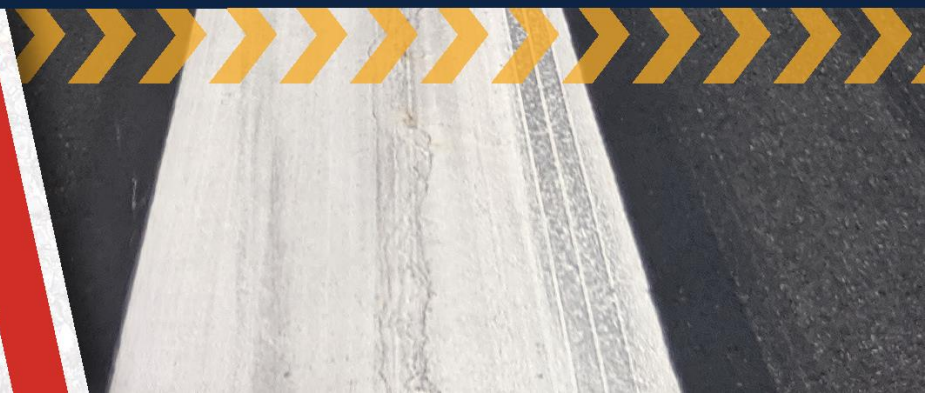
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2021	**X01**	RW 15-33	6105	AC	32,850	48	AC Reconstruction	$ 345,000
2021	**X01**	RW 15-33	6110	AC	61,150	32	AC Reconstruction	$ 643,000
2021	**X01**	RW 15-33	6115	AC	26,300	50	AC Reconstruction	$ 277,000
2021	**X01**	TW A	110	AC	33,525	66	AC Rehabilitation	$ 235,000
2021	**X01**	TW A	115	AC	3,886	64	AC Rehabilitation	$ 28,000
2021	**X01**	TW A	125	AC	2,214	52	AC Reconstruction	$ 24,000
2021	**X01**	TW CONN	305	AC	2,700	62	AC Rehabilitation	$ 19,000
2021	**X01**	AP RU 15	5105	AC	3,500	68	AC Rehabilitation	$ 25,000
2022	**X01**	TW A	105	AC	18,850	68	AC Rehabilitation	$ 132,000
2022	**X01**	TW CONN	205	AC	5,409	68	AC Rehabilitation	$ 38,000
2022	**X01**	TW CONN	310	AC	5,521	68	AC Rehabilitation	$ 39,000
2023	**X01**	AP RU 33	5110	AC	4,663	68	AC Rehabilitation	$ 33,000
2025	**X01**	AP	4105	AC	12,400	69	AC Rehabilitation	$ 87,000
2028	**X01**	AP	4110	AC	12,546	68	AC Rehabilitation	$ 88,000

**All planning cost values have been rounded to the nearest thousand dollars.*

Figure E.3: Major Rehabilitation Planning Annual Budget 2021-2030



Chapter 1: Introduction



Chapter 1 – Introduction

The State of Florida has 128 public airports, 100 of which are recognized as part of the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS). These public-use airports are vital to Florida's economy as well as the economy of the United States. The Florida Airport System (FAS) provides opportunities for the State to capitalize on an increasingly global marketplace. Florida's system of commercial service and general aviation (GA) airports are important to businesses throughout the State as air travel is essential to tourism, Florida's most prominent industry.

1.1 Background

In 1992, the Florida Department of Transportation (FDOT) established the Statewide Airfield Pavement Management Program (SAPMP) to provide program managers, District Aviation Offices, and Airport operators with a system to proactively manage airfield pavement infrastructure within the FAS. The SAPMP includes network-level Pavement Condition Index (PCI) surveys for Airport facilities that are categorized as GA, Reliever (RL), and Commercial (PR). Currently, the SAPMP includes 95 participating public-use airports with pavement facilities and provides its users with comprehensive data to better manage their pavement assets.

There are millions of square feet of pavement infrastructure at airports across a network of runways, taxiways, aprons, and other areas. This pavement infrastructure is vital to the support and safety of aircraft operations. Timely maintenance, repair, and major rehabilitation of pavement infrastructure allows the Airport to operate safely, efficiently, and economically without excessive down time.

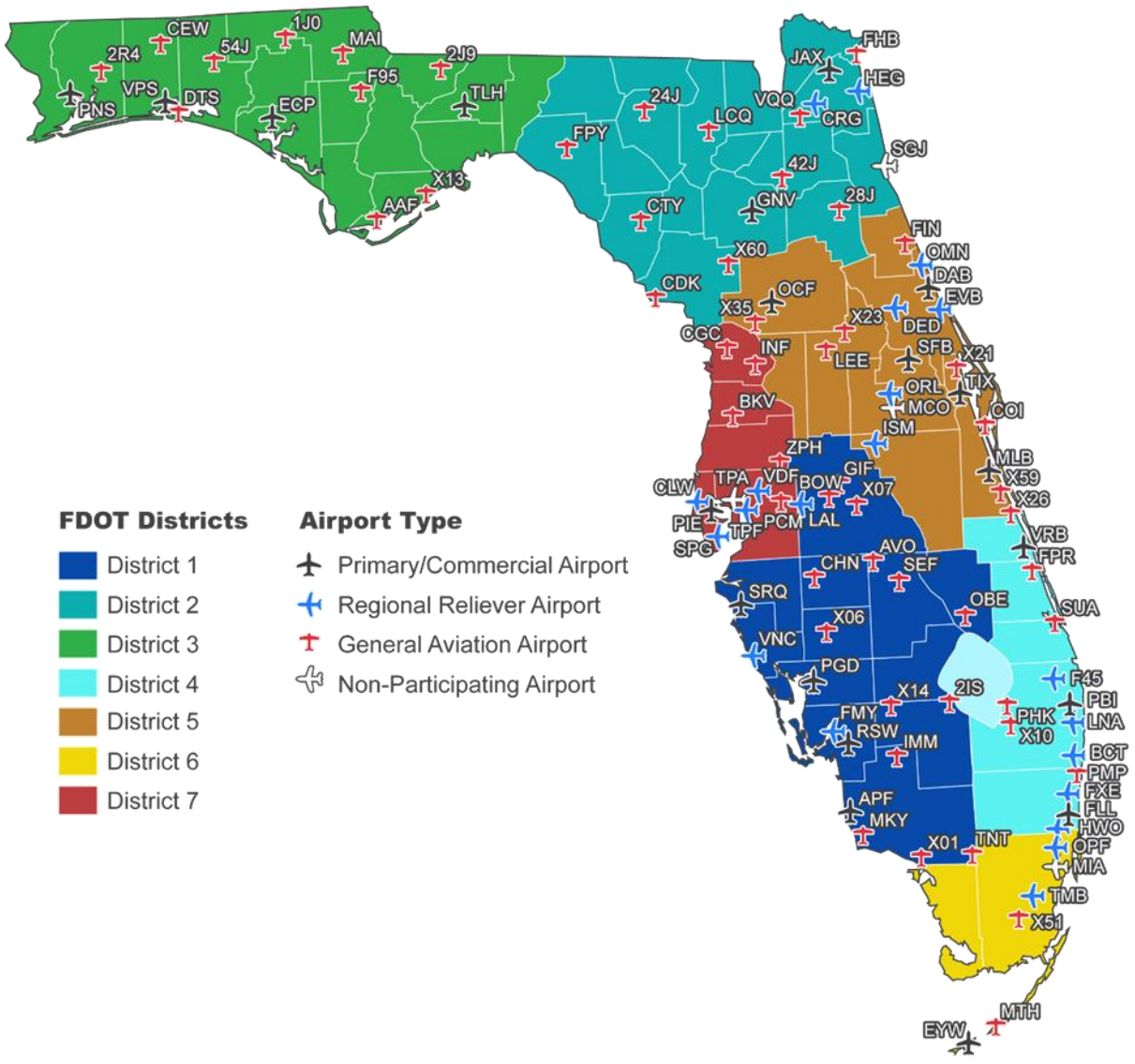
Airports participating in the Airport Improvement Program (AIP) Grant Program are required by the FAA to develop and implement a pavement maintenance program in order to be eligible for funding per FAA Advisory Circular 150/5380-6C "Guidelines and Procedures for Maintenance of Airport Pavements" and 150/5380-7B "Airport Pavement Management Program (PMP)". The AIP program requires detailed assessments of airfield pavements at least once a year for a pavement management program. The frequency of the detailed inspections may be extended to every three years if the pavement is assessed according to the PCI survey procedure described in ASTM D5340-12 "Standard Test Method for Airport Pavement Condition Index Surveys".

In general, adherence to the FAA Advisory Circulars is mandatory for projects funded with federal grant monies through the AIP program and with revenue from the Passenger Facilities Charges (PFC) Program. Further information is detailed in FAA Grant Assurance No. 11 "Pavement Maintenance," No. 34 "Policies, Standards, and Specifications," and PFC Assurance No. 9 "Standards and Specifications." The FDOT performs the SAPMP System Updates for the benefit of participating public-use and publicly-owned airports through the Aviation Office (AO).

The SAPMP addresses the requirements of maintaining an effective pavement management program for participating airports at the network level. Network-level management of pavement assets provides insight for short-term and long-term budget needs, understanding of the overall condition of the network (current and future), and knowledge of the pavement facilities that are under consideration for projects. A network-level evaluation can support the identification of

maintenance, repair, and major rehabilitation needs and budgetary planning-level opinions of probable construction costs.

Figure 1.1: Florida Aviation System (Facilities with Pavement) and FDOT Districts



1.2 Stakeholders

Ultimately, the SAPMP is performed for the benefit of the stakeholders. The table below outlines the primary stakeholders of the FDOT SAPMP and their role in the program.

Table 1.2: FDOT SAPMP Stakeholders

Role	Description
FAA Orlando Airports District Office (Orlando ADO)	Key Stakeholder; local ADO Program Manager personnel that oversees the grant administration of AIP grant with Planning Agency Sponsor (Florida Department of Transportation).
Florida Department of Transportation (FDOT)	Key Stakeholder; the FDOT is the "Sponsor" for the AIP grant agreement. Specifically, the Aviation Office (AO) provides development and operations support for the Florida Airport System.
FDOT District Offices	The seven FDOT District Offices, specifically the Aviation representatives, provide essential support to the SAPMP System Update and the AO Program Manager (AO-PM). Each District supports the SAPMP's ongoing efforts by providing local construction cost information throughout the State, which is used as the basis of the development for maintenance, repair, and major rehabilitation opinions of probable construction costs for planning purposes.
Participating Public-Use and Publicly Owned Airports	The airports are the end-user and primary beneficiary of the SAPMP. The SAPMP provides a specific Airport Pavement Evaluation Report that meets the requirements of the FAA AC 150/5380-7B. Individual participating airports are provided a final Airport Pavement Evaluation Report by the Consultant that is specific to each airport's airfield PCI assessment.
Aviation Office Program Manager (AO-PM)	FDOT AO Airport Engineering Manager; oversees and manages the overall Program System Update.

1.3 General Scope of Work

The SAPMP is limited to performing tasks in the adherence to the key elements of an effective pavement management program on a statewide level. The primary tasks undertaken to update the FDOT SAPMP include, but are not limited to:

- Research and evaluation of existing record documentation;
- Establishment of a pavement system inventory;
- Development of a pavement network definition map and supplemental GIS model;
- Functional pavement evaluations via the PCI assessment method;
- Customization of PAVER™ software including prioritization, policies, and performance models;
- Analysis of condition data; and
- Maintenance, repair, and rehabilitation planning.

1.4 FDOT SAPMP Objectives

The SAPMP enables the FDOT AO and FAA to monitor pavement conditions at airports in the Florida Airport System. The SAPMP provides objective condition information needed to make informed decisions regarding the significant capital investment the public-use airport pavement infrastructure represents.

Airport staff are responsible for making decisions regarding the timing and type of maintenance and rehabilitation activities that should be completed in order to maintain an acceptable operational condition and adequate load-carrying capacity. Utilizing the SAPMP will help Airport staff better understand the relative condition of their pavement facilities and when those facilities should be rehabilitated. The data collected from the SAPMP can be used for project programming for the next 10 years. This report summarizes the data collection, analysis, program update, and implementation of the FDOT SAPMP.

A comprehensive SAPMP provides information that assists with the project programming process. The primary objectives of the FDOT SAPMP consist of the following:

- Assist airports in meeting the requirements of Public Law 103-305;
- Assist airports in complying with FAA Grant Assurances 11 and 19;
- Provide airports with functional pavement condition in accordance with ASTM D5340-12 (current) and with the FAA AC 150/5380-7B (current) based on visual assessment efforts;
- Provide airports with planning-level guidance on maintenance, repair, and rehabilitation in accordance with the FAA AC 150/5380-6C (current) based on pavement conditions and distress data in terms of type, severity, and extent; and
- Provide airports, FDOT Districts, FDOT AO, and the FAA Airports District Office with long-term, planning-level forecasts of pavement performance and rehabilitation budgetary needs (e.g., maintenance, repair, and major reconstruction) through reports.

From a pavement management perspective, one of the most valuable aspects of the PCI methodology is the ability to save money by effectively prioritizing the rehabilitation of pavement assets that have reached critical condition. Critical PCI values are assigned to deterioration models for pavement assets based on their respective use and rank. The concept of critical PCI will be further discussed in **Chapter 5**, but it is used as a benchmark to help identify pavement assets that should receive rehabilitation. In doing so, the PCI methodology can help create a proactive maintenance and rehabilitation (M&R) strategy to effectively address pavement projects before the cost of these projects increases significantly.

With M&R costs escalating over time, the consequences of inadequate maintenance practices can result in an inefficient allocation of funding. If maintenance is conducted before a significant decline in pavement condition occurs, substantial repair and/or rehabilitation costs may be avoided or delayed. **Figure 1.4** illustrates how the cost of pavement repairs can significantly increase if M&R activities are delayed.

Figure 1.4: Typical Pavement Condition Life Cycle

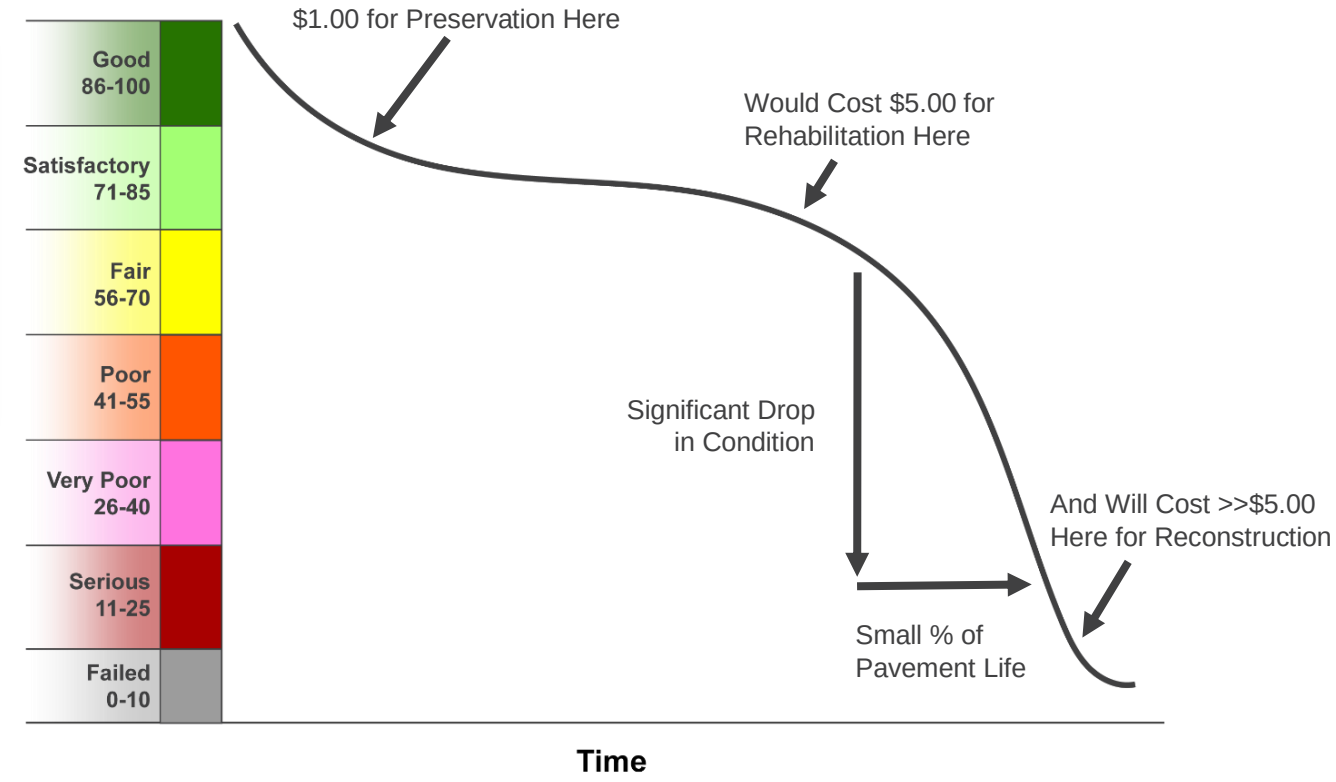
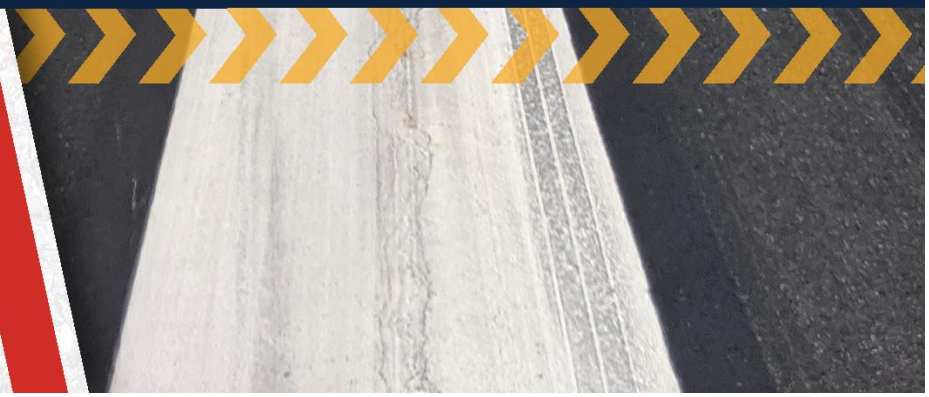


**Figure is for conceptual purposes only – unit costs are not specific to airfield pavements.*

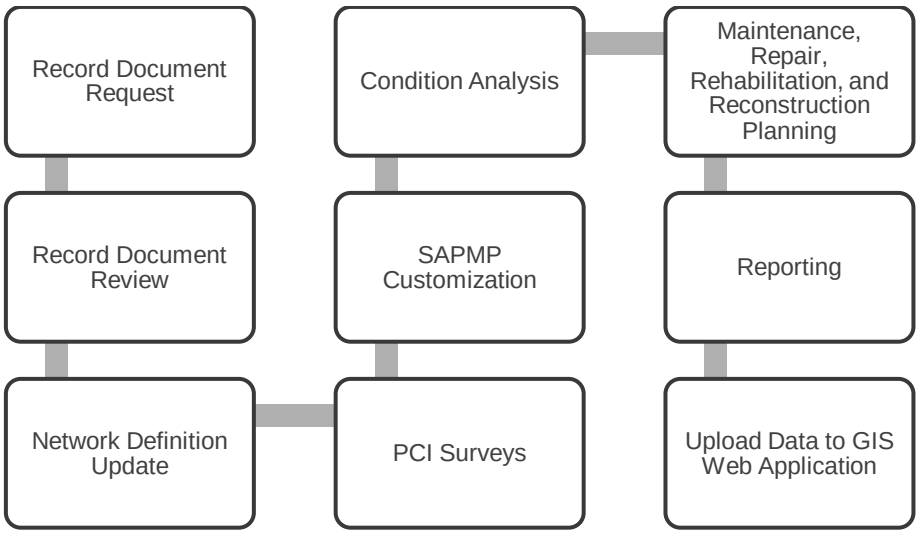
Chapter 2: Methodology



Chapter 2 – Methodology

An effective pavement management program incorporates both the regular collection of pavement condition information and communication of information to appropriate sponsors. This chapter of the report defines the specific methods utilized as part of the SAPMP System Update to meet the requirements of an effective pavement management system as defined by the FAA AC 150/5380-7B. **Figure 2** summarizes the overall process for the FDOT SAPMP.

Figure 2: FDOT SAPMP General Process



2.1 Airfield Pavement Database

This SAPMP utilizes PAVER™ 7.0 software as its airfield pavement database. The PAVER™ software application was developed by the U.S. Army Construction Engineering Research Laboratory and sponsored by the FAA, Federal Highway Administration, U.S. Army, U.S. Air Force, and U.S. Navy to meet the objectives of an effective pavement management system. The PAVER™ database includes a network-level inventory of the participating airport's eligible airfield pavement facilities. PAVER™ can achieve the following pavement management objectives:

- Create a manageable inventory system;
- Analyze the current condition of pavements in accordance with the ASTM D5340;
- Develop pavement performance models to forecast conditions; and
- Generate maintenance, repair, and major rehabilitation recommendations based on budgetary scenarios.

PAVER™ inventory management is based on a tiered organizational structure consisting of networks, branches, sections, and samples, with the sample being the smallest unit of management. Critical elements of an effective pavement management program are maintained within the network-level PAVER™ database and typically consist of pavement inventory

characteristics, pavement structure, work history, historic condition records, and analytical customization.

2.2 Airfield Pavement Record Keeping (Historical Records Research)

In accordance with the FAA AC 150/5380-7B, it is a best practice that airports maintain records of all airfield construction and maintenance related to the pavement facilities. An airport should maintain detailed records of maintenance (routine, emergency, and proactive) activities, which should consist of:

- Location and limits of work;
- Types and severities of repaired distresses;
- Work type and cost; and
- Supporting Documents (e.g., contract documents, construction drawings, specifications, bid tabulations, repair products, photograph records).

As part of the SAPMP, participating airport's staff was asked to provide documentation regarding the historical work performed at the Airport, including construction drawings and bid tabulations. This information is used to identify location, limits, type of work, pavement cross-sections, and representative material costs.

Updated historical data collected during this task was entered into the PAVER™ database. This database includes the following fields for historical information:

- Date of last construction/rehabilitation
- Work type performed
- Comments for documenting pavement cross-section
- Pavement surface type
- Section area (limits of work)

The SAPMP PAVER™ database accuracy is limited to the record documentation provided by the participating airports. Airport Sponsors should rely on this information as a planning tool and defer to final as-built plans, record drawings, and/or engineer's construction report for pavement construction records.

2.3 Airfield Pavement Structure

A pavement is a prepared surface designed to provide a continuous, smooth ride at a certain speed and to support an estimated amount of traffic for a certain number of years. A pavement structure is composed of constructed layers consisting of subgrade, subbase, base, structural, and surface courses. For the FDOT SAPMP, two (2) predominant pavement types are classified for evaluation and analysis: Asphalt Concrete (AC) and Portland cement concrete (PCC). Composite Structures, known as Whitetopping Pavements consisting of PCC on AC, are also present at limited airports in Florida and are evaluated separately.

Asphalt Concrete

Asphalt concrete is a pavement comprised of aggregate mixture with an asphalt cement binder. The FDOT SAPMP categorizes three (3) Asphalt Concrete surface types: Asphalt Concrete (AC), Asphalt Concrete overlaid on Asphalt Concrete (AAC), and Asphalt Concrete overlaid on Portland cement concrete (APC).

Asphalt Concrete (AC)

A flexible pavement section consisting of aggregate mixture with asphalt cement binder layered on engineered base course material that is layered on subbase and subgrade soil material.

Asphalt Concrete Overlaid on Asphalt Concrete (AAC)

A flexible pavement section consisting of aggregate mixture with asphalt cement binder layered on an existing flexible AC pavement section. Airfield pavement sections are considered to be AAC when a pavement rehabilitation includes a pavement milling and resurfacing operation or a direct overlay of Asphalt Concrete without surface preparation.

Asphalt Concrete Overlaid on Portland Cement Concrete (APC)

A flexible pavement section consisting of aggregate mixture with asphalt cement binder layered on an existing PCC pavement section. This unique pavement composition may result in distinct pavement distress manifestations known as reflective joint cracking.

Portland Cement Concrete

Portland cement concrete is a pavement comprised of aggregate mixture with a Portland cement binder. The FDOT SAPMP categorizes Portland cement concrete (PCC) as the primary rigid pavement section.

Portland Cement Concrete (PCC)

A rigid pavement section composed of Portland cement concrete placed on a granular or treated base course that is supported on a compacted subgrade. The concrete surface provides a texture of nonskid qualities, prevents the infiltration of surface water into the subgrade, and provides structural support for airplane loading. Rigid pavement construction requires the layout of appropriately designed joints. Concrete overlays built in accordance with the FAA Advisory Circular 150/5320-6F “Airport Pavement Design and Evaluation” are recognized as PCC pavement.

Composite Structure – Whitetopping Pavement

Whitetopping pavement is a composite pavement comprised of relatively thin PCC overlaid on an existing AC pavement structure. There are three (3) types of Whitetopping Pavements: Conventional (WHT), Thin (TWT), and Ultra-Thin (UTW).

Conventional Whitetopping (WHT)

A composite pavement structure consisting of a modified PCC overlaid on an existing AC pavement section. The modified PCC layer is typically greater than 6 inches in thickness.

Thin Whitetopping (TWT)

A composite pavement structure consisting of modified PCC overlaid on an existing AC pavement section. The modified PCC layer is typically between 4 and 6 inches in thickness.

Ultra-Thin Whitetopping (UTW)

A composite pavement structure consisting of a modified PCC overlaid on an existing AC pavement section. The modified PCC layer is typically between 2 and 4 inches in thickness.

2.4 Airfield Pavement Traffic

A pavement section is typically designed to meet the needs of the user (airlines, air cargo, general aviation, and/or military) in providing a safe, smooth, operational surface. Pavement deterioration generally occurs gradually from aircraft loading and environmental conditions.

This System Update does not involve a study or analysis of X01's aircraft fleet mix or traffic operations. However, it is strongly recommended that the Airport incorporate the requirements of the FAA AC 150/5320-6F when developing design-level rehabilitation activities; this AC provides guidance on incorporation of aircraft traffic fleet mix data.

2.5 Pavement Management Program Network Definition Terminology

To facilitate an effective pavement management program, a pavement network must be established and subdivided into smaller, manageable working units called samples. Sectioning of the pavement network was established in a prior System Update and was revised during this SAPMP to account for work that has been performed on the airfield since the previous update. Information from historic records is used to help define the limits of the smaller working units. A critical input for a pavement inventory and network definition is the date of last major construction or rehabilitation, as this type of work will reset the PCI to a value of 100 and reestablish limits for the samples.

The following sections define the common terms used in pavement management systems and cover their application for this SAPMP System Update.

2.5.1 Pavement Network Identification

Establishing the pavement network is the first step in organizing pavements into a structure for pavement management. The network is the starting point of the hierarchy of pavement management organization. A network typically consists of one or more pavement *branches*, which have one or more pavement *sections*. For example, a network can be all the pavements within an Airport's airfield or all the pavements in a statewide program. For the FDOT SAPMP, a network represents an individual Airport's airfield pavement facilities maintained by the Airport.

2.5.2 Pavement Branch Identification

A pavement branch, also known as a facility, is a logical unit of generally identifiable pavement within a network that has a distinct functional classification. For example, within an airfield, each runway, taxiway, or apron is considered a branch. Each branch contains at least one section but may contain more if pavement feature characteristics are distinct throughout the branch.

2.5.3 Pavement Section Identification

A pavement section, or feature, is a subdivision of a branch and has consistent characteristics throughout its length or area. These characteristics include structural composition (pavement layer material type and thickness), construction history, age, traffic type, traffic frequency, and pavement condition. A section is the basic management unit of a pavement network and is the level at which maintenance, repair, or major rehabilitation treatments are considered.

2.5.4 Pavement Sample Unit Identification

A pavement sample unit is an arbitrarily defined subdivision of a pavement section that has a standard size range of 20 contiguous slabs (±8 slabs) for PCC pavement and 5,000 contiguous square feet (±2,000 SF) for AC. A sample unit is the smallest subdivision of a pavement network and is analyzed during field assessments to establish condition ratings.

2.5.5 Terminology Summary

Below is a summary table, **Table 2.5.5**, with definitions and examples of common SAPMP terminology.

Table 2.5.5: SAPMP Terminology

SAPMP Terminology	Common Definition	Airport Example
Network	Totality of pavement assets maintained by the Airport.	"Tallahassee International Airport – Airfield Pavements"
Branch Name	Commonly defined asset name as established by Airport and by use.	"Runway 18-36"
Branch ID	Codified shorthand name for commonly defined asset established for database identification.	"RW 18-36" RW, Branch Use, "Runway" "Runway 18-36", Runway Facility
Section ID	Codified identification for pavement asset that is distinct by pavement composition, work history, aircraft loading, or condition.	"6105"
Sample Unit	A numeric identification of an area of pavement (5,000 ± 2,000 SF of AC or 20 ± 8 slabs of PCC) that has been inspected in accordance with ASTM D5340-12.	"300"

2.6 Airfield PCI Survey Methodology

In adherence to the FAA AC 150/5380-7B, the FDOT SAPMP utilizes the PCI survey method to collect pavement distress data and analyze the condition. The PCI survey procedure is a visual statistical sampling of pavements for recording primary distress types (e.g. cracking and deformation), associated severities, and quantities as defined by the ASTM D5340-12. This effort is the primary means of obtaining and recording pavement distress data. The PCI survey consists primarily of visual assessments of pavement surfaces for signs of distress and deterioration resulting from loading (aircraft) and environmental influences.

Overall, a visual pavement condition survey provides an indication of the cause and rate of deterioration of a pavement section from a functional point of view and can help identify if any underlying structural deficiencies are present. Although a visual PCI survey does not predict the remaining structural life of a pavement section or its ability to support loads, it does assess the rating of the operational surface. Functional condition, determined by the PCI method, can provide a cost-effective means to plan for pavement rehabilitation projects. Timely application of pavement rehabilitation may lead to the extension of functional life of individual pavement sections. This method varies from structural evaluation; functional condition is limited to visually observed distresses and indicative modes of pavement deterioration. A formal structural evaluation analyzes subsurface conditions, material characteristics, and qualitative pavement structure attributes. A structural evaluation may consist of subsurface geotechnical exploration, falling weight deflectometer testing, petrographic testing, material coring, and/or flexural testing.

2.6.1 Pavement Distress Types

For each sample, the severity and quantity of defined distresses are recorded and then analyzed in accordance with the ASTM D5340-12 standard, which identifies 17 AC distress types and 16 PCC distress types. **Tables 2.6.1 (a) and 2.6.1 (b)** identify these distresses and their common causes or mechanisms.

Table 2.6.1 (a): Pavement Distress Types – Asphalt Concrete

Distress Mechanism	Distress Type
Load	Alligator Cracking Rutting
Climate/Durability	Block Cracking Joint Reflection Cracking Longitudinal and Transverse Cracking (LT) Raveling Shoving Weathering
Construction/Material	Bleeding Corrugation Depression Polished Aggregate Slippage Cracking Swelling
Other	Jet Blast Erosion Oil Spillage Patching and Utility Cut Patching

Table 2.6.1 (b): Pavement Distress Types – Portland Cement Concrete

Distress Mechanism	Distress Type
Load	Corner Break Longitudinal, Transverse, and Diagonal Cracking (LTD) Pumping Shattered Slab/Intersecting Cracks
Climate/Durability	Blowup Durability "D" Cracking Joint Seal Damage Popouts
Construction/Material	Alkali Silica Reaction (ASR) Scaling Shrinkage Cracking
Other	Corner Spalling Joint Spalling Large Patching and Utility Cut Settlement or Faulting Small Patching

2.6.2 PCI Survey Procedures

PCI surveys are conducted on sample units defined in previous System Updates. Sample units are subject to change at the discretion of field personnel and/or to major pavement rehabilitation treatments. Furthermore, access to sample units based on accessibility or operational impacts may affect the overall sampling rate effort at each airport. **Tables 2.6.2 (a) and (b)** define the sampling criteria used by the FDOT SAPMP. A higher sampling rate may be utilized to achieve greater statistical confidence, should the Airport have the available resources to perform PCI survey independent of the FDOT SAPMP.

Table 2.6.2 (a): Recommended Sampling Rates for Asphalt Concrete

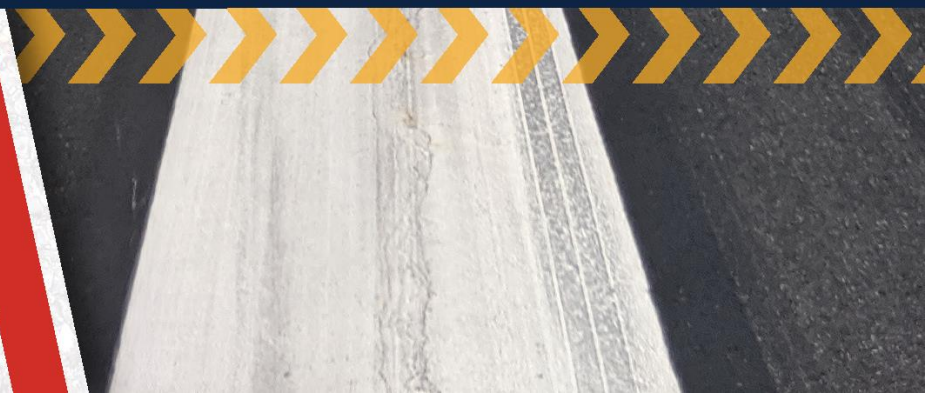
Number of Total Sample Units in Section	Sample Units to Inspect	
	Runways	Taxiways, Aprons, and Others
1 - 4	1	1
5 - 10	2	1
11 - 15	3	2
16 - 30	5	3
31 - 40	7	4
41 - 50	8	5
51 or more	20% but ≤ 20	10% but ≤ 10

Table 2.6.2 (b): Recommended Sampling Rates for Portland Cement Concrete

Number of Total Sample Units in Section	Sample Units to Inspect	
	Runways	Taxiways, Aprons, and Others
1 - 3	1	1
4 - 6	2	1
7 - 10	3	2
11 - 15	4	2
16 - 20	5	3
21 - 30	7	3
31 - 40	8	4
41 - 50	10	5
51 or more	20% but ≤ 20	10% but ≤ 10

The FDOT SAPMP is limited to select sample units for each section identified in each airport's Airfield Pavement Network Definition. The intent is to perform a limited amount of sample unit PCI survey to reasonably reflect the functional condition. Due to the limited sampling criteria, there may be instances of pavement distress and deterioration outside of the inspected sample units that were not observed.

Chapter 3: Airfield Pavement System Inventory



Chapter 3 – Airfield Pavement System Inventory

This chapter discusses the inventory data collected from the Airport and summarizes network-level characteristics of the Airport's airfield pavements. At the start of each FDOT SAPMP System Update, all airports are asked to review the existing airfield pavement network definition exhibit for accuracy. Furthermore, participating airports are asked to provide documentation of any recent or anticipated construction related to their airfield pavements.

3.1 Airfield Pavement Network Information

3.1.1 Previous and/or Anticipated Airfield Pavement Construction

Based on information provided by the Airport, **Table 3.1.1** summarizes recent or anticipated airfield pavement construction projects since 2016.

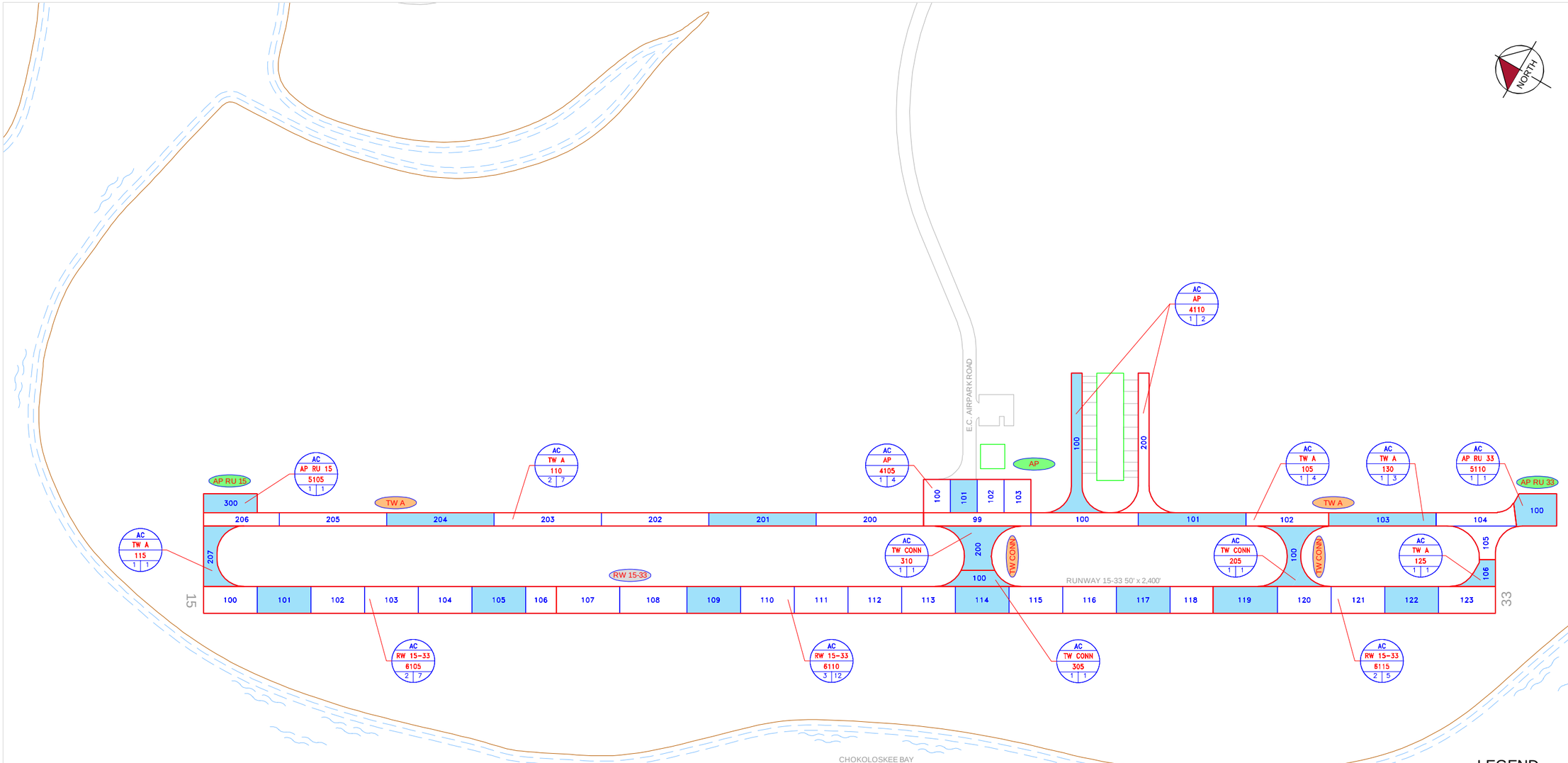
Table 3.1.1: Summary of Previous and/or Anticipated Airfield Pavement Construction

Construction Year	Location	Work Type / Pavement Section
2022	RW 15-33	Complete Reconstruction - AC

The Airport provided a combination of record drawings, reports, and staff input, which aided in developing the construction history of the Airport's pavements since inception. Major rehabilitation and construction activities performed in the last 24 months, or anticipated in the next 24 months, are assumed to restore the PCI to 100. These activities include pavement overlay, mill and overlay, new construction, and/or complete reconstruction. These pavements were not formally subject to a PCI assessment and actual conditions may vary. Furthermore, any localized maintenance or repair performed in the assessment areas that would improve the PCI are considered in the condition analysis.

Figure 3.1.1 (a), the Airfield Pavement Network Definition Exhibit provides details of the PCI assessment efforts. The exhibit identifies pavement facilities, surface types, section definitions, and sample unit delineations. **Figure 3.1.1 (b)**, the Airfield Pavement System Inventory Exhibit provides details of the work history updates communicated by the Airport. The Exhibit provides the approximate limits of recent and/or anticipated construction on the airfield pavement facilities. The limits are based on documentation provided by the Airport and, if constructed, are confirmed during field surveys.

X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- AAC / AP MAIN / 4105 / 10 | 100 — PAVEMENT SURFACE TYPE; PAVEMENT BRANCH ID; SECTION NUMBER; NUMBER OF SAMPLE UNITS IN SECTION; NUMBER OF SAMPLE UNITS TO BE INSPECTED
- AAC / AP MAIN / 4105 / 0 | 100 — SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.
- 100 — INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 20
AC: 20 PCC: 0

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE

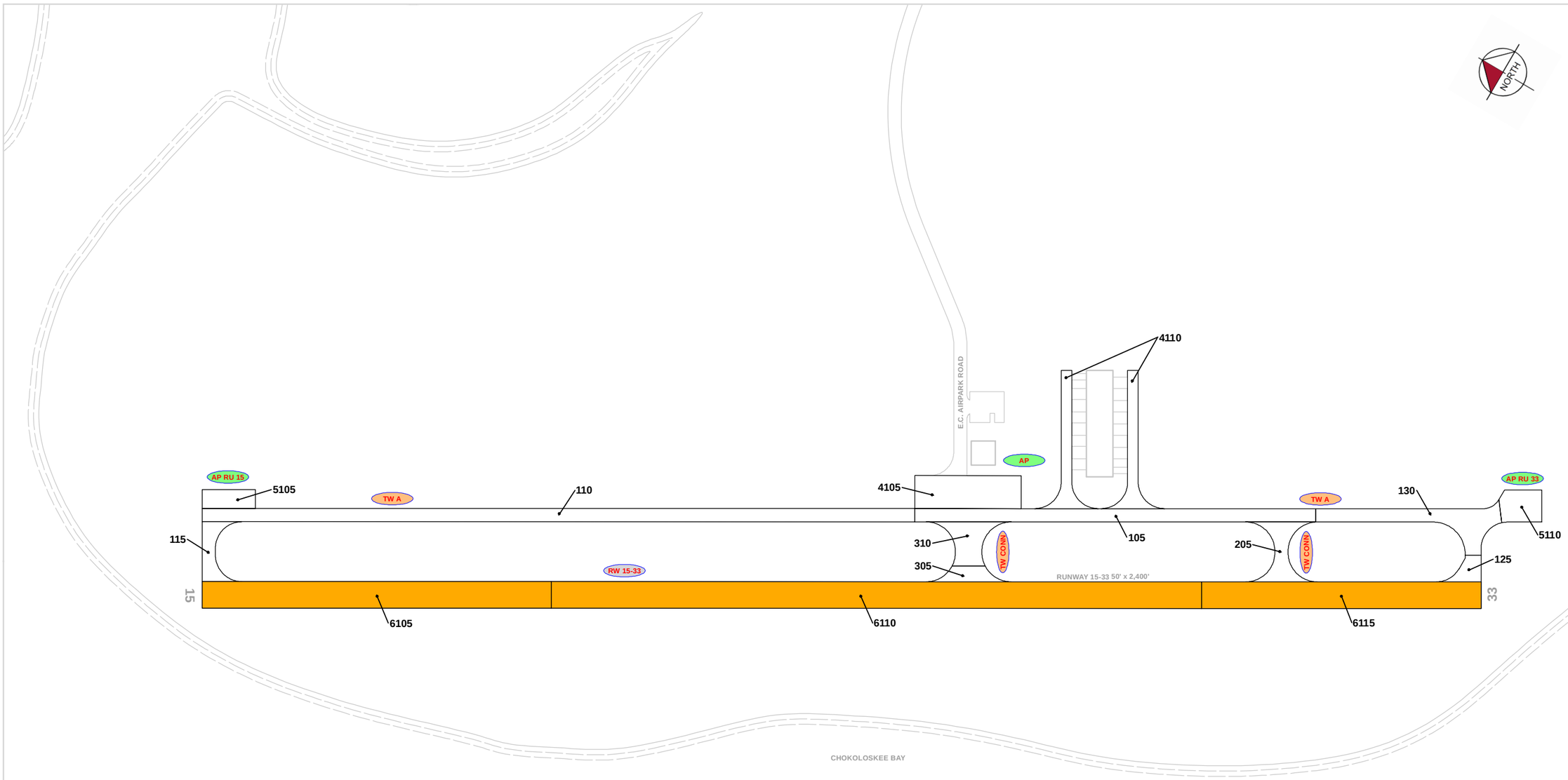
AIRFIELD PAVEMENT NETWORK DEFINITION EXHIBIT

Statewide Airfield Pavement Management Program
EVERGLADES AIRPARK

FDOT

2021

X01



RECENT & ANTICIPATED CONSTRUCTION ACTIVITY

CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
2022	RW 15-33	Complete Reconstruction - AC

LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

PROJECT YEAR

2016		2021	
2017		2022	
2018		2023	
2019		2024	
2020		2025	

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

AIRFIELD PAVEMENT SYSTEM INVENTORY EXHIBIT

Statewide Airfield Pavement Management Program

EVERGLADES AIRPARK

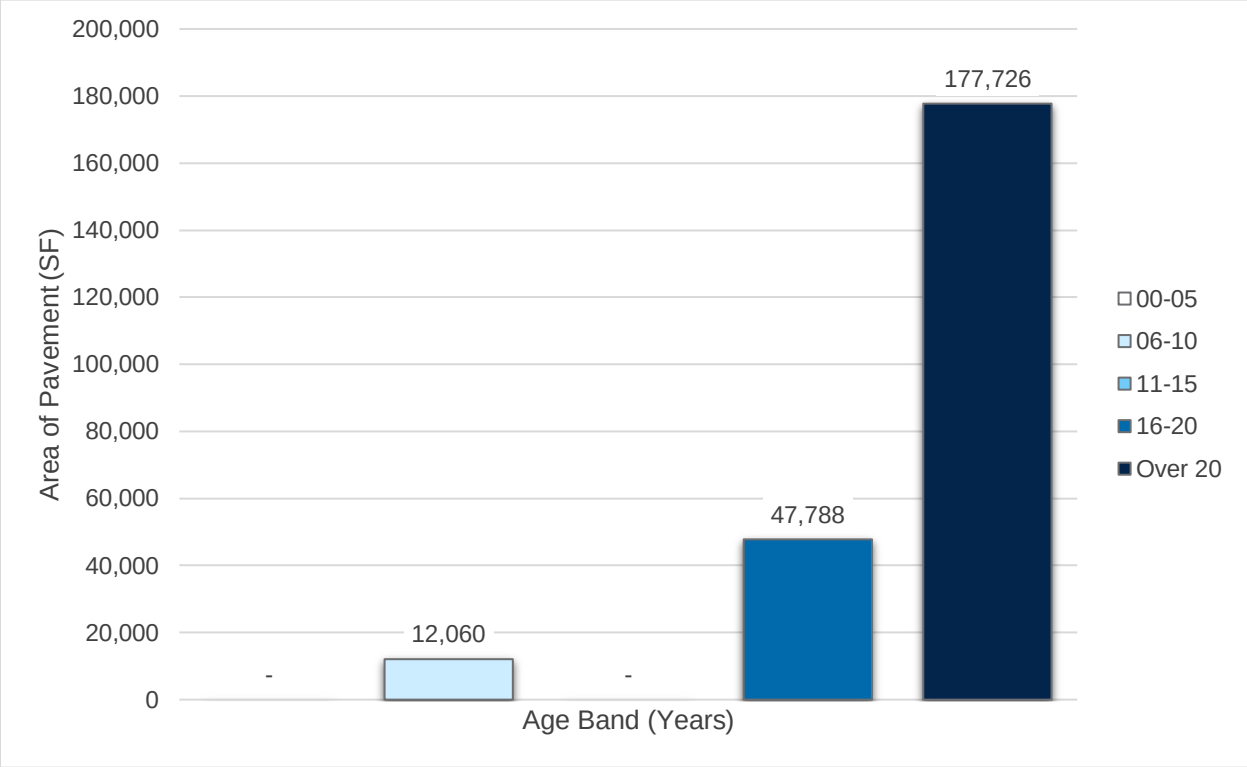
FDOT

2021

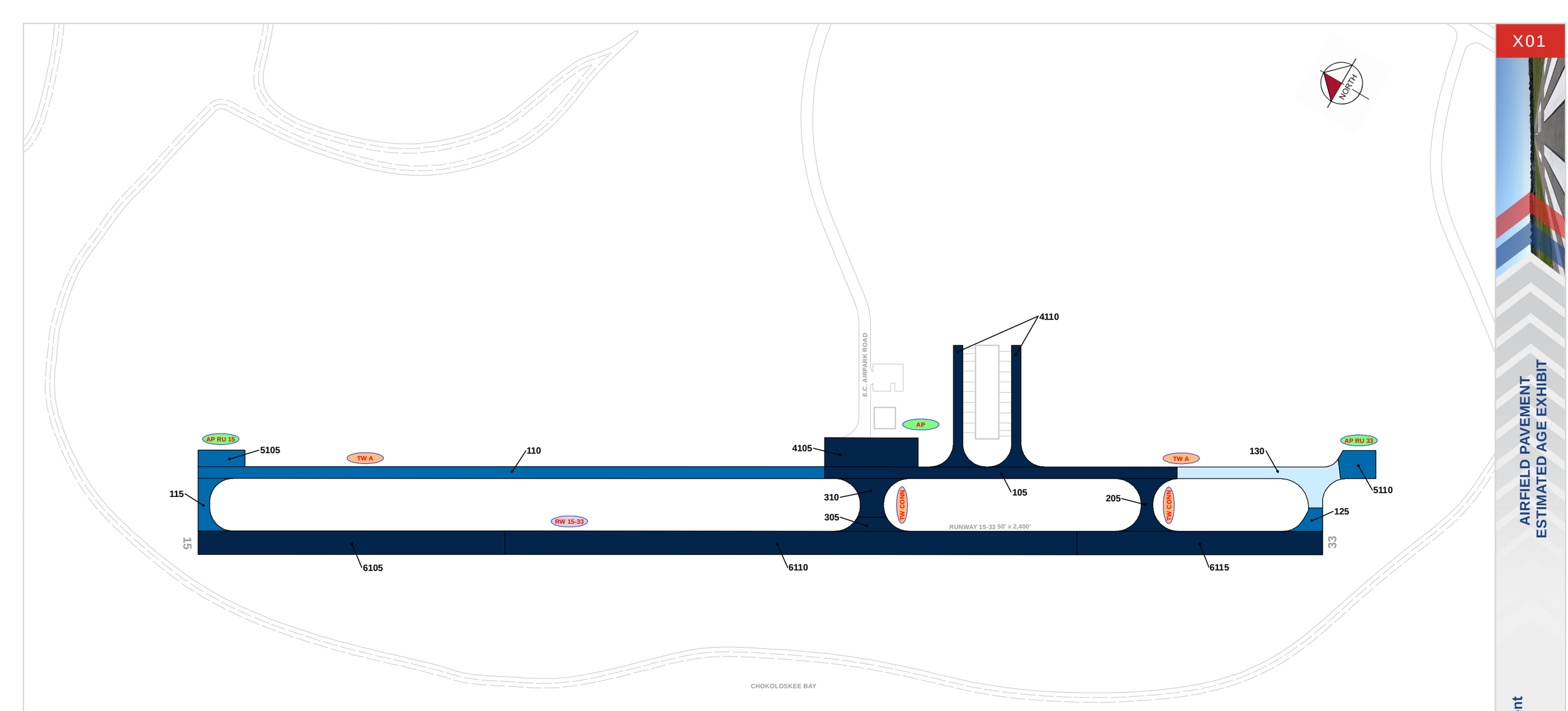
3.1.2 Estimated Pavement Age

Standard pavement design practice considers a design life of 20 years. Design inputs typically require subgrade soil conditions, pavement layer material characteristics, and anticipated loading (aircraft fleet mix) for the design-life period. Based on the review of historic airfield pavement construction activities, **Figure 3.1.2 (a)** summarizes the age of the pavement sections since the last major construction activity has occurred. **Figure 3.1.2 (b)** provides the approximate limits of those age ranges on the airfield pavement facilities. This is intended to be a rough estimate based on interpretation of the limited data available at the time of report. The estimation of pavement age is based on information requested from the Airport.

Figure 3.1.2 (a): Age of Pavements at PCI Survey



X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

AGE AT INSPECTION

- 0-5 Years
- 6-10 Years
- 11-15 Years
- 16-20 Years
- > 20 Years

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

AIRFIELD PAVEMENT
ESTIMATED AGE EXHIBIT

Statewide Airfield Pavement Management Program
EVERGLADES AIRPARK

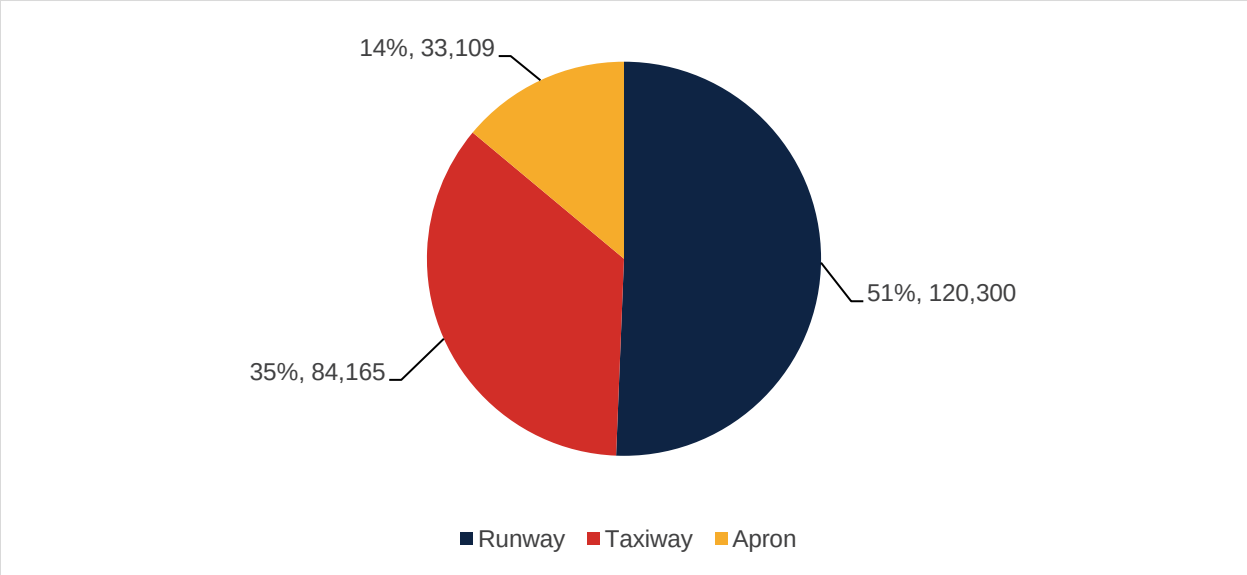
FDOT

2021

3.1.3 Functional Use

Pavements are subject to variations in aircraft loading patterns based on use and overall operations. This is termed "functional use" or "branch use." For this SAPMP System Update, the following categories of pavement functional use are identified: Runway, Taxiway, Taxilane, and Apron. **Figure 3.1.3** summarizes pavement functional use by area and excludes paved shoulders.

Figure 3.1.3: Airfield Pavement Branch Use by Area (SF)

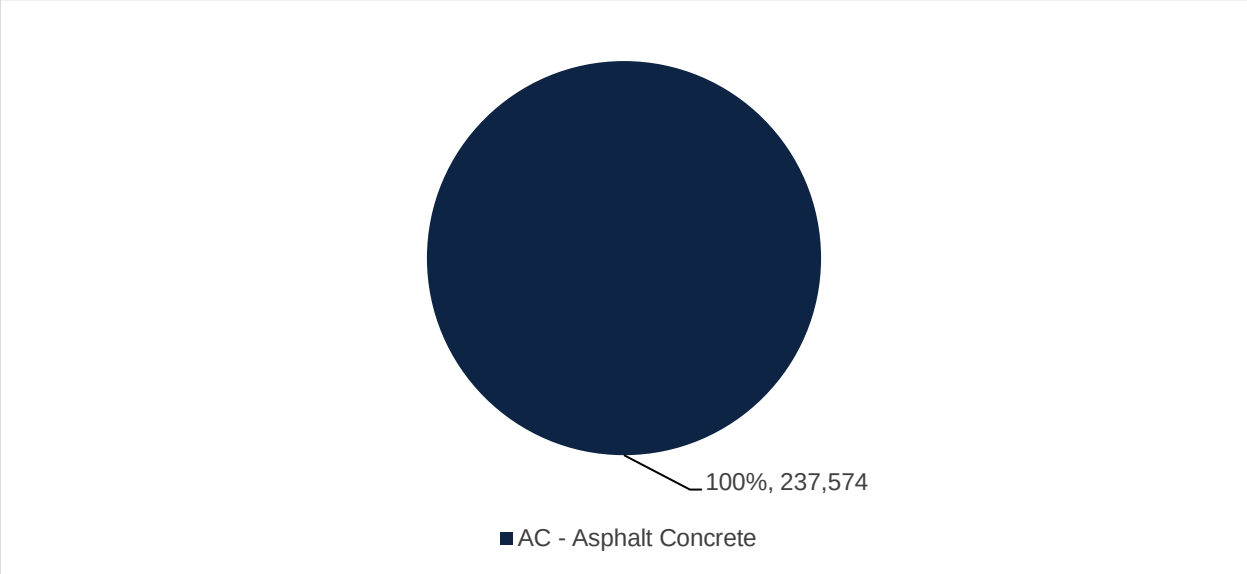


3.1.4 Pavement Surface Type

The airfield pavement facility surface types within the SAPMP include four common types of pavement: Portland cement concrete (PCC), Asphalt Concrete (AC), Asphalt Concrete overlaid on Asphalt Concrete (AAC), and Asphalt Concrete overlaid on Portland cement concrete (APC).

Based on the record documentation incorporated within the SAPMP database and as observed during airfield pavement field assessments, pavement surface types have been assigned to the various pavement sections. **Figure 3.1.4** summarizes the applicable pavement types observed at X01.

Figure 3.1.4: Airfield Pavement Surface Type by Area (SF)



3.1.5 Pavement System Inventory Details

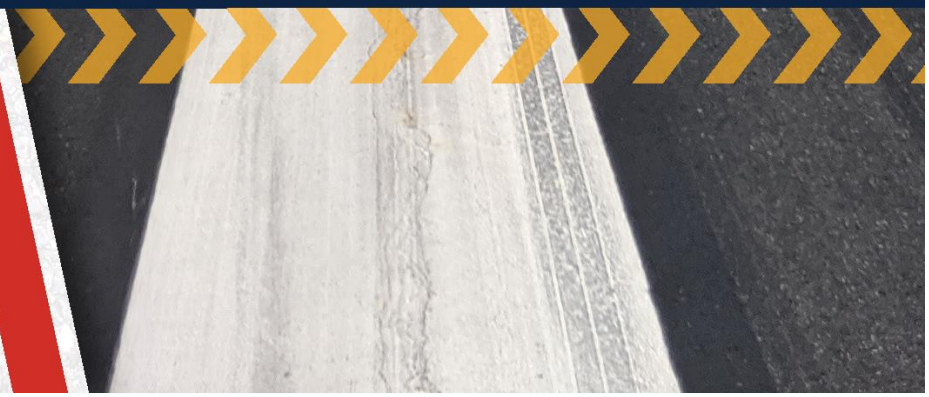
The pavement inventory scope includes updates to existing pavement geometry and the development of an AutoCAD model with spatial projection for use within GIS. **Appendix A** includes the airfield pavement network definition exhibit and the airfield pavement system inventory exhibit, which visually summarize the results of the airfield pavement system inventory analysis.

Table 3.1.5 displays the section-level pavement inventory data. The data is based on the record documentation provided by the airports and from previous updates. The information presented relies on the accuracy and the adequacy of data provided. In some cases, characteristics such as pavement area may be estimated based on aerial interpretation of spatially-projected imagery. Additionally, if the last construction date is unknown, a date of January 1 of the estimated year was assigned to the section. The accuracy of data is appropriate for this network-level planning document. Should the Airport perform rehabilitation work, it is recommended that project-level investigations be performed to support the data accuracy needed for design and construction.

Table 3.1.5: Pavement System Inventory Details

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
X01	RW 15-33	Runway	6105	32,850	AC	1/1/1969
X01	RW 15-33	Runway	6110	61,150	AC	1/1/1969
X01	RW 15-33	Runway	6115	26,300	AC	1/1/1969
X01	TW A	Taxiway	105	18,850	AC	1/1/1997
X01	TW A	Taxiway	110	33,525	AC	3/1/2005
X01	TW A	Taxiway	115	3,886	AC	1/1/2003
X01	TW A	Taxiway	125	2,214	AC	1/1/2003
X01	TW A	Taxiway	130	12,060	AC	1/1/2014
X01	TW CONN	Taxiway	205	5,409	AC	1/1/1997
X01	TW CONN	Taxiway	305	2,700	AC	1/1/1969
X01	TW CONN	Taxiway	310	5,521	AC	1/1/1996
X01	AP	Apron	4105	12,400	AC	1/1/1996
X01	AP	Apron	4110	12,546	AC	1/1/1997
X01	AP RU 15	Apron	5105	3,500	AC	1/1/2003
X01	AP RU 33	Apron	5110	4,663	AC	1/1/2003

Chapter 4: Airfield Pavement Condition Analysis



Chapter 4 – Airfield Pavement Condition Analysis

Distress type, severity, and extent are required in the computation of a PCI value. The PCI provides insight to possible causes of deterioration to help support pavement maintenance and rehabilitation planning. The PCI method of pavement condition evaluation is strictly a visual review of surface condition, also referred to as a functional evaluation. Further evaluation of pavement conditions may be necessary, such as structural evaluation, for design- and/or project-level determination of pavement rehabilitation needs.

4.1 Airfield Pavement Condition Index

4.1.1 Network-Level Analysis

The following figure, **Figure 4.1.1**, summarizes the network-level pavement condition analysis based on the most recent survey results. On a network level, approximately 17% of inspected pavements are in Good or Satisfactory condition. Presently, roughly 31% of inspected pavements are in Fair condition and the remaining 52% of inspected pavements are in Poor or worse condition.

Figure 4.1.1: Latest Condition – Overall Network

4.1.2 Branch-Level Analysis

The following **Figures 4.1.2 (a)-(d)** summarize branch-level pavement conditions according to the most recent PCI assessment results.

Figure 4.1.2 (a): Latest Condition Summary – Branch-Level

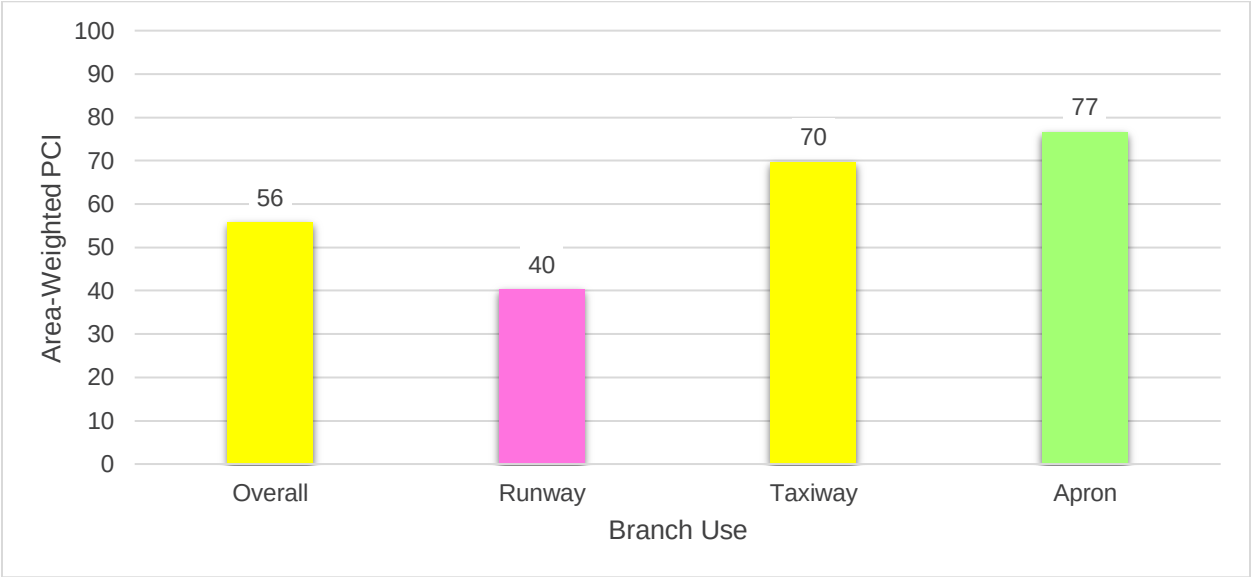


Figure 4.1.2 (b): Latest Condition – Runway

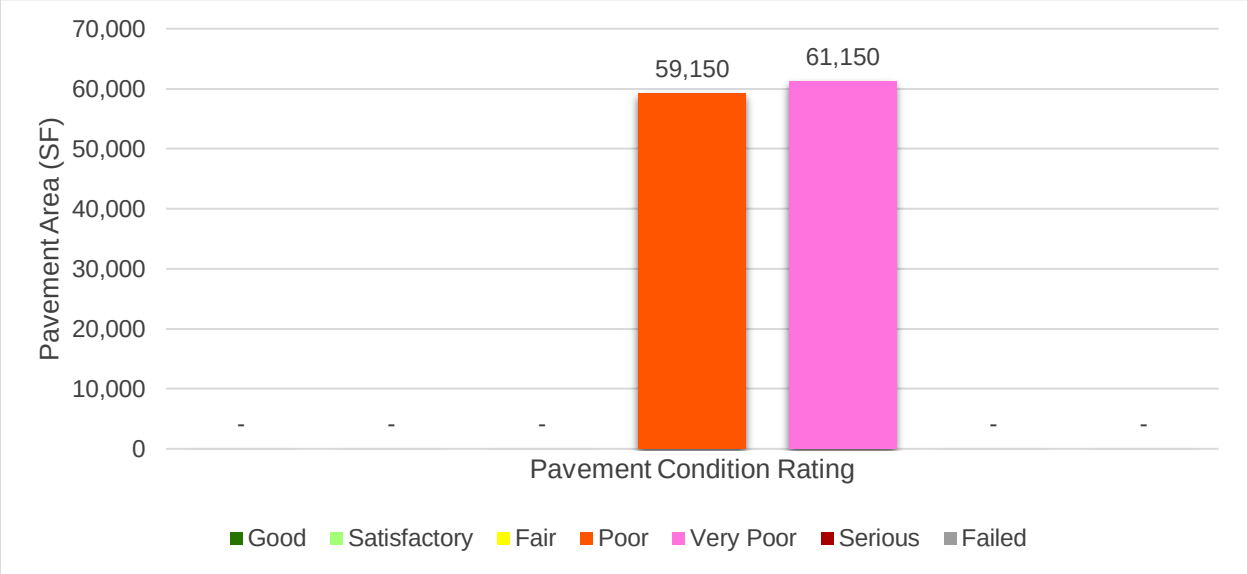


Figure 4.1.2 (c): Latest Condition – Taxiway

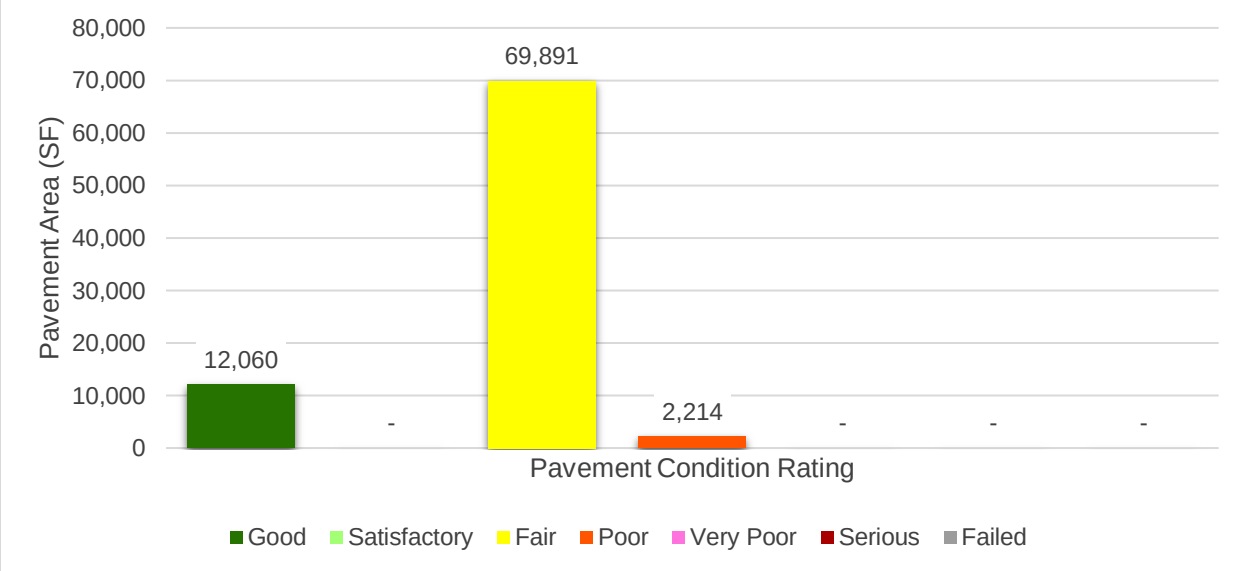


Figure 4.1.2 (d): Latest Condition – Apron

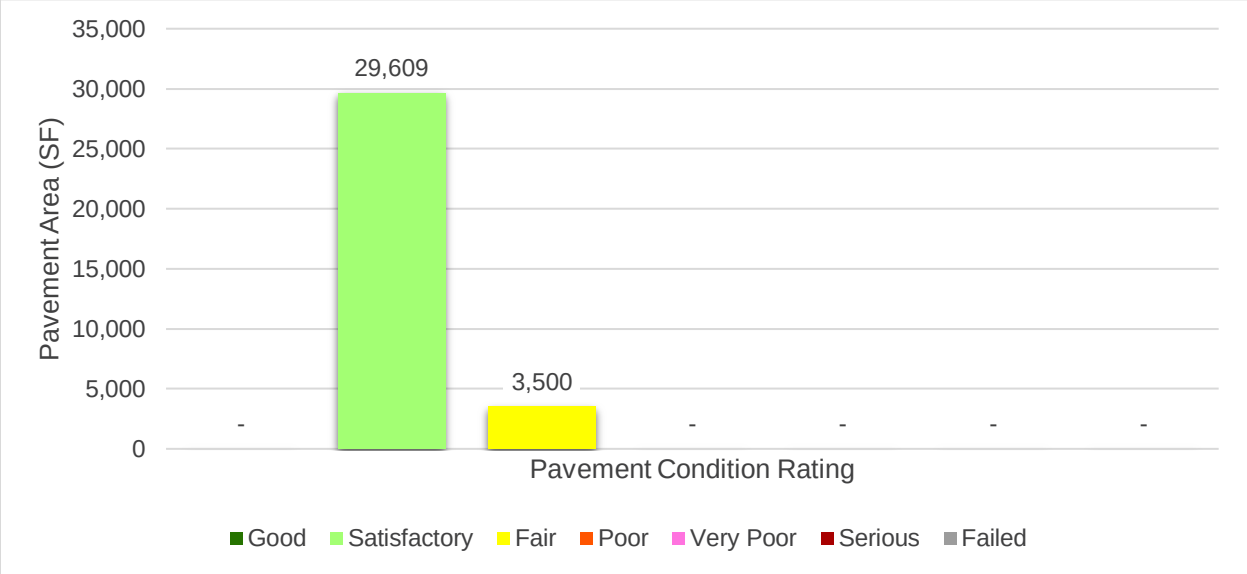


Table 4.1.2 details the branch-level condition for each airfield pavement branch.

Table 4.1.2: Latest Condition Summary – Branch-Level

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Area-Weighted Avg PCI	Condition Rating
RW 15-33	Runway	3	120,300	40	Very Poor
TW A	Taxiway	5	70,535	70	Fair
TW CONN	Taxiway	3	13,630	68	Fair
AP	Apron	2	24,946	79	Satisfactory
AP RU 15	Apron	1	3,500	69	Fair
AP RU 33	Apron	1	4,663	72	Satisfactory

4.1.3 Section-Level Analysis

Table 4.1.3 provides each pavement section's area-weighted average PCI and the percent of distress related to load, climate, and other factors. The causes of condition deterioration help inform maintenance, repair, and rehabilitation decisions. For example, load-related distress can indicate that the pavement is reaching the end of its structural design life and the selected rehabilitation treatment should include either strengthening or reconstruction. **Figure 4.1.3** provides a technical exhibit that graphically depicts PCI values and ratings determined from this SAPMP System Update.

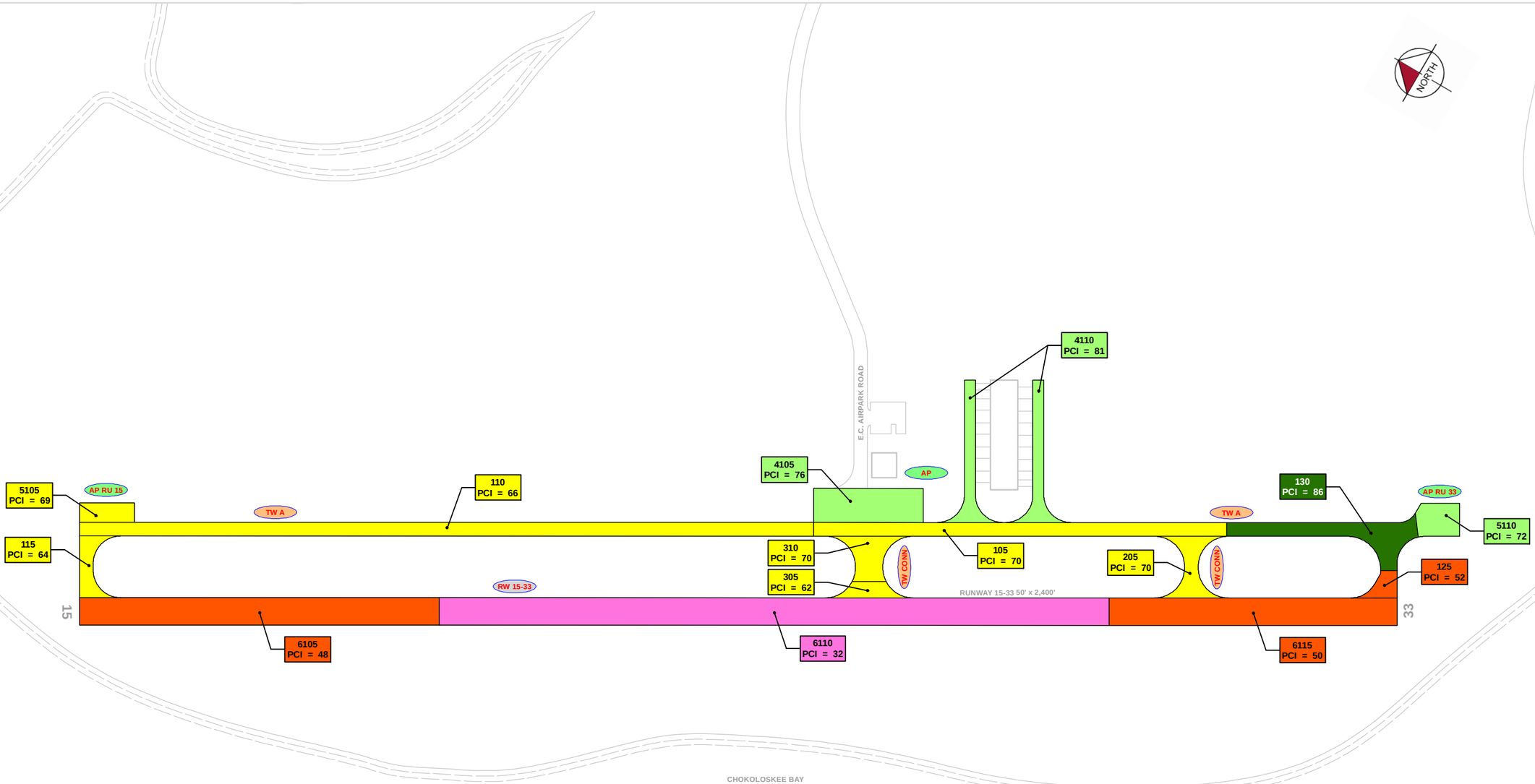
Pavement facilities that have been reconstructed within the past 24 months, or are anticipated for reconstruction within the next 24 months, may have been omitted from this assessment. Pavement that has received major rehabilitation will be set to a PCI of 100 for this analysis.

Table 4.1.3: Latest Pavement Condition Index Summary – Section-Level

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other	Sample Units Inspected	Total Sample Units in Section
X01	RW 15-33	Runway	6105	32,850	AC	48	Poor	100	0	0	2	7
X01	RW 15-33	Runway	6110	61,150	AC	32	Very Poor	92	0	8	3	12
X01	RW 15-33	Runway	6115	26,300	AC	50	Poor	100	0	0	2	5
X01	TW A	Taxiway	105	18,850	AC	70	Fair	100	0	0	1	4
X01	TW A	Taxiway	110	33,525	AC	66	Fair	100	0	0	2	7
X01	TW A	Taxiway	115	3,886	AC	64	Fair	84	0	16	1	1
X01	TW A	Taxiway	125	2,214	AC	52	Poor	97	0	3	1	1
X01	TW A	Taxiway	130	12,060	AC	86	Good	39	0	61	1	3
X01	TW CONN	Taxiway	205	5,409	AC	70	Fair	100	0	0	1	1
X01	TW CONN	Taxiway	305	2,700	AC	62	Fair	97	0	3	1	1
X01	TW CONN	Taxiway	310	5,521	AC	70	Fair	80	0	20	1	1
X01	AP	Apron	4105	12,400	AC	76	Satisfactory	100	0	0	1	4
X01	AP	Apron	4110	12,546	AC	81	Satisfactory	100	0	0	1	2
X01	AP RU 15	Apron	5105	3,500	AC	69	Fair	100	0	0	1	1
X01	AP RU 33	Apron	5110	4,663	AC	72	Satisfactory	100	0	0	1	1

** Zero (0) Sample Units Inspected signifies that the pavement section was not inspected during this SAPMP System Update due to recent construction projects. These sections correlate with the gray sections on the Network Definition Exhibit.*

X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

2020 PAVEMENT CONDITION INDEX

- PCI 86-100 Good
- PCI 71-85 Satisfactory
- PCI 56-70 Fair
- PCI 41-55 Poor
- PCI 26-40 Very Poor
- PCI 11-25 Serious
- PCI 0-10 Failed

"SECTION ID"
"PCI VALUE"

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

AIRFIELD PAVEMENT CONDITION INDEX EXHIBIT

Statewide Airfield Pavement Management Program

EVERGLADES AIRPARK

FDOT

2021

4.2 Summary of Pavement Condition Evaluation Results

4.2.1 Network-Level Observations

The PCI assessment for Everglades Airpark (X01) was performed in September 2020. The overall area-weighted average PCI value of the network was 56, representing a condition rating of Fair.

Based on the FAA 5010 Report as of 03/25/2021, the Airport has reported 6,700 operations for 12 months ending 02/28/2019.

4.2.2 Branch-Level Observations

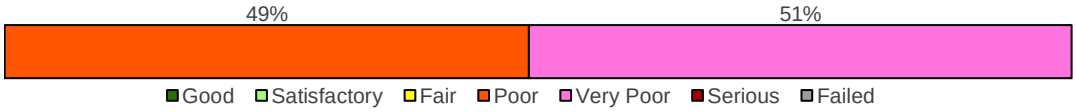
The following branch-level observations are a summary of select pavement facilities identified during the PCI assessment, including a discussion of general conditions and branch characteristics. The summary may not include all branches and/or sections within the airport's airfield pavement network. Representative distress photographs of airfield pavements are presented in **Appendix D**. "Vicinity" photos refer to the approximate boundaries of an inspected sample unit within the section and provide an overview of the section condition but are not focused on a specific distress. The Re-inspection Report found in **Appendix E** provides listings of each sample unit and distress.

Runways

RW 15-33

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
RW 15-33	RUNWAY	3	120,300	40	Very Poor

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 49% Poor (41-55 PCI), 51% Very Poor (26-40 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
6105	AC	32,850	48	Poor
6110	AC	61,150	32	Very Poor
6115	AC	26,300	50	Poor

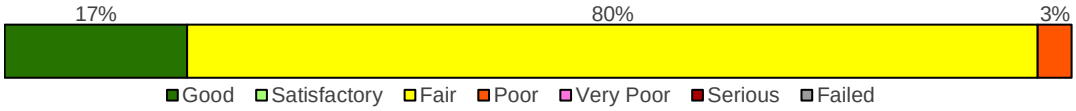
RW 15-33 consists of 3 flexible pavement sections, totaling 120,300 sf. The last major construction date for the branch was 1969, resulting in an area-weighted average age at inspection of 52 years old. Overall, RW 15-33 is in Very Poor condition with an area-weighted average PCI of 40.

Taxiways

TW A

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	5	70,535	70	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 17% Good (86-100 PCI), 80% Fair (56-70 PCI), 3% Poor (41-55 PCI).



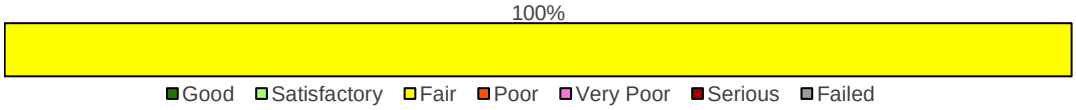
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
105	AC	18,850	70	Fair
110	AC	33,525	66	Fair
115	AC	3,886	64	Fair
125	AC	2,214	52	Poor
130	AC	12,060	86	Good

TW A consists of 5 flexible pavement sections, totaling 70,535 sf. The last major construction dates range from 1997 to 2014, resulting in an area-weighted average age at inspection of 16 years old. Overall, TW A is in Fair condition with an area-weighted average PCI of 70.

TW CONN

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW CONN	TAXIWAY	3	13,630	68	Fair

The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
205	AC	5,409	70	Fair
305	AC	2,700	62	Fair
310	AC	5,521	70	Fair

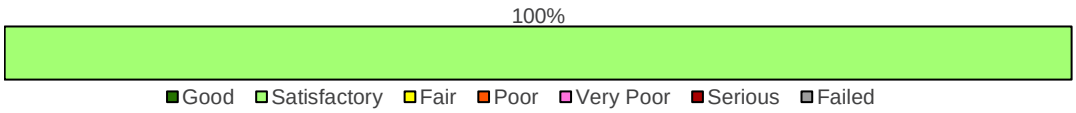
TW CONN consists of 3 flexible pavement sections, totaling 13,630 sf. The last major construction dates range from 1969 to 1997, resulting in an area-weighted average age at inspection of 30 years old. Overall, TW CONN is in Fair condition with an area-weighted average PCI of 68.

Aprons

AP

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP	APRON	2	24,946	79	Satisfactory

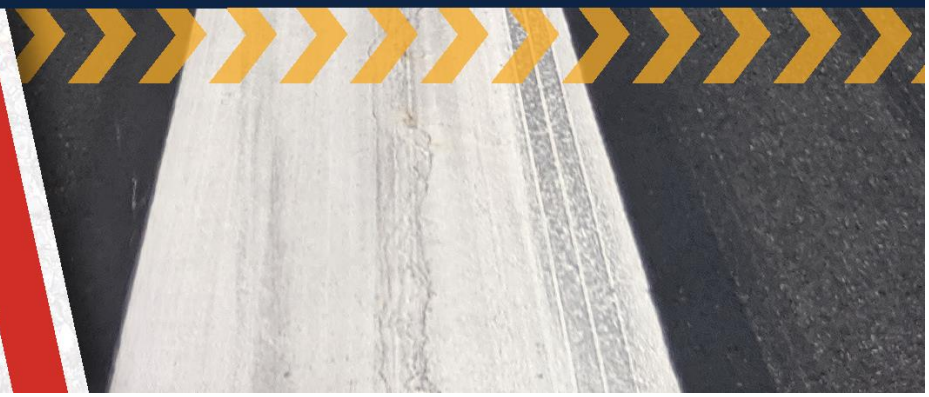
The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 100% Satisfactory (71-85 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4105	AC	12,400	76	Satisfactory
4110	AC	12,546	81	Satisfactory

AP consists of 2 flexible pavement sections, totaling 24,946 sf. The last major construction dates range from 1996 to 1997, resulting in an area-weighted average age at inspection of 24 years old. Overall, AP is in Satisfactory condition with an area-weighted average PCI of 79.

Chapter 5: SAPMP Customization



Chapter 5 – SAPMP Customization

Once the PAVER™ database is populated with inventory and condition data including PCI and rank, it is further customized with key elements such as network-level attributes, performance models, critical PCI, maintenance policies, and unit costs that are specific to the FDOT SAPMP. Each of these factors plays a role in the development of rehabilitation strategies as they help to identify maintenance and rehabilitation needs for long-term management.

The FDOT SAPMP is organized to provide airports with planning-level data and does not intend to preclude the responsible engineer from performing the appropriate level of investigation and analysis in determining the appropriate design details of a pavement rehabilitation. It would not be advisable to solely base design-level rehabilitation without the appropriate level of investigation and determination of pavement deterioration beyond that of a visual functional condition assessment.

5.1 Network-Level Customization

The network-level attribute fields used in the FDOT SAPMP PAVER™ database consist of the Network, Airport Classification, District, FAA ADO Area, Inspection Phase, and Continuing Florida Aviation System Planning Process (CFASPP) Center. Each of these elements are briefly defined below.

- The “Network” field identifies the airport being analyzed;
- The “Airport Classification” field classifies the Airport according to the type and volume of aircraft traffic;
  - “GA” for General Aviation, community airports
  - “RL” for Regional Relievers
  - “PR” for Primary/Commercial airports
- The “District” field identifies the FDOT District to which the Airport belongs;
- The “FAA ADO Area” is an area used by the Orlando ADO to assign airports within those areas to the responsible FAA ADO personnel (planners, engineers, and environmentalists);
- The “Inspection Phase” denotes which phase of the SAPMP the airport is surveyed, Phase 1 or Phase 2; and
- The “CFASPP Center” identifies which Region or Metropolitan Area of the Continuing Florida Aviation Systems Planning Process an airport falls within.

5.2 Pavement Condition Forecasts

Pavement performance models, alternatively known as forecast models, prediction curves, or family curves, are developed from past and current distress data, as well as age data. These prediction curves are used to develop forecasts of PCI values that then help determine optimum timing for pavement maintenance and rehabilitation.

5.2.1 Forecasting PCI Considerations

Performance models will continue to be refined as the FDOT updates the SAPMP with subsequent PCI surveys. With the refinement of additional PCI and age data points, the forecasting of pavement conditions will continue to better reflect the performance trends of airfield pavements in the FAS. Forecasting of pavement condition for the Airport is intended for planning purposes only. **The estimation of forecasted PCI values gives no assurance of future pavement conditions as PCI values represent an engineering estimation to be used as a planning tool. Forecasted PCI data should not be the sole metric for determining the year in which a project should be planned. Design-level planning should be undertaken by the responsible engineer prior to the development of airfield design plans.** Design-level recommendations for pavement rehabilitation and/or reconstruction will require the appropriate application of the procedures defined in the FAA AC 150/5320-6F.

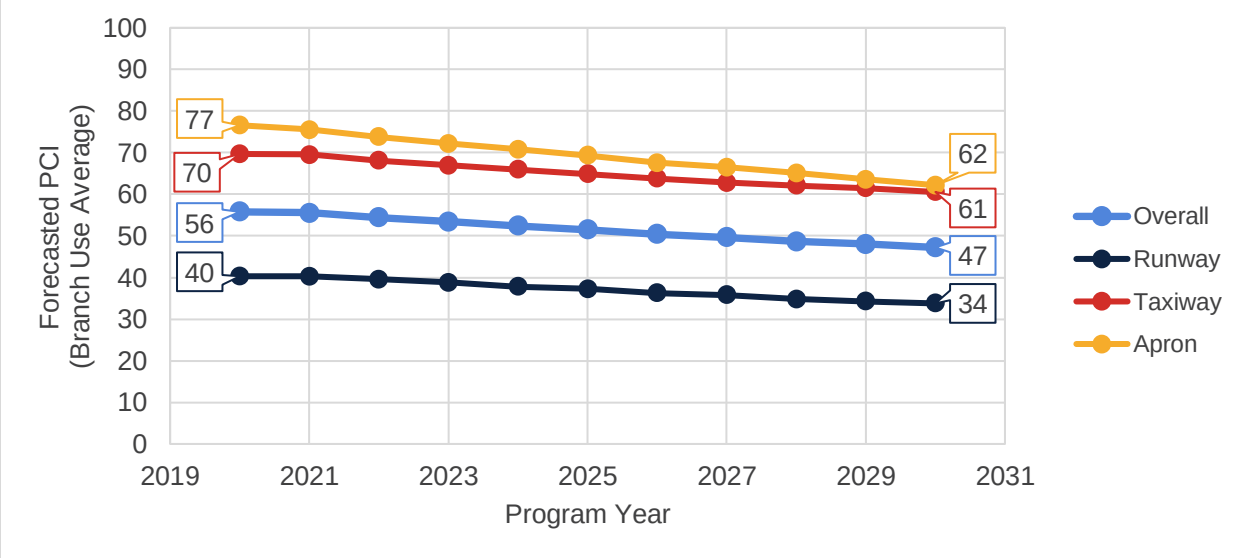
5.2.2 Performance Models

To develop pavement performance models, data for each section is combined into "groups" or "families" according to pavement type, traffic, and functional use. For the FDOT SAPMP, the models were defined for both PCC- and AC-surfaced pavements and further divided according to functional use. Based on average deterioration rates for different pavement types, each pavement section is assigned to a specific deterioration family to forecast the condition over a 10-year period.

5.2.3 Branch-Level Pavement Condition Forecast

Figure 5.2.3 depicts the branch-level pavement condition forecast for each branch use (Runway, Taxiway, Taxilane, and/or Apron) as well as the overall network. The condition forecasts are for a 10-year duration, starting in 2021 through 2030.

Figure 5.2.3: Forecasted Branch-Level Pavement Performance



5.2.4 Section-Level Pavement Condition Forecast

Table 5.2.4 provides section-level details for PCI forecasts. Pavement condition forecasts should be used for planning purposes only, as actual condition of sections is subject to the sensitivities in changes of traffic and maintenance frequency.

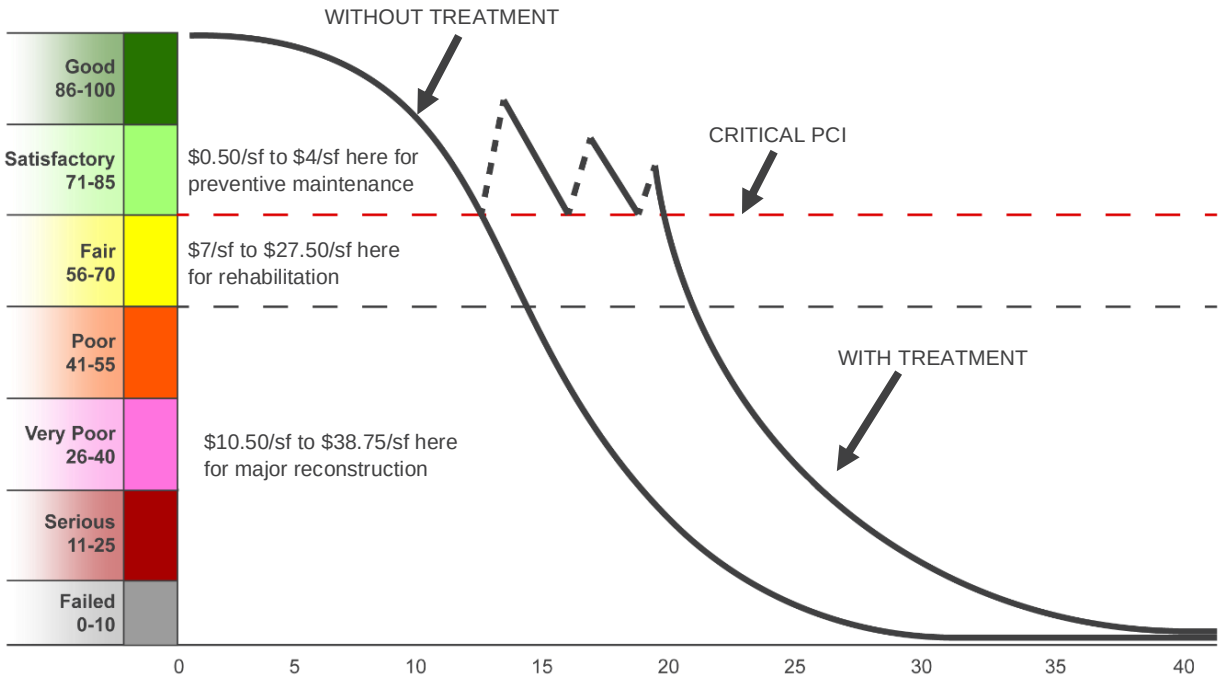
Table 5.2.4: Forecasted PCI Values 2021-2030 – Section-Level

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI									
				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
X01	RW 15-33	6105	48	48	48	47	46	46	45	45	44	44	43
X01	RW 15-33	6110	32	32	31	30	29	28	27	26	25	24	24
X01	RW 15-33	6115	50	50	49	49	48	48	47	47	46	46	45
X01	TW A	105	70	70	68	67	66	65	64	63	62	62	61
X01	TW A	110	66	66	65	64	63	62	61	60	60	59	58
X01	TW A	115	64	64	63	62	61	60	60	59	58	58	57
X01	TW A	125	52	52	52	51	51	50	50	50	49	49	48
X01	TW A	130	86	85	83	81	80	78	76	75	73	72	71
X01	TW CONN	205	70	70	68	67	66	65	64	63	62	62	61
X01	TW CONN	305	62	62	61	60	60	59	58	58	57	56	56
X01	TW CONN	310	70	70	68	67	66	65	64	63	62	62	61
X01	AP	4105	76	75	73	72	70	69	67	66	65	63	62
X01	AP	4110	81	80	78	76	75	73	71	70	68	67	65
X01	AP RU 15	5105	69	68	67	65	64	63	62	60	59	58	57
X01	AP RU 33	5110	72	71	70	68	67	65	64	63	62	60	59

5.3 Critical PCI Value

An important concept in pavement management is the critical PCI value, a value that prompts major rehabilitation activities. It serves as a condition threshold that helps determine a section's suitability to receive major work. As soon as a section's PCI reaches the critical PCI value, the rate of PCI loss (deterioration) is expected to increase. The critical PCI concept assumes that once a pavement section deteriorates to this critical level, it is more cost-effective to complete a major rehabilitation project rather than continuing to apply preventive maintenance or deferring major work until more costly reconstruction activities are required. **Figure 5.3 (a)** illustrates the benefit of applying lower cost preventive maintenance to extend the life of the pavement.

Figure 5.3 (a): General Pavement Treatments by Condition Range



Critical PCI values vary and are typically based on a pavement's surface type, functional use, and importance, or priority, in daily operations. Pavement priority is generally assigned based on the branch use of a pavement section. In previous updates, the critical PCI value was set to 65 for all functional uses. Based on FAA Order 5100.38D Change 1 Airport Improvement Handbook, issued February 26, 2019, the FAA has established pavement construction based on thresholds that distinguish Rehabilitation and Reconstruction. Pavement sections between PCI Values 55 and 69 will be considered for Rehabilitation and sections between PCI Values 0 to 54 will be considered for Reconstruction at the planning-level, as shown in **Table 5.3 (a)**. The FDOT SAPMP will integrate the PCI thresholds for airfield pavement projects to maintain alignment with the FAA AIP and/or PFC eligibility for project planning. Moving forward, the critical PCI value will now be defined at 69 for the FDOT SAPMP. Critical PCI values for this SAPMP System Update are shown in **Table 5.3 (b)**.

Table 5.3 (a): AIP Handbook PCI Requirements

PCI Requirements for Airfield Pavement Projects	
Airfield Pavement Project Type	**PCI Requirement**
Reconstruction	PCI < 55 (Poor)
Rehabilitation	PCI < 70 (Fair)
Maintenance	N/A

**Source:* AIP Handbook, in reference to Runways, Taxiways, and Aprons as seen in table G-2, H-1, and I-1 respectively

Table 5.3 (b): Critical PCI Values by Branch Use

Branch Use		
Runway	**Taxiway**	**Apron**
69	69	69

Figures 5.3 (b) and 5.3 (c) depict the decision process for major rehabilitation project identification with the assumption of available funds (Shahin). Should funding be unavailable for pavement sections in need of major rehabilitation, the Airport may elect to apply appropriate localized stopgap repair strategies. As the figures show, once major rehabilitation has been applied, the PCI of the section is reset to 100.

Figure 5.3 (b): Major Rehabilitation Planning Decision Diagram, PCI < Critical PCI

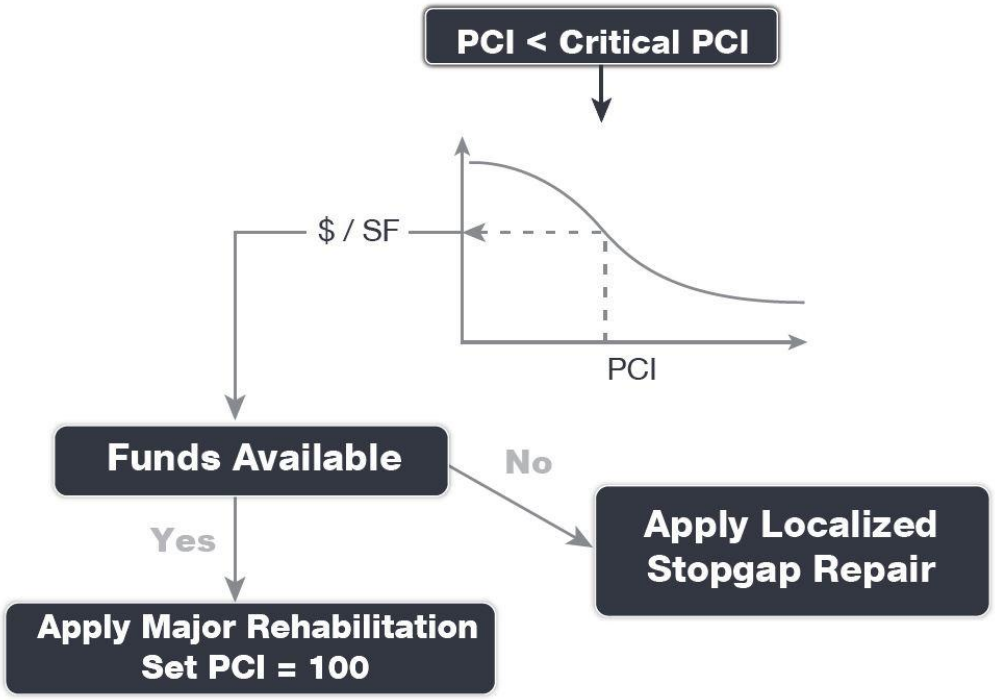
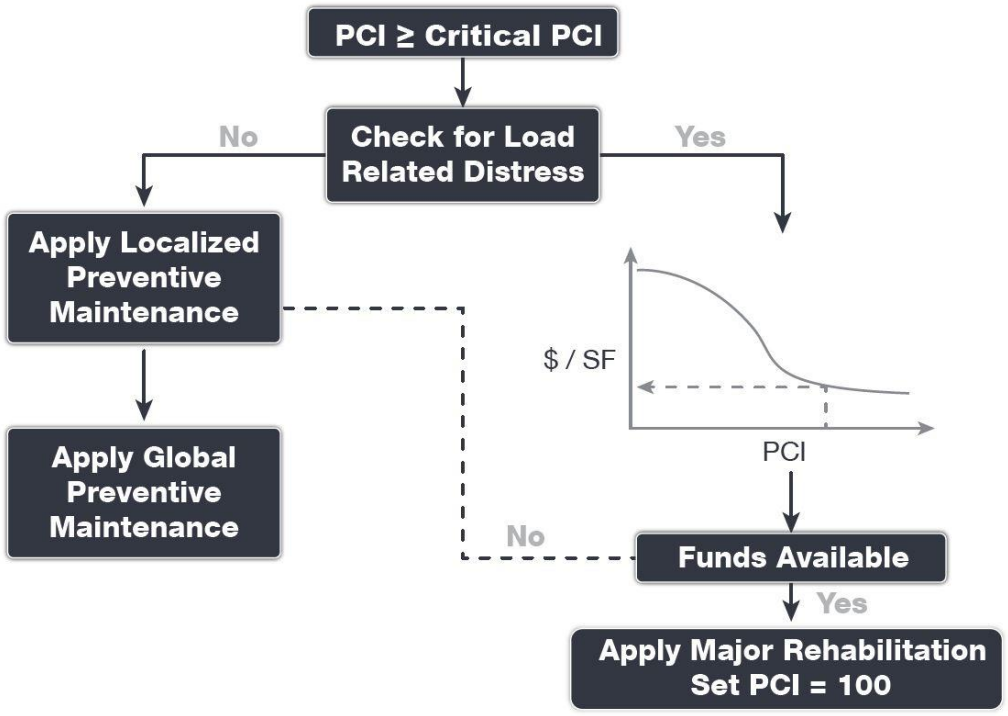


Figure 5.3 (c): Major Rehabilitation Planning Decision Diagram, PCI ≥ Critical PCI



5.4 Localized Maintenance and Repair

This section discusses both localized maintenance and major rehabilitation M&R methods and how they may be most effectively applied to extend the life of the pavement network. General maintenance and rehabilitation (M&R) methods are characterized under two broad categories: localized maintenance and major rehabilitation.

Localized maintenance is best applied as a conservation measure and is applied to slow the rate of pavement deterioration. It may, however, be applied as a temporary corrective measure in isolated areas. Proactive localized maintenance, and specifically preservation, is highly recommended to the Airport. However, it is recognized that once pavements have deteriorated below a certain condition threshold (the critical PCI value), the pavement benefits from more substantial rehabilitation in lieu of localized repairs.

Major rehabilitation is recommended when a pavement section falls below the critical PCI value or if a pavement section has a significant presence of load-related distress. Major rehabilitation efforts can correct or improve structural deficiencies and/or functional deterioration for pavement sections within a network.

M&R planning combines methods of repair to address the cause of the problem rather than just treating the symptom. For example, a PCC corner break may require slab under-sealing, full-depth patching, and joint sealing. While these repair methods apply to specific distress and pavement types, they also consider the impact of Foreign Object Debris (FOD) on aircraft operations. Untidy or improperly constructed repair activities may disintegrate and potentially create FOD at or near the repair site. Therefore, maintenance activities must include quality control monitoring to ensure that repairs are conducted properly, and clean-up activities are undertaken to address this potential. The current version of the FAA Advisory Circular 150/5210-24 “Airport Foreign Object Debris (FOD) Management” provides additional guidance for developing and managing an airport FOD program.

5.4.1 Localized Maintenance and Repair Approach

Localized maintenance differs from major rehabilitation in that localized maintenance is applied based on the distresses observed and not an averaged or forecasted PCI value. Treatments are selected based on the appropriate corrective measure for a given distress type and severity level. Localized maintenance can be applied either as a preventive measure or a safety (“stopgap”) measure. The two types of localized maintenance are described below in further detail.

- Localized Preventive Maintenance and Repair
  - Distress maintenance activities performed with the primary objective of slowing the rate of deterioration. These activities typically include crack sealing and patching.
- Localized Stopgap/Safety Maintenance and Repair
  - Defined as the localized distress repair needed to keep a pavement in a safe and operational condition. These activities are typically applied to high-severity distresses or distresses impacting operations.

5.4.2 Localized Work Types

The following sections provide detailed descriptions of the maintenance policy work types identified in the Localized Maintenance Policy.

AC Crack Sealing

Crack sealing is the process of cleaning and sealing (or resealing) cracks in AC pavements. This repair is used to fill longitudinal and transverse cracks, including reflective cracks and block cracks that are wider than 1/8-inch. The purpose of this treatment is to prevent water and incompressible materials from entering cracks and causing further deterioration of the pavement structure. Accumulation of incompressible materials in cracks may lead to spalling and is a source of FOD. Crack sealing is cost-effective when used as a preventive measure. Depending on the size of the crack, routing and cleaning the crack may be necessary to remove the loose material within the crack for better adherence of the crack sealant to the crack face. Measurement of this work type is typically in linear feet.

AC Full-Depth Patching

This technique involves replacing the full thickness of the AC layer and may include replacement of the base and subbase layers. Full-depth patching is used to repair structural and material-related distresses, such as alligator cracking, corrugation, depressions, rutting, slippage cracking, and swelling in AC pavements. This repair may be limited to the top AC layer (partial-depth patch) if the base and subbase layers exhibit no signs of deterioration. Measurement of this work type is typically in square feet or square yards.

AC Partial-Depth AC Patching

This technique involves the removal of a given thickness of the surface layer using a milling machine and adding back a layer of AC pavement. This technique removes the deteriorated layer and provides a good bond for an overlay. It can correct or improve the structural capacity or functional requirement, such as skid resistance and ride quality. This repair is used for surface distresses that can occur over a large area, such as raveling, shoving, and bleeding. While mill and replace can be a major rehabilitation M&R method when applied at a large scale, its application in a localized capacity to treat specific distress types also classifies it under localized maintenance for the purpose of this study. After milling operations are completed, any cracks still present should be cleaned and sealed prior to the placement of a tack coat and AC overlay layer(s). Measurement of this work type is typically in square feet or square yards.

Grinding

Grinding is the process of removing a thin layer of the existing concrete by grinding it with a series of closely spaced, rotating saw blades. This method is used to re-profile jointed concrete pavements with poor ride quality due to faulting or warping. Grinding is also used to restore transverse drainage and to provide a textured pavement surface. The concern with this type of maintenance is that if too much material is removed, the overall structural composition of the pavement section may change, potentially reducing the overall life of the pavement. Measurement of this work type is typically in square feet or square yards.

Monitor Pavement

Monitor pavement is recommended when the distresses do not interfere with ride quality, do not have FOD potential, and do not pose an immediate safety concern.

PCC Crack Sealing

Crack sealing is the process of routing, cleaning, and sealing (or resealing) cracks in PCC pavement to prevent water from infiltrating into the pavement foundation and to stop the accumulation of incompressible materials in the cracks. Water entering cracks can weaken the subgrade, potentially leading to pumping, corner breaks, and/or shattered slabs. Accumulation of incompressible materials in cracks may lead to spalling and is a source of FOD. Routing and cleaning of the crack is often necessary to adhere the crack sealant to both sides of the crack. Measurement of this work type is typically in linear feet.

PCC Full-Depth Patching

This type of M&R activity involves full-depth replacement of a portion of a PCC slab. This repair is used for medium- and high-severity corner breaks, medium-severity durability cracking, medium-severity blowups and buckling, and high-severity large patches. This repair requires restoring load transfer if near a joint or crack. Measurement of this work type is typically in square feet or square yards.

PCC Joint Seal

Joint sealing is the process of cleaning and sealing (or resealing) joints in PCC pavement to prevent water from infiltrating into the pavement foundation and to stop the accumulation of incompressible materials in the joints. Water entering joints can weaken the subgrade, potentially leading to pumping, corner breaks, and/or shattered slabs. Accumulation of incompressible materials in joints leads to spalling of the concrete and is a source of FOD. In some cases, it may be necessary to re-saw the pavement joints to remove old material prior to resealing. Measurement of this work type is typically in linear feet.

PCC Partial-Depth Patching

Partial-depth patching involves removing shallow, localized areas of deteriorated or spalled PCC pavement and replacing them with a suitable patch-like cement concrete or epoxy concrete. This method is used to repair distresses that are confined to the top few inches of the slab, such as joint and corner spalling. This repair would require restoring the joint sealant if near a joint. Measurement of this work type is typically in square feet or square yards.

PCC Slab Replacement

This type of M&R activity involves full-depth replacement of an entire PCC slab. This repair is used to repair high-severity blowups and buckling, high-severity durability cracking, medium- and high-severity shattered slabs, and medium- and high-severity ASR. This repair requires restoring load transfer with adjacent slabs through dowels or similar means. Measurement of this work type is typically in square feet or square yards.

Surface Seal

Application of a surface treatment provides AC-surfaced pavements with an unoxidized layer of bituminous material that can help extend the life of a pavement that is experiencing climate-related distresses such as weathering and raveling. The surface treatment can also serve as a repair that re-establishes a bond between aggregates, slowing pavement deterioration and reducing FOD potential. Measurement of this work type is typically in square feet or square yards.

5.4.3 Localized Maintenance Planning-Level Unit Costs

The activities identified here are based on research of practical pavement treatments in consideration of the FAA AC 150/5380-6C. The Localized Maintenance Policies and associated planning-level unit costs are developed in consideration of a network-level analysis.

The Localized Maintenance and Repair Policies and associated planning-level unit costs are based on a statewide consideration of pavement treatments and construction costs from both airfield pavements and the FDOT Historical Cost Information archives. Furthermore, a consideration of limited repair quantities is factored into the determination of conservative planning-level unit costs. Neither FDOT nor the Consultant team have control over the cost of labor, materials, equipment, the Contractor's methods of determining prices, or over competitive bidding or market conditions. Opinions of probable construction costs provided herein are based on the information known to the FDOT at this time and represent only the Consultant team's judgment as a design professional familiar with the construction industry. This Report cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable construction costs.

Tables 5.4.3 (a) and **(b)** display the cost by maintenance activity for AC and PCC pavement types, respectively. Because the localized maintenance activities identified for both preventive and stopgap work types are based on a statewide network approach, project-specific evaluations and maintenance quantities should be developed prior to construction.

Table 5.4.3 (a): Localized M&R Planning-Level Unit Costs – Asphalt Concrete

Localized Work Type	General Aviation Costs	Work Type Unit
AC Crack Sealing	$ 3.00	LF
AC Full-Depth Patching	$ 7.50	SF
AC Partial-Depth Patching	$ 3.75	SF
Monitor Pavement	-	-
Surface Seal	$ 0.50	SF

Table 5.4.3 (b): Localized M&R Planning-Level Unit Costs – Portland Cement Concrete

Localized Work Type	General Aviation Costs	Work Type Unit
Grinding	$ 2.00	SF
Monitor Pavement	-	-
PCC Crack Sealing	$ 5.00	LF
PCC Joint Seal	$ 3.25	LF
PCC Full-Depth Patching	$ 50.00	SF
PCC Partial-Depth Patching	$ 125.00	SF
PCC Slab Replacement	$ 38.75	SF

**PCC Partial-Depth Patching considers high-early-strength and high-performing repair material.*

5.4.4 Localized Maintenance and Repair Policy

The resulting Localized Maintenance recommendations are identified based on the policy defined in **Tables 5.4.4 (a) and (b)**. **Table 5.4.4 (a)** depicts the localized preventive maintenance policy for AC and PCC pavements. **Table 5.4.4 (b)** depicts the localized stopgap maintenance policy for AC and PCC pavements.

Table 5.4.4 (a): Localized Preventive Maintenance and Repair Policy

Distress	Severity	Localized Work Type	Work Type Unit
Alligator Cracking	Low	Monitor Pavement	-
Alligator Cracking	Medium	AC Full-Depth Patching	SF
Alligator Cracking	High	AC Full-Depth Patching	SF
Bleeding	N/A	Monitor Pavement	-
Block Cracking	Low	Monitor Pavement	-
Block Cracking	Medium	AC Crack Sealing	LF
Block Cracking	High	AC Crack Sealing	LF
Corrugation	Low	Monitor Pavement	-
Corrugation	Medium	AC Full-Depth Patching	SF
Corrugation	High	AC Full-Depth Patching	SF
Depression	Low	Monitor Pavement	-
Depression	Medium	AC Full-Depth Patching	SF
Depression	High	AC Full-Depth Patching	SF
Jet Blast	N/A	Monitor Pavement	-
Jt. Reflective Cracking	Low	Monitor Pavement	-
Jt. Reflective Cracking	Medium	AC Crack Sealing	LF
Jt. Reflective Cracking	High	AC Crack Sealing	LF
L&T Cracking	Low	Monitor Pavement	-
L&T Cracking	Medium	AC Crack Sealing	LF
L&T Cracking	High	AC Crack Sealing	LF
Oil Spillage	N/A	Monitor Pavement	-
Patching	Low	Monitor Pavement	-
Patching	Medium	AC Full-Depth Patching	SF
Patching	High	AC Full-Depth Patching	SF
Polished Aggregate	N/A	Monitor Pavement	-
Raveling	Low	Surface Seal	SF
Raveling	Medium	Surface Seal	SF
Raveling	High	AC Partial-Depth Patching	SF
Rutting	Low	Monitor Pavement	-
Rutting	Medium	AC Full-Depth Patching	SF

Distress	Severity	Localized Work Type	Work Type Unit
Rutting	High	AC Full-Depth Patching	SF
Shoving	Low	Monitor Pavement	-
Shoving	Medium	AC Partial-Depth Patching	SF
Shoving	High	AC Full-Depth Patching	SF
Slippage Cracking	N/A	AC Full-Depth Patching	SF
Swelling	Low	Monitor Pavement	-
Swelling	Medium	AC Full-Depth Patching	SF
Swelling	High	AC Full-Depth Patching	SF
Weathering	Low	Monitor Pavement	-
Weathering	Medium	Surface Seal	SF
Weathering	High	AC Partial-Depth Patching	SF
Blow-up	Low	PCC Full-Depth Patching	SF
Blow-up	Medium	PCC Full-Depth Patching	SF
Blow-up	High	PCC Slab Replacement	SF
Corner Break	Low	Monitor Pavement	-
Corner Break	Medium	PCC Full-Depth Patching	SF
Corner Break	High	PCC Full-Depth Patching	SF
Linear Cracking	Low	Monitor Pavement	-
Linear Cracking	Medium	PCC Crack Sealing	LF
Linear Cracking	High	PCC Full-Depth Patching	SF
Durability Cracking	Low	Monitor Pavement	-
Durability Cracking	Medium	PCC Full-Depth Patching	SF
Durability Cracking	High	PCC Slab Replacement	SF
Jt. Seal Damage	Low	PCC Joint Seal	LF
Jt. Seal Damage	Medium	PCC Joint Seal	LF
Jt. Seal Damage	High	PCC Joint Seal	LF
Small Patch	Low	Monitor Pavement	-
Small Patch	Medium	PCC Partial-Depth Patching	SF
Small Patch	High	PCC Partial-Depth Patching	SF
Large Patch	Low	Monitor Pavement	-
Large Patch	Medium	PCC Full-Depth Patching	SF
Large Patch	High	PCC Full-Depth Patching	SF
Popouts	N/A	Monitor Pavement	-
Pumping	N/A	Monitor Pavement	-
Scaling	Low	Monitor Pavement	-
Scaling	Medium	PCC Partial-Depth Patching	SF

Distress	Severity	Localized Work Type	Work Type Unit
Scaling	High	PCC Slab Replacement	SF
Faulting	Low	Monitor Pavement	-
Faulting	Medium	Grinding	SF
Faulting	High	PCC Slab Replacement	SF
Shattered Slab	Low	PCC Crack Sealing	LF
Shattered Slab	Medium	PCC Slab Replacement	SF
Shattered Slab	High	PCC Slab Replacement	SF
Shrinkage Cracking	N/A	Monitor Pavement	-
Joint Spall	Low	Monitor Pavement	-
Joint Spall	Medium	PCC Partial-Depth Patching	SF
Joint Spall	High	PCC Partial-Depth Patching	SF
Corner Spall	Low	Monitor Pavement	-
Corner Spall	Medium	PCC Partial-Depth Patching	SF
Corner Spall	High	PCC Partial-Depth Patching	SF
ASR	Low	Monitor Pavement	-
ASR	Medium	PCC Slab Replacement	SF
ASR	High	PCC Slab Replacement	SF

Table 5.4.4 (b): Localized Stopgap Maintenance and Repair Policy

Distress	Severity	Localized Work Type	Work Type Unit
Alligator Cracking	Low	Monitor Pavement	-
Alligator Cracking	Medium	AC Full-Depth Patching	SF
Alligator Cracking	High	AC Full-Depth Patching	SF
Bleeding	N/A	Monitor Pavement	-
Block Cracking	Low	Monitor Pavement	-
Block Cracking	Medium	Monitor Pavement	-
Block Cracking	High	AC Crack Sealing	LF
Corrugation	Low	Monitor Pavement	-
Corrugation	Medium	Monitor Pavement	-
Corrugation	High	AC Full-Depth Patching	SF
Depression	Low	Monitor Pavement	-
Depression	Medium	Monitor Pavement	-
Depression	High	AC Full-Depth Patching	SF
Jet Blast	N/A	Monitor Pavement	-
Jt. Reflective Cracking	Low	Monitor Pavement	-

Distress	Severity	Localized Work Type	Work Type Unit
Jt. Reflective Cracking	Medium	Monitor Pavement	-
Jt. Reflective Cracking	High	AC Crack Sealing	LF
L&T Cracking	Low	Monitor Pavement	-
L&T Cracking	Medium	Monitor Pavement	-
L&T Cracking	High	AC Crack Sealing	LF
Oil Spillage	N/A	Monitor Pavement	-
Patching	Low	Monitor Pavement	-
Patching	Medium	Monitor Pavement	-
Patching	High	AC Full-Depth Patching	SF
Polished Aggregate	N/A	Monitor Pavement	-
Raveling	Low	Monitor Pavement	-
Raveling	Medium	Monitor Pavement	-
Raveling	High	AC Partial-Depth Patching	SF
Rutting	Low	Monitor Pavement	-
Rutting	Medium	Monitor Pavement	-
Rutting	High	AC Full-Depth Patching	SF
Shoving	Low	Monitor Pavement	-
Shoving	Medium	Monitor Pavement	-
Shoving	High	AC Full-Depth Patching	SF
Slippage Cracking	N/A	AC Full-Depth Patching	SF
Swelling	Low	Monitor Pavement	-
Swelling	Medium	Monitor Pavement	-
Swelling	High	AC Full-Depth Patching	SF
Weathering	Low	Monitor Pavement	-
Weathering	Medium	Monitor Pavement	-
Weathering	High	Surface Seal	SF
Blow-up	Low	Monitor Pavement	-
Blow-up	Medium	PCC Full-Depth Patching	SF
Blow-up	High	PCC Slab Replacement	SF
Corner Break	Low	Monitor Pavement	-
Corner Break	Medium	PCC Full-Depth Patching	SF
Corner Break	High	PCC Full-Depth Patching	SF
Linear Cracking	Low	Monitor Pavement	-
Linear Cracking	Medium	PCC Crack Sealing	LF
Linear Cracking	High	PCC Crack Sealing	LF
Durability Cracking	Low	Monitor Pavement	-

Distress	Severity	Localized Work Type	Work Type Unit
Durability Cracking	Medium	PCC Full-Depth Patching	SF
Durability Cracking	High	PCC Slab Replacement	SF
Jt. Seal Damage	Low	Monitor Pavement	-
Jt. Seal Damage	Medium	Monitor Pavement	-
Jt. Seal Damage	High	PCC Joint Seal	LF
Small Patch	Low	Monitor Pavement	-
Small Patch	Medium	Monitor Pavement	-
Small Patch	High	PCC Partial-Depth Patching	SF
Large Patch	Low	Monitor Pavement	-
Large Patch	Medium	Monitor Pavement	-
Large Patch	High	PCC Full-Depth Patching	SF
Popouts	N/A	Monitor Pavement	-
Pumping	N/A	Monitor Pavement	-
Scaling	Low	Monitor Pavement	-
Scaling	Medium	Monitor Pavement	-
Scaling	High	PCC Slab Replacement	SF
Faulting	Low	Monitor Pavement	-
Faulting	Medium	Monitor Pavement	-
Faulting	High	PCC Slab Replacement	SF
Shattered Slab	Low	Monitor Pavement	-
Shattered Slab	Medium	PCC Crack Sealing	LF
Shattered Slab	High	PCC Slab Replacement	SF
Shrinkage Cracking	N/A	Monitor Pavement	-
Joint Spall	Low	Monitor Pavement	-
Joint Spall	Medium	PCC Partial-Depth Patching	SF
Joint Spall	High	PCC Partial-Depth Patching	SF
Corner Spall	Low	Monitor Pavement	-
Corner Spall	Medium	PCC Partial-Depth Patching	SF
Corner Spall	High	PCC Partial-Depth Patching	SF
ASR	Low	Monitor Pavement	-
ASR	Medium	PCC Slab Replacement	SF
ASR	High	PCC Slab Replacement	SF

5.5 Major Rehabilitation

Major rehabilitation is recommended to correct or improve structural deficiencies and/or functional deterioration. Often, when pavements are subject to significant changes in the aircraft fleet mix (frequency and type), major rehabilitation is required to provide a pavement section that can meet the structural demands of traffic loading. Major rehabilitation is generally described as a pavement construction that removes and replaces the pavement surface, thus resetting the PCI value to 100 and the pavement age to zero. Typical policies include full- and partial-depth reconstruction and mill and overlay.

5.5.1 Major Rehabilitation Pavement Section Development

Once the timing of the major rehabilitation activity is determined based on the PCI value, existing as-built record documentation is used to determine typical rehabilitation processes and pavement sections. Refinement of the pavement section layers is performed in consideration of the FAA AC 150/5320-6F. It should be noted that no subsurface geotechnical investigation, American Land Title Association (ALTA)/American Congress on Surveying and Mapping (ACSM) Survey, topographic survey, utilities survey, environmental, or site-specific air traffic study(s) have been utilized in the development of the design criteria. No warranty or assurance is implied in this document for final design nor construction for any airfield pavements discussed within this Report.

Major rehabilitation is divided into two policy categories as part of this System Update: Full-Depth Reconstruction (Reconstruction) and Intermediate Major Rehabilitation (Rehabilitation). Based on the pavement type, the general categories are defined as AC Reconstruction and AC Rehabilitation for AC, AAC, and APC pavement types; and PCC Reconstruction and PCC Rehabilitation for PCC pavement types. The pavement sections are based on the average GA Airport Type requirements; no pavement design has been performed in accordance with the FAA AC 150/5320-6F for the determined conceptual sections. **Table 5.5.1** provide details on the conceptual pavement sections developed for this study.

Table 5.5.1: Conceptual Pavement Sections for Major Rehabilitation

Rehabilitation Type	General Aviation Pavement Section
AC Reconstruction	
Full-depth asphalt pavement section reconstruction. Removal of existing pavement section and construction of a new section. **PCI = 54 or less**	Pavement Removal
	Unclassified Excavation
	Subgrade Stabilization (12")
	Limerock Base Course (6")
	Prime Coat
	Tack Coat
	P-401 Surface Course (3")
	Excludes any paved shoulder features
AC Rehabilitation	
Combination of asphalt pavement milling and replacement overlay with 25% of the areas subject to full-depth reconstruction. **PCI = 55 to 69**	**25% AC Reconstruction**
	Mill and Overlay
	AC Milling (3")
	Tack Coat
	P-401 Surface Course (3")
	Excludes any paved shoulder features
PCC Reconstruction	
Full-depth rigid pavement section reconstruction. **PCI = 54 or less**	Pavement Removal
	Unclassified Excavation
	Subgrade Stabilization (6")
	Limerock Base Course (6")
	P-501 PCC Pavement (8")
	PCC Joint Seal
PCC Rehabilitation	
Rehabilitation of PCC pavement with a combination of crack sealing, joint seal replacement, limited patching, and replacement of 25% of slab panels. **PCI = 55 to 69**	**25% Slab Replacement**
	Joint and Crack Seal
	Limited Patching

The identification of rehabilitation needs and conceptual pavement sections have been determined at the planning level. Design-level investigation is recommended prior to developing construction-level design documents and budgets. **This type of construction typically warrants consideration for non-pavement efforts that may include drainage, turfing, electrical lighting, pavement marking, construction contingency, mobilization costs, and project soft costs.**

Reconstruction (AC or PCC)

Reconstruction is the removal and replacement of the existing AC or PCC pavement and base layer and includes preparation of the existing subgrade material. This technique is utilized when the pavement is badly deteriorated or a structural improvement is required. Reconstruction is used when the pavements are structurally deficient and an overlay is not possible due to adjacent pavement grades.

AC Rehabilitation

AC Rehabilitation, for the purposes of this SAPMP, is a removal of all or a portion of the asphalt surface through milling and replacing the milled depth with an overlay of asphalt. This rehabilitation activity is typically applied to pavement that does not require a structural improvement and does not display an extensive amount of load-related distresses. However, this work type conservatively accounts for 25% of the planned area to receive a full-depth replacement of the pavement structure. This is meant to capture any deficiencies that may not be apparent from a visual evaluation of the surface of the pavement. This work type occurs on pavement sections with a PCI value above 54. As a general rule of thumb, intermediate rehabilitation activities have a shorter pavement life compared to a full-depth reconstruction, but AC Rehabilitation will still reset the pavement to a PCI of 100.

PCC Rehabilitation

PCC Rehabilitation, for the purposes of this SAPMP, is a planning-level estimate of several concurrent PCC maintenance activities intended to raise the PCI above Critical without reconstructing the entire area. This work type accounts for the replacement of 25% of the slabs as well as a PCC patching, crack sealing, and joint sealing for areas outside of the panel replacement. This work type occurs on pavement sections with a PCI value above 54.

5.5.2 Major Rehabilitation Planning-Level Unit Costs

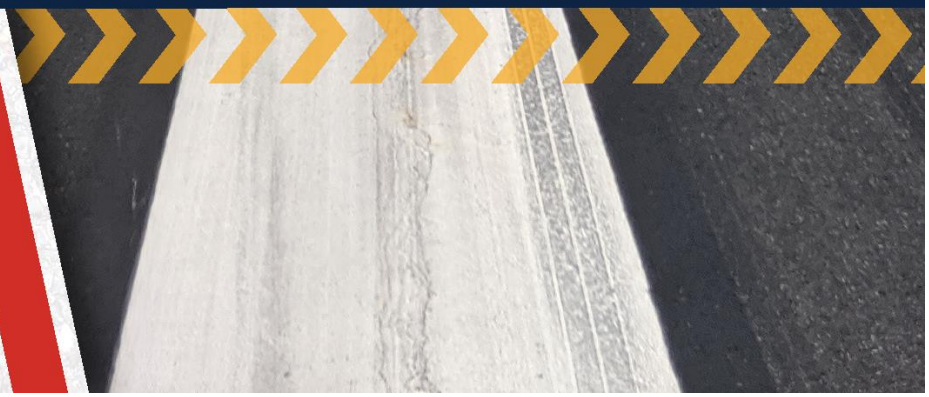
Planning-level opinions of probable construction cost developed for this System Update are based on archived bid tabulations and records from airfield pavement projects provided by participating airports. A review of cost trends and cost factors have been incorporated to assist airports in planning for project budgets.

Neither the FDOT nor the Consultant team have control over the cost of labor, materials, equipment, Contractor's methods of determining prices, or over competitive bidding or market conditions. Opinions of probable construction costs provided herein are based on the information known to the FDOT at this time and represent only the Consultant team's judgment as a design professional familiar with the construction industry. This Report cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable construction costs. **Table 5.5.2** depicts the associated work type planning-level unit costs for Major Rehabilitation for each pavement type.

Table 5.5.2: GA Major Rehabilitation Planning-Level Unit Cost by Pavement Type

Rehabilitation Type	PCI Range	Asphalt Concrete Cost per SF	Portland Cement Concrete Cost Per SF
Rehabilitation	55 to 69	$ 7.00	$ 14.00
Reconstruction	0 to 54	$ 10.50	$ 22.25

Chapter 6: M&R Planning and Budget Scenario Analysis



Chapter 6 – M&R Planning and Budget Scenario Analysis

6.1 Localized Maintenance and Repair Analysis and Recommendations

This FDOT SAPMP System Update provides a planning-level estimation of Localized Maintenance and Repair costs based on the results of the latest PCI assessment performed at the Airport. Due to the limited sample units inspected in certain pavement sections, a statistical extrapolation of distresses is used to estimate the quantities of recommended repair activities at the section level, based the policies defined in **5.4.4 Localized Maintenance and Repair Policy**. These work quantities are limited to a near-term application since they were determined directly from the PCI assessment efforts. As pavements continue to deteriorate year-to-year, quantities and/or distress severities may increase, which will affect the amount and type of localized maintenance required. This analysis can be utilized as a planning tool to assist airport staff in determining an annual budget allocation for maintenance activities that will help maintain airport pavements above the critical PCI value and extend the life of the pavement.

Table 6.1 (a) provides a summary of the anticipated planning-level costs for Year 1 Localized Preventive Maintenance and Localized Stopgap Maintenance. The following table depicts planning-level costs rounded up to the next 10-dollar increment.

Table 6.1 (a): Year 1 Summary of Localized Maintenance

Work Category		Cost
Preventive	$	9,790
Stopgap	$	-
Planning-Level Localized M&R Needs =	***$***	***9,790***

Localized Preventive Maintenance is typically applied to pavements that are in a condition above the critical PCI value of the pavement section. Localized Stopgap Maintenance is typically applied to pavement sections that are at or below the critical PCI value. Application of localized maintenance and repair should be coordinated with the planning of Major Rehabilitation efforts identified through the major rehabilitation analysis. Pavements with stopgap recommendations that are subject to near-term major rehabilitation efforts may remove the need to perform localized (stopgap) maintenance efforts in subsequent years.

Table 6.1 (b) summarizes the anticipated Year 1 Localized Maintenance recommendations by work type, based on the PCI assessment efforts performed as part of this SAPMP System Update. The following table depicts planning-level costs rounded up to the next 10-dollar increment.

Table 6.1 (b): Year 1 Localized Maintenance by Work Type Summary

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	Planning Material Cost
Localized Preventive Maintenance	Surface Seal	19,497	SF	$ 9,790

Table 6.1 (c) provides a breakdown of the anticipated planning-level costs by section for those areas exhibiting distresses that would benefit from Year 1 Localized M&R. The table shows the approximate improved "End Condition" PCI value of the section after the application of Localized M&R. This approximation is intended to depict a planning-level estimate of the effect of the localized M&R on the section-level PCI; the performance of the work does not guarantee the pavement will not deteriorate in other ways outside of the described treatment. The following table depicts planning-level costs rounded up to the next 10-dollar increment.

Table 6.1 (c): Section-Level Year 1 Localized M&R Planning Cost Summary

Network ID	Branch ID	Section ID	Area (SF)	Start PCI	End PCI	Cost
X01	RW 15-33	6105	32,850	48	48	$ -
X01	RW 15-33	6110	61,150	32	32	$ -
X01	RW 15-33	6115	26,300	50	50	$ -
X01	TW A	105	18,850	70	90	$ 4,720
X01	TW A	110	33,525	66	66	$ -
X01	TW A	115	3,886	64	64	$ -
X01	TW A	125	2,214	52	52	$ -
X01	TW A	130	12,060	86	86	$ -
X01	TW CONN	205	5,409	70	80	$ 1,360
X01	TW CONN	305	2,700	62	62	$ -
X01	TW CONN	310	5,521	70	77	$ 700
X01	AP	4105	12,400	76	92	$ 1,870
X01	AP	4110	12,546	81	87	$ 310
X01	AP RU 15	5105	3,500	69	69	$ -
X01	AP RU 33	5110	4,663	72	84	$ 830

6.2 Major Rehabilitation Needs

Major rehabilitation is identified within the FDOT SAPMP as a major construction activity that results in a substantial improvement to the pavement condition and resets the pavement section's PCI value to 100. Major rehabilitation recommendations (AC Rehabilitation, AC Reconstruction, PCC Rehabilitation, and PCC Reconstruction) should be considered as planning-level only. Additional design-level investigation in accordance with FAA Advisory Circulars is required. Recommendations identified within this planning document do not imply final design.

The objective of the Major Pavement Rehabilitation Needs analysis is to develop planning-level projects within an Airport's airfield pavement network. As depicted in **Figure 5.2 (a) and (b)** in **Chapter 5**, major rehabilitation activities are recommended when a pavement section has deteriorated below the critical PCI value, a point at which localized maintenance and repair activities may not be a cost-effective solution. In addition, major rehabilitation is also recommended when the section's PCI value is above the critical PCI value with the section exhibiting a significant amount of load-related distresses. Identification of rehabilitation needs is done at the section-level. This, however, does not limit the Airport from further refining limits of project planning areas.

6.2.1 10-Year Unconstrained Budget Major Rehabilitation Needs

Major rehabilitation needs are identified by analyzing the airport's pavement condition in relationship to critical PCI values, major rehabilitation policies, and unit costs, assuming there are no budget constraints. This is done over a 10-year analysis period. While this is financially impractical, it does yield the unbiased pavement needs over a 10-year time frame at the airport given current and forecasted pavement conditions. The FDOT recognizes that airports are constrained by budgets and does not intend to convey an unrealistic approach of addressing pavement rehabilitation. Each airport has a unique set of challenges and FDOT's goals are to provide it with the data needed to formulate a practical Capital Improvement Program and identify needs in the Joint Automated Capital Improvement Program (JACIP). This includes:

- An estimation of current pavement condition;
- Major pavement rehabilitation needs based on condition and policies; and
- Planning-level cost estimates for the major rehabilitation needs.

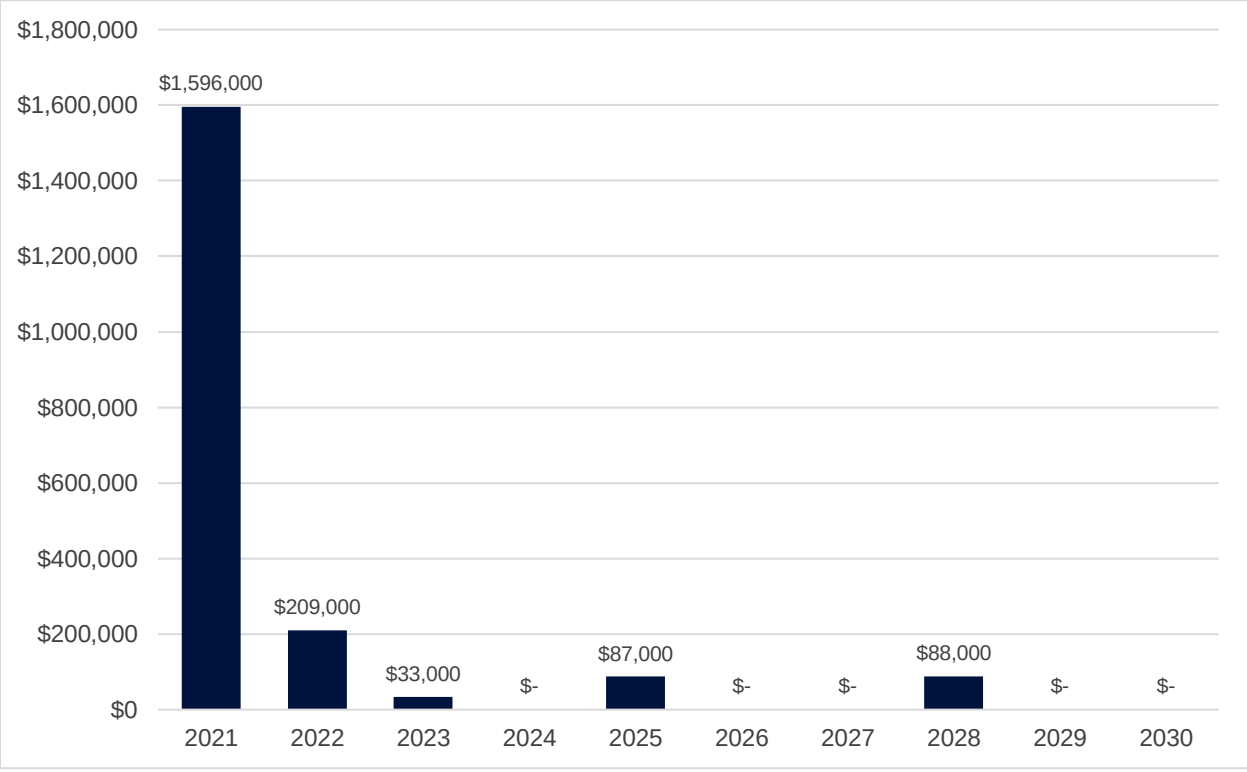
Table 6.2.1 (a) summarizes section-level major rehabilitation needs forecasted for a 10-year period. It should be noted that the following table depicts planning-level costs and has been rounded to the nearest $1,000 for planning purposes.

Table 6.2.1 (a): Section-Level 10-Year Major Rehabilitation Needs

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2021	X01	RW 15-33	6105	AC	32,850	48	AC Reconstruction	$ 345,000
2021	X01	RW 15-33	6110	AC	61,150	32	AC Reconstruction	$ 643,000
2021	X01	RW 15-33	6115	AC	26,300	50	AC Reconstruction	$ 277,000
2021	X01	TW A	110	AC	33,525	66	AC Rehabilitation	$ 235,000
2021	X01	TW A	115	AC	3,886	64	AC Rehabilitation	$ 28,000
2021	X01	TW A	125	AC	2,214	52	AC Reconstruction	$ 24,000
2021	X01	TW CONN	305	AC	2,700	62	AC Rehabilitation	$ 19,000
2021	X01	AP RU 15	5105	AC	3,500	68	AC Rehabilitation	$ 25,000
2022	X01	TW A	105	AC	18,850	68	AC Rehabilitation	$ 132,000
2022	X01	TW CONN	205	AC	5,409	68	AC Rehabilitation	$ 38,000
2022	X01	TW CONN	310	AC	5,521	68	AC Rehabilitation	$ 39,000
2023	X01	AP RU 33	5110	AC	4,663	68	AC Rehabilitation	$ 33,000
2025	X01	AP	4105	AC	12,400	69	AC Rehabilitation	$ 87,000
2028	X01	AP	4110	AC	12,546	68	AC Rehabilitation	$ 88,000

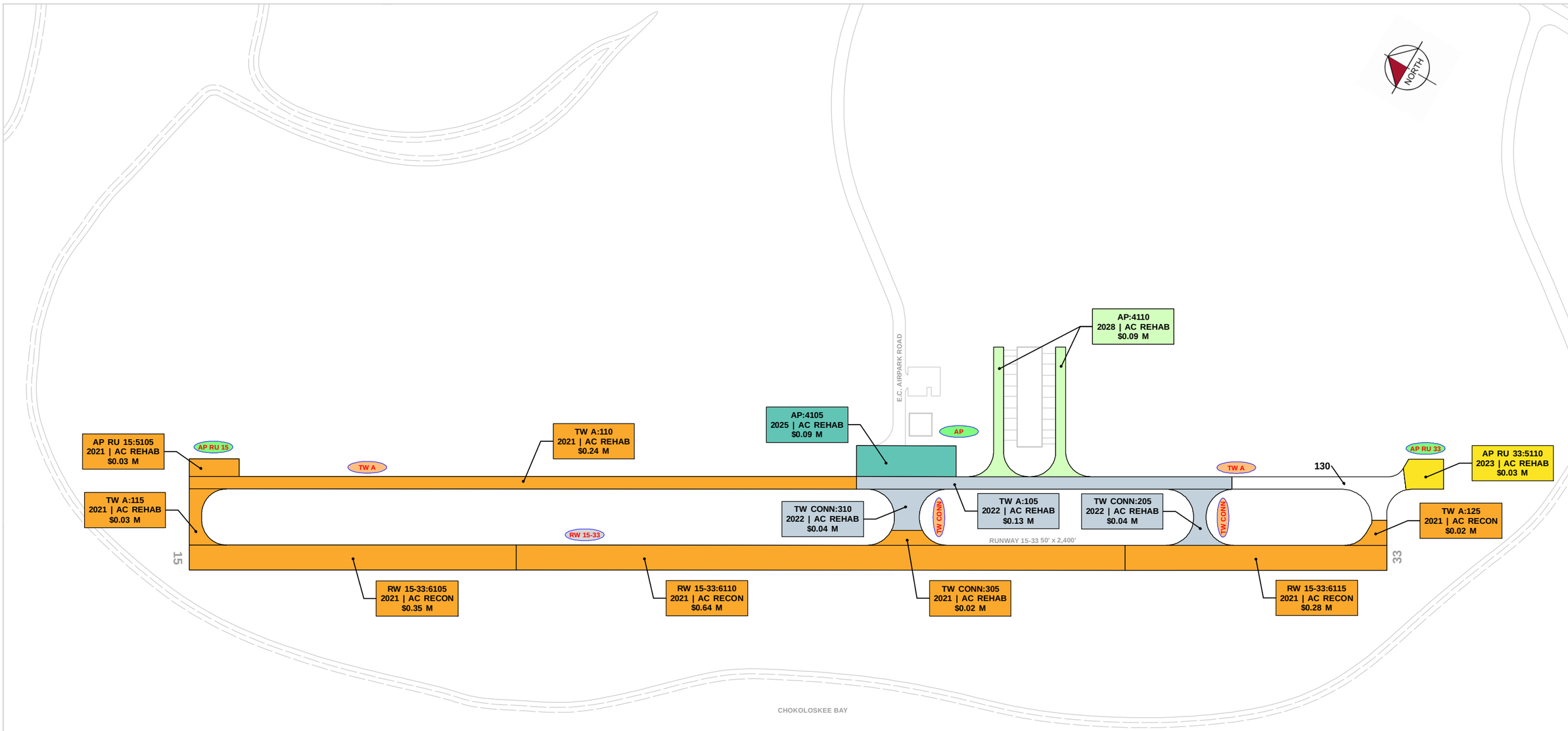
Figure 6.2.1 (a) summarizes the section-level major rehabilitation needs for a 10-year period between 2021 and 2030. **Figure 6.2.1 (b)**, the Airfield Pavement Major Rehabilitation Exhibit, graphically depicts the major rehabilitation needs with rounded costs. As suggested previously, this is planning-level data that can be used by the Airport to support developing a practical CIP.

Figure 6.2.1 (a): 10-Year Major Rehabilitation Needs by Program Year



X01

AIRFIELD PAVEMENT MAJOR REHABILITATION EXHIBIT



LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

PROGRAM YEAR

2021		2026	
2022		2027	
2023		2028	
2024		2029	
2025		2030	

"BRANCH":"SECTION"
"YEAR"|"REHAB ACTIVITY"
"EST. COST"

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

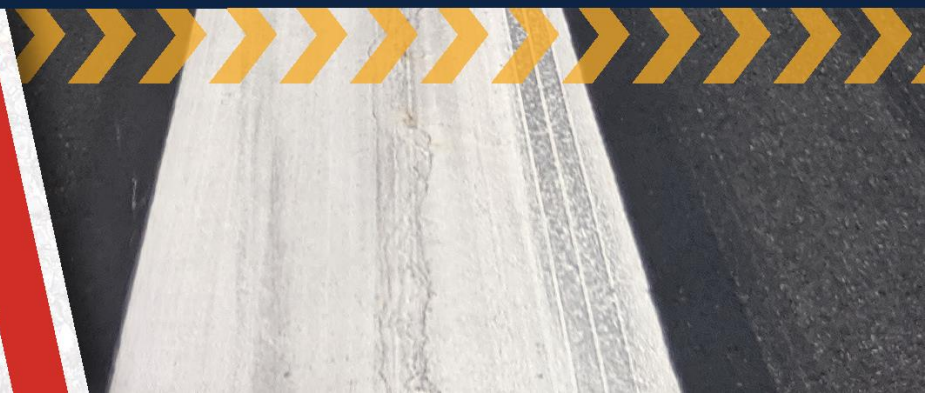
Statewide Airfield Pavement Management Program

EVERGLADES AIRPARK

FDOT

2021

Chapter 7: Conclusion



Chapter 7 – Conclusion

7.1 Recommendations

7.1.1 Continued PCI Surveys

It is recommended that the Airport continue to perform regularly scheduled PCI surveys in accordance with the ASTM D5340-12 (or latest edition) to monitor the condition of airfield pavement facilities.

A high priority should be placed on maintaining good record keeping and re-inspecting the Airport's maintained pavement facilities to ensure continued safe aircraft operations. Per the FAA AC 150/5380-7B, a series of scheduled periodic inspections must be carried out for an effective maintenance program. Re-inspection of pavements should be scheduled in a timely manner to ensure that all areas, particularly those that may not come under day-to-day observation, are thoroughly evaluated and reported.

7.1.2 Localized Maintenance and Repair

While deterioration of the pavements due to usage and exposure to the environment cannot be prevented, applying timely and effective maintenance efforts can slow the anticipated rate of deterioration. Lack of adequate and timely maintenance is a significant factor in pavement deterioration. **Chapter 6** identified localized maintenance and repair needs. It is recommended that Airport sponsors coordinate with their respective airport maintenance staff and airport engineer when developing project-level maintenance and repair efforts.

7.1.3 Major Rehabilitation

Chapter 6 also identified major pavement rehabilitation project needs from 2021-2030. Identification of these rehabilitation needs are performed at the section level for manageable project areas and assume an unconstrained budget scenario. Given the uncertainty in Airport-specific budget information and prioritization goals, the unconstrained budget scenario represents a conservative scenario and identifies pavement needs over a 10-year period. Certainly, it is understood that most airports are faced with constrained budgets, thus further evaluation of projects based on prioritization, operational criticality, funding availability, and practicality is recommended.

7.1.4 Pavement Management System

The following recommendations are made to fully implement an effective pavement management program for the Airport:

- Develop a detailed preventive maintenance program for the Airport based on the recommendations provided in **Section 6.1**;
- Further refine and implement the identified 10-year major rehabilitation needs provided in **Section 6.2**;
- Maintain detailed records on pavement maintenance, construction, and inspection; and
- Maintain records on major pavement construction projects (year, scope, cost, and construction documents).

7.2 Supporting Documents

Airfield Pavement Network Definition Exhibit

The Airfield Pavement Network Definition Exhibit is located in **Chapter 3** and **Appendix C**. The Exhibit depicts the airfield layout in a manner that defines the airfield pavement infrastructure as branches, sections, and sample units in accordance with the ASTM D5340-12. The Exhibit is intended for planning purposes only. Further details can be found on the Airport's adopted Airport Layout Plan. Detailed characteristics are tabulated in **Appendix A.**

Airfield Pavement System Inventory Exhibit

The Airfield Pavement System Inventory Exhibit is located in **Chapter 3** and **Appendix C**. The Exhibit depicts recent and/or anticipated construction activity within the airfield pavement facilities reported by Airport staff. The Exhibit is intended to schematically identify the pavement limits of work and general work description. The information reported on the Airport Response Form provided by each participating airport was used as the basis of the changes. Furthermore, changes are confirmed at the Airport with Airport staff during the in-brief and debrief meeting.

Airfield Pavement Estimated Age Exhibit

The Airfield Pavement Estimated Age Exhibit is located in **Chapter 3** and **Appendix C**. Based on the review of historic airfield pavement construction activities, the Exhibit provides the approximate limits of the age of the pavement sections since the last major construction activity has occurred. This is intended to be a rough estimate based on interpretation of the limited data available at the time of report.

Airfield Pavement Condition Index Exhibit

The Airfield Pavement Condition Index Exhibit is located in **Chapter 4** and **Appendix C**. The Exhibit is a visual summary of the latest conditions reported from the PCI assessment performed at the Airport. Distress analysis occurred in accordance with ASTM D5340-12 (referenced in **Appendix E**), with results being analyzed using PAVER™ software to determine PCI values. The PCI values are identified in the Exhibit and graphically represented using the standard ASTM D5340-12 condition rating categories.

Airfield Pavement Major Rehabilitation Exhibit

The Airfield Pavement Major Rehabilitation Exhibit is located in **Chapter 6** and **Appendix C**. The Exhibit has been prepared based on the section condition analysis, pavement condition forecasts, and major rehabilitation needs analysis. The Exhibit graphically depicts the inventory with the associated rehabilitation type activity, program year, and the planning-level costs. Area limits, rehabilitation type, and planning-level costs should not be considered a design-level recommendation. A tabulation of the 10-Year Major Rehabilitation is located in **Appendix B**.

Inspection Photograph Documentation

Representative field conditions from the PCI assessment are documented with digital photographs located in **Appendix D**. Select photographs are provided with a limited caption on the distress(es) observed. "Vicinity" photos refer to the approximate boundaries of an inspected sample unit within the section and provide an overview of the section condition but are not focused on a specific distress. The Appendix does not contain photographs for every section and sample unit.

7.3 Conclusion

The FDOT SAPMP System Update Phase 1 2020-2021 was completed for the Airport on behalf of the FDOT AO in accordance with the FAA AC 150/5380-7B and 150/5380-6C. FDOT's implementation of the SAPMP has assisted public airports with this requirement in performing PCI survey inspections and analysis in accordance with the ASTM D5340-12.

7.4 References

The following documents are referenced as specific guidelines and procedures for maintaining airport pavements, establishing an effective pavement maintenance program, and identifying specific pavement distresses, probable causes of distresses, survey guidelines, and recommended methods of repair.

- ASTM D5340-12, Standard Test Method for Airport Pavement Condition Index Surveys, American Society for Testing and Materials, West Conshohocken, PA, 2018.
- AC 150/5210-24 Airport Foreign Object Debris (FOD) Management, Federal Aviation Administration, Washington, D.C., 2010.
- AC 150/5320-6F, Airport Pavement Design and Evaluation, Federal Aviation Administration, Washington, D.C., 2016.
- AC 150/5380-7B, Airport Pavement Management Program (PMP), Federal Aviation Administration, Washington, D.C., 2014.
- AC 150/5380-6C, Guidelines and Procedures for Maintenance of Airport Pavements, Federal Aviation Administration, Washington, D.C., 2014.
- AC 150/5370-10H, Standard Specifications for Construction of Airports, Federal Aviation Administration, Washington, D.C., 2018.
- Airport Improvement Program Handbook, Order 5100.38D, Change 1, Federal Aviation Administration, Washington, D.C., 2019.
- Tri-Service Pavements Working Group (TSPWG) Manual 3-270-08. 14-03, Preventive Maintenance Plan (PMP) for Airfield Pavements, Department of Defense, Washington, D.C., 2019.
- Unified Facilities Criteria (UFC) 3-260-16, O&M Manual: Standard Practice for Airfield Pavement Condition Surveys, Department of Defense, Washington, D.C., 2018.
- Unified Facilities Criteria (UFC) 3-260-03, Airfield Pavement Evaluation, Department of Defense, Washington, D.C., 2001.
- Shahin, Mohamed Y., Pavement Management for Airports, Roads, and Parking Lots, Springer, 200

Appendix A: Airfield Pavement Analysis

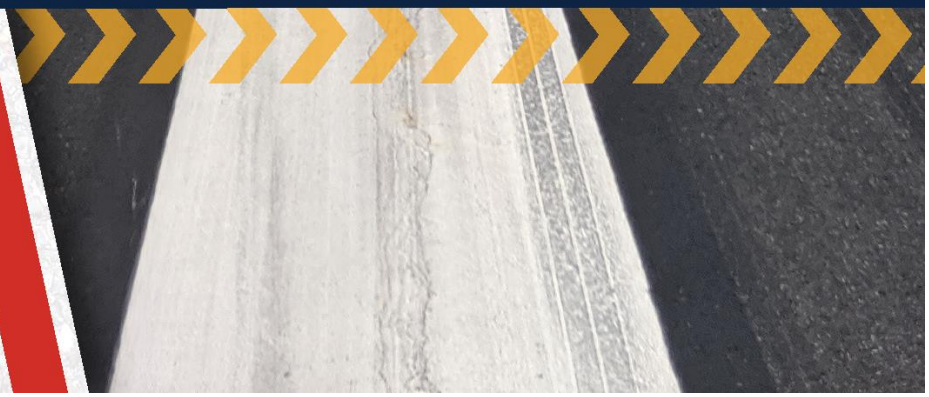


Table A.1: Pavement System Inventory Details

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
X01	RW 15-33	Runway	6105	32,850	AC	1/1/1969
X01	RW 15-33	Runway	6110	61,150	AC	1/1/1969
X01	RW 15-33	Runway	6115	26,300	AC	1/1/1969
X01	TW A	Taxiway	105	18,850	AC	1/1/1997
X01	TW A	Taxiway	110	33,525	AC	3/1/2005
X01	TW A	Taxiway	115	3,886	AC	1/1/2003
X01	TW A	Taxiway	125	2,214	AC	1/1/2003
X01	TW A	Taxiway	130	12,060	AC	1/1/2014
X01	TW CONN	Taxiway	205	5,409	AC	1/1/1997
X01	TW CONN	Taxiway	305	2,700	AC	1/1/1969
X01	TW CONN	Taxiway	310	5,521	AC	1/1/1996
X01	AP	Apron	4105	12,400	AC	1/1/1996
X01	AP	Apron	4110	12,546	AC	1/1/1997
X01	AP RU 15	Apron	5105	3,500	AC	1/1/2003
X01	AP RU 33	Apron	5110	4,663	AC	1/1/2003

Table A.2: Pavement Condition Index Summary (Current PCI Survey) – Section Level

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
X01	RW 15-33	Runway	6105	32,850	48	Poor
X01	RW 15-33	Runway	6110	61,150	32	Very Poor
X01	RW 15-33	Runway	6115	26,300	50	Poor
X01	TW A	Taxiway	105	18,850	70	Fair
X01	TW A	Taxiway	110	33,525	66	Fair
X01	TW A	Taxiway	115	3,886	64	Fair
X01	TW A	Taxiway	125	2,214	52	Poor
X01	TW A	Taxiway	130	12,060	86	Good
X01	TW CONN	Taxiway	205	5,409	70	Fair
X01	TW CONN	Taxiway	305	2,700	62	Fair
X01	TW CONN	Taxiway	310	5,521	70	Fair
X01	AP	Apron	4105	12,400	76	Satisfactory
X01	AP	Apron	4110	12,546	81	Satisfactory
X01	AP RU 15	Apron	5105	3,500	69	Fair
X01	AP RU 33	Apron	5110	4,663	72	Satisfactory

Table A.3: Forecasted PCI Values 2021-2030 – Section-Level

Network ID	Branch ID	Section ID	Current PCI	Forecasted PCI									
				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
X01	RW 15-33	6105	48	48	48	47	46	46	45	45	44	44	43
X01	RW 15-33	6110	32	32	31	30	29	28	27	26	25	24	24
X01	RW 15-33	6115	50	50	49	49	48	48	47	47	46	46	45
X01	TW A	105	70	70	68	67	66	65	64	63	62	62	61
X01	TW A	110	66	66	65	64	63	62	61	60	60	59	58
X01	TW A	115	64	64	63	62	61	60	60	59	58	58	57
X01	TW A	125	52	52	52	51	51	50	50	50	49	49	48
X01	TW A	130	86	85	83	81	80	78	76	75	73	72	71
X01	TW CONN	205	70	70	68	67	66	65	64	63	62	62	61
X01	TW CONN	305	62	62	61	60	60	59	58	58	57	56	56
X01	TW CONN	310	70	70	68	67	66	65	64	63	62	62	61
X01	AP	4105	76	75	73	72	70	69	67	66	65	63	62
X01	AP	4110	81	80	78	76	75	73	71	70	68	67	65
X01	AP RU 15	5105	69	68	67	65	64	63	62	60	59	58	57
X01	AP RU 33	5110	72	71	70	68	67	65	64	63	62	60	59

Pavement Database: FDOT

Network: EVERGLADES AIRP **Branch:** AP RU 15 RUN-UP APRON **Section:** 5105 **Surface:**AC

L.C.D. 1/1/2003 **Use:** APRON **Rank:** P **Length:** 100.00 (Ft) **Width:** 35.00 (Ft) **Est. Area:** 3500.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2003	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: EVERGLADES AIRP **Branch:** AP RU 33 RUN-UP APRON **Section:** 5110 **Surface:**AC

L.C.D. 1/1/2003 **Use:** APRON **Rank:** P **Length:** 80.00 (Ft) **Width:** 50.00 (Ft) **Est. Area:** 4663.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2003	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: EVERGLADES AIRP **Branch:** AP APRON **Section:** 4105 **Surface:**AC

L.C.D. 1/1/1996 **Use:** APRON **Rank:** P **Length:** 200.00 (Ft) **Width:** 62.00 (Ft) **Est. Area:** 12400.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1996	IMPORTED	BUILT	0.00	0.00	☑	1996 AC PAVEMEMNT
1/1/1996	IMPORTED	OVERLAY	0.00	2.00	☑	2" AC ON 6" LIMEROCK ON 12" SUBBASE

Network: EVERGLADES AIRP **Branch:** AP APRON **Section:** 4110 **Surface:**AC

L.C.D. 1/1/1997 **Use:** APRON **Rank:** P **Length:** 520.00 (Ft) **Width:** 20.00 (Ft) **Est. Area:** 12546.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1997	IMPORTED	BUILT	0.00	0.00	☑	1997 AC PAVEMENT
1/1/1997	IMPORTED	OVERLAY	0.00	2.00	☑	2" S-1 AC ON 6" P211 ON 12" STABILIZED SUBBASE

Network: EVERGLADES AIRP **Branch:** RW 15-33 RUNWAY 15-33 **Section:** 6105 **Surface:**AC

L.C.D. 1/1/1969 **Use:** RUNWAY **Rank:** P **Length:** 656.00 (Ft) **Width:** 50.00 (Ft) **Est. Area:** 32850.00001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1969	IMPORTED	BUILT	0.00	1.00	☑	1969: 1" AC ON 6" BASE COURSE

Network: EVERGLADES AIRP **Branch:** RW 15-33 RUNWAY 15-33 **Section:** 6110 **Surface:**AC

L.C.D. 1/1/1969 **Use:** RUNWAY **Rank:** P **Length:** 1,226.00 (Ft) **Width:** 50.00 (Ft) **Est. Area:** 61150.00001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1969	IMPORTED	BUILT	0.00	1.00	☑	1" AC ON 6" BASE COURSE - ASSUME THIS IS 1969 PAVEMENT

Network: EVERGLADES AIRP **Branch:** RW 15-33 RUNWAY 15-33 **Section:** 6115 **Surface:**AC

L.C.D. 1/1/1969 **Use:** RUNWAY **Rank:** P **Length:** 530.00 (Ft) **Width:** 50.00 (Ft) **Est. Area:** 26300.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1969	IMPORTED	BUILT	0.00	1.00	☑	1969: 1" AC ON 6" BASE COURSE

Network: EVERGLADES AIRP **Branch:** TW A TAXIWAY A **Section:** 105 **Surface:**AC

L.C.D. 1/1/1997 **Use:** TAXIWAY **Rank:** P **Length:** 754.00 (Ft) **Width:** 25.00 (Ft) **Est. Area:** 18850.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1997	IMPORTED	BUILT	0.00	2.00	☑	1997: 2" S-1(AC) ON 6" P211 (LIMEROCK) ON 12" STABILIZED

Network: EVERGLADES AIRP **Branch:** TW A TAXIWAY A **Section:** 110 **Surface:**AC

L.C.D. 3/1/2005 **Use:** TAXIWAY **Rank:** P **Length:** 1,350.00 (Ft) **Width:** 25.00 (Ft) **Est. Area:** 33525.00001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
3/1/2005	CR-AC	Complete Reconstruction - AC	0.00	0.00	☑	
1/1/2004	NU-IN	New Construction - Initial	0.00	2.00	☑	2"AC/6"Limerock Base/12"Stab Subg

Network: EVERGLADES AIRP **Branch:** TW A TAXIWAY A **Section:** 115 **Surface:**AC

L.C.D. 1/1/2003 **Use:** TAXIWAY **Rank:** P **Length:** 50.00 (Ft) **Width:** 95.00 (Ft) **Est. Area:** 3886.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2003	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: EVERGLADES AIRP **Branch:** TW A TAXIWAY A **Section:** 125 **Surface:**AC

L.C.D. 1/1/2003 **Use:** TAXIWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 25.00 (Ft) **Est. Area:** 2214.000000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2003	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: EVERGLADES AIRP **Branch:** TW A TAXIWAY A **Section:** 130 **Surface:**AC

L.C.D. 1/1/2014 **Use:** TAXIWAY **Rank:** P **Length:** 300.00 (Ft) **Width:** 40.00 (Ft) **Est. Area:** 12060.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: EVERGLADES AIRP **Branch:** TW CONN TAXIWAY A CO **Section:** 205 **Surface:**AC

L.C.D. 1/1/1997 **Use:** TAXIWAY **Rank:** P **Length:** 140.00 (Ft) **Width:** 40.00 (Ft) **Est. Area:** 5409.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1997	IMPORTED	BUILT	0.00	2.00	☑	1997: 2" S-1(AC) ON 6" P211 (LIMEROCK) ON 12" STABILIZED

Network: EVERGLADES AIRP **Branch:** TW CONN TAXIWAY A CO **Section:** 305 **Surface:**AC

L.C.D. 1/1/1969 **Use:** TAXIWAY **Rank:** P **Length:** 92.00 (Ft) **Width:** 30.00 (Ft) **Est. Area:** 2700.000000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1969	IMPORTED	BUILT	0.00	1.00	☑	1969: 1" AC ON 6" LIMEROCK

Network: EVERGLADES AIRP **Branch:** TW CONN TAXIWAY A CO **Section:** 310 **Surface:**AC
L.C.D. 1/1/1996 **Use:** TAXIWAY **Rank:** P **Length:** 83.00 (Ft) **Width:** 50.00 (Ft) **Est. Area:** 5521.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/1996	IMPORTED	BUILT	0.00	0.00	☑	1996 AC PAVEMEMNT
1/1/1996	IMPORTED	OVERLAY	0.00	2.00	☑	2" AC ON 6" LIMEROCK ON 12" SUBBASE

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	9	177,726.00	0.89	0.74
Complete Reconstruction - AC	1	33,525.00	0.00	0.00
New Construction - AC	5	26,323.00	0.00	0.00
New Construction - Initial	1	33,525.00	2.00	0.00
OVERLAY	3	30,467.00	2.00	0.00

Branch Condition Report

Pavement Database: FDOT

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	Est. Area (SqFt)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
AP	2	720.00	41.00	24,946.00	APRON	78.50	2.50	78.51
AP RU 15	1	100.00	35.00	3,500.00	APRON	69.00	0.00	69.00
AP RU 33	1	80.00	50.00	4,663.00	APRON	72.00	0.00	72.00
RW 15-33	3	2,412.00	50.00	120,300.00	RUNWAY	43.33	8.06	40.30
TW A	5	2,554.00	42.00	70,535.00	TAXIWAY	67.60	10.98	69.94
TW CONN	3	315.00	40.00	13,630.00	TAXIWAY	67.33	3.77	68.42

Pavement Database: FDOT

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average STD PCI	Weighted Average PCI
APRON	4	33,109.00	74.50	4.50	76.59
RUNWAY	3	120,300.00	43.33	8.06	40.30
TAXIWAY	8	84,165.00	67.50	8.99	69.69
ALL	15	237,574.00	64.53	13.51	55.77

Pavement Database: FDOT *NetworkId: X01*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	Est. Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4105	1/1/1996	AC	APRON	P	0	12,400.00	9/14/2020	24	76
AP	4110	1/1/1997	AC	APRON	P	0	12,546.00	9/14/2020	23	81
AP RU 15	5105	1/1/2003	AC	APRON	P	0	3,500.00	9/14/2020	17	69
AP RU 33	5110	1/1/2003	AC	APRON	P	0	4,663.00	9/14/2020	17	72
RW 15-33	6105	1/1/1969	AC	RUNWAY	P	0	32,850.00	9/14/2020	51	48
RW 15-33	6110	1/1/1969	AC	RUNWAY	P	0	61,150.00	9/14/2020	51	32
RW 15-33	6115	1/1/1969	AC	RUNWAY	P	0	26,300.00	9/14/2020	51	50
TW A	105	1/1/1997	AC	TAXIWAY	P	0	18,850.00	9/14/2020	23	70
TW A	110	3/1/2005	AC	TAXIWAY	P	0	33,525.00	9/14/2020	15	66
TW A	115	1/1/2003	AC	TAXIWAY	P	0	3,886.00	9/14/2020	17	64
TW A	125	1/1/2003	AC	TAXIWAY	P	0	2,214.00	9/14/2020	17	52
TW A	130	1/1/2014	AC	TAXIWAY	P	0	12,060.00	9/14/2020	6	86
TW CONN	205	1/1/1997	AC	TAXIWAY	P	0	5,409.00	9/14/2020	23	70
TW CONN	305	1/1/1969	AC	TAXIWAY	P	0	2,700.00	9/14/2020	51	62
TW CONN	310	1/1/1996	AC	TAXIWAY	P	0	5,521.00	9/14/2020	24	70

Pavement Database: FDOT

Age Category	Average Age at Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
06-10	6	12,060.00	1	86.00	0.00	86.00
11-15	15	33,525.00	1	66.00	0.00	66.00
16-20	17	14,263.00	4	64.25	7.63	65.98
21-25	23	54,726.00	5	73.40	4.45	73.88
50+	51	123,000.00	4	48.00	10.68	40.78
ALL	27	237,574.00	15	64.53	13.51	55.77

Appendix B: Maintenance and Rehabilitation Planning Needs

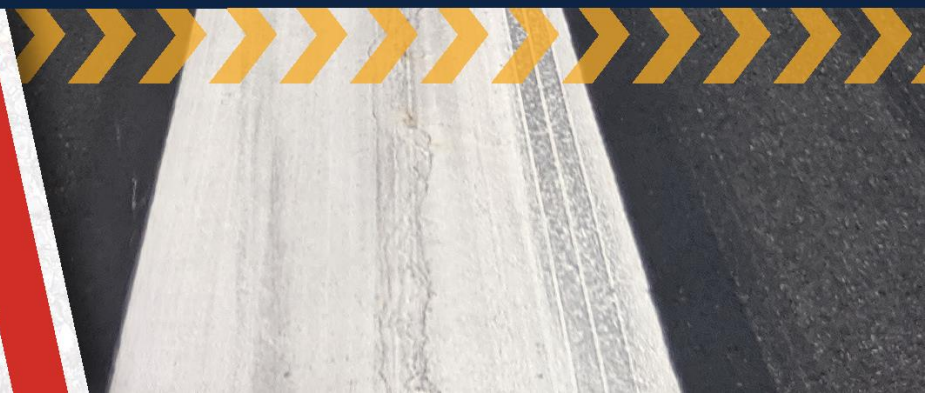


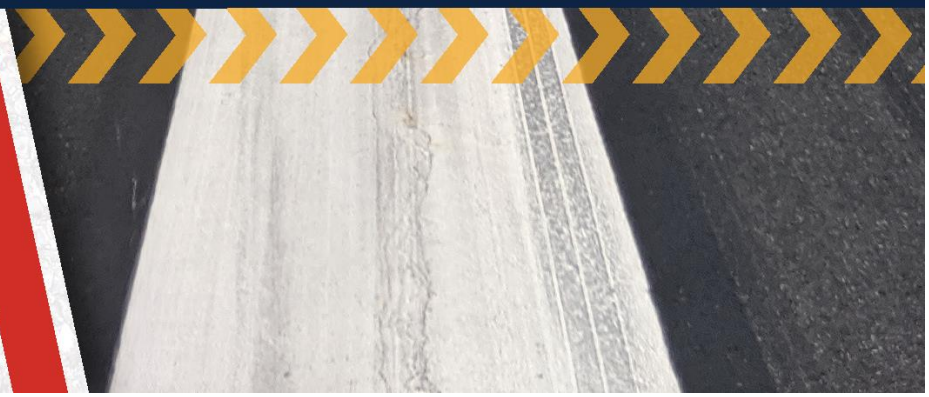
Table B.1: Localized Maintenance and Repair Needs Based on Current Distresses

Network ID	Branch ID	Section ID	Description	Severity	Distress Qty	Distress Unit	Distress Density	Policy Type	Localized Work Type	Work Qty	Work Unit	Unit Cost	Work Cost
X01	TW A	105	RAVELING	Low	9,425	SF	50.0%	Preventive	Surface Seal	9,425	SF	$ 0.50	$ 4,720
X01	TW CONN	205	RAVELING	Low	2,704	SF	50.0%	Preventive	Surface Seal	2,704	SF	$ 0.50	$ 1,360
X01	TW CONN	310	RAVELING	Low	1,380	SF	25.0%	Preventive	Surface Seal	1,380	SF	$ 0.50	$ 700
X01	AP	4105	RAVELING	Low	3,720	SF	30.0%	Preventive	Surface Seal	3,720	SF	$ 0.50	$ 1,870
X01	AP	4110	RAVELING	Low	618	SF	4.9%	Preventive	Surface Seal	618	SF	$ 0.50	$ 310
X01	AP RU 33	5110	RAVELING	Low	1,650	SF	35.4%	Preventive	Surface Seal	1,650	SF	$ 0.50	$ 830

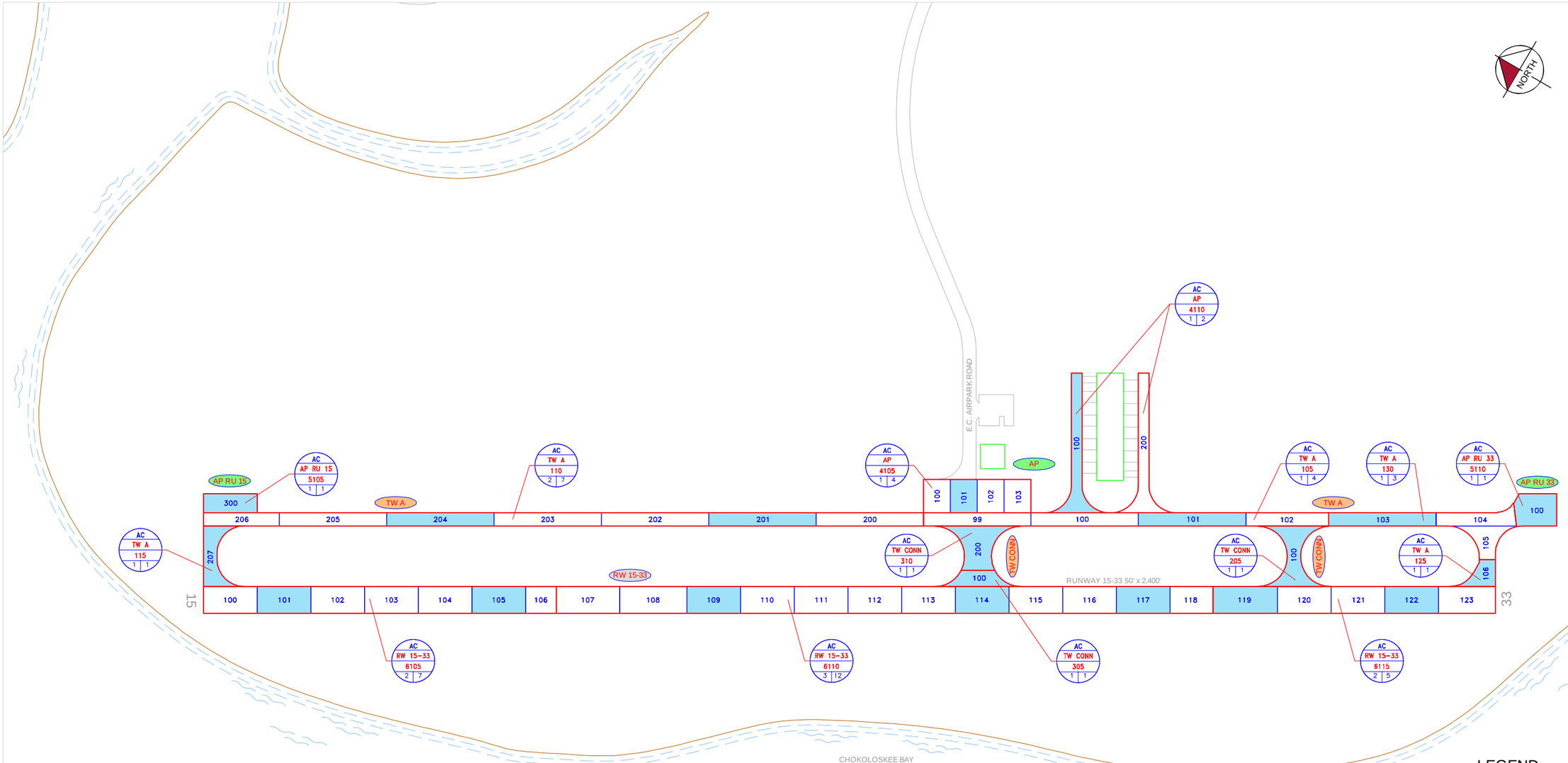
Table B.2: Section-Level 10-Year Major Rehabilitation Needs

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2021	**X01**	RW 15-33	6105	AC	32,850	48	AC Reconstruction	$ 345,000
2021	**X01**	RW 15-33	6110	AC	61,150	32	AC Reconstruction	$ 643,000
2021	**X01**	RW 15-33	6115	AC	26,300	50	AC Reconstruction	$ 277,000
2021	**X01**	TW A	110	AC	33,525	66	AC Rehabilitation	$ 235,000
2021	**X01**	TW A	115	AC	3,886	64	AC Rehabilitation	$ 28,000
2021	**X01**	TW A	125	AC	2,214	52	AC Reconstruction	$ 24,000
2021	**X01**	TW CONN	305	AC	2,700	62	AC Rehabilitation	$ 19,000
2021	**X01**	AP RU 15	5105	AC	3,500	68	AC Rehabilitation	$ 25,000
2022	**X01**	TW A	105	AC	18,850	68	AC Rehabilitation	$ 132,000
2022	**X01**	TW CONN	205	AC	5,409	68	AC Rehabilitation	$ 38,000
2022	**X01**	TW CONN	310	AC	5,521	68	AC Rehabilitation	$ 39,000
2023	**X01**	AP RU 33	5110	AC	4,663	68	AC Rehabilitation	$ 33,000
2025	**X01**	AP	4105	AC	12,400	69	AC Rehabilitation	$ 87,000
2028	**X01**	AP	4110	AC	12,546	68	AC Rehabilitation	$ 88,000

Appendix C: Technical Exhibits



X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- AAC / AP MAIN / 4105 / 10 | 100 — PAVEMENT SURFACE TYPE; PAVEMENT BRANCH ID; SECTION NUMBER; NUMBER OF SAMPLE UNITS IN SECTION; NUMBER OF SAMPLE UNITS TO BE INSPECTED
- AAC / AP MAIN / 4105 / 0 | 100 — SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.
- 100 — INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 20
AC: 20 PCC: 0

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE

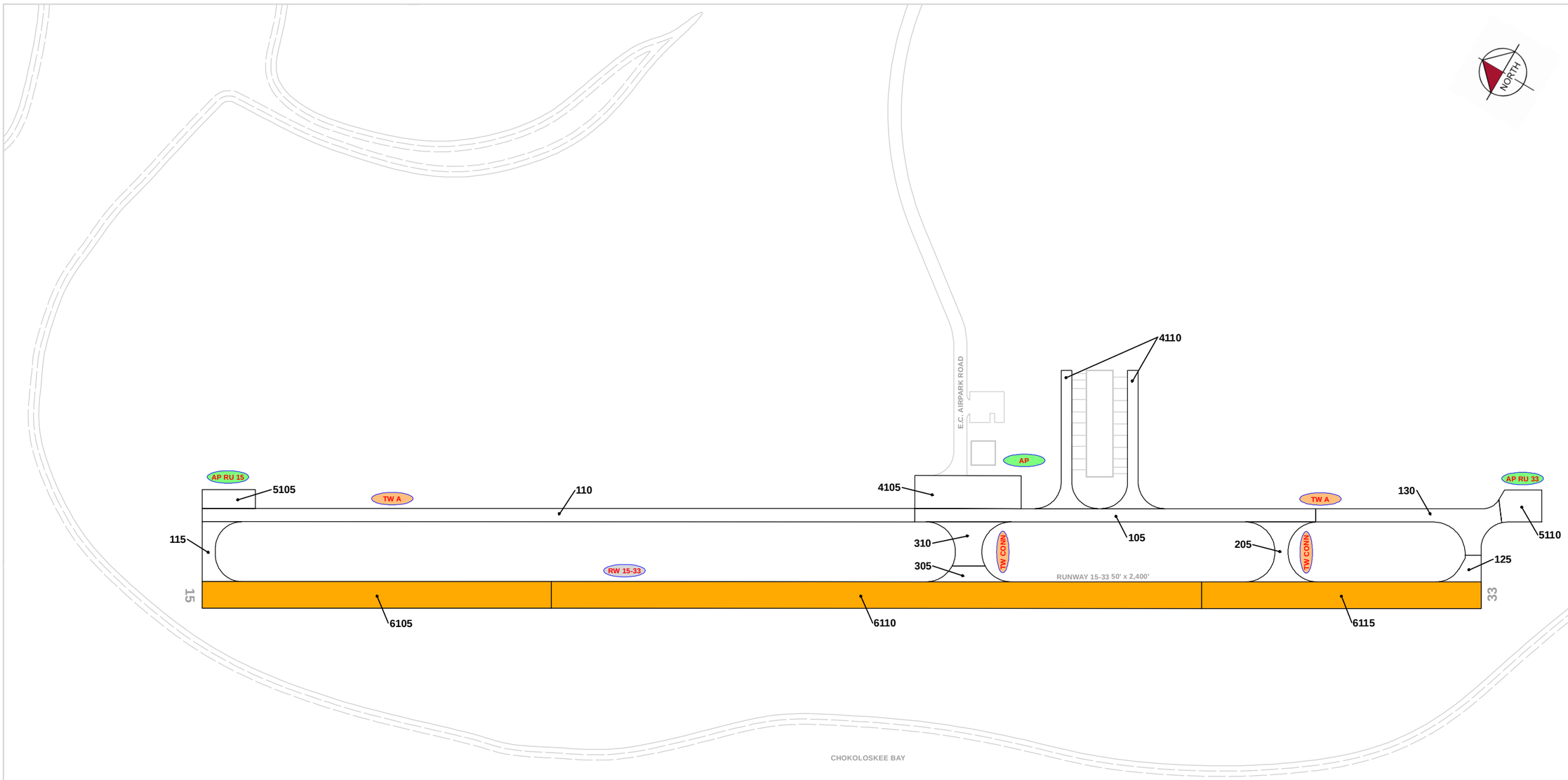
AIRFIELD PAVEMENT NETWORK DEFINITION EXHIBIT

Statewide Airfield Pavement Management Program
EVERGLADES AIRPARK

FDOT

2021

X01



RECENT & ANTICIPATED CONSTRUCTION ACTIVITY

CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
2022	RW 15-33	Complete Reconstruction - AC

LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

PROJECT YEAR

2016		2021	
2017		2022	
2018		2023	
2019		2024	
2020		2025	

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

AIRFIELD PAVEMENT SYSTEM INVENTORY EXHIBIT

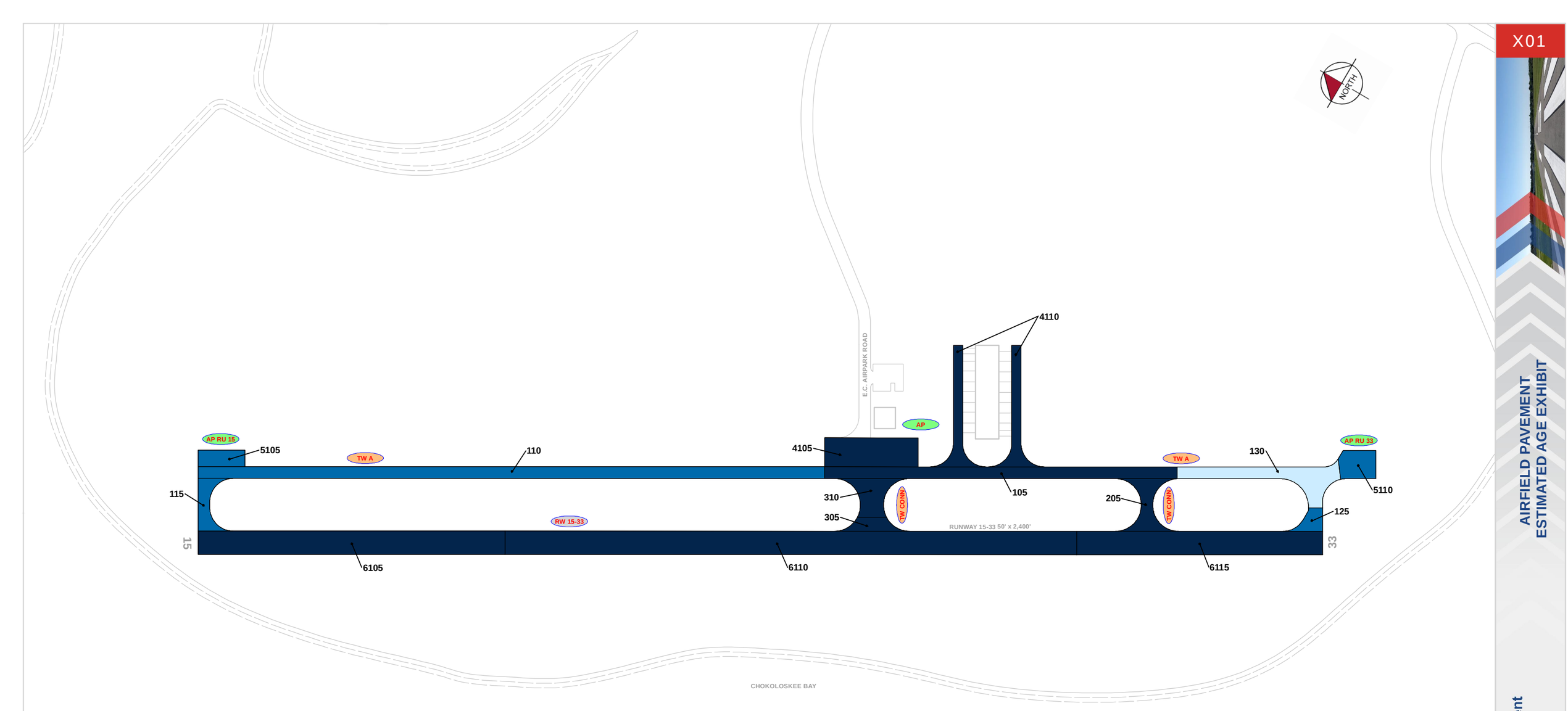
Statewide Airfield Pavement Management Program

EVERGLADES AIRPARK

FDOT

2021

X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

AGE AT INSPECTION

- 0-5 Years
- 6-10 Years
- 11-15 Years
- 16-20 Years
- > 20 Years

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

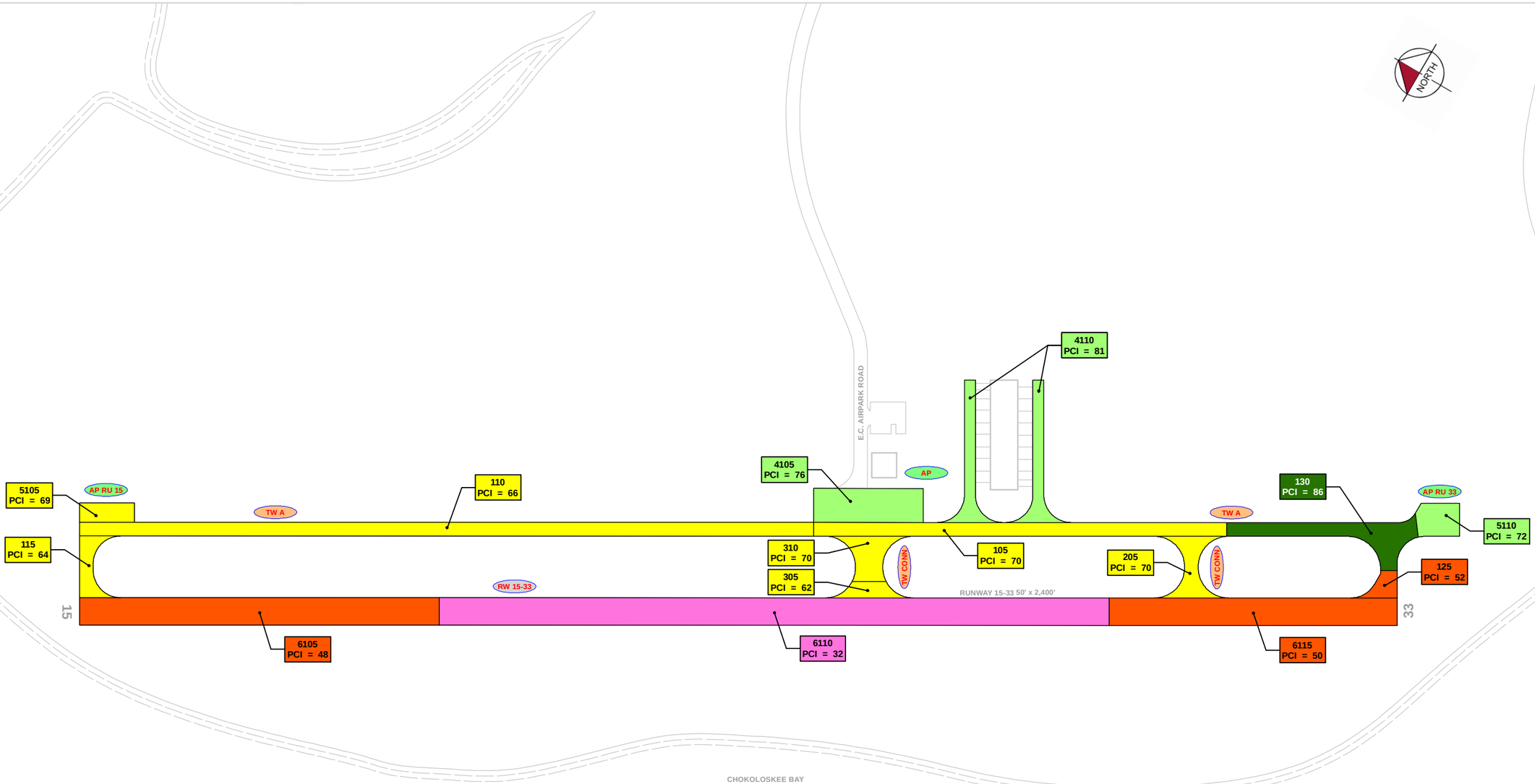
AIRFIELD PAVEMENT
ESTIMATED AGE EXHIBIT

Statewide Airfield Pavement Management Program
EVERGLADES AIRPARK

FDOT

2021

X01



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

2020 PAVEMENT CONDITION INDEX

- PCI 86-100 Good
- PCI 71-85 Satisfactory
- PCI 56-70 Fair
- PCI 41-55 Poor
- PCI 26-40 Very Poor
- PCI 11-25 Serious
- PCI 0-10 Failed

"SECTION ID"
"PCI VALUE"

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

AIRFIELD PAVEMENT CONDITION INDEX EXHIBIT

Statewide Airfield Pavement Management Program

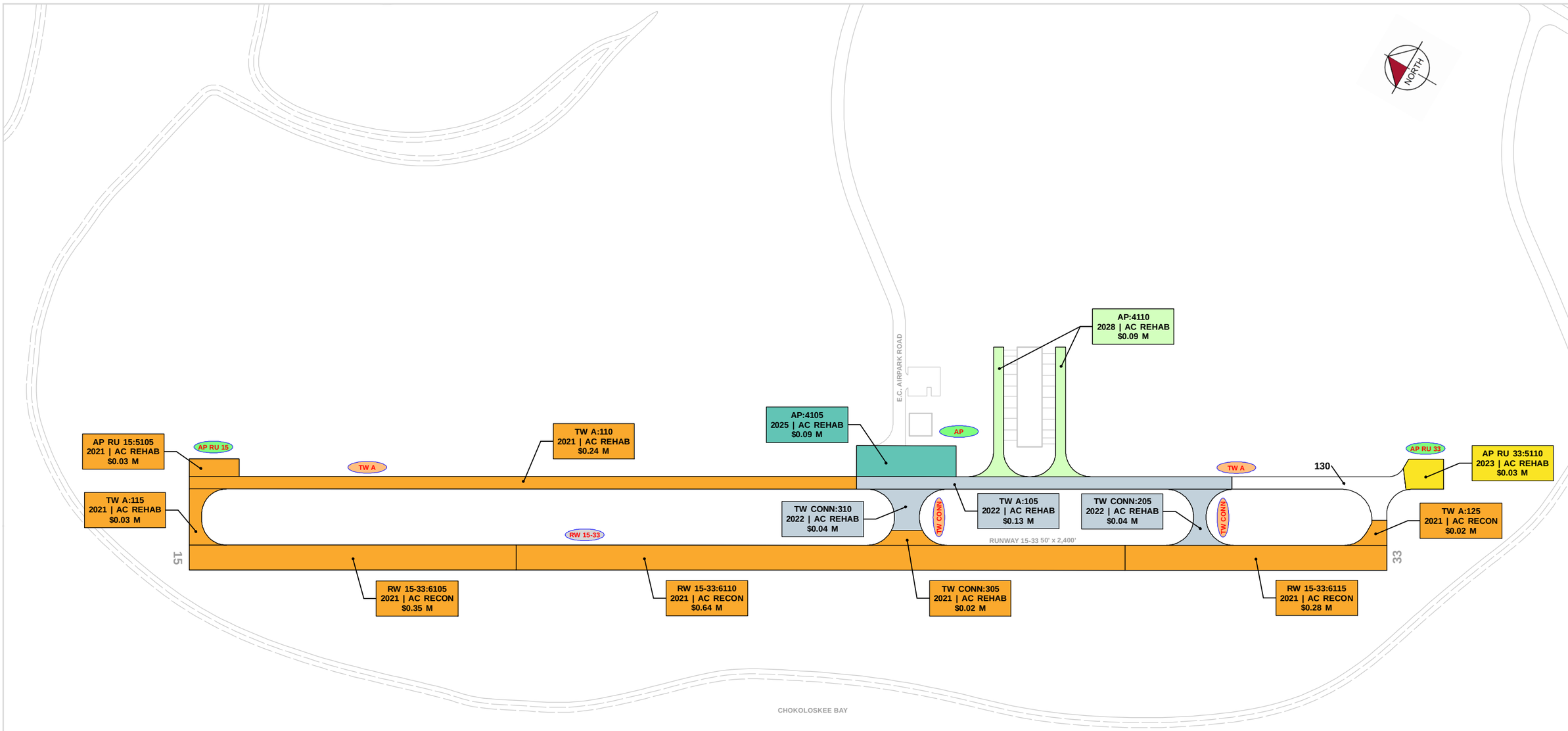
EVERGLADES AIRPARK

FDOT

2021

X01

AIRFIELD PAVEMENT MAJOR REHABILITATION EXHIBIT



LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

PROGRAM YEAR

2021		2026	
2022		2027	
2023		2028	
2024		2029	
2025		2030	

"BRANCH":"SECTION"
"YEAR"|"REHAB ACTIVITY"
"EST. COST"

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

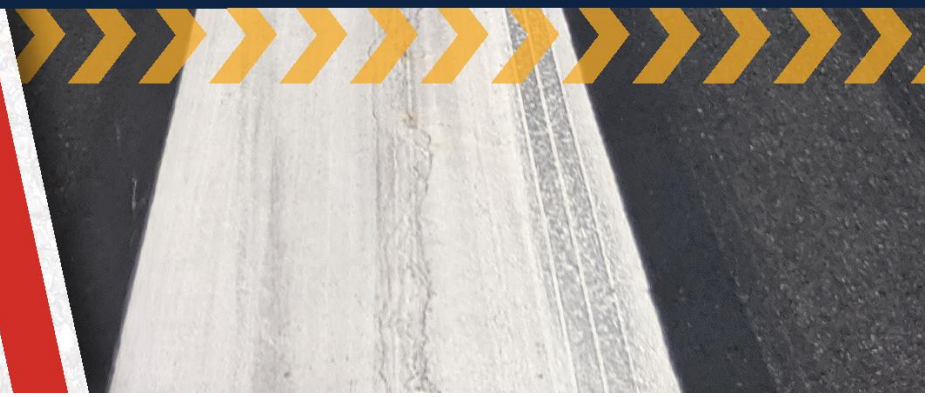
Statewide Airfield Pavement Management Program

EVERGLADES AIRPARK

FDOT

2021

Appendix D: Inspection Photograph Documentation



RW 15-33, Section 6110, Sample Unit 117 - Block Cracking

RW 15-33, Section 6115, Sample Unit 119 - Depression

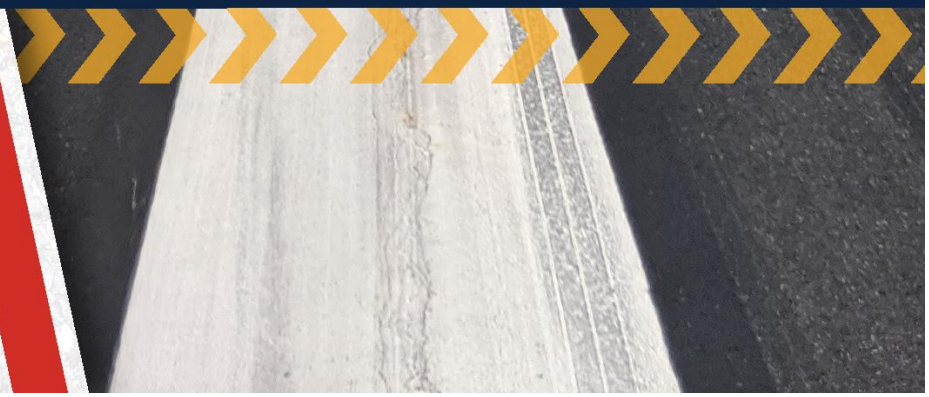
TW A, Section 125, Sample Unit 106 - Patching

TW CONN, Section 305, Sample Unit 100 - Vicinity

AP, Section 4110, Sample Unit 100 - Patching

AP RU 33, Section 5110, Sample Unit 100 - Vicinity

Appendix E: Inspection Distress Details



Re-Inspection Report

FDOT
Generated Date 3/3/2021

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: AP **Name:** APRON **Use:** APRON **Area:** 24,946 SqFt

Section: 4105 of 2 **From:** - **To:** - **Last Const.:** 1/1/1996

Surface: AC **Family:** CA653-GA-AP-AC **Zone:** **Category:** **Rank:** P

Area: 12,400 SqFt **Length:** 200 Ft **Width:** 62 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1996 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Work Date: 1/1/1996 **Work Type:** OVERLAY **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 4 **Surveyed:** 1

Conditions: **PCI:** 76

Inspection Comments:

Sample Number: 101 **Type:** R **Area:** 3100.00 SqFt **PCI:** 76

Sample Comments:

48	L & T CR	L	3.00	Ft
52	RAVELING	L	930.00	SqFt
57	WEATHERING	L	2170.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: AP **Name:** APRON **Use:** APRON **Area:** 24,946 SqFt

Section: 4110 of 2 **From:** - **To:** - **Last Const.:** 1/1/1997

Surface: AC **Family:** CA653-GA-AP-AC **Zone:** **Category:** **Rank:** P

Area: 12,546 SqFt **Length:** 520 Ft **Width:** 20 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1997 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Work Date: 1/1/1997 **Work Type:** OVERLAY **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 2 **Surveyed:** 1

Conditions: **PCI:** 81

Inspection Comments:

Sample Number: 100 **Type:** R **Area:** 6273.00 SqFt **PCI:** 81

Sample Comments:

48	L & T CR	L	9.00	Ft
50	PATCHING	L	100.00	SqFt
52	RAVELING	L	309.00	SqFt
57	WEATHERING	L	5864.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: AP RU 15 **Name:** RUN-UP APRON 15 **Use:** APRON **Area:** 3,500 SqFt

Section: 5105 of 1 **From:** - **To:** - **Last Const.:** 1/1/2003

Surface: AC **Family:** CA653-GA-AP-AC **Zone:** **Category:** **Rank:** P

Area: 3,500 SqFt **Length:** 100 Ft **Width:** 35 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 69

Inspection Comments:

Sample Number: 300 **Type:** R **Area:** 3500.00 SqFt **PCI:** 69

Sample Comments:

48	L & T CR	L	24.00	Ft
52	RAVELING	L	3500.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: AP RU 33 **Name:** RUN-UP APRON 33 **Use:** APRON **Area:** 4,663 SqFt

Section: 5110 of 1 **From:** - **To:** - **Last Const.:** 1/1/2003

Surface: AC **Family:** CA653-GA-AP-AC **Zone:** **Category:** **Rank:** P

Area: 4,663 SqFt **Length:** 80 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 72

Inspection Comments:

Sample Number: 100 **Type:** R **Area:** 4663.00 SqFt **PCI:** 72

Sample Comments:

48	L & T CR	L	166.00	Ft
52	RAVELING	L	1650.00	SqFt
57	WEATHERING	L	3013.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: RW 15-33 **Name:** RUNWAY 15-33 **Use:** RUNWAY **Area:** 120,300 SqFt

Section: 6105 of 3 **From:** - **To:** - **Last Const.:** 1/1/1969

Surface: AC **Family:** CA653-GA-RW-AC **Zone:** **Category:** **Rank:** P

Area: 32,850 SqFt **Length:** 656 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1969 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 7 **Surveyed:** 2

Conditions: **PCI:** 48

Inspection Comments:

Sample Number: 101 **Type:** R **Area:** 5000.00 SqFt **PCI:** 48

Sample Comments:

43	BLOCK CR	L	3100.00	SqFt
48	L & T CR	L	227.00	Ft
52	RAVELING	L	4400.00	SqFt
52	RAVELING	M	600.00	SqFt

Sample Number: 105 **Type:** R **Area:** 5000.00 SqFt **PCI:** 48

Sample Comments:

43	BLOCK CR	L	3100.00	SqFt
48	L & T CR	L	124.00	Ft
52	RAVELING	L	4400.00	SqFt
52	RAVELING	M	600.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: RW 15-33 **Name:** RUNWAY 15-33 **Use:** RUNWAY **Area:** 120,300 SqFt

Section: 6110 of 3 **From:** - **To:** - **Last Const.:** 1/1/1969

Surface: AC **Family:** CA653-GA-RW-AC **Zone:** **Category:** **Rank:** P

Area: 61,150 SqFt **Length:** 1,226 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1969 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 12 **Surveyed:** 3

Conditions: **PCI:** 32

Inspection Comments:

Sample Number: 109 **Type:** R **Area:** 5000.00 SqFt **PCI:** 32

Sample Comments:

43	BLOCK CR	L	1250.00	SqFt
43	BLOCK CR	M	3750.00	SqFt
52	RAVELING	L	4750.00	SqFt
52	RAVELING	M	250.00	SqFt
56	SWELLING	L	250.00	SqFt

Sample Number: 114 **Type:** R **Area:** 5000.00 SqFt **PCI:** 32

Sample Comments:

43	BLOCK CR	L	1250.00	SqFt
43	BLOCK CR	M	3750.00	SqFt
52	RAVELING	L	4500.00	SqFt
52	RAVELING	M	500.00	SqFt
56	SWELLING	L	250.00	SqFt

Sample Number: 117 **Type:** R **Area:** 5000.00 SqFt **PCI:** 32

Sample Comments:

43	BLOCK CR	L	1250.00	SqFt
43	BLOCK CR	M	3750.00	SqFt
52	RAVELING	L	4500.00	SqFt
52	RAVELING	M	500.00	SqFt
56	SWELLING	L	250.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: RW 15-33 **Name:** RUNWAY 15-33 **Use:** RUNWAY **Area:** 120,300 SqFt

Section: 6115 of 3 **From:** - **To:** - **Last Const.:** 1/1/1969

Surface: AC **Family:** CA653-GA-RW-AC **Zone:** **Category:** **Rank:** P

Area: 26,300 SqFt **Length:** 530 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1969 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 5 **Surveyed:** 2

Conditions: **PCI:** 50

Inspection Comments:

Sample Number: 119 **Type:** R **Area:** 6000.00 SqFt **PCI:** 49

Sample Comments:

43	BLOCK CR	L	3720.00	SqFt
45	DEPRESSION	L	4.00	SqFt
48	L & T CR	L	58.00	Ft
52	RAVELING	L	5400.00	SqFt
52	RAVELING	M	600.00	SqFt

Sample Number: 122 **Type:** R **Area:** 5000.00 SqFt **PCI:** 51

Sample Comments:

43	BLOCK CR	L	2100.00	SqFt
48	L & T CR	L	237.00	Ft
52	RAVELING	L	4500.00	SqFt
52	RAVELING	M	500.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 70,535 SqFt

Section: 105 of 5 **From:** - **To:** - **Last Const.:** 1/1/1997

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 18,850 SqFt **Length:** 754 Ft **Width:** 25 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1997 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 4 **Surveyed:** 1

Conditions: **PCI:** 70

Inspection Comments:

Sample Number: 101 **Type:** R **Area:** 5000.00 SqFt **PCI:** 70

Sample Comments:

48	L & T CR	L	54.00	Ft
52	RAVELING	L	2500.00	SqFt
57	WEATHERING	L	2500.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 70,535 SqFt

Section: 110 of 5 **From:** - **To:** - **Last Const.:** 3/1/2005

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 33,525 SqFt **Length:** 1,350 Ft **Width:** 25 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2004 **Work Type:** New Construction - Initial **Code:** NU-IN **Is Major M&R:** True

Work Date: 3/1/2005 **Work Type:** Complete Reconstruction - AC **Code:** CR-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 7 **Surveyed:** 2

Conditions: **PCI:** 66

Inspection Comments:

Sample Number: 201 **Type:** R **Area:** 5000.00 SqFt **PCI:** 69

Sample Comments:

48	L & T CR	L	99.00	Ft
52	RAVELING	L	5000.00	SqFt

Sample Number: 204 **Type:** R **Area:** 5000.00 SqFt **PCI:** 64

Sample Comments:

48	L & T CR	L	127.00	Ft
52	RAVELING	L	4950.00	SqFt
52	RAVELING	M	50.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 70,535 SqFt

Section: 115 of 5 **From:** - **To:** - **Last Const.:** 1/1/2003

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 3,886 SqFt **Length:** 50 Ft **Width:** 95 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 64

Inspection Comments:

Sample Number: 207 **Type:** R **Area:** 3886.00 SqFt **PCI:** 64

Sample Comments:

45	DEPRESSION	L	50.00	SqFt
48	L & T CR	L	240.00	Ft
52	RAVELING	L	3886.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 70,535 SqFt

Section: 125 of 5 **From:** - **To:** - **Last Const.:** 1/1/2003

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 2,214 SqFt **Length:** 100 Ft **Width:** 25 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 52

Inspection Comments:

Sample Number: 106 **Type:** R **Area:** 2214.00 SqFt **PCI:** 52

Sample Comments:

45	DEPRESSION	L	8.00	SqFt
48	L & T CR	L	140.00	Ft
50	PATCHING	M	60.00	SqFt
52	RAVELING	L	1723.00	SqFt
52	RAVELING	M	431.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW A **Name:** TAXIWAY A **Use:** TAXIWAY **Area:** 70,535 SqFt

Section: 130 of 5 **From:** - **To:** - **Last Const.:** 1/1/2014

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 12,060 SqFt **Length:** 300 Ft **Width:** 40 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/2014 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 3 **Surveyed:** 1

Conditions: **PCI:** 86

Inspection Comments:

Sample Number: 103 **Type:** R **Area:** 5000.00 SqFt **PCI:** 86

Sample Comments:

45	DEPRESSION	L	75.00	SqFt
57	WEATHERING	L	5000.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW CONN **Name:** TAXIWAY A CONNECTOR **Use:** TAXIWAY **Area:** 13,630 SqFt

Section: 205 of 3 **From:** - **To:** - **Last Const.:** 1/1/1997

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 5,409 SqFt **Length:** 140 Ft **Width:** 40 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1997 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 70

Inspection Comments:

Sample Number: 100 **Type:** R **Area:** 5409.00 SqFt **PCI:** 70

Sample Comments:

48	L & T CR	L	269.00	Ft
52	RAVELING	L	2704.00	SqFt
57	WEATHERING	L	2705.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW CONN **Name:** TAXIWAY A CONNECTOR **Use:** TAXIWAY **Area:** 13,630 SqFt

Section: 305 of 3 **From:** - **To:** - **Last Const.:** 1/1/1969

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 2,700 SqFt **Length:** 92 Ft **Width:** 30 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1969 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 62

Inspection Comments:

Sample Number: 100 **Type:** R **Area:** 2700.00 SqFt **PCI:** 62

Sample Comments:

45	DEPRESSION	L	9.00	SqFt
48	L & T CR	L	145.00	Ft
52	RAVELING	L	2565.00	SqFt
52	RAVELING	M	135.00	SqFt

Network: X01 **Name:** EVERGLADES AIRPARK

Branch: TW CONN **Name:** TAXIWAY A CONNECTOR **Use:** TAXIWAY **Area:** 13,630 SqFt

Section: 310 of 3 **From:** - **To:** - **Last Const.:** 1/1/1996

Surface: AC **Family:** CA653-GA-TW-AC **Zone:** **Category:** **Rank:** P

Area: 5,521 SqFt **Length:** 83 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 1/1/1996 **Work Type:** OVERLAY **Code:** IMPORTED **Is Major M&R:** True

Work Date: 1/1/1996 **Work Type:** BUILT **Code:** IMPORTED **Is Major M&R:** True

Last Insp. Date: 9/14/2020 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 70

Inspection Comments:

Sample Number: 200 **Type:** R **Area:** 5521.00 SqFt **PCI:** 70

Sample Comments:

48	L & T CR	L	225.00	Ft
52	RAVELING	L	1380.00	SqFt
56	SWELLING	L	191.00	SqFt
57	WEATHERING	L	4141.00	SqFt

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