

2022

*Statewide Airfield Pavement Management Program*



# Airport Pavement Evaluation Report

CLW - Clearwater Air Park | *District 7*



AVIATION





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*Florida Department of Transportation*

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# ***Statewide Airfield Pavement Management Program***

## **Airport Pavement Evaluation Report**

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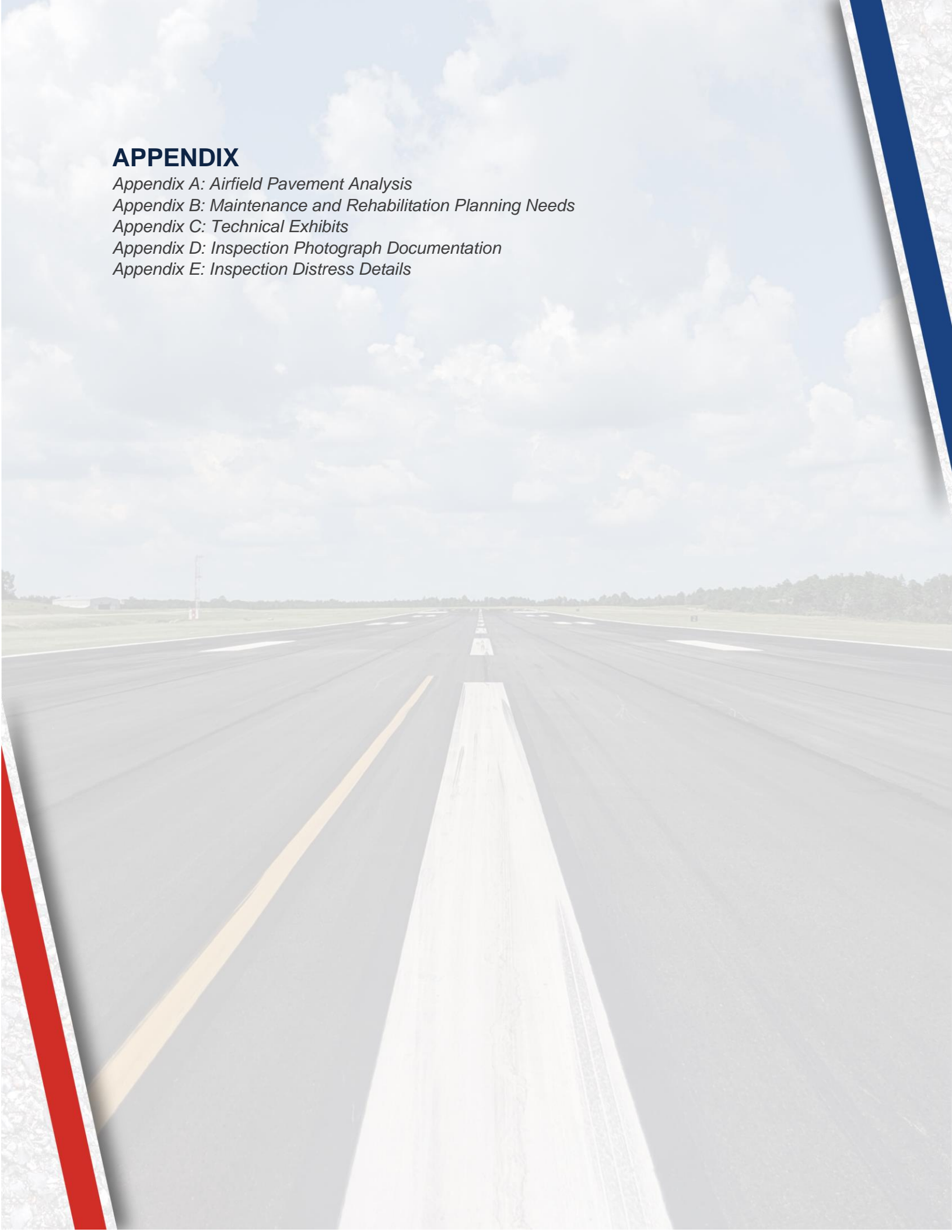
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# Executive Summary





# 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). The scope of the SAPMP encompasses 95 public-use airport facilities distributed throughout the seven (7) participating FDOT Districts. Clearwater Air Park'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 D5340-20 "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 D5340-20, 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. This is graphically depicted in **Figure E.1**.

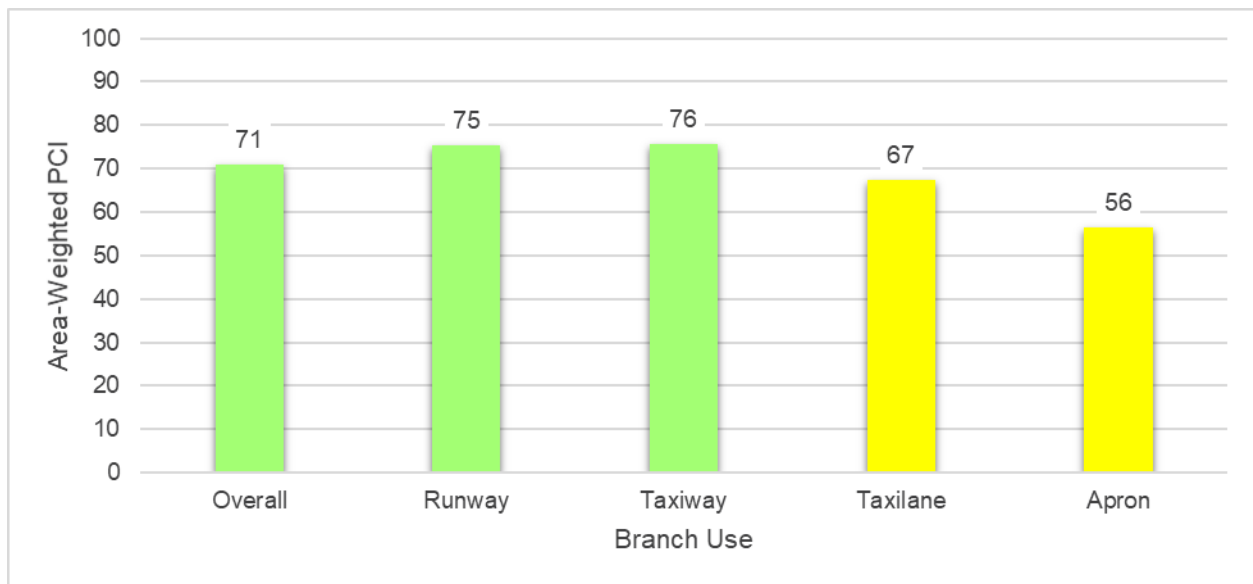
*Figure E.1: PCI Rating*

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 April 2022, approximately 0.7 million square feet of pavement was assessed as part of the airside pavement network PCI survey at Clearwater Air Park (CLW). In general, airfield pavements at CLW are in Satisfactory condition with an area-weighted PCI of 71. The area-weighted average PCI values of the runways, taxiways, taxilanes, and aprons are 75, 76, 67, and 56, respectively. **Figure E.2** and **Table E.1** summarize the current PCI values for CLW.

*Figure E.2: Current 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
CLW	RW 16-34	Runway	6105	15,000	85	Satisfactory
CLW	RW 16-34	Runway	6110	224,775	72	Satisfactory
CLW	RW 16-34	Runway	6120	22,500	83	Satisfactory
CLW	RW 16-34	Runway	6130	45,750	85	Satisfactory
CLW	TW A	Taxiway	105	63,329	75	Satisfactory
CLW	TW A	Taxiway	107	5,097	85	Satisfactory
CLW	TW A	Taxiway	110	7,086	78	Satisfactory
CLW	TW A	Taxiway	135	22,265	63	Fair
CLW	TW A	Taxiway	140	12,540	73	Satisfactory
CLW	TW A	Taxiway	145	23,716	85	Satisfactory
CLW	TW A	Taxiway	150	15,000	89	Good
CLW	TW A1	Taxiway	115	6,928	77	Satisfactory
CLW	TW A2	Taxiway	120	6,567	66	Fair
CLW	TW A3	Taxiway	125	6,967	62	Fair
CLW	TL CENTER	Taxilane	3410	11,073	48	Poor
CLW	TL T-HANG	Taxilane	3310	13,365	86	Good
CLW	TL T-HANG	Taxilane	3605	14,273	46	Poor



Network ID	Branch ID	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
CLW	TL T-HANG	Taxilane	3610	13,025	91	Good
CLW	TL T-HANG	Taxilane	3615	1,446	40	Very Poor
CLW	AP CENTER	Apron	4405	18,903	88	Good
CLW	AP N	Apron	4505	19,396	35	Very Poor
CLW	AP N	Apron	4510	2,581	80	Satisfactory
CLW	AP T-HANG	Apron	4105	37,331	57	Fair
CLW	AP T-HANG	Apron	4205	24,739	64	Fair
CLW	AP T-HANG	Apron	4305	31,604	42	Poor

## Forecasted Pavement Conditions

**Table E.2** provides section-level details for PCI forecasts. Pavement condition forecasts should be used for planning purposes only, as the actual condition of sections is subject to 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 2023-2032 – Section-Level*

Network ID	Branch ID	Section ID	Current PCI	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CLW	RW 16-34	6105	85	83	81	79	78	76	74	72	71	69	67
CLW	RW 16-34	6110	72	70	68	66	65	63	61	59	58	56	54
CLW	RW 16-34	6120	83	81	79	77	76	74	72	70	69	67	65
CLW	RW 16-34	6130	85	83	81	79	78	77	75	74	73	72	71
CLW	TW A	105	75	73	72	71	69	68	67	66	65	64	63
CLW	TW A	107	85	83	81	79	78	76	74	73	72	70	69
CLW	TW A	110	78	76	75	73	72	71	69	68	67	66	65
CLW	TW A	135	63	62	61	60	60	59	58	58	57	56	55
CLW	TW A	140	73	71	70	69	68	67	66	65	64	63	62
CLW	TW A	145	85	83	81	80	78	77	75	74	73	72	71
CLW	TW A	150	89	86	84	83	81	79	77	76	74	73	72
CLW	TW A1	115	77	75	74	72	71	70	69	67	66	65	64
CLW	TW A2	120	66	65	64	63	62	61	61	60	59	58	58
CLW	TW A3	125	62	61	60	60	59	58	57	57	56	55	55
CLW	TL CENTER	3410	48	47	46	45	45	44	43	41	40	39	38
CLW	TL T-HANG	3310	86	84	82	80	78	77	75	74	72	71	70
CLW	TL T-HANG	3605	46	45	44	43	42	41	40	39	37	36	34
CLW	TL T-HANG	3610	91	88	86	84	82	81	79	77	76	74	73
CLW	TL T-HANG	3615	40	39	37	36	34	33	31	30	28	26	24
CLW	AP CENTER	4405	88	85	83	81	79	77	74	72	70	68	66
CLW	AP N	4505	35	32	29	26	23	20	17	14	11	9	6
CLW	AP N	4510	80	78	76	74	72	71	69	68	66	65	64

Network ID	Branch ID	Section ID	Current PCI	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CLW	AP T-HANG	4105	57	56	55	55	54	54	53	53	52	52	51
CLW	AP T-HANG	4205	64	63	61	60	59	59	58	57	56	56	55
CLW	AP T-HANG	4305	42	40	38	36	34	32	29	26	23	20	17

## Major Rehabilitation Planning 2023-2032

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.

Due to 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; however, based on the thresholds identified by the FAA in the AIP Handbook, major rehabilitation will now be identified for pavement sections below a PCI value of 70.

The results of the maintenance, repair, and major rehabilitation analysis identified approximately \$7.11M in major rehabilitation needs for the 10-year forecast period. Year 1 major needs are \$4.83M and localized maintenance needs for Year 1 are \$0.01M.

*Table E.3: Major Rehabilitation Planning 2023-2032*

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2023	CLW	RW 16-34	6110	AAC	224,775	70	AC Rehabilitation	\$ 2,361,000
2023	CLW	TW A	135	AAC	22,265	62	AC Rehabilitation	\$ 234,000
2023	CLW	TW A2	120	AAC	6,567	65	AC Rehabilitation	\$ 69,000
2023	CLW	TW A3	125	AAC	6,967	61	AC Rehabilitation	\$ 74,000
2023	CLW	TL CENTER	3410	AC	11,073	47	AC Reconstruction	\$ 205,000
2023	CLW	TL T-HANG	3605	AC	14,273	45	AC Reconstruction	\$ 265,000
2023	CLW	TL T-HANG	3615	AC	1,446	39	AC Reconstruction	\$ 27,000
2023	CLW	AP N	4505	AC	19,396	32	AC Reconstruction	\$ 359,000
2023	CLW	AP T-HANG	4105	AC	37,331	56	AC Rehabilitation	\$ 392,000
2023	CLW	AP T-HANG	4205	AC	24,739	63	AC Rehabilitation	\$ 260,000
2023	CLW	AP T-HANG	4305	AC	31,604	40	AC Reconstruction	\$ 585,000
2025	CLW	TW A	140	AAC	12,540	69	AC Rehabilitation	\$ 146,000
2026	CLW	TW A	105	AAC	63,329	69	AC Rehabilitation	\$ 770,000



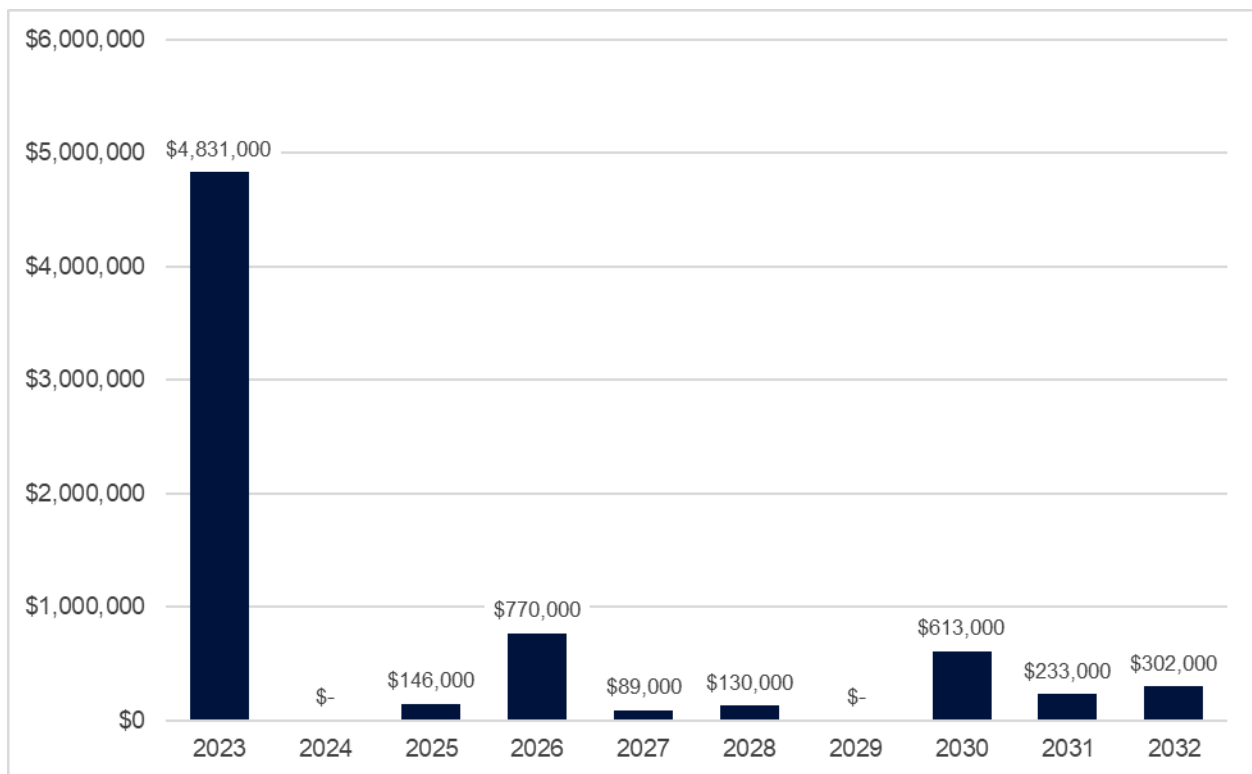
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Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2027	CLW	TW A1	115	AAC	6,928	70	AC Rehabilitation	\$ 89,000
2028	CLW	TW A	110	AAC	7,086	69	AC Rehabilitation	\$ 95,000
2028	CLW	AP N	4510	AC	2,581	69	AC Rehabilitation	\$ 35,000
2030	CLW	RW 16-34	6120	AAC	22,500	69	AC Rehabilitation	\$ 333,000
2030	CLW	AP CENTER	4405	AAC	18,903	70	AC Rehabilitation	\$ 280,000
2031	CLW	RW 16-34	6105	AAC	15,000	69	AC Rehabilitation	\$ 233,000
2032	CLW	TW A	107	AAC	5,097	69	AC Rehabilitation	\$ 84,000
2032	CLW	TL T-HANG	3310	AAC	13,365	70	AC Rehabilitation	\$ 218,000

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

Figure E.3: 10-Year Major Rehabilitation Needs by Program Year





# 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 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 General Aviation (GA), Reliever (RL), and Primary/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 Circulars 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 D5340-20 “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).

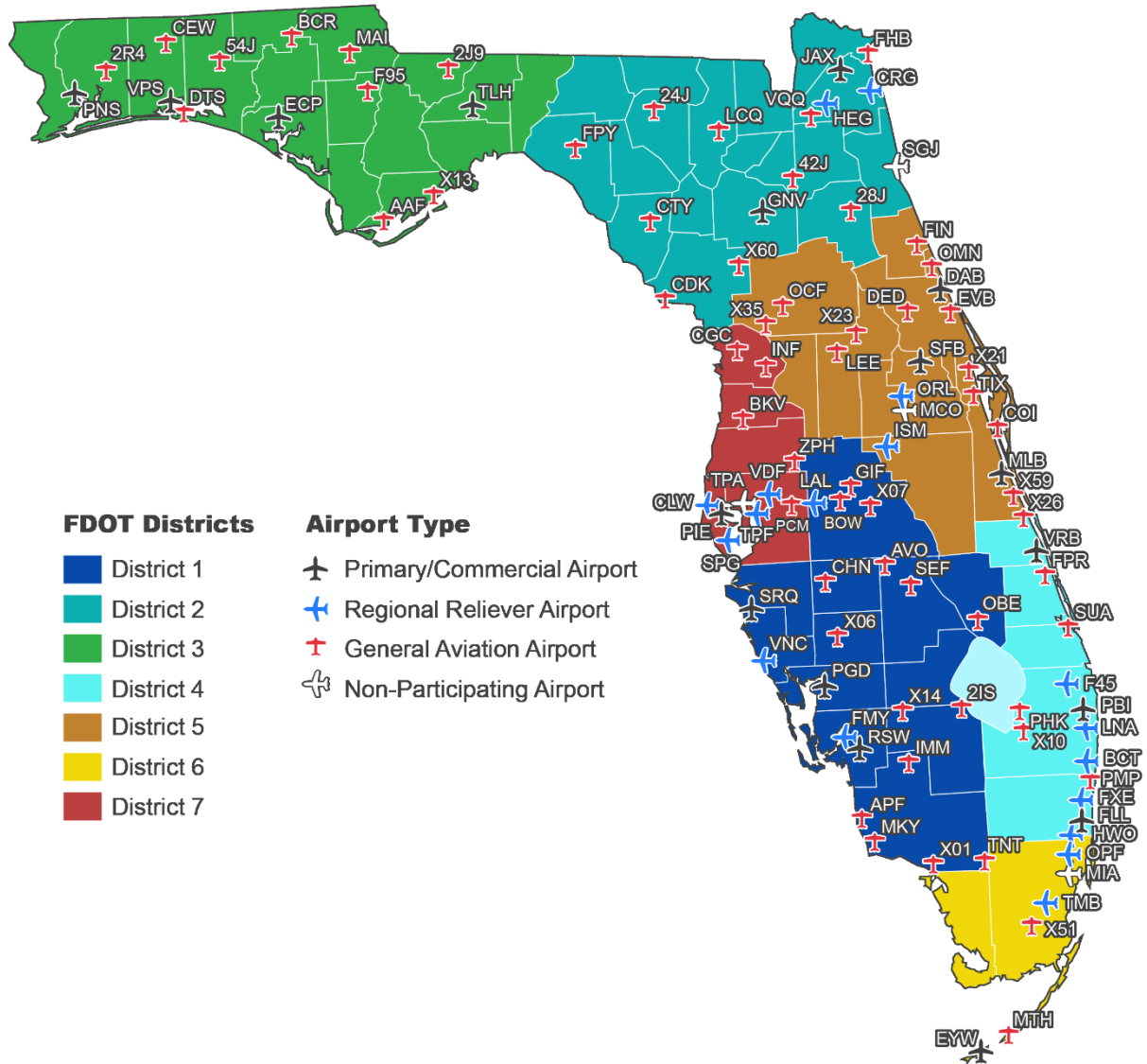
The SAPMP addresses the requirements of maintaining an effective pavement management program for participating airports at the network level. Network-level management of pavement assets provides insight for short-term and long-term budget needs, understanding of the overall condition of the network (current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

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## Statewide Airfield Pavement Management Program

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

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
<b>FAA Orlando Airports District Office (Orlando ADO)</b>	Key Stakeholder: local ADO Program Manager personnel that oversees the grant administration of AIP grant with Planning Agency Sponsor (Florida Department of Transportation).
<b>Florida Department of Transportation (FDOT)</b>	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.
<b>FDOT District Offices</b>	The seven (7) 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 development for maintenance, repair, and major rehabilitation opinions of probable construction costs for planning purposes.
<b>Participating Public-Use and Publicly-Owned Airports</b>	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.
<b>Aviation Office Program Manager (AO-PM)</b>	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 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 that 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.

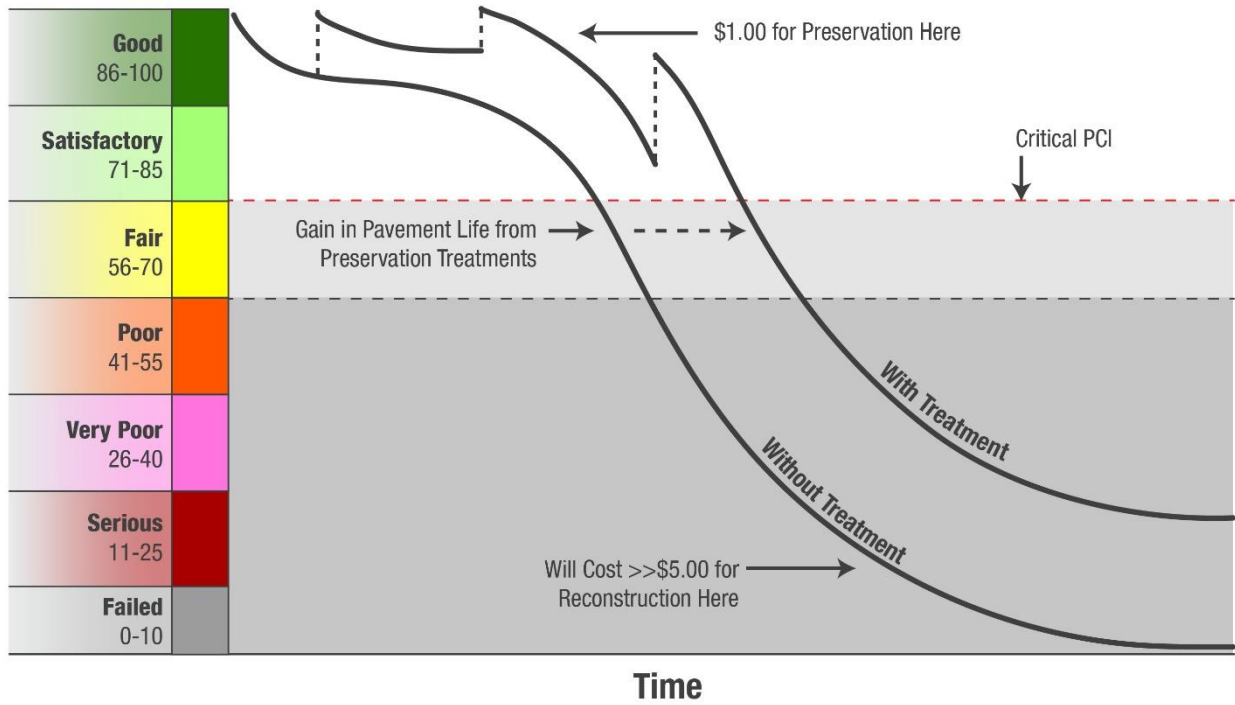
A comprehensive SAPMP provides information that assists with the project programming process. The primary objectives of the FDOT SAPMP consist of the following:

- » 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 D5340-20 (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 before they reach 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: Pavement Life and the Effect of Treatments



FAA Eligibility Thresholds: ☐ >70: Routine Maintenance ☐ 55-70: Rehabilitation Eligible ☐ <55: Reconstruction Eligible

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



## Chapter 2: Methodology

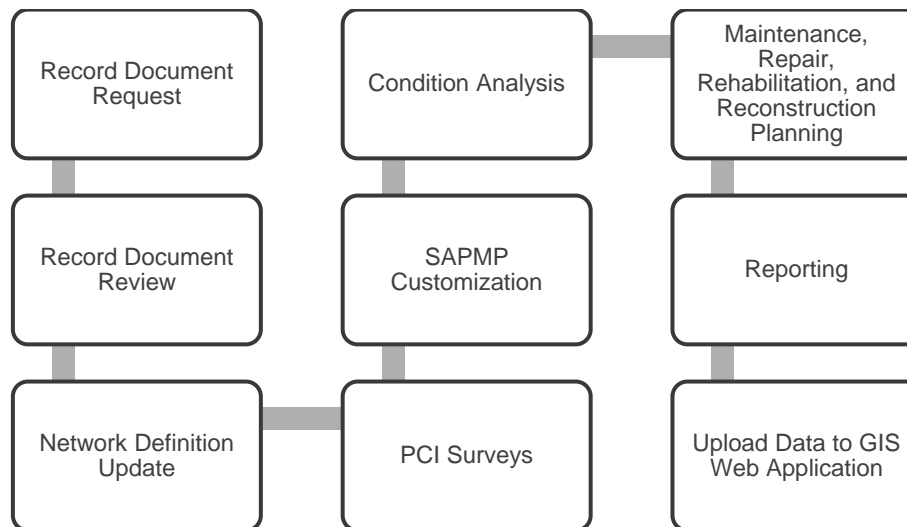




## Chapter 2 – Methodology

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 ASTM D5340-20;
- » 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 (routine, emergency, and proactive) related to the pavement facilities. These records 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, and 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.

### 2.3.1 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.

### 2.3.2 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.

### 2.3.3 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 (WT), Thin (TWT), and Ultra-Thin (UWT).

#### **Conventional Whitetopping (WT)**

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 (UWT)**

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 CLW'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. 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 section PCI to a value of 100.

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 ( $\pm 8$  slabs) for PCC pavement and 5,000 contiguous square feet ( $\pm 2,000$  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
<b>Network</b>	Totality of pavement assets maintained by the Airport.	"Tallahassee International Airport – Airfield Pavements"
<b>Branch Name</b>	Commonly defined asset name as established by Airport and by use.	"Runway 18-36"
<b>Branch ID</b>	Codified shorthand name for commonly defined asset established for database identification.	"RW 18-36" RW, Branch Use, "Runway" "Runway 18-36", Runway Facility
<b>Section ID</b>	Codified identification for pavement asset that is distinct by pavement composition, work history, aircraft loading, or condition.	"6105"
<b>Sample Unit</b>	A numeric identification of an area of pavement ( $5,000 \pm 2,000$ SF of AC or $20 \pm 8$ slabs of PCC) that has been inspected in accordance with ASTM D5340-20.	"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 D5340-20. 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 D5340-20 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	Runway Sampling Rate	Taxiways, Aprons, and Others Sampling Rate
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*


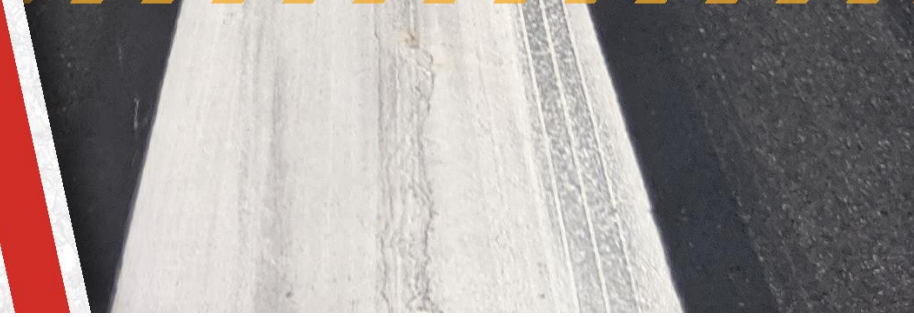
Number of Total Sample Units in Section	Runway Sampling Rate	Taxiways, Aprons, and Others Sampling Rate
1 - 3	1	1
4 - 6	2	1
7 - 10	3	2
11 - 15	4	2
16 - 20	5	3
21 - 30	7	3
31 - 40	8	4
41 - 50	10	5
51 or more	20% but ≤ 20	10% but ≤ 10

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 surveys 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.



A photograph of a long, straight airfield runway stretching towards the horizon under a bright blue sky with scattered white clouds. The runway has a central white dashed line and yellow edge lines. The image is framed by a red diagonal bar on the left and a blue diagonal bar on the right.

# **Chapter 3: Airfield Pavement System Inventory**

A horizontal band of yellow chevron patterns pointing to the right, located below the chapter title.A close-up, low-angle view of the runway pavement, showing the texture of the asphalt and the white dashed line. The image is framed by a red diagonal bar on the left and a blue diagonal bar on the right.

## 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

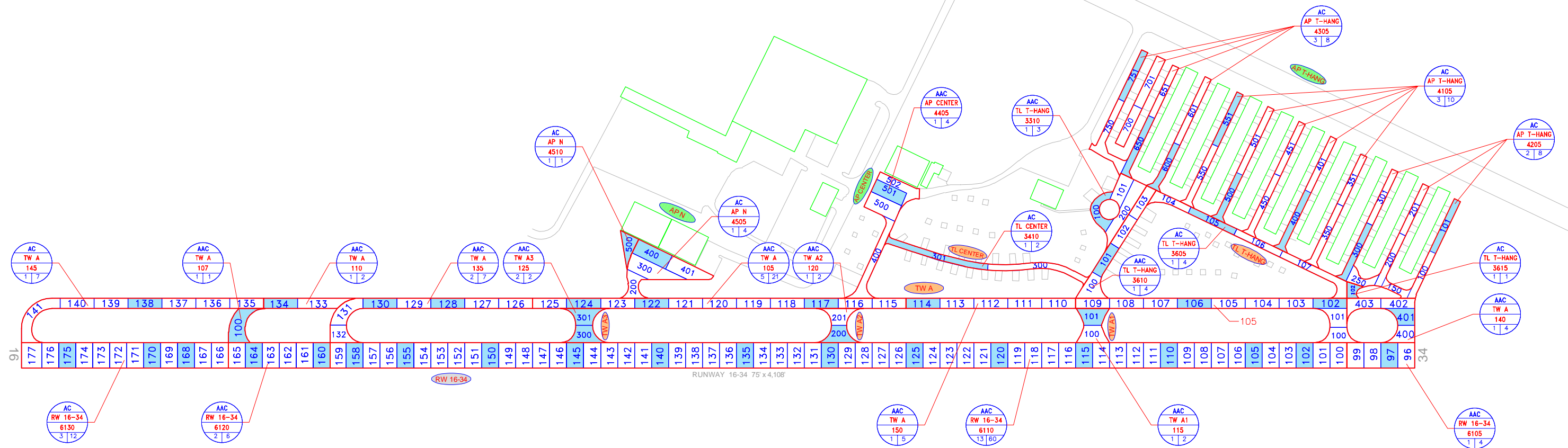
Based on information provided by the Airport, **Table 3.1.1** summarizes recent or anticipated airfield pavement construction projects since 2017.

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

Construction Year	Location	Work Type / Pavement Section
No Information Provided		

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.



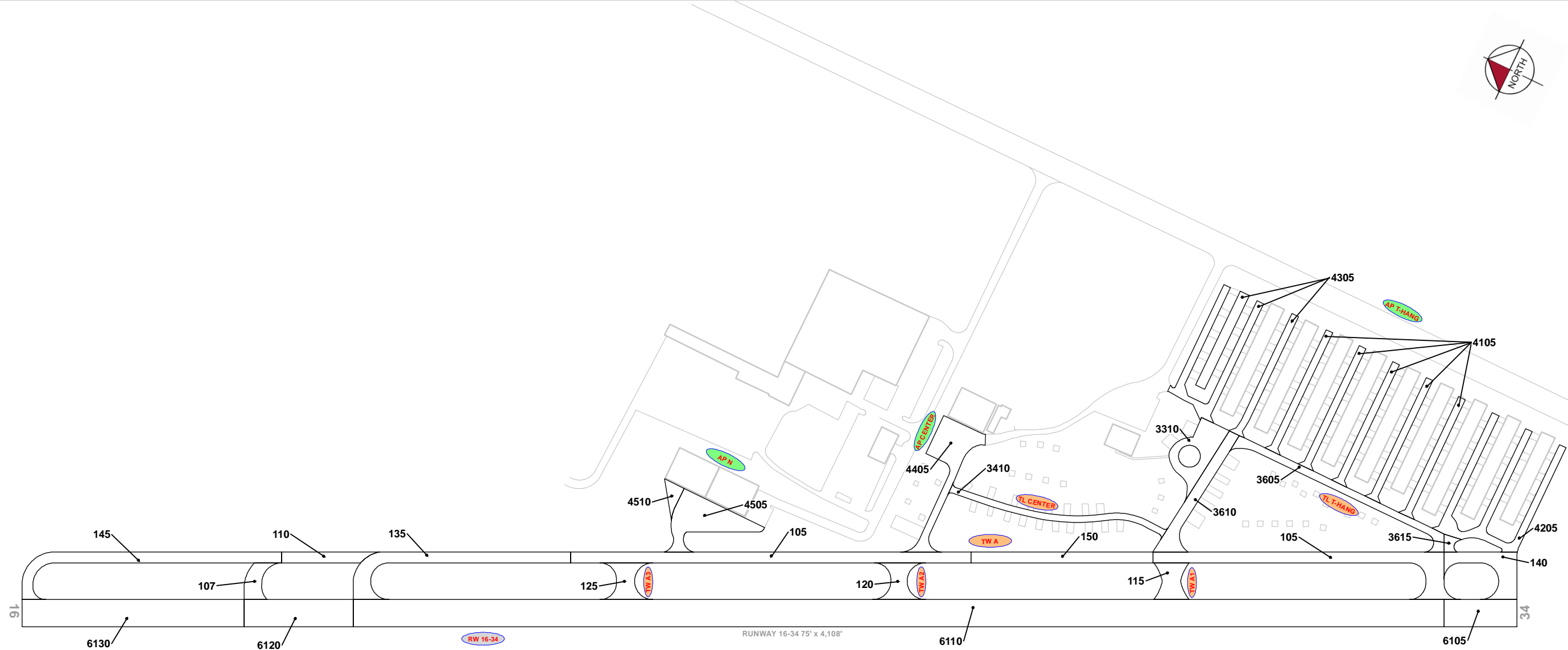
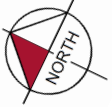
LEGEND

- TYPICAL RUNWAY BRANCH ID
- TYPICAL TAXIWAY BRANCH ID
- TYPICAL APRON BRANCH ID
- PAVEMENT SURFACE TYPE
- PAVEMENT BRANCH ID
- SECTION NUMBER
- NUMBER OF SAMPLE UNITS IN SECTION  
NUMBER OF SAMPLE UNITS TO BE INSPECTED
- SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.
- INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 51  
AC: 51    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.





RECENT & ANTICIPATED CONSTRUCTION ACTIVITY		
CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
NO INFORMATION PROVIDED		

**LEGEND**

TYPICAL RUNWAY BRANCH ID

TYPICAL TAXIWAY BRANCH ID

TYPICAL APRON BRANCH ID

**PROJECT YEAR**

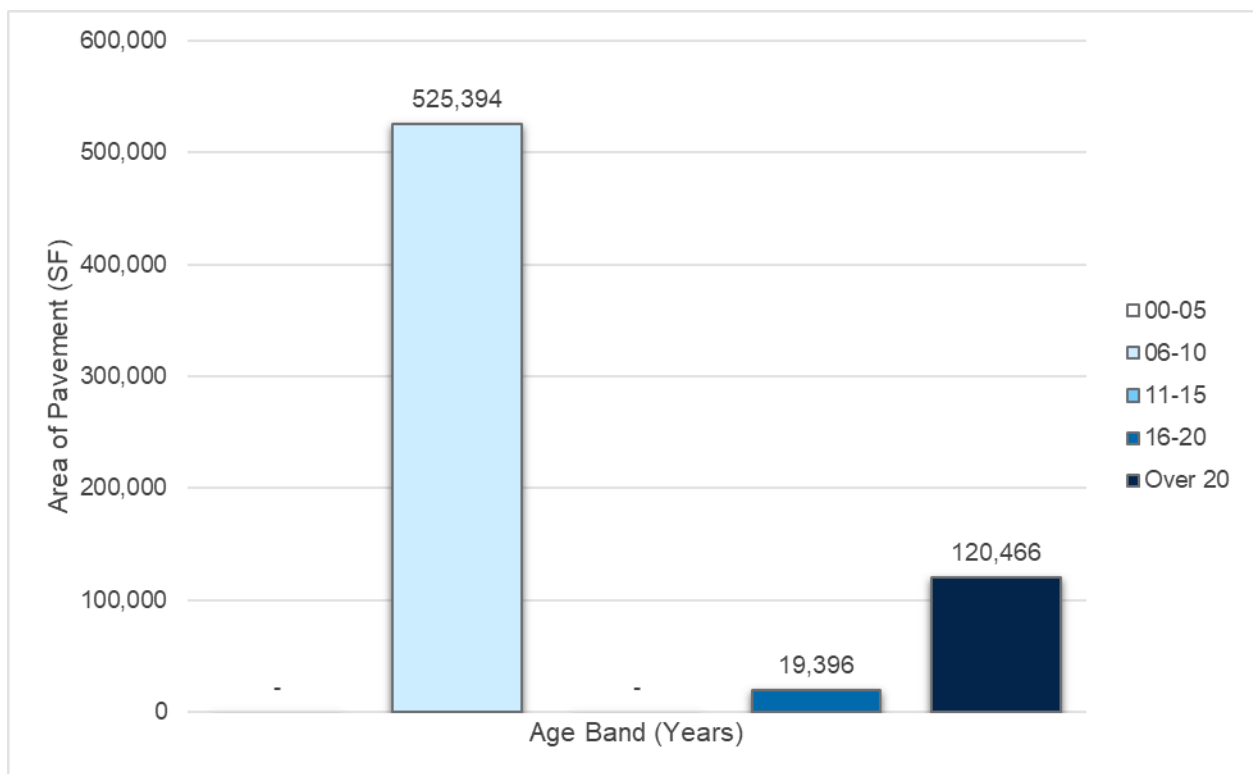
2017	2022
2018	2023
2019	2024
2020	2025
2021	2026

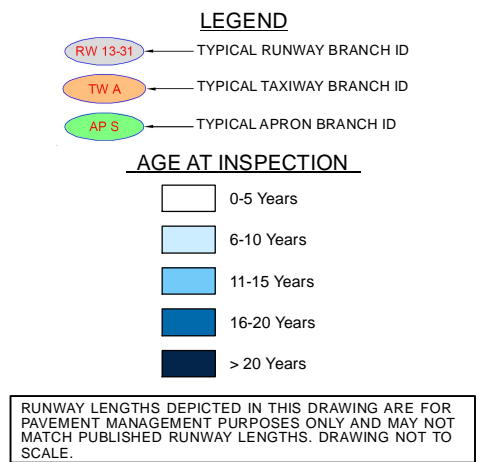
RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

### 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*



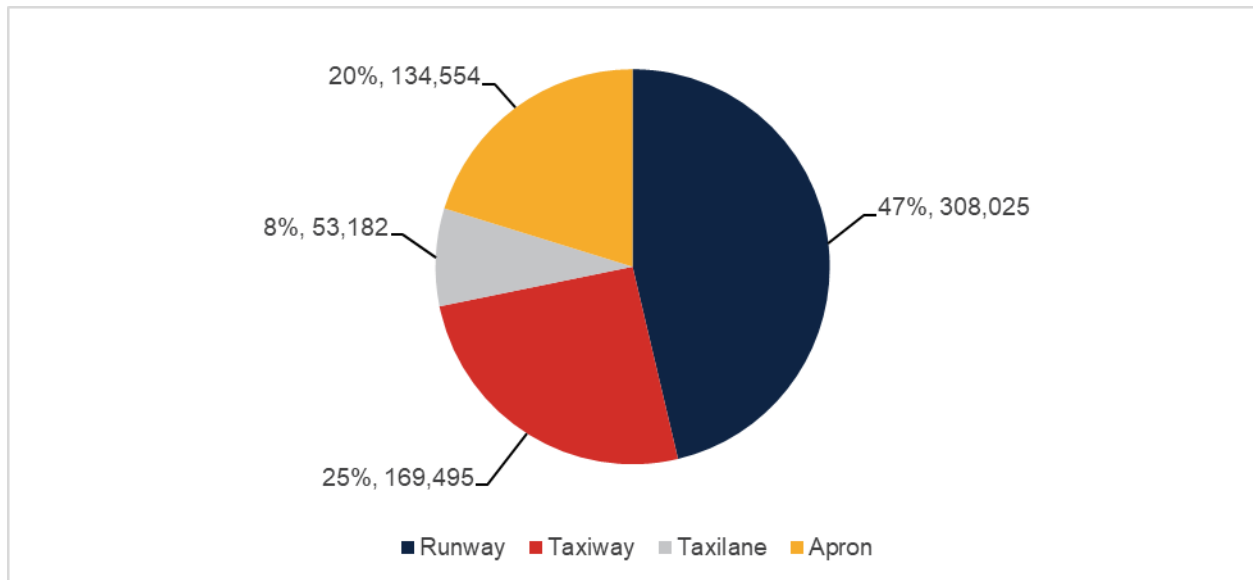




### 3.1.3 Functional Use

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)*

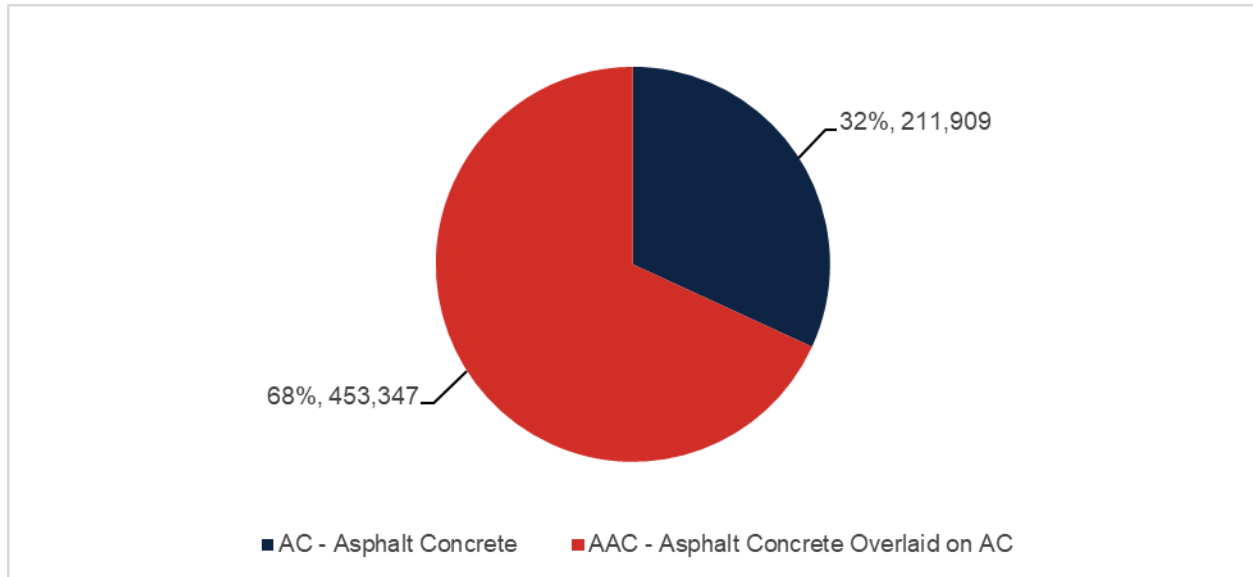


### 3.1.4 Pavement Surface Type

The airfield pavement facility surface types within the SAPMP include four (4) common types of pavement: Asphalt Concrete (AC), Asphalt Concrete overlaid on Asphalt Concrete (AAC), Asphalt Concrete overlaid on Portland cement concrete (APC), and Portland cement concrete (PCC).

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 CLW.

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 C** 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, which is based on record documentation provided by the airports and from previous System 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
CLW	RW 16-34	Runway	6105	15,000	AAC	1/1/2013
CLW	RW 16-34	Runway	6110	224,775	AAC	1/1/2013
CLW	RW 16-34	Runway	6120	22,500	AAC	1/1/2013
CLW	RW 16-34	Runway	6130	45,750	AC	1/1/2013
CLW	TW A	Taxiway	105	63,329	AAC	1/1/2013
CLW	TW A	Taxiway	107	5,097	AAC	1/1/2013
CLW	TW A	Taxiway	110	7,086	AAC	1/1/2013
CLW	TW A	Taxiway	135	22,265	AAC	1/1/2013

# Airport Pavement Evaluation Report

## Statewide Airfield Pavement Management Program

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
CLW	TW A	Taxiway	140	12,540	AAC	1/1/2013
CLW	TW A	Taxiway	145	23,716	AC	1/1/2013
CLW	TW A	Taxiway	150	15,000	AAC	1/1/2013
CLW	TW A1	Taxiway	115	6,928	AAC	1/1/2013
CLW	TW A2	Taxiway	120	6,567	AAC	1/1/2013
CLW	TW A3	Taxiway	125	6,967	AAC	1/1/2013
CLW	TL CENTER	Taxilane	3410	11,073	AC	12/15/1999
CLW	TL T-HANG	Taxilane	3310	13,365	AAC	1/1/2015
CLW	TL T-HANG	Taxilane	3605	14,273	AC	1/1/1996
CLW	TL T-HANG	Taxilane	3610	13,025	AAC	1/1/2015
CLW	TL T-HANG	Taxilane	3615	1,446	AC	1/1/1991
CLW	AP CENTER	Apron	4405	18,903	AAC	1/1/2015
CLW	AP N	Apron	4505	19,396	AC	1/1/2003
CLW	AP N	Apron	4510	2,581	AC	1/1/2012
CLW	AP T-HANG	Apron	4105	37,331	AC	1/1/1996
CLW	AP T-HANG	Apron	4205	24,739	AC	1/1/1996
CLW	AP T-HANG	Apron	4305	31,604	AC	12/25/1999



A photograph of a long, straight asphalt runway stretching towards the horizon under a bright blue sky filled with fluffy white clouds. The runway has a central white dashed line and yellow edge lines. The image is framed by a red diagonal bar on the left and a blue diagonal bar on the right.

# **Chapter 4: Airfield Pavement Condition Analysis**

A close-up, low-angle view of the runway pavement, showing the texture of the asphalt and the white dashed center line. A series of yellow chevron markings are visible on the right side of the frame.The background of the entire slide is a light gray, textured surface resembling gravel or crushed stone.

## Chapter 4 – Airfield Pavement Condition Analysis

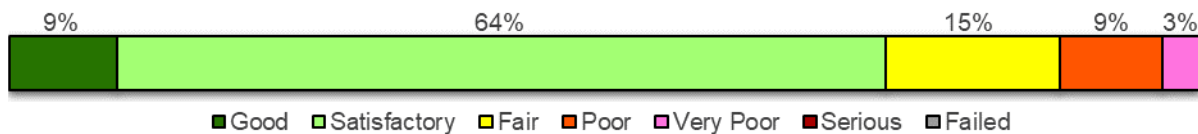
The Pavement Condition Index (PCI) provides insight to possible causes of deterioration to help support pavement maintenance and rehabilitation planning. Distress type, severity, and extent are required in the computation of a PCI value. The PCI method of pavement condition evaluation is strictly a visual 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 73% of inspected pavements are in Good or Satisfactory condition. Presently, roughly 15% of inspected pavements are in Fair condition and the remaining 12% of inspected pavements are in Poor or worse condition.

*Figure 4.1.1: Current Condition – Overall Network*



#### 4.1.2 Branch-Level Analysis

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

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

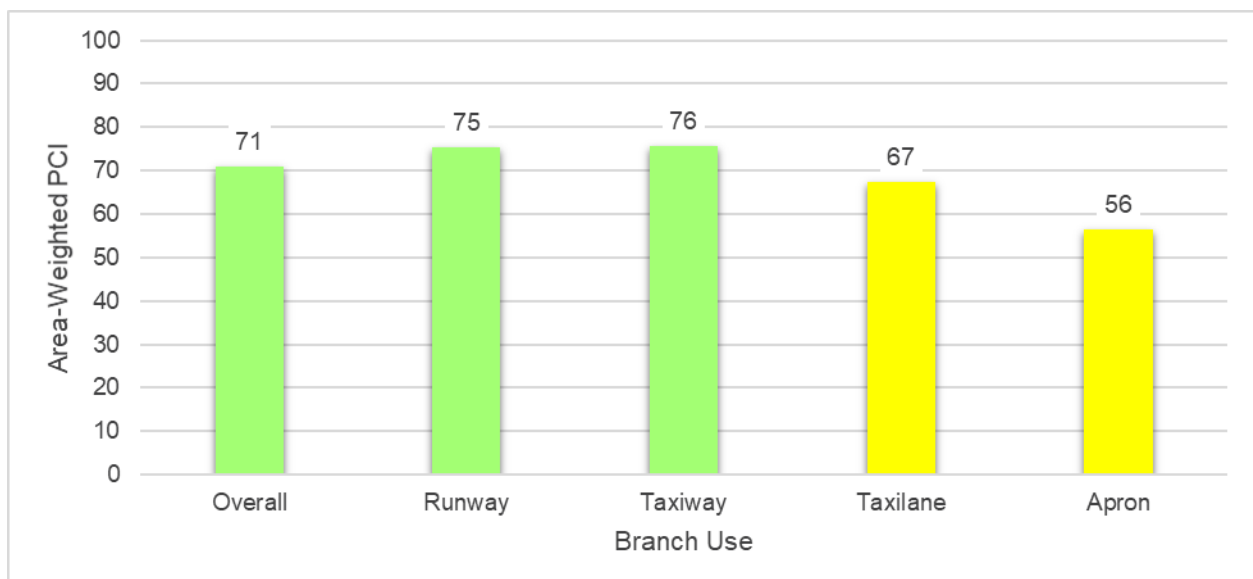


Figure 4.1.2 (b): Current Condition – Runway

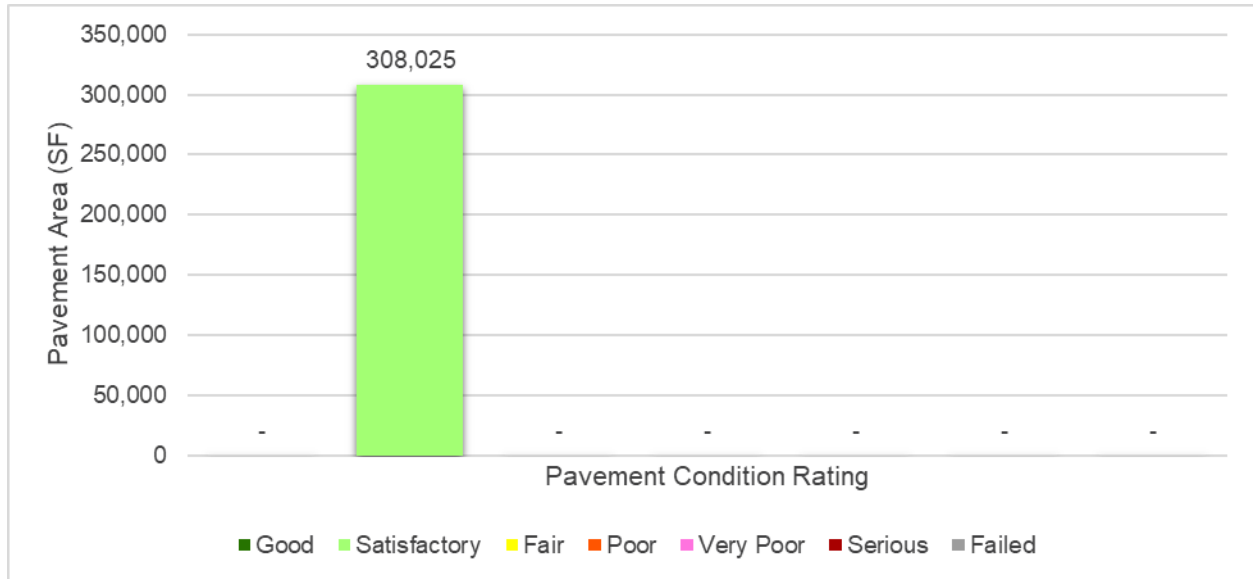


Figure 4.1.2 (c): Current Condition – Taxiway

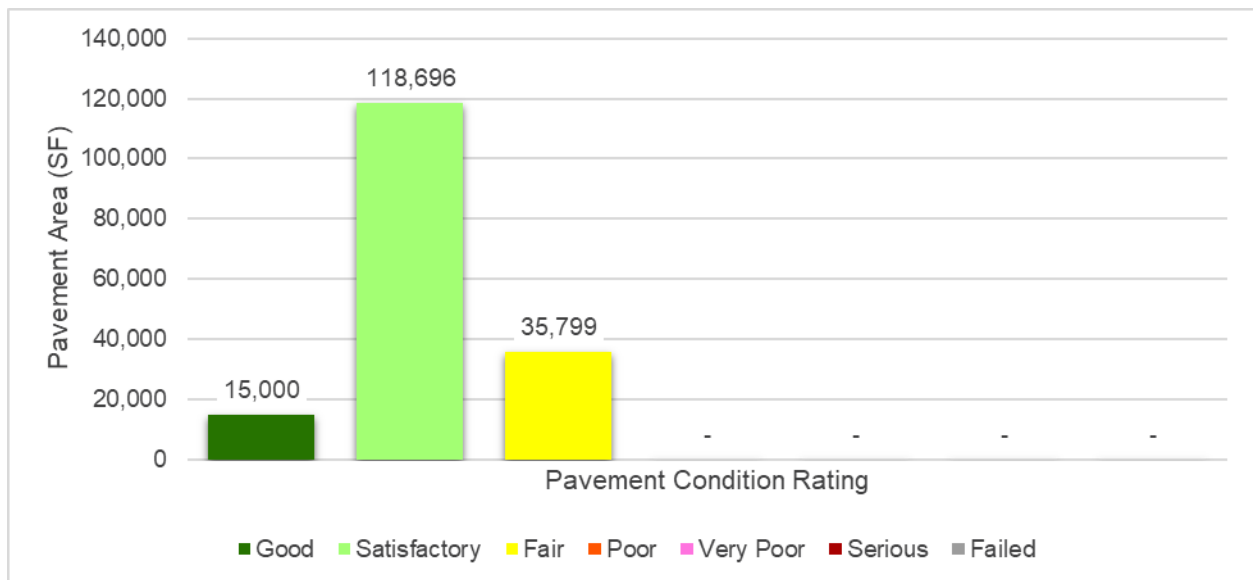
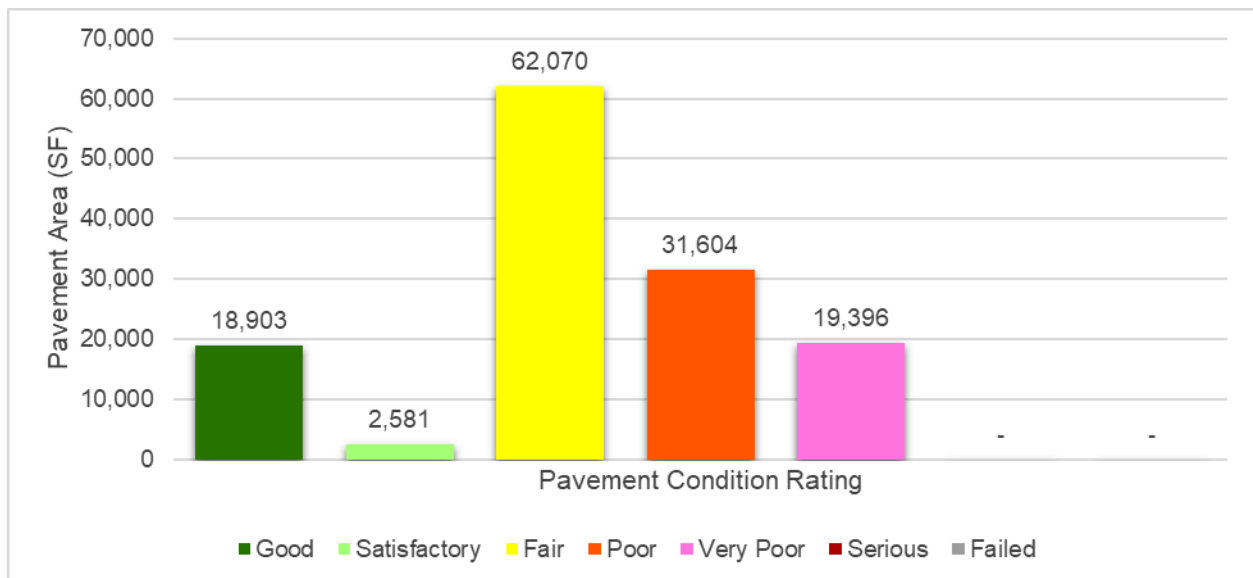




Figure 4.1.2 (d): Current Condition – Taxi lane



Figure 4.1.2 (e): Current Condition – Apron



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

*Table 4.1.2: Current Condition Summary – Branch-Level*

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Area-Weighted Avg PCI	Condition Rating
RW 16-34	Runway	4	308,025	75	Satisfactory
TW A	Taxiway	7	149,033	77	Satisfactory
TW A1	Taxiway	1	6,928	77	Satisfactory
TW A2	Taxiway	1	6,567	66	Fair
TW A3	Taxiway	1	6,967	62	Fair
TL CENTER	Taxilane	1	11,073	48	Poor
TL T-HANG	Taxilane	4	42,109	72	Satisfactory
AP CENTER	Apron	1	18,903	88	Good
AP N	Apron	2	21,977	40	Very Poor
AP T-HANG	Apron	3	93,674	54	Poor

#### 4.1.3 Section-Level Analysis

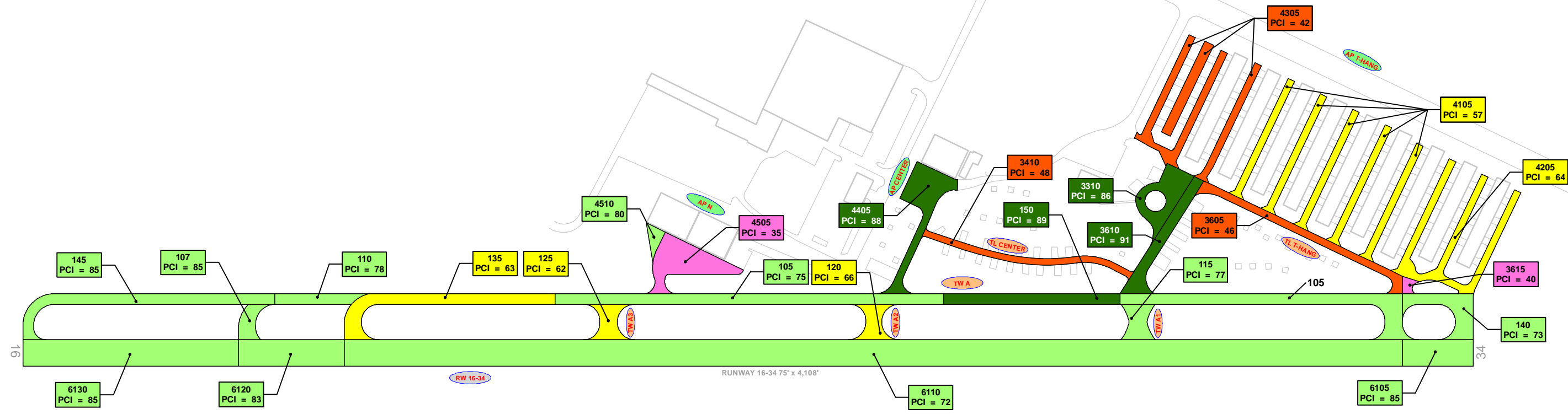
**Table 4.1.3** provides each pavement section's area-weighted average PCI and the percent of distress related to load, climate, and other factors. The causes of condition deterioration help inform maintenance, repair, and rehabilitation decisions. For example, load-related distress can indicate that 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
CLW	RW 16-34	Runway	6105	15,000	AAC	85	Satisfactory	100	0	0	1	4
CLW	RW 16-34	Runway	6110	224,775	AAC	72	Satisfactory	72	0	28	13	60
CLW	RW 16-34	Runway	6120	22,500	AAC	83	Satisfactory	100	0	0	2	6
CLW	RW 16-34	Runway	6130	45,750	AC	85	Satisfactory	94	0	6	3	12
CLW	TW A	Taxiway	105	63,329	AAC	75	Satisfactory	66	0	34	5	21
CLW	TW A	Taxiway	107	5,097	AAC	85	Satisfactory	100	0	0	1	1
CLW	TW A	Taxiway	110	7,086	AAC	78	Satisfactory	100	0	0	1	2
CLW	TW A	Taxiway	135	22,265	AAC	63	Fair	81	0	19	2	7
CLW	TW A	Taxiway	140	12,540	AAC	73	Satisfactory	71	0	29	1	4
CLW	TW A	Taxiway	145	23,716	AC	85	Satisfactory	100	0	0	1	7
CLW	TW A	Taxiway	150	15,000	AAC	89	Good	100	0	0	1	5
CLW	TW A1	Taxiway	115	6,928	AAC	77	Satisfactory	53	0	47	1	2
CLW	TW A2	Taxiway	120	6,567	AAC	66	Fair	100	0	0	1	2
CLW	TW A3	Taxiway	125	6,967	AAC	62	Fair	53	0	47	2	2
CLW	TL CENTER	Taxilane	3410	11,073	AC	48	Poor	100	0	0	1	2
CLW	TL T-HANG	Taxilane	3310	13,365	AAC	86	Good	100	0	0	1	3
CLW	TL T-HANG	Taxilane	3605	14,273	AC	46	Poor	100	0	0	1	4
CLW	TL T-HANG	Taxilane	3610	13,025	AAC	91	Good	100	0	0	1	4
CLW	TL T-HANG	Taxilane	3615	1,446	AC	40	Very Poor	100	0	0	1	1
CLW	AP CENTER	Apron	4405	18,903	AAC	88	Good	100	0	0	1	4
CLW	AP N	Apron	4505	19,396	AC	35	Very Poor	100	0	0	1	4
CLW	AP N	Apron	4510	2,581	AC	80	Satisfactory	100	0	0	1	1
CLW	AP T-HANG	Apron	4105	37,331	AC	57	Fair	100	0	0	3	10
CLW	AP T-HANG	Apron	4205	24,739	AC	64	Fair	100	0	0	2	8
CLW	AP T-HANG	Apron	4305	31,604	AC	42	Poor	85	5	10	3	8

\* 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.



**LEGEND**

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

**2022 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.



## 4.2 Summary of Pavement Condition Evaluation Results

### 4.2.1 Network-Level Observations

The PCI assessment for Clearwater Air Park (CLW) was performed in April 2022. The overall area-weighted average PCI value of the network was 71, representing a condition rating of Satisfactory.

Based on the FAA 5010 Report as of 10/23/2022, the Airport has reported 50,590 operations for 12 months ending 12/14/2017.

### 4.2.2 Branch-Level Observations

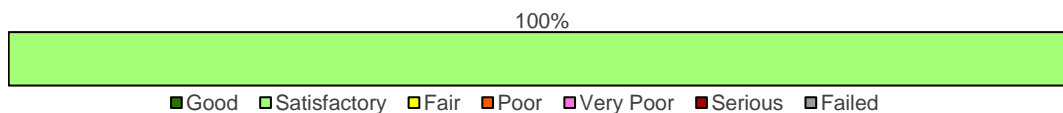
The following branch-level observations are a summary of select pavement facilities identified during the PCI assessment, including a discussion of general conditions and branch characteristics. The summary may not include all branches and/or sections within the Airport's airfield pavement network. Representative 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 16-34*

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
RW 16-34	RUNWAY	4	308,025	75	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
6105	AAC	15,000	85	Satisfactory
6110	AAC	224,775	72	Satisfactory
6120	AAC	22,500	83	Satisfactory
6130	AC	45,750	85	Satisfactory

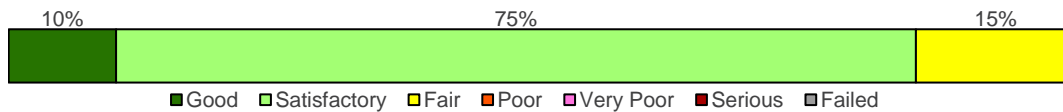
RW 16-34 consists of 4 flexible pavement sections, totaling 308,025 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 9 years old. Overall, RW 16-34 is in Satisfactory condition with an area-weighted average PCI of 75.

## Taxiways

### *TW A*

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	7	149,033	77	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: 10% Good (86-100 PCI), 75% Satisfactory (71-85 PCI), 15% Fair (56-70 PCI).



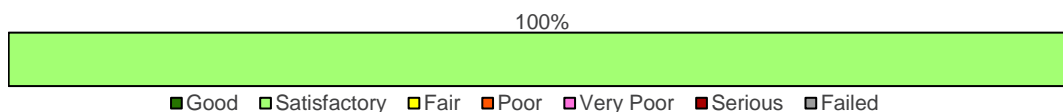
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
105	AAC	63,329	75	Satisfactory
107	AAC	5,097	85	Satisfactory
110	AAC	7,086	78	Satisfactory
135	AAC	22,265	63	Fair
140	AAC	12,540	73	Satisfactory
145	AC	23,716	85	Satisfactory
150	AAC	15,000	89	Good

TW A consists of 7 flexible pavement sections, totaling 149,033 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 9 years old. Overall, TW A is in Satisfactory condition with an area-weighted average PCI of 77.

### *TW A1*

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A1	TAXIWAY	1	6,928	77	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).



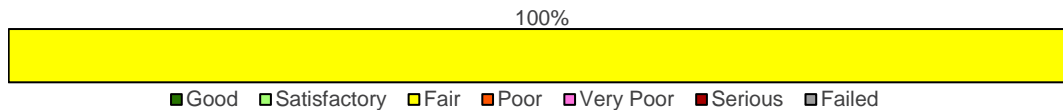
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
115	AAC	6,928	77	Satisfactory

TW A1 consists of 1 flexible pavement section, totaling 6,928 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 9 years old. Overall, TW A1 is in Satisfactory condition with an area-weighted average PCI of 77.

### TW A2

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A2	TAXIWAY	1	6,567	66	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).



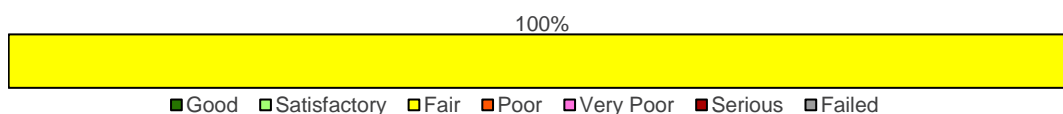
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
120	AAC	6,567	66	Fair

TW A2 consists of 1 flexible pavement section, totaling 6,567 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 9 years old. Overall, TW A2 is in Fair condition with an area-weighted average PCI of 66.

### TW A3

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TW A3	TAXIWAY	1	6,967	62	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
125	AAC	6,967	62	Fair

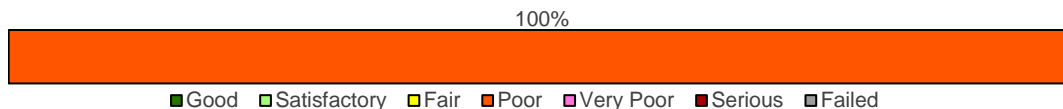
TW A3 consists of 1 flexible pavement section, totaling 6,967 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 9 years old. Overall, TW A3 is in Fair condition with an area-weighted average PCI of 62.

## **Taxilanes**

### ***TL CENTER***

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL CENTER	TAXILANE	1	11,073	48	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: 100% Poor (41-55 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3410	AC	11,073	48	Poor

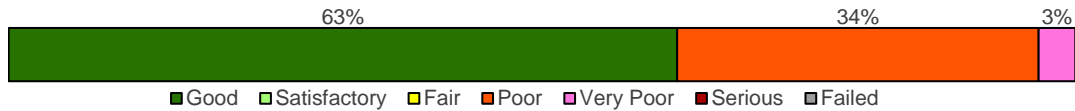
TL CENTER consists of 1 flexible pavement section, totaling 11,073 sf. The last major construction date for the branch was 1999, resulting in an area-weighted average age at inspection of 22 years old. Overall, TL CENTER is in Poor condition with an area-weighted average PCI of 48.

### ***TL T-HANG***

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
TL T-HANG	TAXILANE	4	42,109	72	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: 63% Good (86-100 PCI), 34% Poor (41-55 PCI), 3% Very Poor (26-40 PCI).





Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
3310	AAC	13,365	86	Good
3605	AC	14,273	46	Poor
3610	AAC	13,025	91	Good
3615	AC	1,446	40	Very Poor

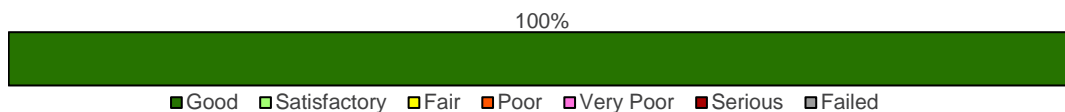
TL T-HANG consists of 4 flexible pavement sections, totaling 42,109 sf. The last major construction dates range from 1991 to 2015, resulting in an area-weighted average age at inspection of 15 years old. Overall, TL T-HANG is in Satisfactory condition with an area-weighted average PCI of 72.

### Aprons

#### **AP CENTER**

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP CENTER	APRON	1	18,903	88	Good

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% Good (86-100 PCI).



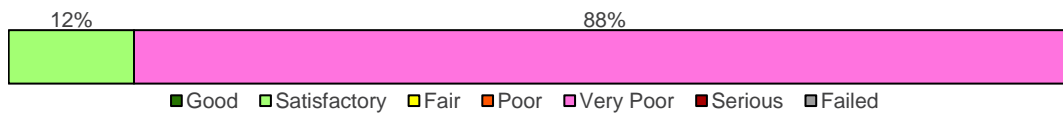
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4405	AAC	18,903	88	Good

AP CENTER consists of 1 flexible pavement section, totaling 18,903 sf. The last major construction date for the branch was 2015, resulting in an area-weighted average age at inspection of 7 years old. Overall, AP CENTER is in Good condition with an area-weighted average PCI of 88.

### AP N

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP N	APRON	2	21,977	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: 12% Satisfactory (71-85 PCI), 88% Very Poor (26-40 PCI).



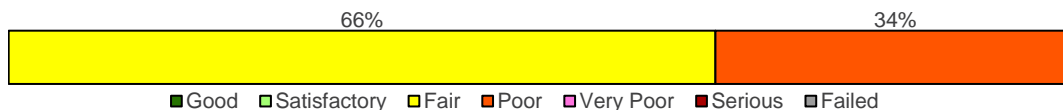
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4505	AC	19,396	35	Very Poor
4510	AC	2,581	80	Satisfactory

AP N consists of 2 flexible pavement sections, totaling 21,977 sf. The last major construction dates range from 2003 to 2012, resulting in an area-weighted average age at inspection of 18 years old. Overall, AP N is in Very Poor condition with an area-weighted average PCI of 40.

### AP T-HANG

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area-Weighted Avg PCI	Branch Condition Rating
AP T-HANG	APRON	3	93,674	54	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: 66% Fair (56-70 PCI), 34% Poor (41-55 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
4105	AC	37,331	57	Fair
4205	AC	24,739	64	Fair
4305	AC	31,604	42	Poor

AP T-HANG consists of 3 flexible pavement sections, totaling 93,674 sf. The last major construction dates range from 1996 to 1999, resulting in an area-weighted average age at inspection of 25 years old. Overall, AP T-HANG is in Poor condition with an area-weighted average PCI of 54.



# **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 play 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. As a reminder, 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.

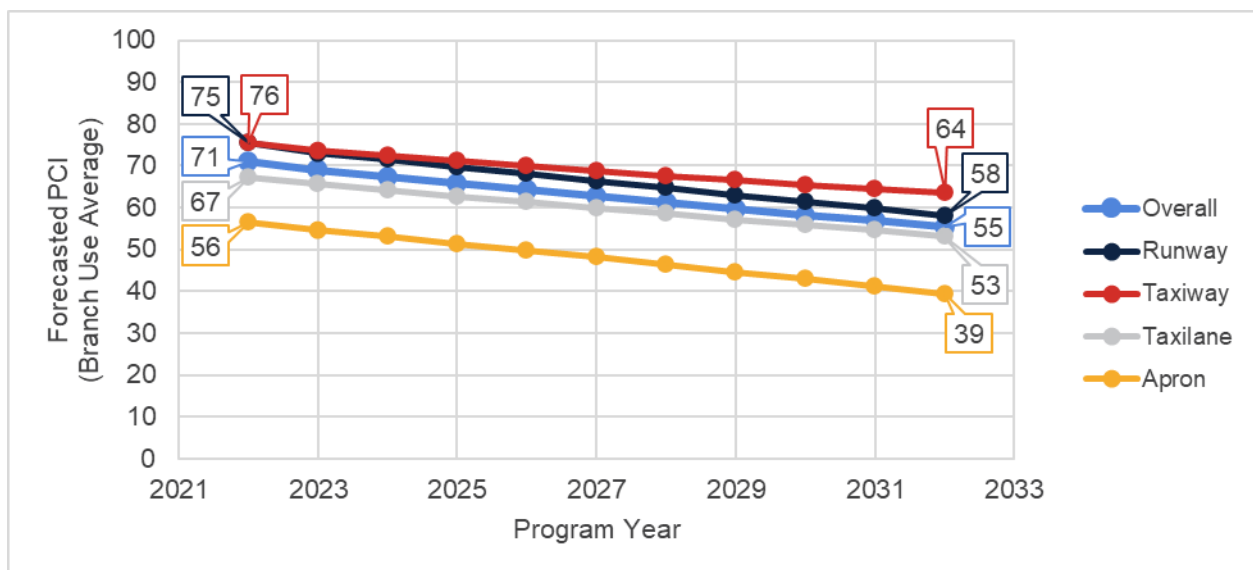
### 5.2.2 Performance Models

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 2023 through 2032.

*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.

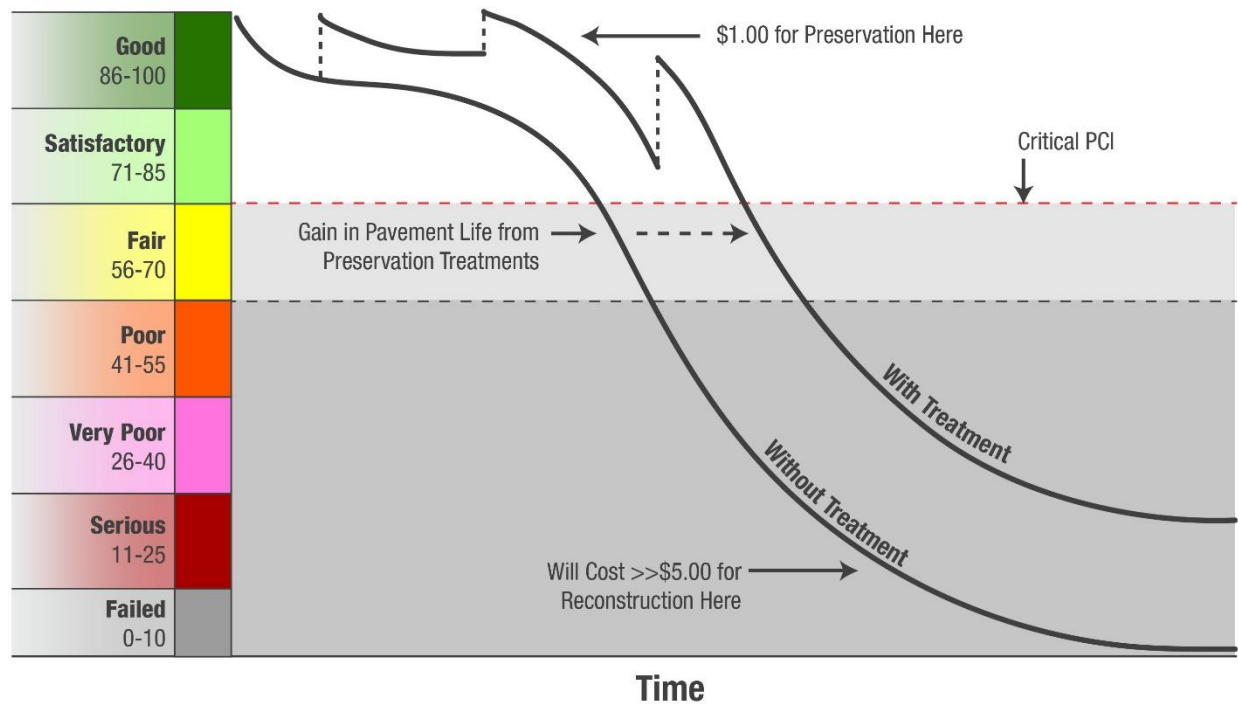
*Table 5.2.4: Forecasted PCI Values 2023-2032 – Section-Level*

Network ID	Branch ID	Section ID	Current PCI	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CLW	RW 16-34	6105	85	83	81	79	78	76	74	72	71	69	67
CLW	RW 16-34	6110	72	70	68	66	65	63	61	59	58	56	54
CLW	RW 16-34	6120	83	81	79	77	76	74	72	70	69	67	65
CLW	RW 16-34	6130	85	83	81	79	78	77	75	74	73	72	71
CLW	TW A	105	75	73	72	71	69	68	67	66	65	64	63
CLW	TW A	107	85	83	81	79	78	76	74	73	72	70	69
CLW	TW A	110	78	76	75	73	72	71	69	68	67	66	65
CLW	TW A	135	63	62	61	60	60	59	58	58	57	56	55
CLW	TW A	140	73	71	70	69	68	67	66	65	64	63	62
CLW	TW A	145	85	83	81	80	78	77	75	74	73	72	71
CLW	TW A	150	89	86	84	83	81	79	77	76	74	73	72
CLW	TW A1	115	77	75	74	72	71	70	69	67	66	65	64
CLW	TW A2	120	66	65	64	63	62	61	61	60	59	58	58
CLW	TW A3	125	62	61	60	60	59	58	57	57	56	55	55
CLW	TL CENTER	3410	48	47	46	45	45	44	43	41	40	39	38
CLW	TL T-HANG	3310	86	84	82	80	78	77	75	74	72	71	70
CLW	TL T-HANG	3605	46	45	44	43	42	41	40	39	37	36	34
CLW	TL T-HANG	3610	91	88	86	84	82	81	79	77	76	74	73
CLW	TL T-HANG	3615	40	39	37	36	34	33	31	30	28	26	24
CLW	AP CENTER	4405	88	85	83	81	79	77	74	72	70	68	66
CLW	AP N	4505	35	32	29	26	23	20	17	14	11	9	6
CLW	AP N	4510	80	78	76	74	72	71	69	68	66	65	64
CLW	AP T-HANG	4105	57	56	55	55	54	54	53	53	52	52	51
CLW	AP T-HANG	4205	64	63	61	60	59	59	58	57	56	56	55
CLW	AP T-HANG	4305	42	40	38	36	34	32	29	26	23	20	17

### 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): Pavement Life and the Effect of Treatments



FAA Eligibility Thresholds:   >70: Routine Maintenance   55-70: Rehabilitation Eligible   <55: Reconstruction Eligible

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

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 System Updates, the critical PCI value was set to 65 for all functional uses. Now, 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 70 will be considered for Rehabilitation and sections less than 55 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 be defined at 70 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 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*

Runway	Taxiway	Apron
70	70	70

**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,  $PCI < \text{Critical } PCI$

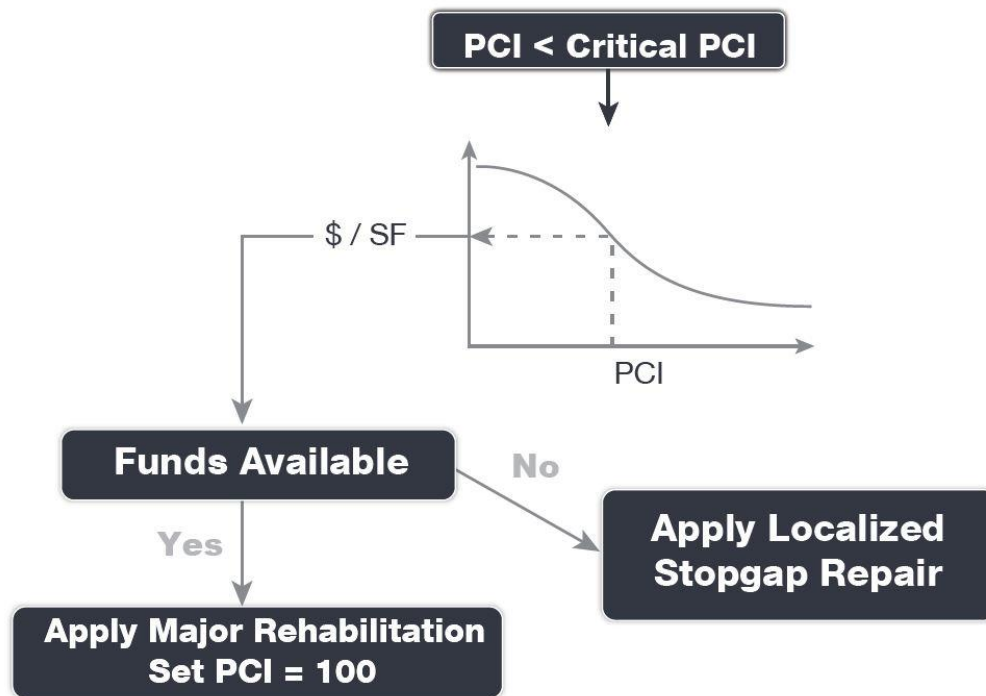
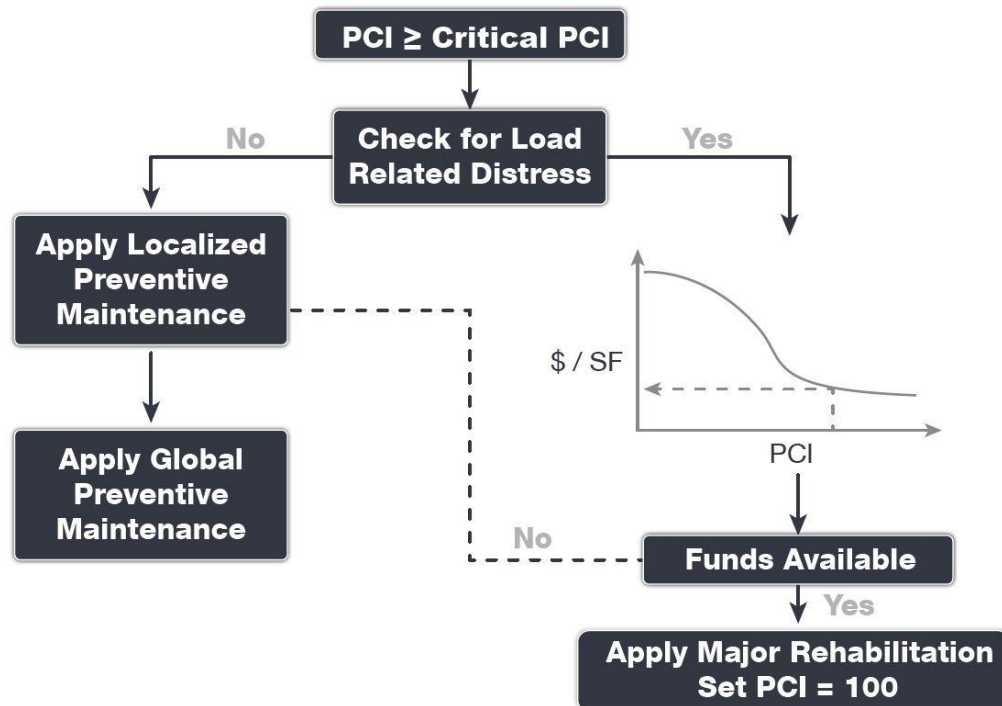


Figure 5.3 (c): Major Rehabilitation Planning Decision Diagram,  $PCI \geq \text{Critical } PCI$



## 5.4 Localized Maintenance and Repair

This section discusses both localized maintenance and major rehabilitation 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 (2) 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 (2) 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 the 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	Reliever Costs	Work Type Unit
AC Crack Sealing	\$ 4.00	LF
AC Full-Depth Patching	\$ 11.50	SF
AC Partial-Depth Patching	\$ 4.75	SF
Surface Seal	\$ 0.75	SF

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

Localized Work Type	Reliever Costs	Work Type Unit
Grinding	\$ 2.00	SF
PCC Crack Sealing	\$ 7.00	LF
PCC Joint Seal	\$ 4.25	LF
PCC Full-Depth Patching	\$ 65.00	SF
PCC Partial-Depth Patching	\$ 169.00	SF
PCC Slab Replacement	\$ 51.50	SF

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

#### 5.4.4 Localized Maintenance and Repair Policy

**Table 5.4.4** and **Table 5.4.5** depicts the Localized Preventive Maintenance Policy and the Localized Stopgap Maintenance Policy for AC and PCC pavements. The resulting Localized Maintenance recommendations for this program are identified based on this policy.

*Table 5.4.4: AC Pavement Localized Preventive & Stopgap Maintenance & Repair Policy*

Distress	Severity	Description	AC Preventive Work Type	AC Stopgap Work Type
41	Low	Alligator Cracking	Monitor Pavement	Monitor Pavement
41	Medium	Alligator Cracking	AC Full Depth Patching	AC Full Depth Patching
41	High	Alligator Cracking	AC Full Depth Patching	AC Full Depth Patching
42	N/A	Bleeding	Monitor Pavement	Monitor Pavement
43	Low	Block Cracking	Monitor Pavement	Monitor Pavement
43	Medium	Block Cracking	AC Crack Sealing	Monitor Pavement
43	High	Block Cracking	AC Crack Sealing	AC Crack Sealing
44	Low	Corrugation	Monitor Pavement	Monitor Pavement
44	Medium	Corrugation	AC Full Depth Patching	Monitor Pavement
44	High	Corrugation	AC Full Depth Patching	AC Full Depth Patching
45	Low	Depression	Monitor Pavement	Monitor Pavement
45	Medium	Depression	AC Full Depth Patching	Monitor Pavement
45	High	Depression	AC Full Depth Patching	AC Full Depth Patching
46	N/A	Jet Blast	Monitor Pavement	Monitor Pavement
47	Low	Jt. Reflective Cracking	Monitor Pavement	Monitor Pavement
47	Medium	Jt. Reflective Cracking	AC Crack Sealing	Monitor Pavement
47	High	Jt. Reflective Cracking	AC Full Depth Patching	AC Full Depth Patching
48	Low	L&T Cracking	Monitor Pavement	Monitor Pavement
48	Medium	L&T Cracking	AC Crack Sealing	Monitor Pavement
48	High	L&T Cracking	AC Full Depth Patching	AC Full Depth Patching
49	N/A	Oil Spillage	Monitor Pavement	Monitor Pavement
50	Low	Patching	Monitor Pavement	Monitor Pavement
50	Medium	Patching	AC Full Depth Patching	Monitor Pavement
50	High	Patching	AC Full Depth Patching	AC Full Depth Patching
51	N/A	Polished Aggregate	Monitor Pavement	Monitor Pavement
52	Low	Raveling	Surface Seal	Monitor Pavement
52	Medium	Raveling	Surface Seal	Monitor Pavement
52	High	Raveling	AC Partial Depth Patching	AC Partial Depth Patching
53	Low	Rutting	Monitor Pavement	Monitor Pavement
53	Medium	Rutting	AC Full Depth Patching	Monitor Pavement
53	High	Rutting	AC Full Depth Patching	AC Full Depth Patching
54	Low	Shoving	Monitor Pavement	Monitor Pavement
54	Medium	Shoving	AC Partial Depth Patching	Monitor Pavement

Distress	Severity	Description	AC Preventive Work Type	AC Stopgap Work Type
54	High	Shoving	AC Full Depth Patching	AC Full Depth Patching
55	N/A	Slippage Cracking	AC Full Depth Patching	AC Full Depth Patching
56	Low	Swelling	Monitor Pavement	Monitor Pavement
56	Medium	Swelling	AC Full Depth Patching	Monitor Pavement
56	High	Swelling	AC Full Depth Patching	AC Full Depth Patching
57	Low	Weathering	Monitor Pavement	Monitor Pavement
57	Medium	Weathering	Surface Seal	Monitor Pavement
57	High	Weathering	AC Partial Depth Patching	Surface Seal

*Table 5.4.5: PCC Pavement Localized Preventive & Stopgap Maintenance & Repair Policy*

Distress	Severity	Description	PCC Preventive Work Type	PCC Stopgap Work Type
61	Low	Blow-up	PCC Full Depth Patching	Monitor Pavement
61	Medium	Blow-up	PCC Full Depth Patching	PCC Full Depth Patching
61	High	Blow-up	PCC Slab Replacement	PCC Slab Replacement
62	Low	Corner Break	Monitor Pavement	Monitor Pavement
62	Medium	Corner Break	PCC Full Depth Patching	PCC Full Depth Patching
62	High	Corner Break	PCC Full Depth Patching	PCC Full Depth Patching
63	Low	Linear Cracking	Monitor Pavement	Monitor Pavement
63	Medium	Linear Cracking	PCC Crack Sealing	PCC Crack Sealing
63	High	Linear Cracking	PCC Full Depth Patching	PCC Crack Sealing
64	Low	Durability Cracking	Monitor Pavement	Monitor Pavement
64	Medium	Durability Cracking	PCC Full Depth Patching	PCC Full Depth Patching
64	High	Durability Cracking	PCC Slab Replacement	PCC Slab Replacement
65	Low	Jt. Seal Damage	PCC Joint Seal	Monitor Pavement
65	Medium	Jt. Seal Damage	PCC Joint Seal	Monitor Pavement
65	High	Jt. Seal Damage	PCC Joint Seal	PCC Joint Seal
66	Low	Small Patch	Monitor Pavement	Monitor Pavement
66	Medium	Small Patch	PCC Partial Depth Patching	Monitor Pavement
66	High	Small Patch	PCC Partial Depth Patching	PCC Partial Depth Patching
67	Low	Large Patch	Monitor Pavement	Monitor Pavement
67	Medium	Large Patch	PCC Full Depth Patching	Monitor Pavement
67	High	Large Patch	PCC Full Depth Patching	PCC Full Depth Patching
68	N/A	Popouts	Monitor Pavement	Monitor Pavement
69	N/A	Pumping	Monitor Pavement	Monitor Pavement
70	Low	Scaling	Monitor Pavement	Monitor Pavement
70	Medium	Scaling	PCC Slab Replacement	Monitor Pavement
70	High	Scaling	PCC Slab Replacement	PCC Slab Replacement
71	Low	Faulting	Monitor Pavement	Monitor Pavement
71	Medium	Faulting	Grinding	Monitor Pavement

Distress	Severity	Description	PCC Preventive Work Type	PCC Stopgap Work Type
71	High	Faulting	PCC Slab Replacement	PCC Slab Replacement
72	Low	Shattered Slab	PCC Crack Sealing	Monitor Pavement
72	Medium	Shattered Slab	PCC Slab Replacement	PCC Crack Sealing
72	High	Shattered Slab	PCC Slab Replacement	PCC Slab Replacement
73	N/A	Shrinkage Cracking	Monitor Pavement	Monitor Pavement
74	Low	Joint Spall	Monitor Pavement	Monitor Pavement
74	Medium	Joint Spall	PCC Partial Depth Patching	PCC Partial Depth Patching
74	High	Joint Spall	PCC Partial Depth Patching	PCC Partial Depth Patching
75	Low	Corner Spall	Monitor Pavement	Monitor Pavement
75	Medium	Corner Spall	PCC Partial Depth Patching	PCC Partial Depth Patching
75	High	Corner Spall	PCC Partial Depth Patching	PCC Partial Depth Patching
76	Low	ASR	Monitor Pavement	Monitor Pavement
76	Medium	ASR	PCC Slab Replacement	PCC Slab Replacement
76	High	ASR	PCC Slab Replacement	PCC Slab Replacement

## 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 (2) 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 Reliever 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	Reliever Pavement Section
<b>AC Reconstruction</b>	
<i>Full-depth asphalt pavement section reconstruction. Removal of existing pavement section and construction of a new section.</i>  <b>PCI &lt;55</b>	Pavement Removal
	Unclassified Excavation
	Subgrade Stabilization (12")
	Limerock Base Course (8")
	Prime Coat
	Tack Coat
	P-401 Surface Course (4")
	<i>Excludes any paved shoulder features</i>
<b>AC Rehabilitation</b>	
<i>Combination of asphalt pavement milling and replacement overlay with 15% of the areas subject to full-depth reconstruction.</i>  <b>PCI = 55 to 70</b>	<b>15% AC Reconstruction</b>
	<b>Mill and Overlay</b>
	AC Milling (3")
	Tack Coat
	P-401 Surface Course (3")
	<i>Excludes any paved shoulder features</i>
<b>PCC Reconstruction</b>	
<i>Full-depth rigid pavement section reconstruction.</i>  <b>PCI &lt; 55</b>	Pavement Removal
	Unclassified Excavation
	Subgrade Stabilization (12")
	Limerock Base Course (6")
	P-501 PCC Pavement (14")
	PCC Joint Seal
<b>PCC Rehabilitation</b>	
<i>Rehabilitation of PCC pavement with a combination of crack sealing, joint seal replacement, limited patching, and replacement of 15% of slab panels.</i>  <b>PCI = 55 to 70</b>	<b>15% Slab Replacement</b>
	<b>Joint and Crack Seal</b>
	<b>Limited Patching</b>

*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 15% 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 between 55 and 70. 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 15% 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 between 55 and 70.


#### **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: RL 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 70	\$10.50	\$22.50
Reconstruction	0 to 55	\$18.50	\$45.00



# **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	\$ 13,670
Stopgap	\$ -
<b>Planning-Level Localized M&amp;R Needs =</b>	<b>\$ 13,670</b>

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	AC Crack Sealing	1,342	LF	\$ 5,380
	Surface Seal	6,971	SF	\$ 5,250
	AC Full-Depth Patching	264	SF	\$ 3,040

**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
CLW	RW 16-34	6105	15,000	85	85	\$ -
CLW	RW 16-34	6110	224,775	72	74	\$ 5,210
CLW	RW 16-34	6120	22,500	83	83	\$ -
CLW	RW 16-34	6130	45,750	85	85	\$ -
CLW	TW A	105	63,329	75	75	\$ 3,040
CLW	TW A	107	5,097	85	89	\$ 20
CLW	TW A	110	7,086	78	78	\$ -
CLW	TW A	135	22,265	63	63	\$ -
CLW	TW A	140	12,540	73	78	\$ 150
CLW	TW A	145	23,716	85	88	\$ 130
CLW	TW A	150	15,000	89	89	\$ -
CLW	TW A1	115	6,928	77	77	\$ -
CLW	TW A2	120	6,567	66	66	\$ -
CLW	TW A3	125	6,967	62	62	\$ -
CLW	TL CENTER	3410	11,073	48	48	\$ -
CLW	TL T-HANG	3310	13,365	86	94	\$ 2,010
CLW	TL T-HANG	3605	14,273	46	46	\$ -
CLW	TL T-HANG	3610	13,025	91	94	\$ 490
CLW	TL T-HANG	3615	1,446	40	40	\$ -
CLW	AP CENTER	4405	18,903	88	94	\$ 2,130
CLW	AP N	4505	19,396	35	35	\$ -
CLW	AP N	4510	2,581	80	87	\$ 490
CLW	AP T-HANG	4105	37,331	57	57	\$ -
CLW	AP T-HANG	4205	24,739	64	64	\$ -
CLW	AP T-HANG	4305	31,604	42	42	\$ -

## 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 **Figures 5.3 (b) and (c)** 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 up to the nearest \$1,000 for planning purposes.

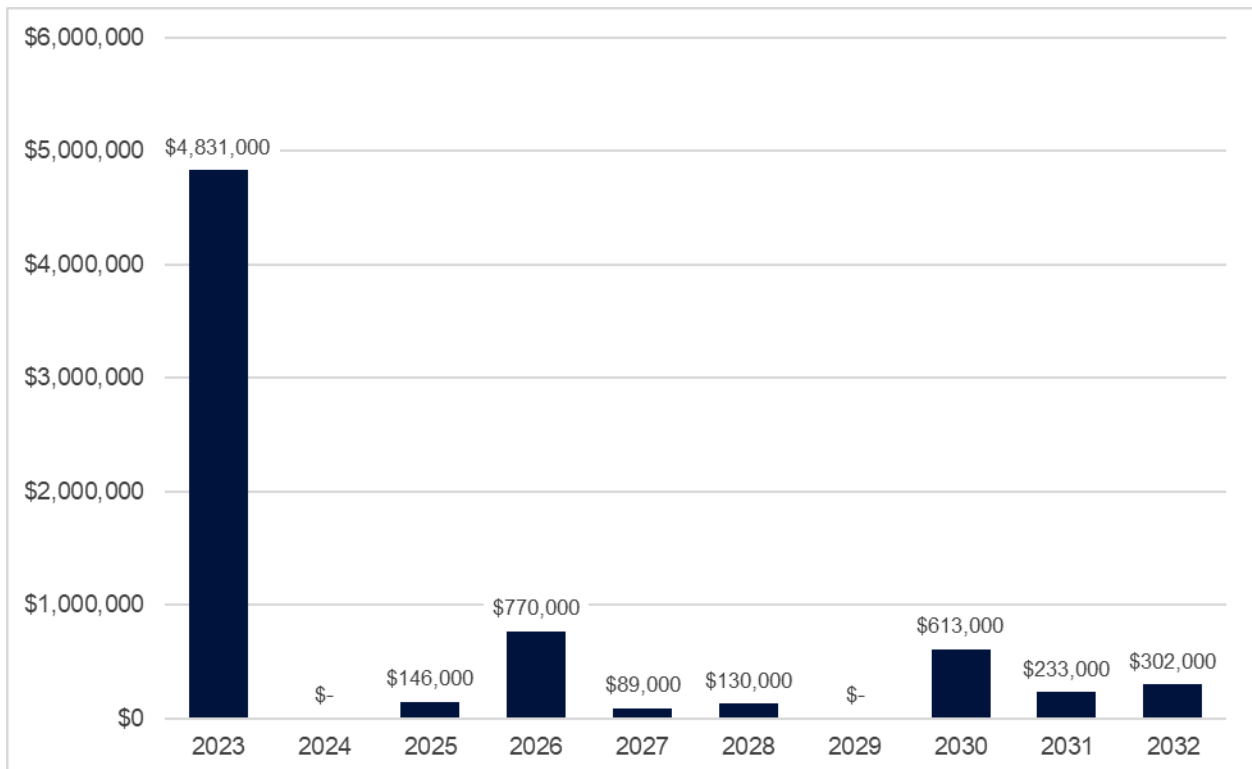
*Table 6.2.1 (a): Section-Level 10-Year Major Rehabilitation Needs*

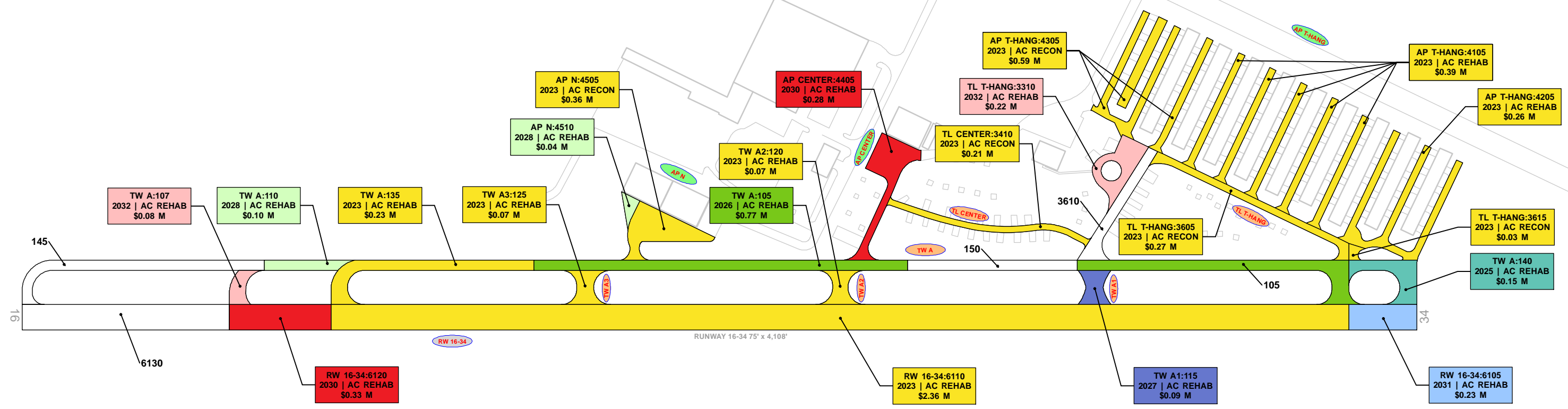
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2023	CLW	RW 16-34	6110	AAC	224,775	70	AC Rehabilitation	\$ 2,361,000
2023	CLW	TW A	135	AAC	22,265	62	AC Rehabilitation	\$ 234,000
2023	CLW	TW A2	120	AAC	6,567	65	AC Rehabilitation	\$ 69,000
2023	CLW	TW A3	125	AAC	6,967	61	AC Rehabilitation	\$ 74,000
2023	CLW	TL CENTER	3410	AC	11,073	47	AC Reconstruction	\$ 205,000

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2023	CLW	TL T-HANG	3605	AC	14,273	45	AC Reconstruction	\$ 265,000
2023	CLW	TL T-HANG	3615	AC	1,446	39	AC Reconstruction	\$ 27,000
2023	CLW	AP N	4505	AC	19,396	32	AC Reconstruction	\$ 359,000
2023	CLW	AP T-HANG	4105	AC	37,331	56	AC Rehabilitation	\$ 392,000
2023	CLW	AP T-HANG	4205	AC	24,739	63	AC Rehabilitation	\$ 260,000
2023	CLW	AP T-HANG	4305	AC	31,604	40	AC Reconstruction	\$ 585,000
2025	CLW	TW A	140	AAC	12,540	69	AC Rehabilitation	\$ 146,000
2026	CLW	TW A	105	AAC	63,329	69	AC Rehabilitation	\$ 770,000
2027	CLW	TW A1	115	AAC	6,928	70	AC Rehabilitation	\$ 89,000
2028	CLW	TW A	110	AAC	7,086	69	AC Rehabilitation	\$ 95,000
2028	CLW	AP N	4510	AC	2,581	69	AC Rehabilitation	\$ 35,000
2030	CLW	RW 16-34	6120	AAC	22,500	69	AC Rehabilitation	\$ 333,000
2030	CLW	AP CENTER	4405	AAC	18,903	70	AC Rehabilitation	\$ 280,000
2031	CLW	RW 16-34	6105	AAC	15,000	69	AC Rehabilitation	\$ 233,000
2032	CLW	TW A	107	AAC	5,097	69	AC Rehabilitation	\$ 84,000
2032	CLW	TL T-HANG	3310	AAC	13,365	70	AC Rehabilitation	\$ 218,000

**Figure 6.2.1 (a)** summarizes the section-level major rehabilitation needs for a 10-year period between 2023 and 2032. **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*





**LEGEND**

TYPICAL RUNWAY BRANCH ID  
 TYPICAL TAXIWAY BRANCH ID  
 TYPICAL APRON BRANCH ID

**PROGRAM YEAR**

2023	2028
2024	2029
2025	2030
2026	2031
2027	2032

"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.





# 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 D5340-20 (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 2023-2032. 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 D5340-20. 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 D5340-20 (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 D5340-20 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 2 2021-2023 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 D5340-20.

## 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 D5340-20, 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., 2019.
- » 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, 2005.



A photograph of a long, straight airfield runway stretching towards the horizon under a bright blue sky with scattered white clouds. The runway has a central white dashed line and yellow edge lines. The image is framed by a red diagonal bar on the left and a blue diagonal bar on the right.

# **Appendix A: Airfield Pavement Analysis**

A close-up photograph of the runway pavement, showing a white dashed line and yellow chevron markings. The image is framed by a red diagonal bar on the left and a blue diagonal bar on the right.

*Table A.1: Pavement System Inventory Details*

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
CLW	RW 16-34	Runway	6105	15,000	AAC	1/1/2013
CLW	RW 16-34	Runway	6110	224,775	AAC	1/1/2013
CLW	RW 16-34	Runway	6120	22,500	AAC	1/1/2013
CLW	RW 16-34	Runway	6130	45,750	AC	1/1/2013
CLW	TW A	Taxiway	105	63,329	AAC	1/1/2013
CLW	TW A	Taxiway	107	5,097	AAC	1/1/2013
CLW	TW A	Taxiway	110	7,086	AAC	1/1/2013
CLW	TW A	Taxiway	135	22,265	AAC	1/1/2013
CLW	TW A	Taxiway	140	12,540	AAC	1/1/2013
CLW	TW A	Taxiway	145	23,716	AC	1/1/2013
CLW	TW A	Taxiway	150	15,000	AAC	1/1/2013
CLW	TW A1	Taxiway	115	6,928	AAC	1/1/2013
CLW	TW A2	Taxiway	120	6,567	AAC	1/1/2013
CLW	TW A3	Taxiway	125	6,967	AAC	1/1/2013
CLW	TL CENTER	Taxilane	3410	11,073	AC	12/15/1999
CLW	TL T-HANG	Taxilane	3310	13,365	AAC	1/1/2015
CLW	TL T-HANG	Taxilane	3605	14,273	AC	1/1/1996
CLW	TL T-HANG	Taxilane	3610	13,025	AAC	1/1/2015
CLW	TL T-HANG	Taxilane	3615	1,446	AC	1/1/1991
CLW	AP CENTER	Apron	4405	18,903	AAC	1/1/2015
CLW	AP N	Apron	4505	19,396	AC	1/1/2003
CLW	AP N	Apron	4510	2,581	AC	1/1/2012
CLW	AP T-HANG	Apron	4105	37,331	AC	1/1/1996
CLW	AP T-HANG	Apron	4205	24,739	AC	1/1/1996
CLW	AP T-HANG	Apron	4305	31,604	AC	12/25/1999

*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
CLW	RW 16-34	Runway	6105	15,000	85	Satisfactory
CLW	RW 16-34	Runway	6110	224,775	72	Satisfactory
CLW	RW 16-34	Runway	6120	22,500	83	Satisfactory
CLW	RW 16-34	Runway	6130	45,750	85	Satisfactory
CLW	TW A	Taxiway	105	63,329	75	Satisfactory
CLW	TW A	Taxiway	107	5,097	85	Satisfactory
CLW	TW A	Taxiway	110	7,086	78	Satisfactory
CLW	TW A	Taxiway	135	22,265	63	Fair
CLW	TW A	Taxiway	140	12,540	73	Satisfactory
CLW	TW A	Taxiway	145	23,716	85	Satisfactory
CLW	TW A	Taxiway	150	15,000	89	Good
CLW	TW A1	Taxiway	115	6,928	77	Satisfactory
CLW	TW A2	Taxiway	120	6,567	66	Fair
CLW	TW A3	Taxiway	125	6,967	62	Fair
CLW	TL CENTER	Taxilane	3410	11,073	48	Poor
CLW	TL T-HANG	Taxilane	3310	13,365	86	Good
CLW	TL T-HANG	Taxilane	3605	14,273	46	Poor
CLW	TL T-HANG	Taxilane	3610	13,025	91	Good
CLW	TL T-HANG	Taxilane	3615	1,446	40	Very Poor
CLW	AP CENTER	Apron	4405	18,903	88	Good
CLW	AP N	Apron	4505	19,396	35	Very Poor
CLW	AP N	Apron	4510	2,581	80	Satisfactory
CLW	AP T-HANG	Apron	4105	37,331	57	Fair
CLW	AP T-HANG	Apron	4205	24,739	64	Fair
CLW	AP T-HANG	Apron	4305	31,604	42	Poor

*Table A.3: Forecasted PCI Values 2023-2032 – Section-Level*

Network ID	Branch ID	Section ID	Current PCI	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CLW	RW 16-34	6105	85	83	81	79	78	76	74	72	71	69	67
CLW	RW 16-34	6110	72	70	68	66	65	63	61	59	58	56	54
CLW	RW 16-34	6120	83	81	79	77	76	74	72	70	69	67	65
CLW	RW 16-34	6130	85	83	81	79	78	77	75	74	73	72	71
CLW	TW A	105	75	73	72	71	69	68	67	66	65	64	63
CLW	TW A	107	85	83	81	79	78	76	74	73	72	70	69
CLW	TW A	110	78	76	75	73	72	71	69	68	67	66	65
CLW	TW A	135	63	62	61	60	60	59	58	58	57	56	55
CLW	TW A	140	73	71	70	69	68	67	66	65	64	63	62
CLW	TW A	145	85	83	81	80	78	77	75	74	73	72	71
CLW	TW A	150	89	86	84	83	81	79	77	76	74	73	72
CLW	TW A1	115	77	75	74	72	71	70	69	67	66	65	64
CLW	TW A2	120	66	65	64	63	62	61	61	60	59	58	58
CLW	TW A3	125	62	61	60	60	59	58	57	57	56	55	55
CLW	TL CENTER	3410	48	47	46	45	45	44	43	41	40	39	38
CLW	TL T-HANG	3310	86	84	82	80	78	77	75	74	72	71	70
CLW	TL T-HANG	3605	46	45	44	43	42	41	40	39	37	36	34
CLW	TL T-HANG	3610	91	88	86	84	82	81	79	77	76	74	73
CLW	TL T-HANG	3615	40	39	37	36	34	33	31	30	28	26	24
CLW	AP CENTER	4405	88	85	83	81	79	77	74	72	70	68	66
CLW	AP N	4505	35	32	29	26	23	20	17	14	11	9	6
CLW	AP N	4510	80	78	76	74	72	71	69	68	66	65	64
CLW	AP T-HANG	4105	57	56	55	55	54	54	53	53	52	52	51
CLW	AP T-HANG	4205	64	63	61	60	59	59	58	57	56	56	55
CLW	AP T-HANG	4305	42	40	38	36	34	32	29	26	23	20	17



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Pavement Database: FDOT

Network: CLEARWATER AIR Branch: AP CENTER CENTER APRON Section: 4405 Surface: AAC  
 L.C.D. 1/1/2015 Use: APRON Rank: P Length: 364.00 (Ft) Width: 100.00 (Ft) True Area: 18903.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2015	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	UNKNOWN
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
12/25/1999	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	

Network: CLEARWATER AIR Branch: AP N NORTH APRON Section: 4505 Surface: AC  
 L.C.D. 1/1/2003 Use: APRON Rank: P Length: 200.00 (Ft) Width: 100.00 (Ft) True Area: 19396.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	2" AC/6" Crushed PCC/9" Stab Subgrad
1/1/2003	NU-IN	New Construction - Initial	0.00	2.00	<input checked="" type="checkbox"/>	

Network: CLEARWATER AIR Branch: AP N NORTH APRON Section: 4510 Surface: AC  
 L.C.D. 1/1/2012 Use: APRON Rank: P Length: 94.00 (Ft) Width: 60.00 (Ft) True Area: 2581.000000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2012	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	

Network: CLEARWATER AIR Branch: AP T-HANG T-HANGAR APR Section: 4105 Surface: AC  
 L.C.D. 1/1/1996 Use: APRON Rank: P Length: 1,800.00 (Ft) Width: 20.00 (Ft) True Area: 37331.00001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX EST 1996: 2" FDOT P-331
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/1996	IMPORT ED	BUILT	0.00	2.00	<input checked="" type="checkbox"/>	

Network: CLEARWATER AIR Branch: AP T-HANG T-HANGAR APR Section: 4205 Surface: AC  
 L.C.D. 1/1/1996 Use: APRON Rank: P Length: 1,200.00 (Ft) Width: 20.00 (Ft) True Area: 24739.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX 1996: 2" FDOT P-331
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/1996	IMPORT ED	BUILT	0.00	2.00	<input checked="" type="checkbox"/>	
1/1/1996	IMPORT ED	OVERLAY	0.00	6.00	<input checked="" type="checkbox"/>	1996: 6" P-211 ON 9" P-160

Network: CLEARWATER AIR Branch: AP T-HANG T-HANGAR APR Section: 4305 Surface: AC  
 L.C.D. 12/25/199 Use: APRON Rank: P Length: 1,480.00 (Ft) Width: 20.00 (Ft) True Area: 31604.00000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
12/25/1999	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	

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Pavement Database: FDOT

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> RW 16-34		RUNWAY 16-34		<b>Section:</b> 6105	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> RUNWAY	<b>Rank:</b> P	<b>Length:</b> 200.00 (Ft)	<b>Width:</b> 75.00 (Ft)	<b>True Area:</b> 15000.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/2002	NU-IN	New Construction - Initial	0.00	2.00	<input checked="" type="checkbox"/>	2"AC/6"Crushed PCC/9"Stab Subgrad	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> RW 16-34		RUNWAY 16-34		<b>Section:</b> 6110	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> RUNWAY	<b>Rank:</b> P	<b>Length:</b> 2,997.00 (Ft)	<b>Width:</b> 75.00 (Ft)	<b>True Area:</b> 224775.0000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/1991	IMPORT ED	OVERLAY	0.00	1.50	<input checked="" type="checkbox"/>	1991: 1.5" P-401	
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP	
1/1/1970	IMPORT ED	BUILT	0.00	1.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> RW 16-34		RUNWAY 16-34		<b>Section:</b> 6120	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> RUNWAY	<b>Rank:</b> P	<b>Length:</b> 300.00 (Ft)	<b>Width:</b> 50.00 (Ft)	<b>True Area:</b> 22500.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/1992	IMPORT ED	BUILT	0.00	0.00	<input checked="" type="checkbox"/>	ASSUME 1992 AC RECONSTRUCTION	
1/1/1992	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> RW 16-34		RUNWAY 16-34		<b>Section:</b> 6130	<b>Surface:</b> AC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> RUNWAY	<b>Rank:</b> P	<b>Length:</b> 600.00 (Ft)	<b>Width:</b> 100.00 (Ft)	<b>True Area:</b> 45750.00001 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" P-401, 6" P-219 RECYCLED CON	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TL CENTER		CENTER APRON		<b>Section:</b> 3410	<b>Surface:</b> AC
<b>L.C.D.</b> 12/15/199	<b>Use:</b> TAXILAN	<b>Rank:</b> P	<b>Length:</b> 610.00 (Ft)	<b>Width:</b> 18.00 (Ft)	<b>True Area:</b> 11073.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>		
12/15/1999	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>		

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<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TL T-HANG T-HANGAR TAX		<b>Section:</b> 3310		<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2015		<b>Use:</b> TAXILAN	<b>Rank:</b> P	<b>Length:</b> 180.00 (Ft)	<b>Width:</b> 80.00 (Ft)	<b>True Area:</b> 13365.00000 (SqFt)
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2015	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	Seal coated with GRIPFLEX
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
12/25/1999	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TL T-HANG T-HANGAR TAX		<b>Section:</b> 3605		<b>Surface:</b> AC
<b>L.C.D.</b> 1/1/1996		<b>Use:</b> TAXILAN	<b>Rank:</b> P	<b>Length:</b> 660.00 (Ft)	<b>Width:</b> 20.00 (Ft)	<b>True Area:</b> 14273.00000 (SqFt)
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX 1996: 2" P-331 ON 6" P-211 ON 9" P-160 SOIL: SP
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/1996	IMPORT ED	BUILT	0.00	2.00	<input checked="" type="checkbox"/>	
1/1/1996	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TL T-HANG T-HANGAR TAX		<b>Section:</b> 3610		<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2015		<b>Use:</b> TAXILAN	<b>Rank:</b> P	<b>Length:</b> 385.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 13025.00000 (SqFt)
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2015	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	Seal coated with GRIPFLEX 1996: 2" P-331 ON 6" P-211 ON 9" P-160 SOIL: SP
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/1996	IMPORT ED	BUILT	0.00	2.00	<input checked="" type="checkbox"/>	
1/1/1996	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TL T-HANG T-HANGAR TAX		<b>Section:</b> 3615		<b>Surface:</b> AC
<b>L.C.D.</b> 1/1/1991		<b>Use:</b> TAXILAN	<b>Rank:</b> P	<b>Length:</b> 50.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 1446.000000 (SqFt)
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2014	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX EST 1991 AC PAVEMENT
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	
1/1/1991	IMPORT ED	BUILT	0.00	0.00	<input checked="" type="checkbox"/>	

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Network: CLEARWATER AIR Branch: TW A TAXIWAY A Section: 105 Surface: AAC  
 L.C.D. 1/1/2013 Use: TAXIWAY Rank: P Length: 2,600.00 (Ft) Width: 30.00 (Ft) True Area: 63329.00001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/1991	IMPORT ED	OVERLAY	0.00	1.50	<input checked="" type="checkbox"/>	1991: 1.5" P-401
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL TYPE: SP
1/1/1970	IMPORT ED	BUILT	0.00	1.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK

Network: CLEARWATER AIR Branch: TW A TAXIWAY A Section: 107 Surface: AAC  
 L.C.D. 1/1/2013 Use: TAXIWAY Rank: P Length: 475.00 (Ft) Width: 30.00 (Ft) True Area: 5097.000001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY
1/1/1992	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1992 AC PAVEMENT

Network: CLEARWATER AIR Branch: TW A TAXIWAY A Section: 110 Surface: AAC  
 L.C.D. 1/1/2013 Use: TAXIWAY Rank: P Length: 475.00 (Ft) Width: 30.00 (Ft) True Area: 7086.000002 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/1992	IMPORT ED	BUILT	0.00	0.00	<input checked="" type="checkbox"/>	1992 AC PAVEMENT
1/1/1992	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP
1/1/1984	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	ESTIMATE 1984 CEMENT STABILIZED LIMEROCK

Network: CLEARWATER AIR Branch: TW A1 TAXIWAY A1 Section: 115 Surface: AAC  
 L.C.D. 1/1/2013 Use: TAXIWAY Rank: P Length: 100.00 (Ft) Width: 50.00 (Ft) True Area: 6928.000002 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	1991: AC PAVEMENT
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP
1/1/1970	IMPORT ED	BUILT	0.00	1.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK



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Pavement Database: FDOT

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TW A		TAXIWAY A		<b>Section:</b> 135	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 700.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 22265.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/1998	IMPORT ED	BUILT	0.00	0.00	<input checked="" type="checkbox"/>	CONDITION/AGE FEATURE	
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	CHANGE FROM 1998 INSPECTION EST 1991 AC PAVEMENT	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TW A		TAXIWAY A		<b>Section:</b> 140	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 400.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 12540.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/2002	NU-IN	New Construction - Initial	0.00	2.00	<input checked="" type="checkbox"/>	2"AC/6"Crushed PCC/9"Stab Subgrad	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TW A		TAXIWAY A		<b>Section:</b> 145	<b>Surface:</b> AC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 700.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 23716.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	2" P-401, 6" P-219 RECYCLED CON	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TW A		TAXIWAY A		<b>Section:</b> 150	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 2,600.00 (Ft)	<b>Width:</b> 30.00 (Ft)	<b>True Area:</b> 15000.00000 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	REMOVE OR MILL EXISTING ASP	
1/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	<input checked="" type="checkbox"/>	1991: 1.5" P-401	
1/1/1970	NU-IN	New Construction - Initial	0.00	0.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK	

<b>Network:</b> CLEARWATER AIR		<b>Branch:</b> TW A2		TAXIWAY A2		<b>Section:</b> 120	<b>Surface:</b> AAC
<b>L.C.D.</b> 1/1/2013	<b>Use:</b> TAXIWAY	<b>Rank:</b> P	<b>Length:</b> 100.00 (Ft)	<b>Width:</b> 50.00 (Ft)	<b>True Area:</b> 6567.000002 (SqFt)		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments	
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY	
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX	
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	1991: AC PAVEMENT	
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP	
1/1/1970	IMPORT ED	BUILT	0.00	1.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK	

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**Work History Report**

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*Pavement Database: FDOT*

**Network:** CLEARWATER AIR    **Branch:** TW A3    TAXIWAY A3    **Section:** 125    **Surface:** AAC  
**L.C.D.** 1/1/2013    **Use:** TAXIWAY    **Rank:** P    **Length:** 100.00 (Ft)    **Width:** 50.00 (Ft)    **True Area:** 6967.000002 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2013	ML-OVL	Mill and Overlay	0.00	0.00	<input checked="" type="checkbox"/>	0.5" MILL, 1.5" P-401 OVERLAY
1/1/2003	ST-SC	Surface Treatment - Seal Coat	0.00	0.00	<input type="checkbox"/>	Seal coated with GRIPFLEX
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	1991: AC PAVEMENT
1/1/1991	IMPORT ED	OVERLAY	0.00	0.00	<input checked="" type="checkbox"/>	SOIL: SP
1/1/1970	IMPORT ED	BUILT	0.00	1.00	<input checked="" type="checkbox"/>	1970: 1" AC ON 6" LIMEROCK

**Summary:**

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	13	451,231.00	1.00	0.78
Mill and Overlay	15	453,347.00	0.00	0.00
New Construction - Initial	12	214,025.00	0.50	0.87
OVERLAY	17	728,106.00	0.53	1.45
Overlay - AC Structural	1	15,000.00	0.00	0.00
Surface Treatment - Seal Coat	29	738,871.00	0.00	0.00

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**Branch Condition Report**

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*Pavement Database: FDOT*

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
AP CENTE	1	364.00	100.00	18,903.00	APRON	88.00	0.00	88.00
AP N	2	294.00	80.00	21,977.00	APRON	57.50	22.50	40.28
AP T-HANG	3	4,480.00	20.00	93,674.00	APRON	54.33	9.18	53.79
RW 16-34	4	4,097.00	75.00	308,025.00	RUNWAY	81.25	5.40	75.37
TL CENTER	1	610.00	18.00	11,073.00	TAXILANE	48.00	0.00	48.00
TL T-HANG	4	1,275.00	40.00	42,109.00	TAXILANE	65.75	22.92	72.41
TW A	7	7,950.00	30.00	149,033.00	TAXIWAY	78.29	8.26	76.52
TW A1	1	100.00	50.00	6,928.00	TAXIWAY	77.00	0.00	77.00
TW A2	1	100.00	50.00	6,567.00	TAXIWAY	66.00	0.00	66.00
TW A3	1	100.00	50.00	6,967.00	TAXIWAY	62.00	0.00	62.00



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<b>Use Category</b>	<b>Number of Sections</b>	<b>Total Area (SqFt)</b>	<b>Arithmetic Average PCI</b>	<b>Average STD PCI</b>	<b>Weighted Average PCI</b>
APRON	6	134,554.00	61.00	18.94	56.39
RUNWAY	4	308,025.00	81.25	5.40	75.37
TAXILANE	5	53,182.00	62.20	21.69	67.33
TAXIWAY	10	169,495.00	75.30	8.98	75.54
ALL	25	665,256.00	70.20	16.74	70.93

Pavement Database: FDOT

NetworkId: CLW

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP CENTER	4405	1/1/2015	AAC	APRON	P	0	18,903.00	4/6/2022	7	88
AP N	4505	1/1/2003	AC	APRON	P	0	19,396.00	4/6/2022	19	35
AP N	4510	1/1/2012	AC	APRON	P	0	2,581.00	4/6/2022	10	80
AP T-HANG	4105	1/1/1996	AC	APRON	P	0	37,331.00	4/6/2022	26	57
AP T-HANG	4205	1/1/1996	AC	APRON	P	0	24,739.00	4/6/2022	26	64
AP T-HANG	4305	12/25/1999	AC	APRON	P	0	31,604.00	4/6/2022	23	42
RW 16-34	6105	1/1/2013	AAC	RUNWAY	P	0	15,000.00	4/6/2022	9	85
RW 16-34	6110	1/1/2013	AAC	RUNWAY	P	0	224,775.00	4/6/2022	9	72
RW 16-34	6120	1/1/2013	AAC	RUNWAY	P	0	22,500.00	4/6/2022	9	83
RW 16-34	6130	1/1/2013	AC	RUNWAY	P	0	45,750.00	4/6/2022	9	85
TL CENTER	3410	12/15/1999	AC	TAXILANE	P	0	11,073.00	4/6/2022	23	48
TL T-HANG	3310	1/1/2015	AAC	TAXILANE	P	0	13,365.00	4/6/2022	7	86
TL T-HANG	3605	1/1/1996	AC	TAXILANE	P	0	14,273.00	4/6/2022	26	46
TL T-HANG	3610	1/1/2015	AAC	TAXILANE	P	0	13,025.00	4/6/2022	7	91
TL T-HANG	3615	1/1/1991	AC	TAXILANE	P	0	1,446.00	4/6/2022	31	40
TW A	105	1/1/2013	AAC	TAXIWAY	P	0	63,329.00	4/6/2022	9	75
TW A	107	1/1/2013	AAC	TAXIWAY	P	0	5,097.00	4/6/2022	9	85
TW A	110	1/1/2013	AAC	TAXIWAY	P	0	7,086.00	4/6/2022	9	78
TW A	135	1/1/2013	AAC	TAXIWAY	P	0	22,265.00	4/6/2022	9	63
TW A	140	1/1/2013	AAC	TAXIWAY	P	0	12,540.00	4/6/2022	9	73
TW A	145	1/1/2013	AC	TAXIWAY	P	0	23,716.00	4/6/2022	9	85
TW A	150	1/1/2013	AAC	TAXIWAY	P	0	15,000.00	4/6/2022	9	89
TW A1	115	1/1/2013	AAC	TAXIWAY	P	0	6,928.00	4/6/2022	9	77
TW A2	120	1/1/2013	AAC	TAXIWAY	P	0	6,567.00	4/6/2022	9	66
TW A3	125	1/1/2013	AAC	TAXIWAY	P	0	6,967.00	4/6/2022	9	62

*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	9	525,394.00	18	79.06	8.68	76.56
16-20	19	19,396.00	1	35.00	0.00	35.00
21-25	23	42,677.00	2	45.00	3.00	43.56
26-30	26	76,343.00	3	55.67	7.41	57.21
31-35	31	1,446.00	1	40.00	0.00	40.00
ALL	13	665,256.00	25	70.20	16.74	70.93



# **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
CLW	RW 16-34	6110	L & T CR	Medium	1,302	LF	0.6%	Preventive	AC Crack Sealing	1,302	LF	\$ 4.00	\$ 5,210
CLW	TW A	105	DEPRESSION	Medium	203	SF	0.3%	Preventive	AC Full-Depth Patching	264	SF	\$ 11.50	\$ 3,040
CLW	TW A	107	L & T CR	Medium	3	LF	0.1%	Preventive	AC Crack Sealing	3	LF	\$ 4.00	\$ 20
CLW	TW A	140	L & T CR	Medium	37	LF	0.3%	Preventive	AC Crack Sealing	37	LF	\$ 4.00	\$ 150
CLW	TW A	145	RAVELING	Low	166	SF	0.7%	Preventive	Surface Seal	166	SF	\$ 0.75	\$ 130
CLW	TL T-HANG	3310	WEATHERING	Medium	2,675	SF	20.0%	Preventive	Surface Seal	2,675	SF	\$ 0.75	\$ 2,010
CLW	TL T-HANG	3610	WEATHERING	Medium	650	SF	5.0%	Preventive	Surface Seal	650	SF	\$ 0.75	\$ 490
CLW	AP CENTER	4405	WEATHERING	Medium	2,835	SF	15.0%	Preventive	Surface Seal	2,835	SF	\$ 0.75	\$ 2,130
CLW	AP N	4510	WEATHERING	Medium	645	SF	25.0%	Preventive	Surface Seal	645	SF	\$ 0.75	\$ 490



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

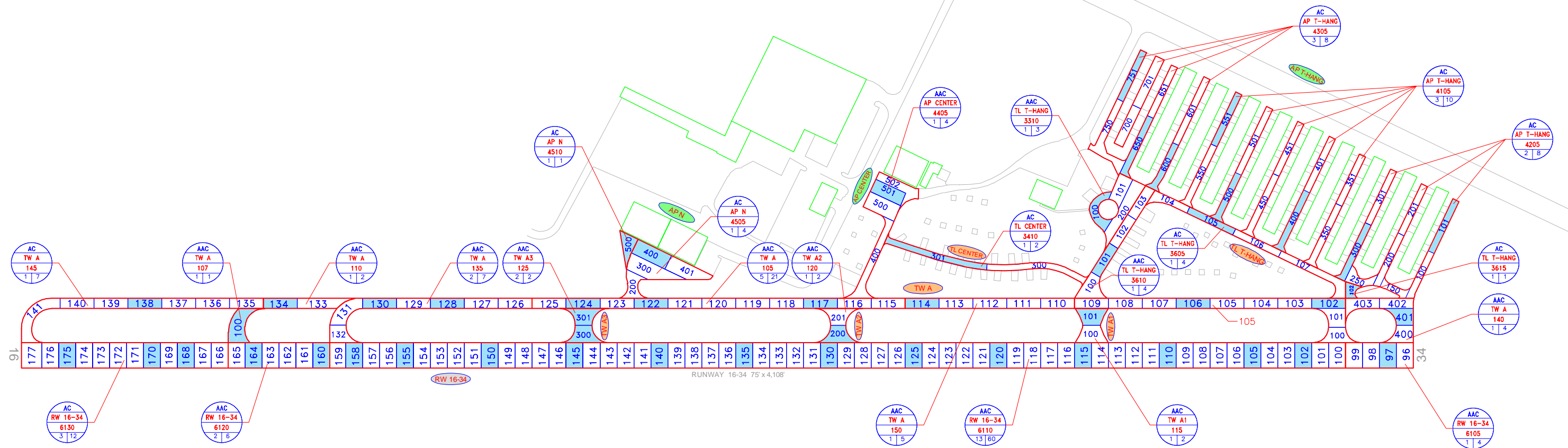
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate
2023	CLW	RW 16-34	6110	AAC	224,775	70	AC Rehabilitation	\$ 2,361,000
2023	CLW	TW A	135	AAC	22,265	62	AC Rehabilitation	\$ 234,000
2023	CLW	TW A2	120	AAC	6,567	65	AC Rehabilitation	\$ 69,000
2023	CLW	TW A3	125	AAC	6,967	61	AC Rehabilitation	\$ 74,000
2023	CLW	TL CENTER	3410	AC	11,073	47	AC Reconstruction	\$ 205,000
2023	CLW	TL T-HANG	3605	AC	14,273	45	AC Reconstruction	\$ 265,000
2023	CLW	TL T-HANG	3615	AC	1,446	39	AC Reconstruction	\$ 27,000
2023	CLW	AP N	4505	AC	19,396	32	AC Reconstruction	\$ 359,000
2023	CLW	AP T-HANG	4105	AC	37,331	56	AC Rehabilitation	\$ 392,000
2023	CLW	AP T-HANG	4205	AC	24,739	63	AC Rehabilitation	\$ 260,000
2023	CLW	AP T-HANG	4305	AC	31,604	40	AC Reconstruction	\$ 585,000
2025	CLW	TW A	140	AAC	12,540	69	AC Rehabilitation	\$ 146,000
2026	CLW	TW A	105	AAC	63,329	69	AC Rehabilitation	\$ 770,000
2027	CLW	TW A1	115	AAC	6,928	70	AC Rehabilitation	\$ 89,000
2028	CLW	TW A	110	AAC	7,086	69	AC Rehabilitation	\$ 95,000
2028	CLW	AP N	4510	AC	2,581	69	AC Rehabilitation	\$ 35,000
2030	CLW	RW 16-34	6120	AAC	22,500	69	AC Rehabilitation	\$ 333,000
2030	CLW	AP CENTER	4405	AAC	18,903	70	AC Rehabilitation	\$ 280,000
2031	CLW	RW 16-34	6105	AAC	15,000	69	AC Rehabilitation	\$ 233,000
2032	CLW	TW A	107	AAC	5,097	69	AC Rehabilitation	\$ 84,000
2032	CLW	TL T-HANG	3310	AAC	13,365	70	AC Rehabilitation	\$ 218,000

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



# Appendix C: Technical Exhibits





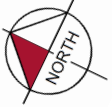
LEGEND

- TYPICAL RUNWAY BRANCH ID
- TYPICAL TAXIWAY BRANCH ID
- TYPICAL APRON BRANCH ID
- PAVEMENT SURFACE TYPE
- PAVEMENT BRANCH ID
- SECTION NUMBER
- NUMBER OF SAMPLE UNITS IN SECTION  
NUMBER OF SAMPLE UNITS TO BE INSPECTED
- SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.
- INSPECTED SAMPLE UNITS.

TOTAL SAMPLES INSPECTED = 51  
AC: 51    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.





RECENT & ANTICIPATED CONSTRUCTION ACTIVITY		
CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
NO INFORMATION PROVIDED		

**LEGEND**

TYPICAL RUNWAY BRANCH ID

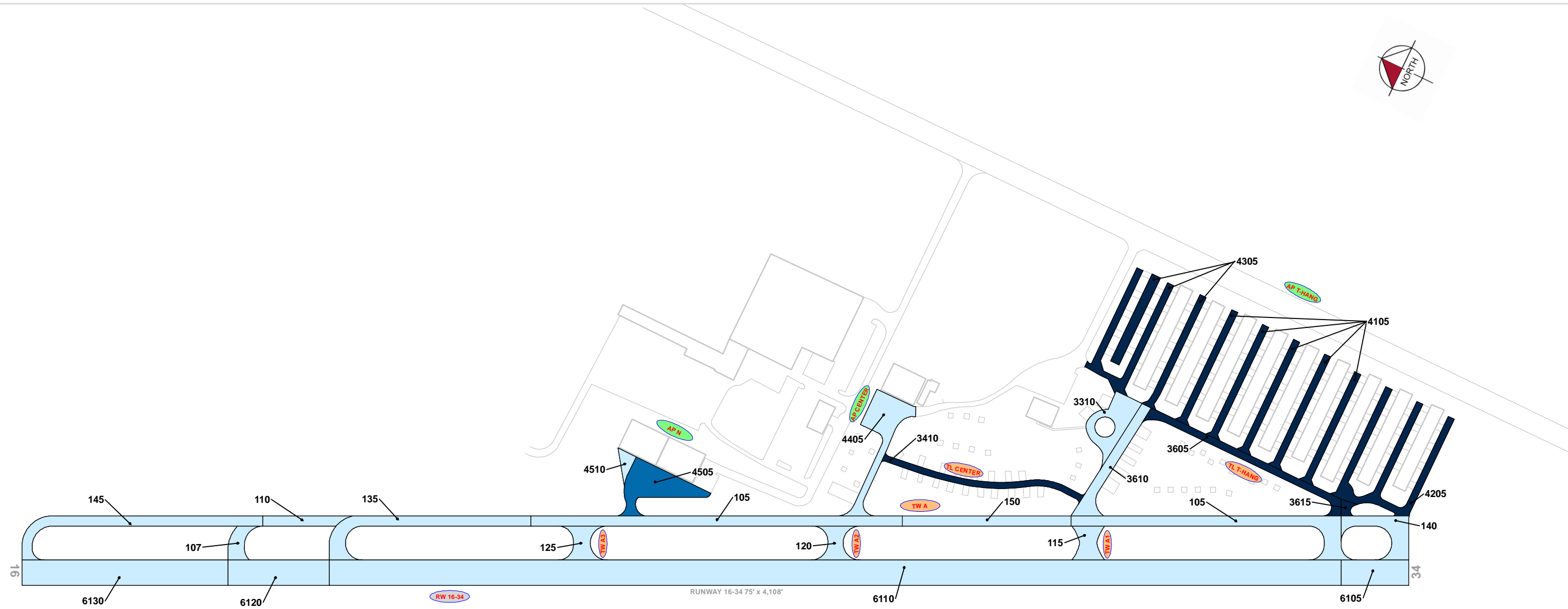
TYPICAL TAXIWAY BRANCH ID

TYPICAL APRON BRANCH ID

**PROJECT YEAR**

2017	2022
2018	2023
2019	2024
2020	2025
2021	2026

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



**LEGEND**

TYPICAL RUNWAY BRANCH ID

TYPICAL TAXIWAY BRANCH ID

TYPICAL APRON BRANCH ID

**AGE AT INSPECTION**

0-5 Years

6-10 Years

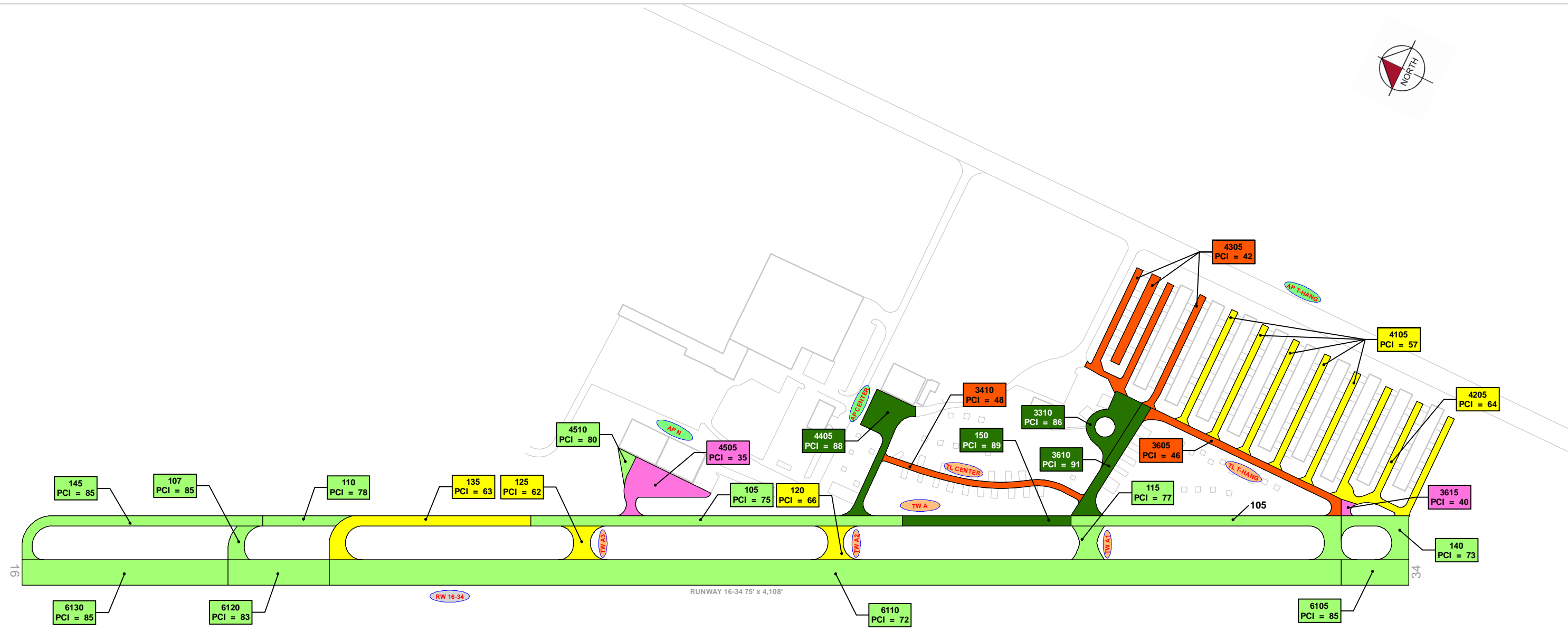
11-15 Years

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.





**LEGEND**

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

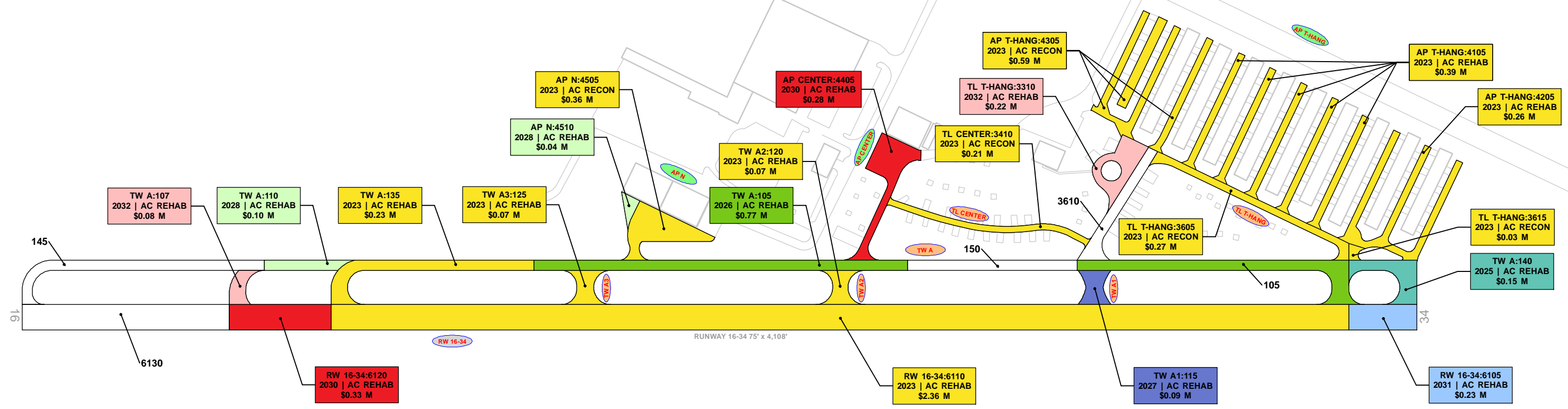
AP S — TYPICAL APRON BRANCH ID

**2022 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.



**LEGEND**

TYPICAL RUNWAY BRANCH ID  
 TYPICAL TAXIWAY BRANCH ID  
 TYPICAL APRON BRANCH ID

**PROGRAM YEAR**

2023	2028
2024	2029
2025	2030
2026	2031
2027	2032

"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.





# Appendix D: Inspection Photograph Documentation







RW 16-34, Section 6110, Sample Unit 110 – Longitudinal & Transverse Cracking



RW 16-34, Section 6110, Sample Unit 130 – Longitudinal & Transverse Cracking and Swelling





RW 16-34, Section 6110, Sample Unit 155 – Longitudinal & Transverse Cracking



TW A, Section 105, Sample Unit 102 – Depression





TW A, Section 135, Sample Unit 128 – Block Cracking



TL CENTER, Section 3410, Sample Unit 301 – Raveling





TL T-HANG, Section 3605, Sample Unit 105 – Longitudinal & Transverse Cracking and Raveling



AP T-HANG, Section 4305, Sample Unit 650 – Patching and Raveling





# **Appendix E: Inspection Distress Details**



# Re-Inspection Report

FDOT

Generated Date

11/17/2022

Page 1 of 26

<b>Network:</b>	CLW	<b>Name:</b>	CLEARWATER AIR PARK				
<b>Branch:</b>	AP CENTER	<b>Name:</b>	CENTER APRON	<b>Use:</b>	APRON	<b>Area:</b>	18,903 SqFt
<b>Section:</b>	4405	of	1	<b>From:</b>	-	<b>To:</b>	-
<b>Surface:</b>	AAC	<b>Family:</b>	CA653-RL-AP-AAC-APC	<b>Zone:</b>		<b>Category:</b>	
<b>Area:</b>	18,903 SqFt	<b>Length:</b>	364 Ft	<b>Width:</b>	100 Ft	<b>Rank:</b>	P
<b>Slabs:</b>		<b>Slab Length:</b>	Ft	<b>Slab Width:</b>	Ft	<b>Joint Length:</b>	Ft
<b>Shoulder:</b>		<b>Street Type:</b>		<b>Grade:</b>	0	<b>Lanes:</b>	0
<b>Section Comments:</b>							
<b>Work Date:</b>	12/25/1999	<b>Work Type:</b>	New Construction - Initial	<b>Code:</b>	NU-IN	<b>Is Major M&amp;R:</b>	True
<b>Work Date:</b>	1/1/2003	<b>Work Type:</b>	Surface Treatment - Seal Coat	<b>Code:</b>	ST-SC	<b>Is Major M&amp;R:</b>	False
<b>Work Date:</b>	1/1/2014	<b>Work Type:</b>	Surface Treatment - Seal Coat	<b>Code:</b>	ST-SC	<b>Is Major M&amp;R:</b>	False
<b>Work Date:</b>	1/1/2015	<b>Work Type:</b>	Mill and Overlay	<b>Code:</b>	ML-OVL	<b>Is Major M&amp;R:</b>	True
<b>Last Insp. Date:</b>	4/6/2022	<b>TotalSamples:</b>	4	<b>Surveyed:</b>	1		
<b>Conditions:</b>	PCI: 88						
<b>Inspection Comments:</b>							
<b>Sample Number:</b>	501	<b>Type:</b>	R	<b>Area:</b>	3927.00 SqFt	<b>PCI:</b>	88
<b>Sample Comments:</b>							
57	WEATHERING	L	3338.00	SqFt			
57	WEATHERING	M	589.00	SqFt			



Network:	CLW			Name:	CLEARWATER AIR PARK							
Branch:	AP N		Name:	NORTH APRON		Use:	APRON		Area:	21,977 SqFt		
Section:	4505		of	2		From:	-		To:	-		
Surface:	AC		Family:	CA653-RL-AP-AC		Zone:			Category:			
Area:	19,396 SqFt		Length:	200 Ft		Width:	100 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 - Initial				Code:	NU-IN		Is Major M&R:	True
Work Date:	1/1/2014		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Last Insp. Date:	4/6/2022		TotalSamples:	4		Surveyed:	1					
Conditions:	PCI: 35											
Inspection Comments:												
Sample Number:	400		Type:	R		Area:	4840.00 SqFt		PCI:	35		
Sample Comments:												
48	L & T CR		L	64.00 Ft								
48	L & T CR		M	50.00 Ft								
50	PATCHING		L	486.00 SqFt								
50	PATCHING		M	42.00 SqFt								
52	RAVELING		L	2156.00 SqFt								
52	RAVELING		M	2156.00 SqFt								

Network:	CLW			Name:	CLEARWATER AIR PARK										
Branch:	AP N		Name:	NORTH APRON		Use:	APRON		Area:	21,977 SqFt					
Section:	4510		of	2		From:	-		To:	-		Last Const.:	1/1/2012		
Surface:	AC		Family:	CA653-RL-AP-AC			Zone:				Category:	Rank: P			
Area:	2,581 SqFt		Length:	94 Ft		Width:	60 Ft								
Slabs:			Slab Length:	Ft		Slab Width:	Ft		Joint Length:	Ft					
Shoulder:			Street Type:			Grade:	0		Lanes:	0					
Section Comments:															
Work Date:	1/1/2012			Work Type:	New Construction - Initial					Code:	NU-IN		Is Major M&R:	True	
Last Insp. Date:	4/6/2022			TotalSamples:	1			Surveyed:	1						
Conditions:	PCI: 80														
Inspection Comments:															
Sample Number:	500		Type:	R		Area:	2581.00 SqFt			PCI:	80				
Sample Comments:															
48	L & T CR		L	53.00 Ft											
57	WEATHERING		L	1936.00 SqFt											
57	WEATHERING		M	645.00 SqFt											

Network:	CLW			Name:	CLEARWATER AIR PARK							
Branch:	AP T-HANG		Name:	T-HANGAR APRON		Use:	APRON		Area:	93,674 SqFt		
Section:	4105 of 3		From:	-			To:	-		Last Const.:	1/1/1996	
Surface:	AC		Family:	CA653-RL-AP-AC		Zone:			Category:	Rank: P		
Area:	37,331 SqFt		Length:	1,800 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:	1/1/1996		Work Type:	BUILT				Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/2003		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2014		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Last Insp. Date:	4/6/2022		TotalSamples:	10		Surveyed:	3					
Conditions:	PCI: 57											
Inspection Comments:												
Sample Number:	400		Type:	R		Area:	4010.00 SqFt		PCI:	52		
Sample Comments:												
48	L & T CR		L	250.00 Ft								
48	L & T CR		M	246.00 Ft								
50	PATCHING		L	60.00 SqFt								
50	PATCHING		M	34.00 SqFt								
52	RAVELING		L	3916.00 SqFt								
Sample Number:	500		Type:	R		Area:	3196.00 SqFt		PCI:	65		
Sample Comments:												
48	L & T CR		L	423.00 Ft								
52	RAVELING		L	3196.00 SqFt								
Sample Number:	551		Type:	R		Area:	3400.00 SqFt		PCI:	57		
Sample Comments:												
48	L & T CR		L	301.00 Ft								
48	L & T CR		M	125.00 Ft								
52	RAVELING		L	3400.00 SqFt								

<b>Network:</b>	CLW		<b>Name:</b>	CLEARWATER AIR PARK								
<b>Branch:</b>	AP T-HANG		<b>Name:</b>	T-HANGAR APRON		<b>Use:</b>	APRON	<b>Area:</b>	93,674 SqFt			
<b>Section:</b>	4205		of	3	<b>From:</b>	-		<b>To:</b>	-		<b>Last Const.:</b>	1/1/1996
<b>Surface:</b>	AC		<b>Family:</b>	CA653-RL-AP-AC		<b>Zone:</b>			<b>Category:</b>	<b>Rank:</b> P		
<b>Area:</b>	24,739 SqFt		<b>Length:</b>	1,200 Ft		<b>Width:</b>	20 Ft					
<b>Slabs:</b>			<b>Slab Length:</b>	Ft		<b>Slab Width:</b>	Ft		<b>Joint Length:</b>	Ft		
<b>Shoulder:</b>			<b>Street Type:</b>			<b>Grade:</b>	0		<b>Lanes:</b>	0		
<b>Section Comments:</b>												
<b>Work Date:</b>	1/1/1996		<b>Work Type:</b> BUILT					<b>Code:</b>	IMPORTED		<b>Is Major M&amp;R:</b>	True
<b>Work Date:</b>	1/1/1996		<b>Work Type:</b> OVERLAY					<b>Code:</b>	IMPORTED		<b>Is Major M&amp;R:</b>	True
<b>Work Date:</b>	1/1/2003		<b>Work Type:</b> Surface Treatment - Seal Coat					<b>Code:</b>	ST-SC		<b>Is Major M&amp;R:</b>	False
<b>Work Date:</b>	1/1/2014		<b>Work Type:</b> Surface Treatment - Seal Coat					<b>Code:</b>	ST-SC		<b>Is Major M&amp;R:</b>	False
<b>Last Insp. Date:</b>	4/6/2022		<b>TotalSamples:</b>	8		<b>Surveyed:</b>	2					
<b>Conditions:</b>	PCI: 64											
<b>Inspection Comments:</b>												
<b>Sample Number:</b>	101		<b>Type:</b>	R		<b>Area:</b>	3400.00 SqFt		<b>PCI:</b>	64		
<b>Sample Comments:</b>												
48	L & T CR		L	41.00 Ft								
52	RAVELING		L	3230.00 SqFt								
52	RAVELING		M	170.00 SqFt								
<b>Sample Number:</b>	300		<b>Type:</b>	R		<b>Area:</b>	3738.00 SqFt		<b>PCI:</b>	64		
<b>Sample Comments:</b>												
48	L & T CR		L	288.00 Ft								
48	L & T CR		M	50.00 Ft								
52	RAVELING		L	3738.00 SqFt								



Network:	CLW			Name:	CLEARWATER AIR PARK				
Branch:	AP T-HANG		Name:	T-HANGAR APRON		Use:	APRON	Area:	93,674 SqFt
Section:	4305	of	3	From:	-	To:	-	Last Const.:	12/25/1999
Surface:	AC	Family:	CA653-RL-AP-AC		Zone:		Category:		Rank: P
Area:	31,604 SqFt		Length:	1,480 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:	12/25/1999		Work Type: New Construction - Initial			Code:	NU-IN		Is Major M&R: True
Work Date:	1/1/2003		Work Type: Surface Treatment - Seal Coat			Code:	ST-SC		Is Major M&R: False
Work Date:	1/1/2014		Work Type: Surface Treatment - Seal Coat			Code:	ST-SC		Is Major M&R: False
Last Insp. Date:	4/6/2022		TotalSamples:	8		Surveyed:	3		
Conditions:	PCI: 42								
Inspection Comments:									
Sample Number:	600		Type:	R	Area:	3160.00 SqFt		PCI:	40
Sample Comments:									
43	BLOCK CR		M	760.00 SqFt					
48	L & T CR		L	103.00 Ft					
48	L & T CR		M	190.00 Ft					
50	PATCHING		L	144.00 SqFt					
52	RAVELING		L	3016.00 SqFt					
Sample Number:	650		Type:	R	Area:	3904.00 SqFt		PCI:	44
Sample Comments:									
41	ALLIGATOR CR		L	5.00 SqFt					
43	BLOCK CR		L	195.00 SqFt					
48	L & T CR		L	274.00 Ft					
48	L & T CR		M	50.00 Ft					
50	PATCHING		L	118.00 SqFt					
50	PATCHING		M	14.00 SqFt					
52	RAVELING		L	3772.00 SqFt					
Sample Number:	751		Type:	R	Area:	3200.00 SqFt		PCI:	43
Sample Comments:									
45	DEPRESSION		M	76.00 SqFt					
48	L & T CR		L	160.00 Ft					
48	L & T CR		M	310.00 Ft					
52	RAVELING		L	3200.00 SqFt					

Network:	CLW	Name:	CLEARWATER AIR PARK						
Branch:	RW 16-34	Name:	RUNWAY 16-34	Use:	RUNWAY	Area:	308,025 SqFt		
Section:	6105	of	4	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-RW-AAC-APC	Zone:		Category:		Rank:	P
Area:	15,000 SqFt	Length:	200 Ft	Width:	75 Ft				
Slabs:		Slab Length:	Ft	Slab Width:	Ft	Joint Length:		Ft	
Shoulder:		Street Type:		Grade:	0	Lanes:	0		
Section Comments:									
Work Date:	1/1/2002	Work Type:	New Construction - Initial		Code:	NU-IN	Is Major M&R:	True	
Work Date:	1/1/2003	Work Type:	Surface Treatment - Seal Coat		Code:	ST-SC	Is Major M&R:	False	
Work Date:	1/1/2013	Work Type:	Mill and Overlay		Code:	ML-OVL	Is Major M&R:	True	
Last Insp. Date:	4/6/2022	TotalSamples:	4	Surveyed:	1				
Conditions:	PCI:	85							
Inspection Comments:									
Sample Number:	97	Type:	R	Area:	3750.00 SqFt	PCI:	85		
Sample Comments:									
48	L & T CR	L	112.00	Ft					
57	WEATHERING	L	3750.00	SqFt					

Network:	CLW	Name:	CLEARWATER AIR PARK						
Branch:	RW 16-34	Name:	RUNWAY 16-34		Use:	RUNWAY	Area:	308,025 SqFt	
Section:	6110	of	4	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-RW-AAC-APC	Zone:		Category:		Rank:	P
Area:	224,775 SqFt	Length:	2,997 Ft	Width:	75 Ft				
Slabs:		Slab Length:	Ft	Slab Width:	Ft	Joint Length:		Ft	
Shoulder:		Street Type:		Grade:	0	Lanes:	0		
Section Comments:									
Work Date:	1/1/1970	Work Type:	BUILT			Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/1991	Work Type:	OVERLAY			Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/1991	Work Type:	OVERLAY			Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/2003	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2013	Work Type:	Mill and Overlay			Code:	ML-OVL	Is Major M&R:	True
Last Insp. Date:	4/6/2022	TotalSamples:	60	Surveyed:	13				
Conditions:	PCI:	72							
Inspection Comments:									
Sample Number:	102	Type:	A	Area:	3750.00 SqFt	PCI:	63		
Sample Comments:									
45	DEPRESSION	L	28.00	SqFt					
48	L & T CR	L	338.00	Ft					
56	SWELLING	L	200.00	SqFt					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	105	Type:	R	Area:	3750.00 SqFt	PCI:	69		
Sample Comments:									
48	L & T CR	L	171.00	Ft					
48	L & T CR	M	50.00	Ft					
56	SWELLING	L	350.00	SqFt					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	110	Type:	R	Area:	3750.00 SqFt	PCI:	67		
Sample Comments:									
48	L & T CR	L	246.00	Ft					
48	L & T CR	M	50.00	Ft					
56	SWELLING	L	375.00	SqFt					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	115	Type:	R	Area:	3750.00 SqFt	PCI:	72		
Sample Comments:									
48	L & T CR	L	182.00	Ft					
48	L & T CR	M	50.00	Ft					
56	SWELLING	L	50.00	SqFt					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	120	Type:	R	Area:	3750.00 SqFt	PCI:	72		
Sample Comments:									
48	L & T CR	L	258.00	Ft					
56	SWELLING	L	375.00	SqFt					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	125	Type:	R	Area:	3750.00 SqFt	PCI:	88		
Sample Comments:									
48	L & T CR	L	73.00	Ft					
57	WEATHERING	L	3750.00	SqFt					
Sample Number:	130	Type:	R	Area:	3750.00 SqFt	PCI:	61		
Sample Comments:									

48	L & T CR	L	388.00	Ft
48	L & T CR	M	55.00	Ft
56	SWELLING	L	375.00	SqFt
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 135		Type: R	Area: 3750.00 SqFt	PCI: 86
Sample Comments:				
48	L & T CR	L	72.00	Ft
56	SWELLING	L	15.00	SqFt
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 140		Type: R	Area: 3750.00 SqFt	PCI: 64
Sample Comments:				
48	L & T CR	L	253.00	Ft
48	L & T CR	M	12.00	Ft
56	SWELLING	L	562.00	SqFt
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 145		Type: R	Area: 3750.00 SqFt	PCI: 68
Sample Comments:				
48	L & T CR	L	232.00	Ft
48	L & T CR	M	18.00	Ft
56	SWELLING	L	188.00	SqFt
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 150		Type: R	Area: 3750.00 SqFt	PCI: 88
Sample Comments:				
48	L & T CR	L	74.00	Ft
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 155		Type: R	Area: 3750.00 SqFt	PCI: 66
Sample Comments:				
48	L & T CR	L	382.00	Ft
56	SWELLING	L	188.00	SqFt
57	WEATHERING	L	3750.00	SqFt
<hr/>				
Sample Number: 158		Type: R	Area: 3750.00 SqFt	PCI: 66
Sample Comments:				
48	L & T CR	L	274.00	Ft
48	L & T CR	M	30.00	Ft
56	SWELLING	L	188.00	SqFt
57	WEATHERING	L	3750.00	SqFt



Network:	CLW		Name:	CLEARWATER AIR PARK							
Branch:	RW 16-34		Name:	RUNWAY 16-34		Use:	RUNWAY	Area:	308,025 SqFt		
Section:	6120 of 4		From:	-		To:	-		Last Const.:	1/1/2013	
Surface:	AAC		Family:	CA653-RL-RW-AAC-APC		Zone:			Rank:	P	
Area:	22,500 SqFt		Length:	300 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:	1/1/1992		Work Type: BUILT				Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/1992		Work Type: OVERLAY				Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/2003		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2013		Work Type: Mill and Overlay				Code:	ML-OVL		Is Major M&R:	True
Last Insp. Date:	4/6/2022		TotalSamples:	6		Surveyed:	2				
Conditions:	PCI: 83										
Inspection Comments:											
Sample Number:	160		Type:	R		Area:	3750.00 SqFt		PCI:	82	
Sample Comments:											
48	L & T CR		L	153.00 Ft							
57	WEATHERING		L	3750.00 SqFt							
Sample Number:	164		Type:	R		Area:	3750.00 SqFt		PCI:	84	
Sample Comments:											
48	L & T CR		L	124.00 Ft							
57	WEATHERING		L	3750.00 SqFt							

<b>Network:</b>	CLW			<b>Name:</b>	CLEARWATER AIR PARK							
<b>Branch:</b>	RW 16-34		<b>Name:</b>	RUNWAY 16-34		<b>Use:</b>	RUNWAY	<b>Area:</b>	308,025 SqFt			
<b>Section:</b>	6130		of	4	<b>From:</b>	-		<b>To:</b>	-		<b>Last Const.:</b>	1/1/2013
<b>Surface:</b>	AC		<b>Family:</b>	CA653-RL-RW-AC		<b>Zone:</b>		<b>Category:</b>		<b>Rank:</b>	P	
<b>Area:</b>	45,750 SqFt		<b>Length:</b>	600 Ft		<b>Width:</b>	100 Ft					
<b>Slabs:</b>	<b>Slab Length:</b>		Ft		<b>Slab Width:</b>		Ft		<b>Joint Length:</b>		Ft	
<b>Shoulder:</b>	<b>Street Type:</b>				<b>Grade:</b>		0		<b>Lanes:</b>		0	
<b>Section Comments:</b>												
<b>Work Date:</b>	1/1/2013			<b>Work Type:</b> New Construction - Initial				<b>Code:</b>	NU-IN		<b>Is Major M&amp;R:</b> True	
<b>Last Insp. Date:</b>	4/6/2022			<b>TotalSamples:</b>	12			<b>Surveyed:</b>	3			
<b>Conditions:</b>	<b>PCI:</b>	85										
<b>Inspection Comments:</b>												
<b>Sample Number:</b>	168		<b>Type:</b>	R		<b>Area:</b>	3750.00 SqFt		<b>PCI:</b>	86		
<b>Sample Comments:</b>												
48	L & T CR		L	96.00 Ft								
57	WEATHERING		L	3750.00 SqFt								
<b>Sample Number:</b>	170		<b>Type:</b>	R		<b>Area:</b>	3750.00 SqFt		<b>PCI:</b>	84		
<b>Sample Comments:</b>												
48	L & T CR		L	110.00 Ft								
56	SWELLING		L	1.00 SqFt								
57	WEATHERING		L	3750.00 SqFt								
<b>Sample Number:</b>	175		<b>Type:</b>	R		<b>Area:</b>	3750.00 SqFt		<b>PCI:</b>	84		
<b>Sample Comments:</b>												
48	L & T CR		L	110.00 Ft								
56	SWELLING		L	7.00 SqFt								
57	WEATHERING		L	3750.00 SqFt								

Network:	CLW			Name:	CLEARWATER AIR PARK				
Branch:	TL CENTER		Name:	CENTER APRON		Use:	TAXILANE	Area:	11,073 SqFt
Section:	3410	of	1	From:	-	To:	-	Last Const.:	12/15/1999
Surface:	AC	Family:	CA653-RL-TW-AC	Zone:		Category:		Rank:	P
Area:	11,073 SqFt	Length:	610 Ft	Width:	18 Ft				
Slabs:		Slab Length:	Ft	Slab Width:	Ft	Joint Length:	Ft		
Shoulder:		Street Type:		Grade:	0	Lanes:	0		
Section Comments:									
Work Date:	12/15/1999	Work Type:	New Construction - Initial			Code:	NU-IN	Is Major M&R:	True
Work Date:	1/1/2003	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2014	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Last Insp. Date:	4/6/2022	TotalSamples:	2	Surveyed:	1				
Conditions:	PCI:	48							
Inspection Comments:									
Sample Number:	301	Type:	R	Area:	5621.00 SqFt	PCI:	48		
Sample Comments:									
52	RAVELING	L	1967.00	SqFt					
52	RAVELING	M	3654.00	SqFt					

Network:	CLW		Name:	CLEARWATER AIR PARK								
Branch:	TL T-HANG		Name:	T-HANGAR TAXILANE		Use:	TAXILANE	Area:	42,109 SqFt			
Section:	3310		of	4	From:	-		To:	-		Last Const.:	1/1/2015
Surface:	AAC		Family:	CA653-RL-TW-AAC-APC		Zone:			Category:	Rank: P		
Area:	13,365 SqFt		Length:	180 Ft		Width:	80 Ft					
Slabs:			Slab Length:	Ft		Slab Width:	Ft		Joint Length:	Ft		
Shoulder:			Street Type:			Grade:	0		Lanes:	0		
Section Comments:												
Work Date:	12/25/1999		Work Type:	New Construction - Initial				Code:	NU-IN		Is Major M&R:	True
Work Date:	1/1/2003		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2014		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2015		Work Type:	Mill and Overlay				Code:	ML-OVL		Is Major M&R:	True
Last Insp. Date:	4/6/2022		TotalSamples:	3		Surveyed:	1					
Conditions:	PCI: 86											
Inspection Comments:												
Sample Number:	100		Type:	R		Area:	3558.00 SqFt		PCI:	86		
Sample Comments:												
57	WEATHERING		L	2846.00 SqFt								
57	WEATHERING		M	712.00 SqFt								



Network:	CLW			Name:	CLEARWATER AIR PARK						
Branch:	TL T-HANG		Name:	T-HANGAR TAXILANE		Use:	TAXILANE	Area:	42,109 SqFt		
Section:	3605 of 4		From:	-		To:	-		Last Const.:	1/1/1996	
Surface:	AC		Family:	CA653-RL-TW-AC		Zone:			Rank:	P	
Area:	14,273 SqFt		Length:	660 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:	1/1/1996		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
Work Date:	1/1/2003		Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2014		Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC		Is Major M&R:	False
Last Insp. Date:	4/6/2022		TotalSamples:	4		Surveyed:	1				
Conditions:	PCI: 46										
Inspection Comments:											
Sample Number:	105		Type:	R		Area:	3000.00 SqFt		PCI:	46	
Sample Comments:											
48	L & T CR		L	246.00 Ft							
48	L & T CR		M	350.00 Ft							
52	RAVELING		L	3000.00 SqFt							

Network:	CLW		Name:	CLEARWATER AIR PARK								
Branch:	TL T-HANG		Name:	T-HANGAR TAXILANE		Use:	TAXILANE	Area:	42,109 SqFt			
Section:	3610		of	4	From:	-		To:	-		Last Const.:	1/1/2015
Surface:	AAC		Family:	CA653-RL-TW-AAC-APC		Zone:			Category:	Rank: P		
Area:	13,025 SqFt		Length:	385 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:	1/1/1996		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
Work Date:	1/1/2003		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2014		Work Type:	Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2015		Work Type:	Mill and Overlay				Code:	ML-OVL		Is Major M&R:	True
Last Insp. Date:	4/6/2022		TotalSamples:	4		Surveyed:	1					
Conditions:	PCI: 91											
Inspection Comments:												
Sample Number:	101		Type:	R		Area:	3004.00 SqFt		PCI:	91		
Sample Comments:												
57	WEATHERING		L	2854.00 SqFt								
57	WEATHERING		M	150.00 SqFt								

Network:		CLW		Name:		CLEARWATER AIR PARK										
Branch:	TL T-HANG		Name:	T-HANGAR TAXILANE		Use:	TAXILANE	Area:	42,109 SqFt							
Section:	3615		of	4	From:	-		To:	-	Last Const.:	1/1/1991					
Surface:	AC		Family:	CA653-RL-TW-AC		Zone:		Category:		Rank:	P					
Area:	1,446 SqFt		Length:	50 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:	1/1/1991		Work Type:				BUILT		Code:	IMPORTED		Is Major M&R:	True			
Work Date:	1/1/2003		Work Type:				Surface Treatment - Seal Coat		Code:	ST-SC		Is Major M&R:	False			
Work Date:	1/1/2014		Work Type:				Surface Treatment - Seal Coat		Code:	ST-SC		Is Major M&R:	False			
Last Insp. Date:												4/6/2022	TotalSamples:	1	Surveyed:	1
Conditions:	PCI:		40													
Inspection Comments:																
Sample Number:	102		Type:	R		Area:	1446.00 SqFt		PCI:	40						
Sample Comments:																
43	BLOCK CR		L	574.00		SqFt										
43	BLOCK CR		M	574.00		SqFt										
50	PATCHING		M	9.00		SqFt										
52	RAVELING		L	1437.00		SqFt										

Network:	CLW	Name:	CLEARWATER AIR PARK						
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt	
Section:	105	of	7	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-TW-AAC-APC	Zone:		Category:		Rank:	P
Area:	63,329 SqFt	Length:	2,600 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:	1/1/1970	Work Type: BUILT				Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/1991	Work Type: OVERLAY				Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/1991	Work Type: OVERLAY				Code:	IMPORTED	Is Major M&R:	True
Work Date:	1/1/2003	Work Type: Surface Treatment - Seal Coat				Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2013	Work Type: Mill and Overlay				Code:	ML-OVL	Is Major M&R:	True
Last Insp. Date:	4/6/2022	TotalSamples:	21	Surveyed:	5				
Conditions:	PCI: 75								
Inspection Comments:									
Sample Number:	102	Type:	R	Area:	3000.00 SqFt	PCI:	70		
Sample Comments:									
45	DEPRESSION	M	48.00	SqFt					
48	L & T CR	L	187.00	Ft					
57	WEATHERING	L	3000.00	SqFt					
Sample Number:	106	Type:	R	Area:	3000.00 SqFt	PCI:	83		
Sample Comments:									
48	L & T CR	L	119.00	Ft					
57	WEATHERING	L	3000.00	SqFt					
Sample Number:	117	Type:	R	Area:	3000.00 SqFt	PCI:	82		
Sample Comments:									
48	L & T CR	L	132.00	Ft					
57	WEATHERING	L	3000.00	SqFt					
Sample Number:	122	Type:	R	Area:	3000.00 SqFt	PCI:	65		
Sample Comments:									
48	L & T CR	L	331.00	Ft					
56	SWELLING	L	248.00	SqFt					
57	WEATHERING	L	3000.00	SqFt					
Sample Number:	124	Type:	R	Area:	3000.00 SqFt	PCI:	73		
Sample Comments:									
48	L & T CR	L	272.00	Ft					
57	WEATHERING	L	3000.00	SqFt					

Network:	CLW	Name:	CLEARWATER AIR PARK					
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt
Section:	107	of 7	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-TW-AAC-APC	Zone:		Category:		Rank: P
Area:	5,097 SqFt	Length:	475 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:	1/1/1992	Work Type: New Construction - Initial				Code:	NU-IN	Is Major M&R: True
Work Date:	1/1/2013	Work Type: Mill and Overlay				Code:	ML-OVL	Is Major M&R: True
Last Insp. Date: 4/6/2022								
		TotalSamples:	1	Surveyed: 1				
Conditions:	PCI: 85							
Inspection Comments:								
Sample Number:	100	Type:	R	Area:	5097.00 SqFt	PCI:	85	
Sample Comments:								
48	L & T CR	L	60.00 Ft					
48	L & T CR	M	3.00 Ft					
57	WEATHERING	L	5097.00 SqFt					



Network:	CLW	Name:		CLEARWATER AIR PARK						
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt		
Section:	110	of	7	From:	-	To:	-	Last Const.:	1/1/2013	
Surface:	AAC	Family:	CA653-RL-TW-AAC-APC		Zone:	Category:		Rank:	P	
Area:	7,086 SqFt		Length:	475 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:	1/1/1984		Work Type: OVERLAY			Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/1992		Work Type: OVERLAY			Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/1992		Work Type: BUILT			Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/2003		Work Type: Surface Treatment - Seal Coat			Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2013		Work Type: Mill and Overlay			Code:	ML-OVL		Is Major M&R:	True
Last Insp. Date:	4/6/2022		TotalSamples:	2		Surveyed:				1
Conditions:	PCI:	78								
Inspection Comments:										
Sample Number:	134	Type:	R	Area:	3000.00 SqFt		PCI:	78		
Sample Comments:										
48	L & T CR		L	148.00 Ft						
50	PATCHING		L	15.00 SqFt						
57	WEATHERING		L	2985.00 SqFt						

Network:		CLW		Name:		CLEARWATER AIR PARK									
Branch:		TW A		Name:		TAXIWAY A		Use:		TAXIWAY		Area:		149,033 SqFt	
Section:		135		of 7		From:		-		To:		-		Last Const.: 1/1/2013	
Surface:		AAC		Family:		CA653-RL-TW-AAC-APC		Zone:		Category:		Rank:		P	
Area:		22,265 SqFt		Length:		700 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:		1/1/1991		Work Type:		OVERLAY				Code:		IMPORTED		Is Major M&R: True	
Work Date:		1/1/1998		Work Type:		BUILT				Code:		IMPORTED		Is Major M&R: True	
Work Date:		1/1/2003		Work Type:		Surface Treatment - Seal Coat				Code:		ST-SC		Is Major M&R: False	
Work Date:		1/1/2013		Work Type:		Mill and Overlay				Code:		ML-OVL		Is Major M&R: True	
Last Insp. Date:		4/6/2022		TotalSamples:		7				Surveyed:		2			
Conditions:		PCI: 63													
Inspection Comments:															
Sample Number:		128		Type:		R		Area:		3000.00 SqFt		PCI:		59	
Sample Comments:															
43	BLOCK CR			L	608.00 SqFt										
48	L & T CR			L	191.00 Ft										
48	L & T CR			M	50.00 Ft										
56	SWELLING			L	100.00 SqFt										
57	WEATHERING			L	3000.00 SqFt										
Sample Number:		130		Type:		R		Area:		3000.00 SqFt		PCI:		67	
Sample Comments:															
48	L & T CR			L	246.00 Ft										
52	RAVELING			L	20.00 SqFt										
56	SWELLING			L	300.00 SqFt										
57	WEATHERING			L	2980.00 SqFt										

Network:	CLW	Name:	CLEARWATER AIR PARK						
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt	
Section:	140	of	7	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-TW-AAC-APC	Zone:		Category:		Rank:	P
Area:	12,540 SqFt	Length:	400 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:	1/1/2002	Work Type:	New Construction - Initial			Code:	NU-IN	Is Major M&R:	True
Work Date:	1/1/2003	Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC	Is Major M&R:	False
Work Date:	1/1/2013	Work Type:	Mill and Overlay			Code:	ML-OVL	Is Major M&R:	True
Last Insp. Date: 4/6/2022									
Conditions:	PCI: 73	TotalSamples:	4	Surveyed:	1				
Inspection Comments:									
Sample Number:	401	Type:	R	Area:	3037.00 SqFt	PCI:	73		
Sample Comments:									
45	DEPRESSION	L	35.00	SqFt					
48	L & T CR	L	88.00	Ft					
48	L & T CR	M	9.00	Ft					
56	SWELLING	L	12.00	SqFt					
57	WEATHERING	L	3037.00	SqFt					

Network:	CLW	Name:	CLEARWATER AIR PARK								
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt			
Section:	145	of	7	From:	-	To:	-	Last Const.:	1/1/2013		
Surface:	AC	Family:	CA653-RL-TW-AC		Zone:		Category:		Rank:	P	
Area:	23,716 SqFt	Length:	700 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:	1/1/2013	Work Type:	New Construction - Initial			Code:	NU-IN	Is Major M&R:	True		
Last Insp. Date:	4/6/2022	TotalSamples:	7		Surveyed:	1					
Conditions:	PCI:	85									
Inspection Comments:											
Sample Number:	138	Type:	R	Area:	3000.00 SqFt		PCI:	85			
Sample Comments:											
48	L & T CR	L	60.00 Ft								
52	RAVELING	L	21.00 SqFt								
57	WEATHERING	L	2979.00 SqFt								

Network:	CLW	Name:	CLEARWATER AIR PARK						
Branch:	TW A	Name:	TAXIWAY A		Use:	TAXIWAY	Area:	149,033 SqFt	
Section:	150	of	7	From:	-	To:	-	Last Const.:	1/1/2013
Surface:	AAC	Family:	CA653-RL-TW-AAC-APC	Zone:		Category:		Rank:	P
Area:	15,000 SqFt	Length:	2,600 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:	1/1/1970	Work Type:	New Construction - Initial			Code:	NU-IN	Is Major M&R:	True
Work Date:	1/1/1991	Work Type:	Overlay - AC Structural			Code:	OL-AS	Is Major M&R:	True
Work Date:	1/1/2013	Work Type:	Mill and Overlay			Code:	ML-OVL	Is Major M&R:	True
Last Insp. Date:	4/6/2022	TotalSamples:	5	Surveyed:	1				
Conditions:	PCI:	89							
Inspection Comments:									
Sample Number:	114	Type:	R	Area:	3000.00 SqFt	PCI:	89		
Sample Comments:									
48	L & T CR	L	31.00	Ft					
57	WEATHERING	L	3000.00	SqFt					



Network:	CLW		Name:		CLEARWATER AIR PARK							
Branch:	TW A1		Name:		TAXIWAY A1		Use:	TAXIWAY	Area:	6,928 SqFt		
Section:	115		of 1		From:	-		To:	-		Last Const.:	1/1/2013
Surface:	AAC		Family:	CA653-RL-TW-AAC-APC		Zone:			Category:	Rank: P		
Area:	6,928 SqFt		Length:	100 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:	1/1/1970		Work Type: BUILT				Code:	IMPORTED		Is Major M&R:	True	
Work Date:	1/1/1991		Work Type: OVERLAY				Code:	IMPORTED		Is Major M&R:	True	
Work Date:	1/1/1991		Work Type: OVERLAY				Code:	IMPORTED		Is Major M&R:	True	
Work Date:	1/1/2003		Work Type: Surface Treatment - Seal Coat				Code:	ST-SC		Is Major M&R:	False	
Work Date:	1/1/2013		Work Type: Mill and Overlay				Code:	ML-OVL		Is Major M&R:	True	
Last Insp. Date:	4/6/2022		TotalSamples:	2		Surveyed:	1					
Conditions:	PCI: 77											
Inspection Comments:												
Sample Number:	101		Type:	R		Area:	3451.00 SqFt		PCI:	77		
Sample Comments:												
45	DEPRESSION		L	82.00 SqFt								
48	L & T CR		L	81.00 Ft								
57	WEATHERING		L	3451.00 SqFt								

Network:	CLW		Name:	CLEARWATER AIR PARK									
Branch:	TW A2		Name:	TAXIWAY A2		Use:	TAXIWAY		Area:	6,567 SqFt			
Section:	120		of	1	From:	-		To:	-		Last Const.:	1/1/2013	
Surface:	AAC		Family:	CA653-RL-TW-AAC-APC		Zone:			Category:	Rank:		P	
Area:	6,567 SqFt		Length:	100 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:	1/1/1970		Work Type:				BUILT		Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/1991		Work Type:				OVERLAY		Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/1991		Work Type:				OVERLAY		Code:	IMPORTED		Is Major M&R:	True
Work Date:	1/1/2003		Work Type:				Surface Treatment - Seal Coat		Code:	ST-SC		Is Major M&R:	False
Work Date:	1/1/2013		Work Type:				Mill and Overlay		Code:	ML-OVL		Is Major M&R:	True
Last Insp. Date:	4/6/2022		TotalSamples:	2		Surveyed:		1					
Conditions:	PCI:		66										
Inspection Comments:													
Sample Number:	200		Type:	R		Area:	3346.00 SqFt		PCI:	66			
Sample Comments:													
48	L & T CR		L	356.00 Ft									
48	L & T CR		M	100.00 Ft									
57	WEATHERING		L	3346.00 SqFt									

Network:	CLW			Name:	CLEARWATER AIR PARK										
Branch:	TW A3			Name:	TAXIWAY A3			Use:	TAXIWAY		Area:	6,967 SqFt			
Section:	125 of 1			From:	-			To:	-			Last Const.:	1/1/2013		
Surface:	AAC			Family:	CA653-RL-TW-AAC-APC			Zone:				Category:	Rank: P		
Area:	6,967 SqFt			Length:	100 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:	1/1/1970			Work Type:	BUILT			Code:	IMPORTED			Is Major M&R:	True		
Work Date:	1/1/1991			Work Type:	OVERLAY			Code:	IMPORTED			Is Major M&R:	True		
Work Date:	1/1/1991			Work Type:	OVERLAY			Code:	IMPORTED			Is Major M&R:	True		
Work Date:	1/1/2003			Work Type:	Surface Treatment - Seal Coat			Code:	ST-SC			Is Major M&R:	False		
Work Date:	1/1/2013			Work Type:	Mill and Overlay			Code:	ML-OVL			Is Major M&R:	True		
Last Insp. Date:	4/6/2022			TotalSamples:	2			Surveyed:	2						
Conditions:	PCI: 62														
Inspection Comments:															
Sample Number:	300			Type:	R			Area:	3496.00 SqFt			PCI:	53		
Sample Comments:															
45	DEPRESSION			L	780.00 SqFt										
48	L & T CR			L	118.00 Ft										
57	WEATHERING			L	3496.00 SqFt										
Sample Number:	301			Type:	R			Area:	3471.00 SqFt			PCI:	71		
Sample Comments:															
48	L & T CR			L	161.00 Ft										
48	L & T CR			M	50.00 Ft										
50	PATCHING			L	76.00 SqFt										
57	WEATHERING			L	3395.00 SqFt										



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