



Florida Department of Transportation

Statewide Airfield Pavement Management Program

Airport Pavement Evaluation Report

Prepared by:

FDOT Aviation Office 605 Suwannee Street Tallahassee, Florida 32399-0450

Website: FDOT Aviation Office

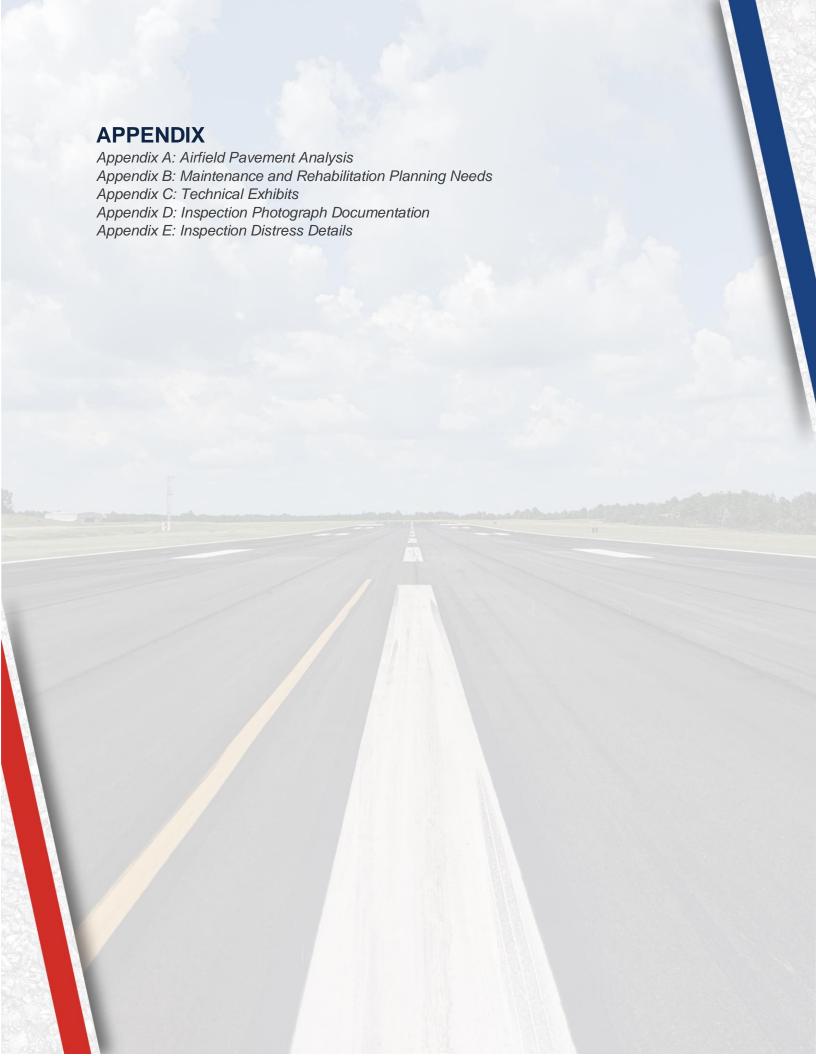
Interactive Web Application: FDOT SAPMP Interactive Web Application



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
Program Background	
Current Pavement Conditions	
Forecasted Pavement Conditions	
Major Rehabilitation Planning 2023-2032	
	1
CHAPTER 1 – INTRODUCTION	8
1.1 Background	8
1.2 Stakeholders	10
1.3 General Scope of Work	10
1.4 FDOT SAPMP Objectives	
CHAPTER 2 – METHODOLOGY	
2.1 Airfield Pavement Database	
2.2 Airfield Pavement Record Keeping (Historical Records Research)	
2.3 Airfield Pavement Structure	
2.3.1 Asphalt Concrete	
2.3.2 Portland Cement Concrete	
2.3.3 Composite Structure – Whitetopping Pavement	16
2.4 Airfield Pavement Traffic	17
2.5 Pavement Management Program Network Definition Terminology	
2.5.1 Pavement Network Identification	
2.5.2 Pavement Branch Identification	
2.5.3 Pavement Section Identification	
2.5.4 Pavement Sample Unit Identification	18
2.5.5 Terminology Summary	
2.6 Airfield PCI Survey Methodology	18
2.6.1 Pavement Distress Types	19
2.6.2 PCI Survey Procedures	20
CHAPTER 3 – AIRFIELD PAVEMENT SYSTEM INVENTORY	
3.1 Airfield Pavement Network Information	
3.1.1 Previous and/or Anticipated Airfield Pavement Construction	23
3.1.2 Estimated Pavement Age	26
3.1.3 Functional Use	
3.1.4 Pavement Surface Type	28
3.1.5 Pavement System Inventory Details	29
CHAPTER 4 – AIRFIELD PAVEMENT CONDITION ANALYSIS	22
4.1 Airfield Pavement Condition Index	
4.1.1 Network-Level Analysis	
4.1.2 Branch-Level Analysis	
4.1.3 Section-Level Analysis	
1, 1, 0 000tion Lover / trialvoid	

4.2 Summary of Pavement Condition Evaluation Results	
4.2.2 Branch-Level Observations	
CHAPTER 5 – SAPMP CUSTOMIZATION	45
5.1 NETWORK-LEVEL CUSTOMIZATION	45
5.2 Pavement Condition Forecasts	
5.2.1 Forecasting PCI Considerations	46
5.2.2 Performance Models	
5.2.3 Branch-Level Pavement Condition Forecast	46
5.2.4 Section-Level Pavement Condition Forecast	47
5.3 Critical PCI Value	48
5.4 LOCALIZED MAINTENANCE AND REPAIR	51
5.4.1 Localized Maintenance and Repair Approach	
5.4.2 Localized Work Types	
5.4.3 Localized Maintenance Planning-Level Unit Costs	
5.4.4 Localized Maintenance and Repair Policy	
5.5 Major Rehabilitation	
5.5.1 Major Rehabilitation Pavement Section Development	
5.5.2 Major Rehabilitation Planning-Level Unit Costs	59
CHAPTER 6 – M&R PLANNING AND BUDGET SCENARIO ANALYSIS	
6.1 Localized Maintenance and Repair Analysis and Recommendations	
6.2 Major Rehabilitation Needs	
6.2.1 10-Year Unconstrained Budget Major Rehabilitation Needs	63
CHAPTER 7 – CONCLUSION	68
7.1 Recommendations	68
7.1.1 Continued PCI Surveys	68
7.1.2 Localized Maintenance and Repair	68
7.1.3 Major Rehabilitation	68
7.1.4 Pavement Management System	68
7.2 Supporting Documents	
Airfield Pavement Network Definition Exhibit	69
Airfield Pavement System Inventory Exhibit	69
Airfield Dayament Estimated Aga Exhibit	69
Airrieid Pavernent Estimated Age Exhibit	
Airfield Pavement Estimated Age Exhibit	
	69
Airfield Pavement Condition Index Exhibit	69 69
Airfield <mark>Pave</mark> ment Condition Index Exhibit	69 69

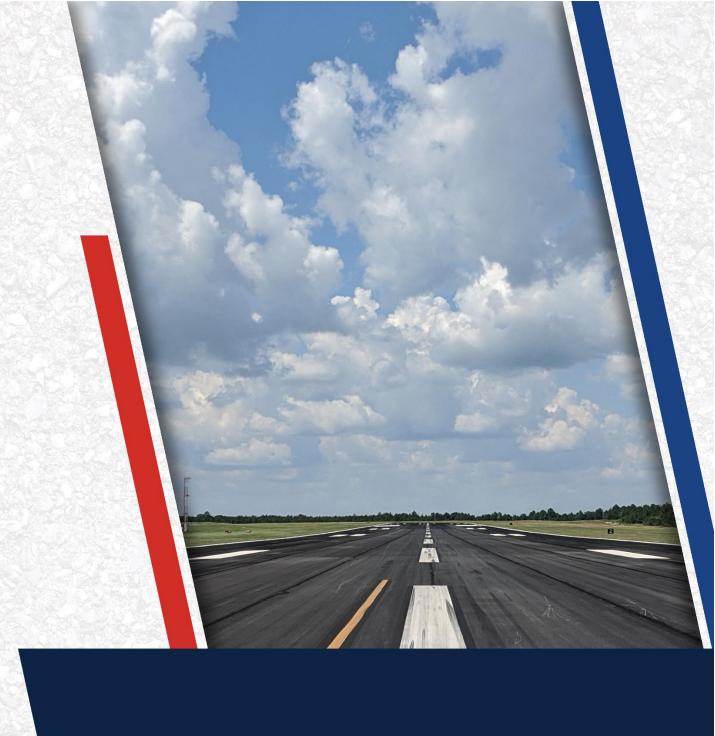


LIST OF TABLES

Table E.1: Pavement Condition Index Summary (Current PCI Survey) - Section Level	2
Table E.2: Forecasted PCI Values 2023-2032 – Section-Level	3
Table E.3: Major Rehabilitation Planning 2023-2032	5
Table 1.2: FDOT SAPMP Stakeholders	10
Table 2.5.5: SAPMP Terminology	18
Table 2.6.1 (a): Pavement Distress Types – Asphalt Concrete	19
Table 2.6.1 (b): Pavement Distress Types – Portland Cement Concrete	20
Table 2.6.2 (a): Recommended Sampling Rates for Asphalt Concrete	20
Table 2.6.2 (b): Recommended Sampling Rates for Portland Cement Concrete	21
Table 3.1.1: Summary of Previous and/or Anticipated Airfield Pavement Construction	23
Table 3.1.5: Pavement System Inventory Details	29
Table 4.1.2: Current Condition Summary – Branch-Level	35
Table 4.1.3: Latest Pavement Condition Index Summary – Section-Level	36
Table 5.2.4: Forecasted PCI Values 2023-2032 – Section-Level	47
Table 5.3 (a): AIP Handbook PCI Requirements for Airfield Pavement Projects	49
Table 5.3 (b): Critical PCI Values by Branch Use	49
Table 5.4.3 (a): Localized M&R Planning-Level Unit Costs – Asphalt Concrete	54
Table 5.4.3 (b): Localized M&R Planning-Level Unit Costs – Portland Cement Concrete	54
Table 5.4.4: AC Pavement Localized Preventive& Stopgap Maintenance & Repair Policy	55
Table 5.4.5: PCC Pavement Localized Preventive& Stopgap Maintenance & Repair Policy	
Table 5.5.1: Conceptual Pavement Sections for Major Rehabilitation	58
Table 5.5.2: RL Major Rehabilitation Planning-Level Unit Cost by Pavement Type	59
Table 6.1 (a): Year 1 Summary of Localized Maintenance	61
Table 6.1 (b): Year 1 Localized Maintenance by Work Type Summary	
Table 6.1 (c): Section-Level Year 1 Localized M&R Planning Cost Summary	
Table 6.2.1 (a): Section-Level 10-Year Major Rehabilitation Needs	64

LIST OF FIGURES

Figure E.1: PCI Rating	1
Figure E.2: Current Condition Summary – Branch-Level	2
Figure E.3: 10-Year Major Rehabilitation Needs by Program Year	6
Figure 1.1: Florida Aviation System (Facilities with Pavement) and FDOT Districts	9
Figure 1.4: Pavement Life and the Effect of Treatments	12
Figure 2: FDOT SAPMP General Process	14
Figure 3.1.1 (a): Airfield Pavement Network Definition Exhibit	24
Figure 3.1.1 (b): Airfield Pavement System Inventory Exhibit	25
Figure 3.1.2 (a): Age of Pavements at PCI Survey	
Figure 3.1.2 (b): Airfield Pavement Estimated Age Exhibit	27
Figure 3.1.3: Airfield Pavement Branch Use by Area (SF)	
Figure 3.1.4: Airfield Pavement Surface Type by Area (SF)	
Figure 4.1.1: Current Condition – Overall Network	
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 – Taxilane	
Figure 4.1.2 (e): Current Condition – Apron	
Figure 4.1.3: Airfield Pavement Condition Index Exhibit	37
Figure 5.2.3: Forecasted Branch-Level Pavement Performance	46
Figure 5.3 (a): Pavement Life and the Effect of Treatments	
Figure 5.3 (b): Major Rehabilitation Planning Decision Diagram, PCI < Critical PCI	
Figure 5.3 (c): Major Rehabilitation Planning Decision Diagram, PCI ≥ Critical PCI	
Figure 6.2.1 (a): 10-Year Major Rehabilitation Needs by Program Year	
Figure 6.2.1 (b): Airfield Pavement Major Rehabilitation Exhibit	66



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. Herlong Recreational Airport'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 July 2022, approximately 1.8 million square feet of pavement was assessed as part of the airside pavement network PCI survey at Herlong Recreational Airport (HEG). In general, airfield pavements at HEG are in Satisfactory condition with an area-weighted PCI of 79. The area-weighted average PCI values of the runways, taxiways, taxilanes, and aprons are 81, 88, 59, and 72, respectively. **Figure E.2** and **Table E.1** summarize the current PCI values for HEG.

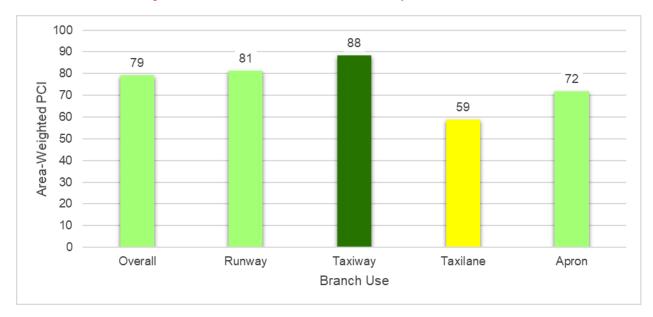


Figure E.2: Current Condition Summary - Branch-Level

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
HEG	RW 7-25	Runway	6105	268,900	69	Fair
HEG	RW 7-25	Runway	6110	131,000	69	Fair
HEG	RW 11-29	Runway	6205	412,753	93	Good
HEG	TW A	Taxiway	105	153,047	84	Satisfactory
HEG	TW B	Taxiway	305	21,515	90	Good
HEG	TW C	Taxiway	605	32,373	94	Good
HEG	TW C	Taxiway	610	4,869	94	Good
HEG	TW C	Taxiway	620	4,869	94	Good
HEG	TW C	Taxiway	625	16,303	94	Good
HEG	TW D	Taxiway	205	171,329	94	Good
HEG	TW E FBO	Taxiway	710	8,877	91	Good
HEG	TW N AP	Taxiway	805	16,073	74	Satisfactory
HEG	TW NE AP	Taxiway	1105	6,535	9	Failed
HEG	TW NW AP	Taxiway	405	4,713	92	Good
HEG	TW NW AP	Taxiway	550	2,186	89	Good
HEG	TL NW HANG	Taxilane	4120	41,757	62	Fair
HEG	TL NW HANG	Taxilane	4125	11,995	66	Fair
HEG	TL NW HANG	Taxilane	4130	15,281	94	Good
HEG	TL T-HANG	Taxilane	905	3,307	41	Poor
HEG	TL T-HANG	Taxilane	915	20,878	43	Poor

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
HEG	TL T-HANG	Taxilane	925	33,188	48	Poor
HEG	AP FBO	Apron	4215	10,233	86	Good
HEG	AP FBO	Apron	4220	22,343	61	Fair
HEG	AP FBO	Apron	4225	13,370	58	Fair
HEG	AP N	Apron	4305	72,711	69	Fair
HEG	AP N	Apron	4307	22,380	72	Satisfactory
HEG	AP N	Apron	4310	10,000	42	Poor
HEG	AP NE	Apron	4410	27,876	3	Failed
HEG	AP NW	Apron	4105	110,686	91	Good
HEG	AP NW	Apron	4110	39,032	92	Good
HEG	AP NW	Apron	4115	60,864	64	Fair
HEG	AP RU 25	Apron	5110	11,371	77	Satisfactory
HEG	AP RU 29	Apron	5115	10,993	94	Good
HEG	AP RU 7	Apron	5105	11,481	71	Satisfactory

Forecasted Pavement Conditions

Table E.2 provides section-level details for PCI forecasts. Pavement condition forecasts should be used for planning purposes only, as 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
HEG	RW 7-25	6105	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 7-25	6110	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 11-29	6205	93	91	88	86	84	83	81	79	78	77	75
HEG	TW A	105	84	82	80	79	77	76	74	73	71	70	69
HEG	TW B	305	90	88	86	84	82	80	79	77	76	74	73
HEG	TW C	605	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	610	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	620	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	625	94	92	90	88	86	84	83	81	79	78	76
HEG	TW D	205	94	92	90	88	86	84	83	81	79	78	76
HEG	TW E FBO	710	91	89	87	85	83	81	79	78	76	75	73
HEG	TW N AP	805	74	73	71	70	69	68	67	66	65	64	63
HEG	TW NE AP	1105	9	9	8	8	7	7	6	6	5	5	4
HEG	TW NW AP	405	92	90	88	86	84	82	80	79	77	75	74
HEG	TW NW AP	550	89	87	85	83	81	80	78	76	75	73	72
HEG	TL NW HANG	4120	62	61	61	60	60	59	59	59	58	58	57
HEG	TL NW HANG	4125	66	65	65	64	63	62	62	61	61	60	60
HEG	TL NW HANG	4130	94	92	90	88	86	84	83	81	79	78	76
HEG	TL T-HANG	905	41	40	39	37	36	35	33	32	30	28	26
HEG	TL T-HANG	915	43	42	41	40	39	37	36	35	33	31	30

Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

Network ID	Branch ID	Section ID	Current PCI	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
HEG	TL T-HANG	925	48	47	47	46	45	44	43	42	41	40	38
HEG	AP FBO	4215	86	84	82	80	77	75	73	71	69	66	64
HEG	AP FBO	4220	61	60	59	58	57	57	56	55	55	54	54
HEG	AP FBO	4225	58	57	56	56	55	55	54	53	53	52	52
HEG	AP N	4305	69	67	65	63	60	58	56	54	52	49	47
HEG	AP N	4307	72	70	69	67	66	65	63	62	61	60	59
HEG	AP N	4310	42	41	39	37	35	32	30	27	24	21	18
HEG	AP NE	4410	3	2	1	0	0	0	0	0	0	0	0
HEG	AP NW	4105	91	89	87	85	82	80	78	76	74	71	69
HEG	AP NW	4110	92	90	88	86	83	81	79	77	75	72	70
HEG	AP NW	4115	64	63	62	61	60	59	58	57	56	56	55
HEG	AP RU 25	5110	77	75	74	72	70	69	67	66	65	63	62
HEG	AP RU 29	5115	94	92	90	88	86	84	82	80	78	76	74
HEG	AP RU 7	5105	71	70	68	67	65	64	63	62	61	60	59



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 \$14.50M in major rehabilitation needs for the 10-year forecast period. Year 1 major needs are \$9.46M and localized maintenance needs for Year 1 are \$0.23M.

Section **Program** Network Area **PCI** Rehabilitation **Planning Cost Branch ID Surface** Year ID ID (SF) **Before Type Estimate** RW 7-25 6105 AAC 2,824,000 2023 HEG 268,900 67 AC Rehabilitation \$ 2023 HEG RW 7-25 6110 AC Rehabilitation 1,376,000 AAC 131,000 67 \$ TW NE AP 1105 PCC 2023 **HEG** 6,535 9 PCC Reconstruction \$ 295,000 TL NW HANG 4120 439,000 2023 **HEG** AC 41,757 61 AC Rehabilitation \$ 4125 2023 **HEG** TL NW HANG AC 11,995 65 AC Rehabilitation \$ 126,000 2023 **HEG** TL T-HANG 905 AC 3,307 40 AC Reconstruction \$ 62,000 2023 **HEG** TL T-HANG 915 AC 20,878 42 AC Reconstruction \$ 387,000 TL T-HANG AC 2023 **HEG** 925 33,188 47 AC Reconstruction \$ 614,000 2023 **HEG** AP FBO 4220 AC 22,343 60 AC Rehabilitation \$ 235,000 2023 **HEG** AP FBO 4225 AC 13,370 57 AC Rehabilitation \$ 141,000 HEG AAC 2023 AP N 4305 72,711 67 AC Rehabilitation \$ 764,000 2023 **HEG** AP N 4310 AC 10,000 41 AC Reconstruction \$ 185,000 2023 **HEG** AP NE 4410 PCC 27,876 2 **PCC** Reconstruction \$ 1,255,000 2023 AP NW 4115 AC 60,864 \$ 640,000 **HEG** 63 AC Rehabilitation AP RU 7 2023 **HEG** 5105 AC 11,481 70 AC Rehabilitation \$ 121,000 2024 **HEG** AP N 4307 AC 22,380 69 AC Rehabilitation \$ 247,000 2026 **HEG** TW N AP 805 AAC 16,073 69 AC Rehabilitation \$ 196,000

Table E.3: Major Rehabilitation Planning 2023-2032

5110

4215

105

4105

AP RU 25

AP FBO

TW A

AP NW



2027

2030

2032

2032

HEG

HEG

HEG

HEG

\$

\$

\$

\$

AC Rehabilitation

AC Rehabilitation

AC Rehabilitation

AC Rehabilitation

146,000

152,000

2,493,000

1,803,000

AC

AAC

AAC

AAC

11,371

10,233

153,047

110,686

69

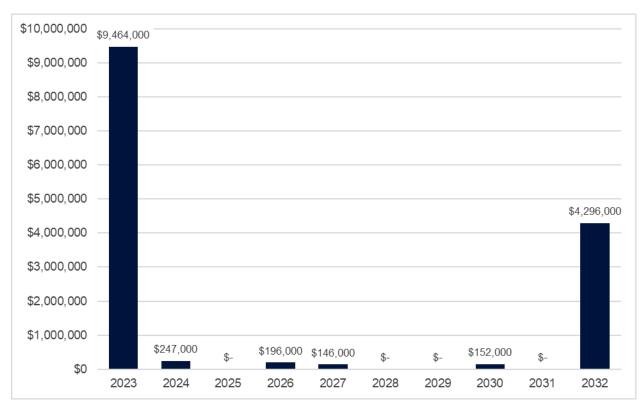
69

69

69

^{*}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".

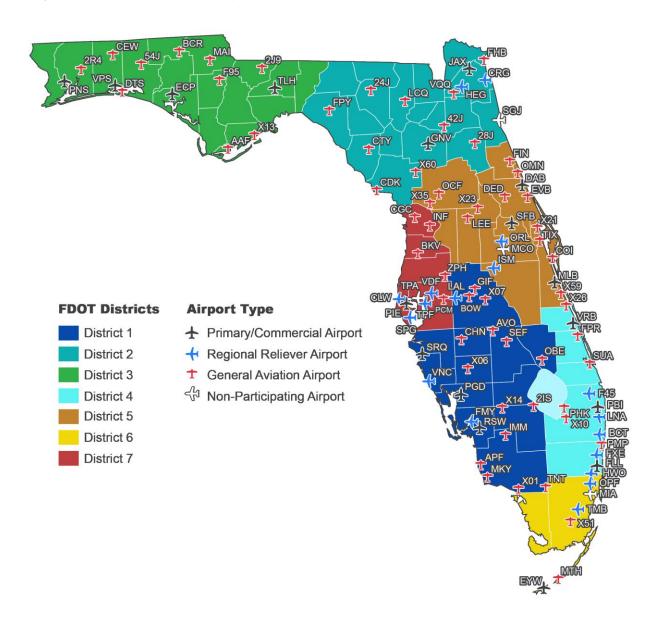
In general, adherence to the FAA Advisory Circulars is mandatory for projects funded with federal grant monies through the AIP program and with revenue from the Passenger Facilities Charges (PFC) Program. Further information is detailed in FAA Grant Assurance No. 11 "Pavement Maintenance," No. 34 "Policies, 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



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
FAA Orlando Airports District Office (Orlando ADO)	Key Stakeholder: local ADO Program Manager personnel that oversees the grant administration of AIP grant with Planning Agency Sponsor (Florida Department of Transportation).
Florida Department of Transportation (FDOT)	Key Stakeholder: the FDOT is the "Sponsor" for the AIP grant agreement. Specifically, the Aviation Office (AO) provides development and operations support for the Florida Airport System.
FDOT District Offices	The seven (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.
Participating Public-Use and Publicly-Owned Airports	The airports are the end-user and primary beneficiary of the SAPMP. The SAPMP provides a specific Airport Pavement Evaluation Report that meets the requirements of the FAA AC 150/5380-7B. Individual participating airports are provided a final Airport Pavement Evaluation Report by the Consultant that is specific to each airport's airfield PCI assessment.
Aviation Office Program Manager (AO-PM)	FDOT AO Airport Engineering Manager: oversees and manages the overall Program System Update.

1.3 General Scope of Work

The SAPMP is limited to performing tasks in 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.



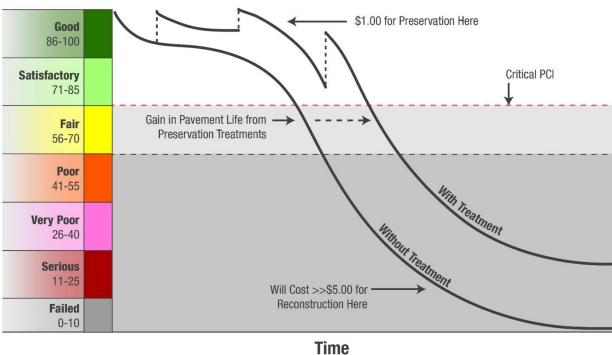
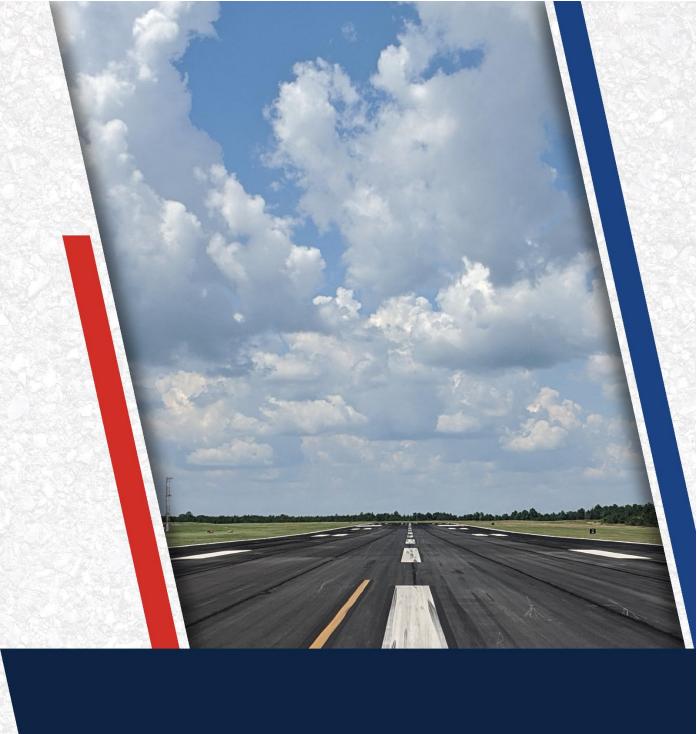


Figure 1.4: Pavement Life and the Effect of Treatments

FAA Eligibilty 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.

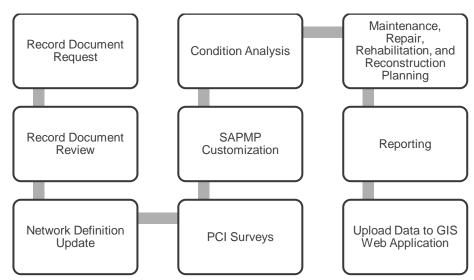


Figure 2: FDOT SAPMP General Process

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.

PAVERTM 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 PAVERTM 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.

<u>Asphalt Concrete Overlaid on Portland Cement Concrete (APC)</u>

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 HEG'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 (±8 slabs) for PCC pavement and 5,000 contiguous square feet (±2,000 SF) for AC. A sample unit is the smallest subdivision of a pavement network and is analyzed during field assessments to establish condition ratings.

2.5.5 Terminology Summary

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

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

Table 2.5.5: SAPMP Terminology

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.

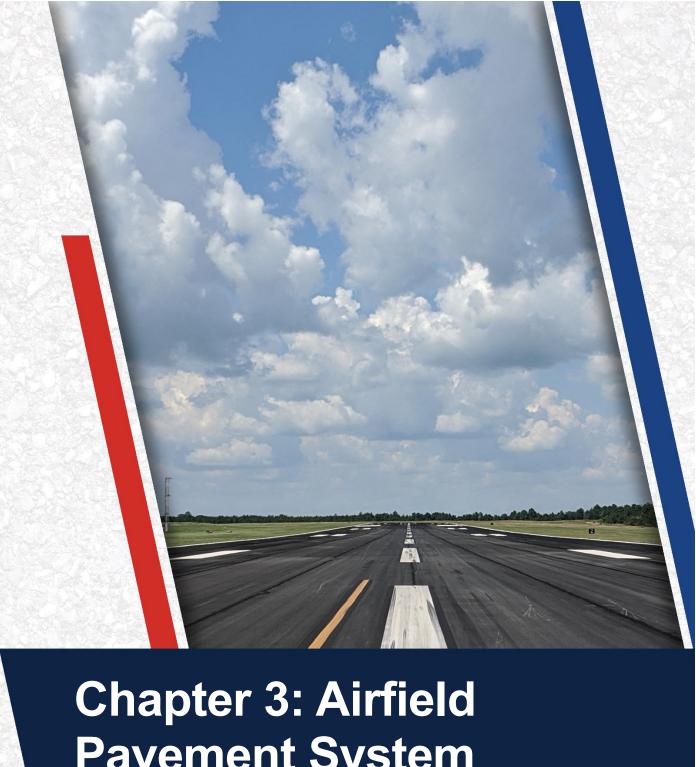
Table 2.6.2 (a): Recommended Sampling Rates for Asphalt Concrete

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.



Pavement System Inventory

Chapter 3 – Airfield Pavement System Inventory

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

3.1 Airfield Pavement Network Information

3.1.1 Previous and/or Anticipated Airfield Pavement Construction

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

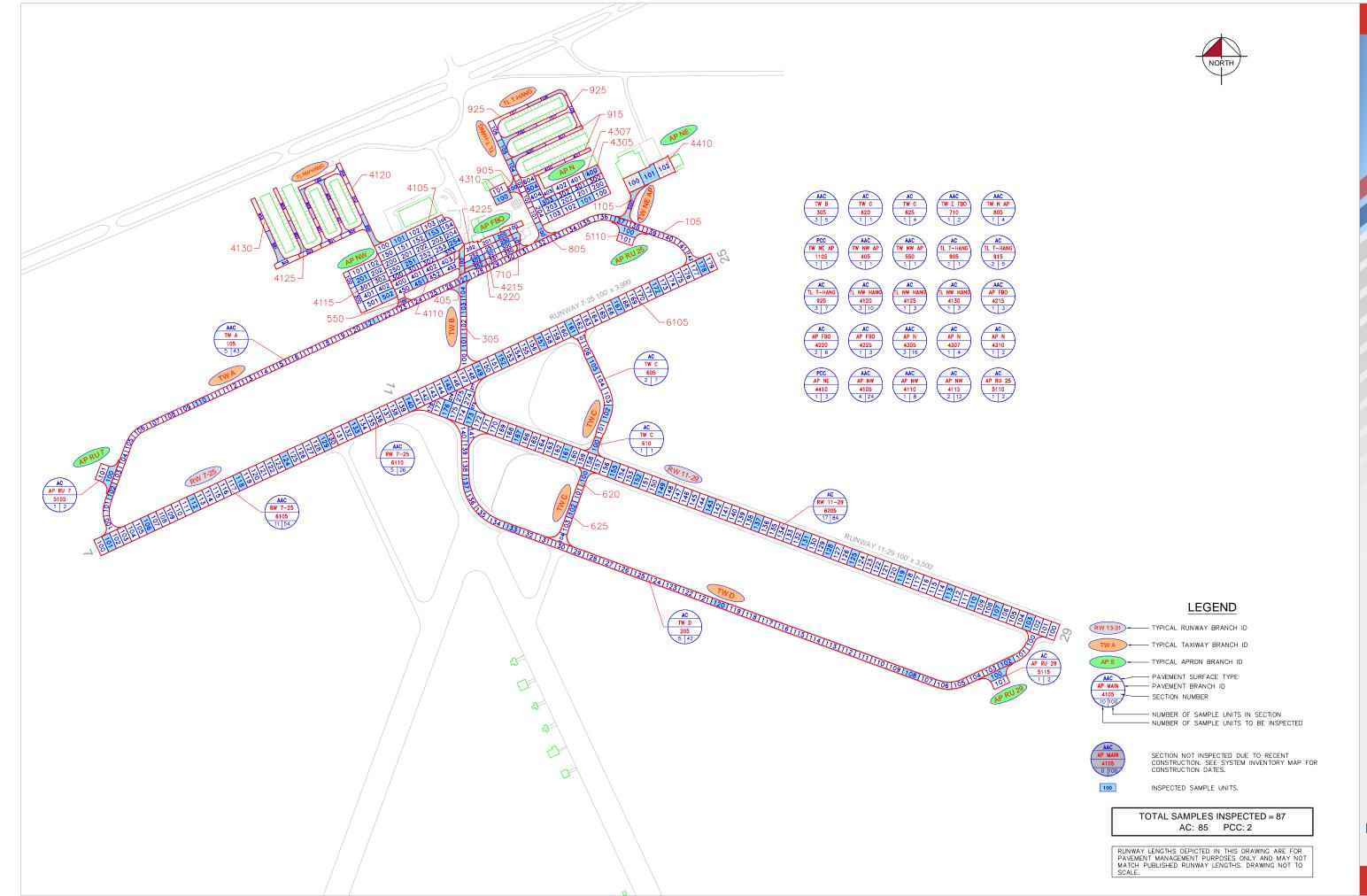
Table 3.1.1: Summary of Previous and/or Anticipated Airfield Pavement Construction

Construction Year	Location	Work Type / Pavement Section
2019	RW 11-29, TW C, TW D, AP RU 29	Complete Reconstruction - AC 4" P-401 OVER LIMEROCK BASE COURSE P-211
	TL NW HANG	New Construction - AC

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

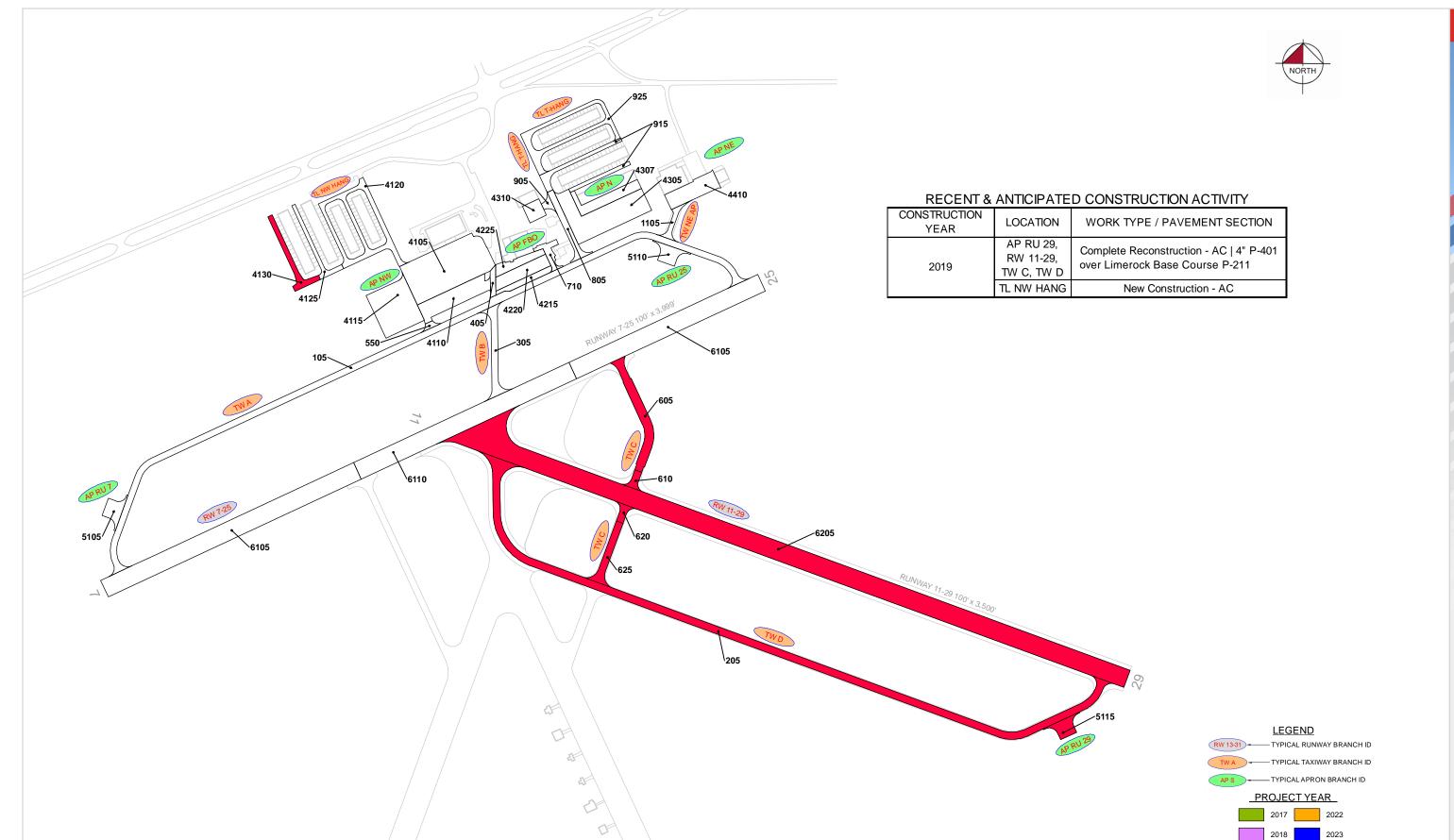
Figure 3.1.1 (a), the Airfield Pavement Network Definition Exhibit, provides details of the PCI assessment efforts. The Exhibit identifies pavement facilities, surface types, section definitions, and sample unit delineations. **Figure 3.1.1 (b)**, the Airfield Pavement System Inventory Exhibit, provides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





2020

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.

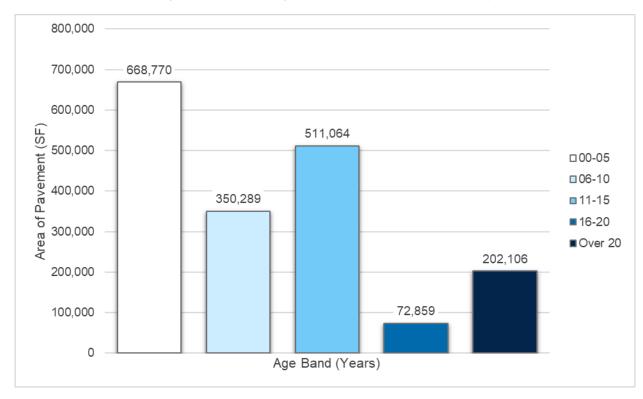
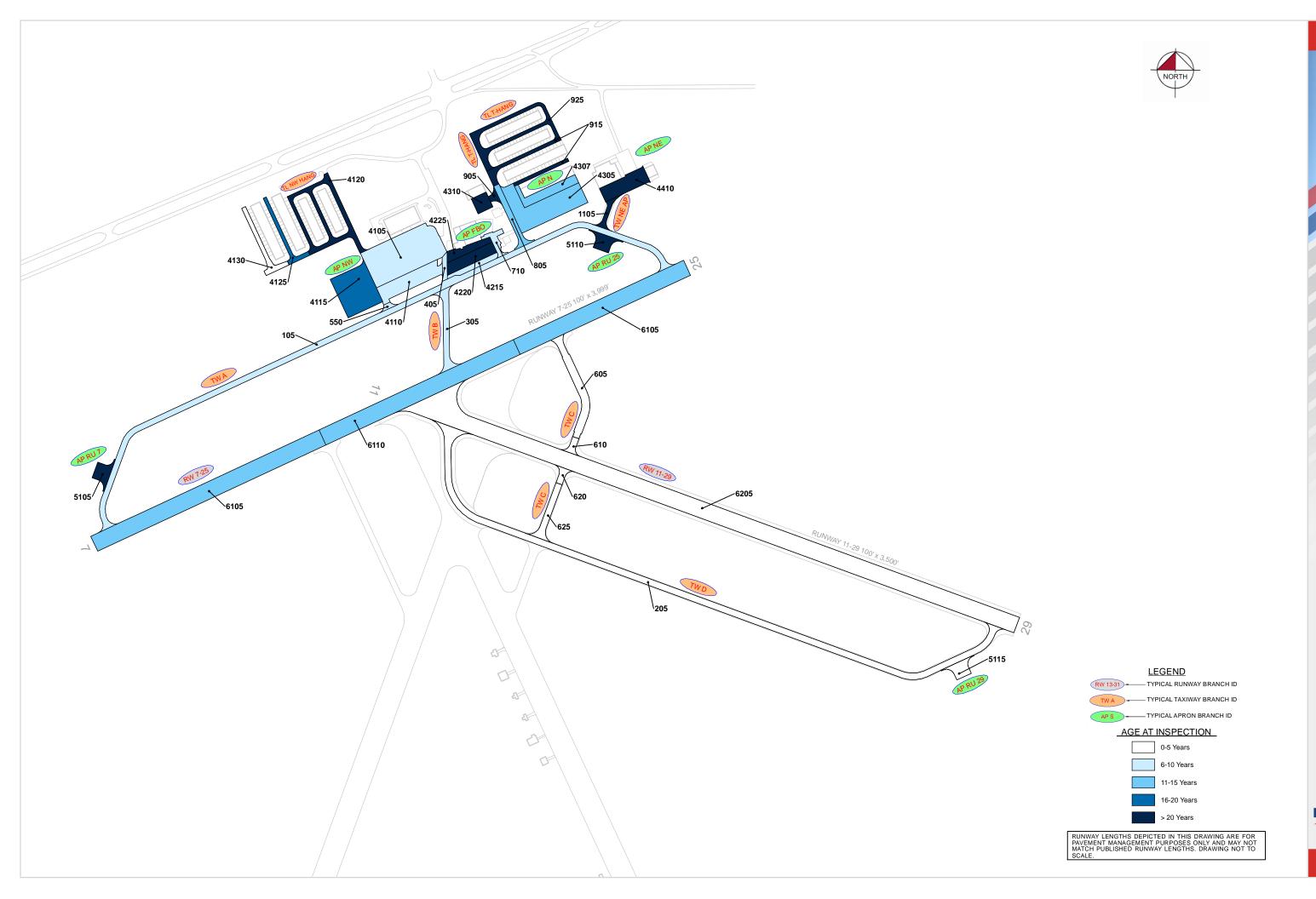


Figure 3.1.2 (a): Age of Pavements at PCI Survey





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.

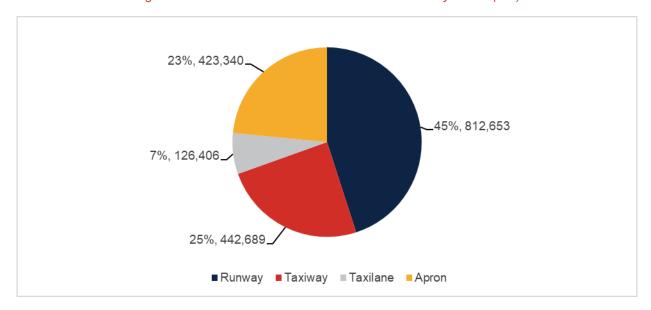


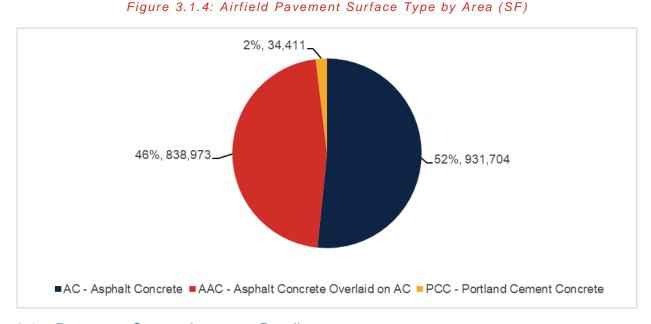
Figure 3.1.3: Airfield Pavement Branch Use by Area (SF)

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 HEG.





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.

Surface **Estimate of Last Network ID Branch ID Branch Use Section ID** Area (SF) **Construction Date** Type **HEG** RW 7-25 Runway 6105 268,900 AAC 1/1/2009 **HEG** RW 7-25 Runway 6110 131,000 AAC 1/1/2009 **HEG** RW 11-29 Runway 6205 412,753 AC 6/1/2019 **HEG** TW A **Taxiway** 105 153,047 AAC 1/1/2013 **HEG** TW B 21,515 AAC 1/1/2013 Taxiway 305 HEG TW C Taxiway 605 32,373 AC 6/1/2019 AC **HEG** TW C Taxiway 610 4,869 6/1/2019 TW C **HEG** Taxiway 620 4,869 AC 6/1/2019

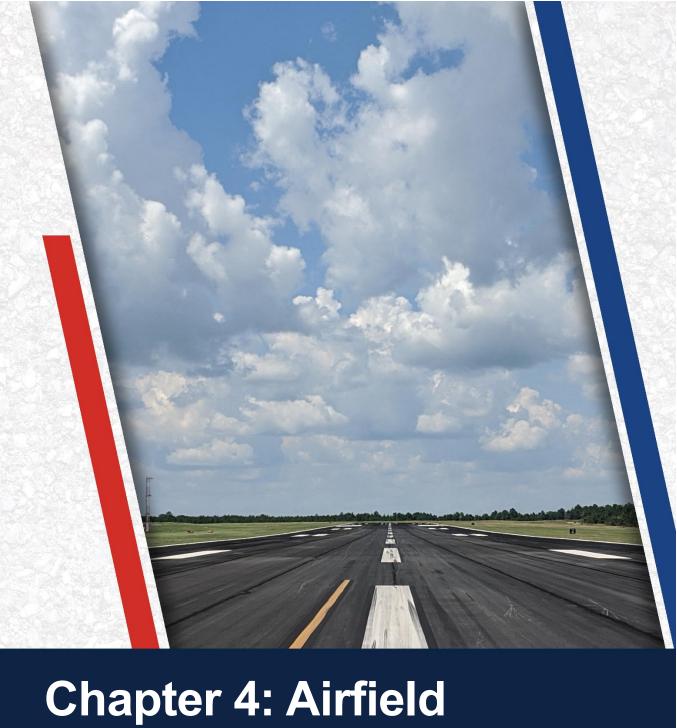
Table 3.1.5: Pavement System Inventory Details



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
HEG	TW C	Taxiway	625	16,303	AC	6/1/2019
HEG	TW D	Taxiway	205	171,329	AC	6/1/2019
HEG	TW E FBO	Taxiway	710	8,877	AAC	7/1/2016
HEG	TW N AP	Taxiway	805	16,073	AAC	1/1/2012
HEG	TW NE AP	Taxiway	1105	6,535	PCC	12/25/1999
HEG	TW NW AP	Taxiway	405	4,713	AAC	7/1/2016
HEG	TW NW AP	Taxiway	550	2,186	AAC	1/1/2013
HEG	TL NW HANG	Taxilane	4120	41,757	AC	1/1/2001
HEG	TL NW HANG	Taxilane	4125	11,995	AC	12/25/2006
HEG	TL NW HANG	Taxilane	4130	15,281	AC	7/1/2019
HEG	TL T-HANG	Taxilane	905	3,307	AC	1/1/1990
HEG	TL T-HANG	Taxilane	915	20,878	AC	1/1/1990
HEG	TL T-HANG	Taxilane	925	33,188	AC	1/1/1996
HEG	AP FBO	Apron	4215	10,233	AAC	7/1/2016
HEG	AP FBO	Apron	4220	22,343	AC	12/25/1999
HEG	AP FBO	Apron	4225	13,370	AC	1/1/1997
HEG	AP N	Apron	4305	72,711	AAC	1/1/2012
HEG	AP N	Apron	4307	22,380	AC	12/25/2009
HEG	AP N	Apron	4310	10,000	AC	1/1/1990
HEG	AP NE	Apron	4410	27,876	PCC	12/25/1999
HEG	AP NW	Apron	4105	110,686	AAC	7/1/2016
HEG	AP NW	Apron	4110	39,032	AAC	7/1/2016
HEG	AP NW	Apron	4115	60,864	AC	1/1/2005
HEG	AP RU 25	Apron	5110	11,371	AC	1/1/1999
HEG	AP RU 29	Apron	5115	10,993	AC	6/1/2019
HEG	AP RU 7	Apron	5105	11,481	AC	1/1/1999





Chapter 4: Airfield Pavement Condition Analysis

Chapter 4 – Airfield Pavement Condition Analysis

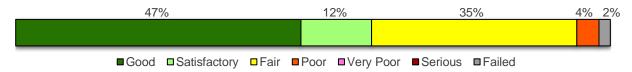
The Pavement Condition Index (PCI) provides insight to possible causes of deterioration to help support pavement maintenance and rehabilitation planning. Distress type, severity, and extent are required in the computation of a PCI value. The PCI method of pavement condition evaluation is strictly a visual review of surface condition, also referred to as a functional evaluation. Further evaluation of pavement conditions may be necessary, such as structural evaluation, for designand/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 59% of inspected pavements are in Good or Satisfactory condition. Presently, roughly 35% of inspected pavements are in Fair condition and the remaining 6% 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.

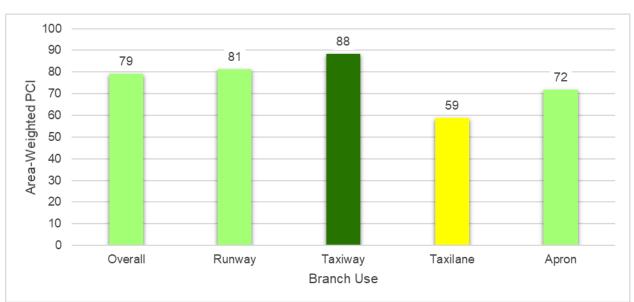


Figure 4.1.2 (a): Current Condition Summary - Branch-Level







Figure 4.1.2 (c): Current Condition - Taxiway

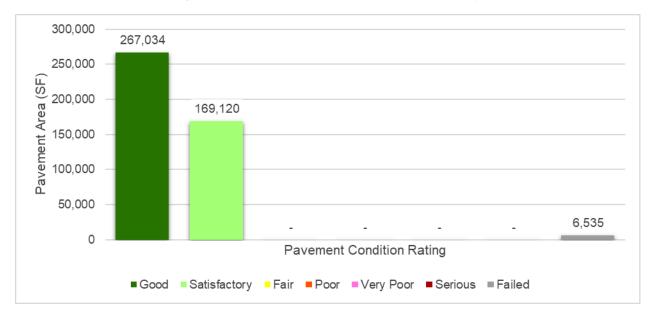




Figure 4.1.2 (d): Current Condition - Taxilane



Figure 4.1.2 (e): Current Condition - Apron

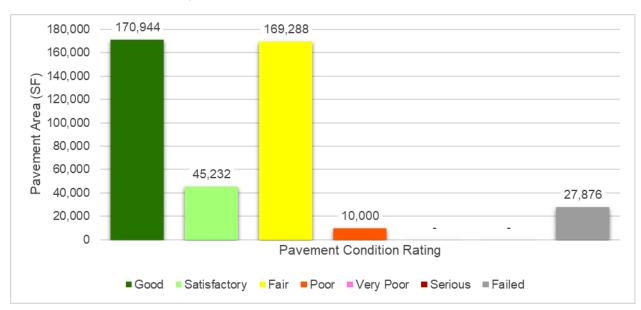




Table 4.1.2 details the branch-level condition for each airfield pavement branch.

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 7-25	Runway	2	399,900	69	Fair
RW 11-29	Runway	1	412,753	93	Good
TW A	Taxiway	1	153,047	84	Satisfactory
TW B	Taxiway	1	21,515	90	Good
TW C	Taxiway	4	58,414	94	Good
TW D	Taxiway	1	171,329	94	Good
TW E FBO	Taxiway	1	8,877	91	Good
TW N AP	Taxiway	1	16,073	74	Satisfactory
TW NE AP	Taxiway	1	6,535	9	Failed
TW NW AP	Taxiway	2	6,899	91	Good
TL NW HANG	Taxilane	3	69,033	70	Fair
TL T-HANG	Taxilane	3	57,373	46	Poor
AP FBO	Apron	3	45,946	66	Fair
AP N	Apron	3	105,091	67	Fair
AP NE	Apron	1	27,876	3	Failed
AP NW	Apron	3	210,582	83	Satisfactory
AP RU 25	Apron	1	11,371	77	Satisfactory
AP RU 29	Apron	1	10,993	94	Good
AP RU 7	Apron	1	11,481	71	Satisfactory

4.1.3 Section-Level Analysis

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

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



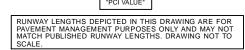
Table 4.1.3: Latest Pavement Condition Index Summary - Section-Level

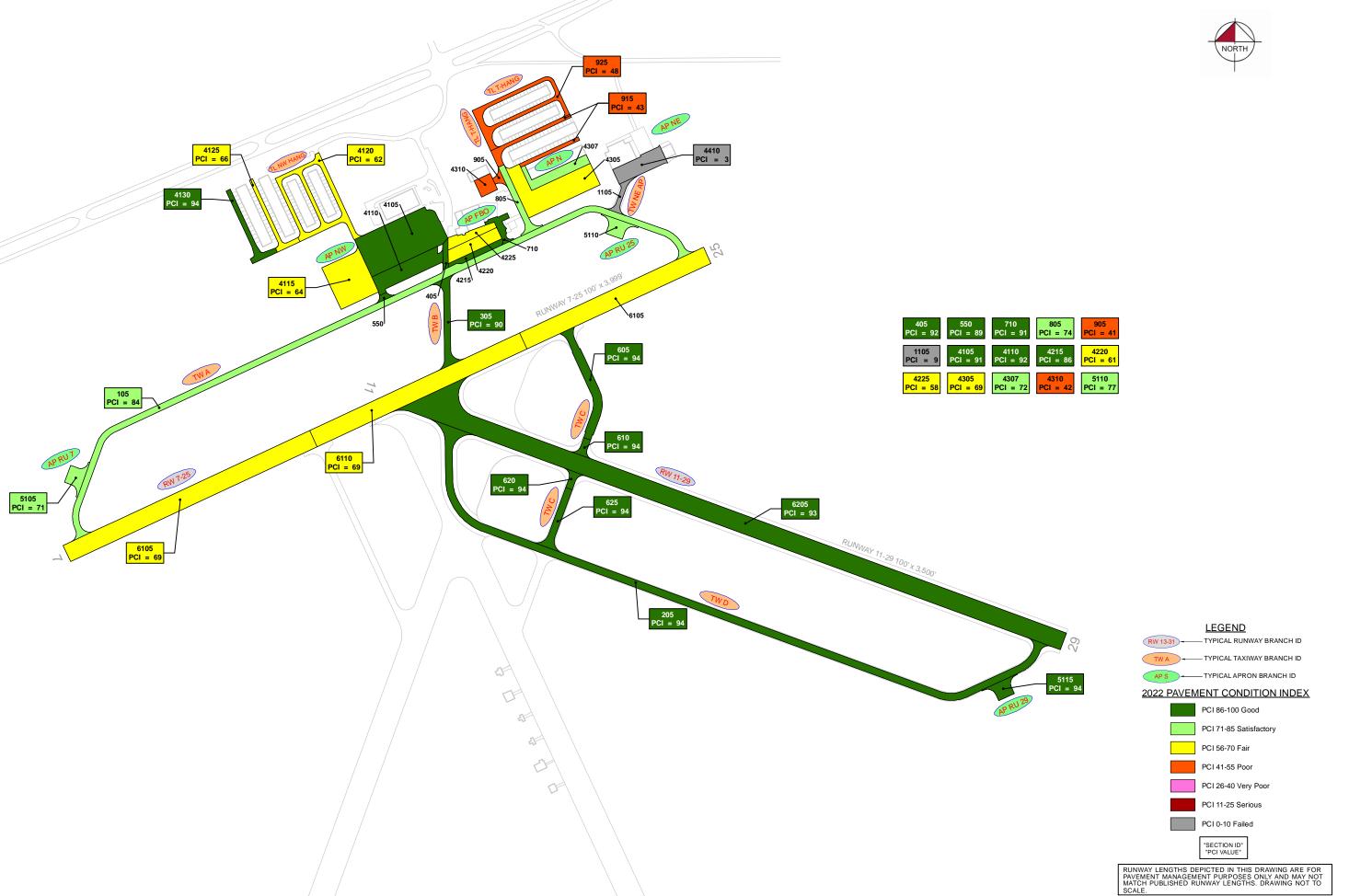
Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface	PCI	Condition Rating	PCI % Climate	PCI % Load	PCI % Other	Sample Units Inspected	Total Sample Units in Section
HEG	RW 7-25	Runway	6105	268,900	AAC	69	Fair	74	0	26	11	54
HEG	RW 7-25	Runway	6110	131,000	AAC	69	Fair	90	0	10	5	26
HEG	RW 11-29	Runway	6205	412,753	AC	93	Good	100	0	0	17	84
HEG	TW A	Taxiway	105	153,047	AAC	84	Satisfactory	100	0	0	5	43
HEG	TW B	Taxiway	305	21,515	AAC	90	Good	100	0	0	3	5
HEG	TW C	Taxiway	605	32,373	AC	94	Good	100	0	0	2	7
HEG	TW C	Taxiway	610	4,869	AC	94	Good	100	0	0	1	1
HEG	TW C	Taxiway	620	4,869	AC	94	Good	100	0	0	1	1
HEG	TW C	Taxiway	625	16,303	AC	94	Good	100	0	0	1	4
HEG	TW D	Taxiway	205	171,329	AC	94	Good	100	0	0	5	42
HEG	TW E FBO	Taxiway	710	8,877	AAC	91	Good	100	0	0	1	2
HEG	TW N AP	Taxiway	805	16,073	AAC	74	Satisfactory	76	0	24	1	4
HEG	TW NE AP	Taxiway	1105	6,535	PCC	9	Failed	4	71	25	1	1
HEG	TW NW AP	Taxiway	405	4,713	AAC	92	Good	100	0	0	1	1
HEG	TW NW AP	Taxiway	550	2,186	AAC	89	Good	100	0	0	1	1
HEG	TL NW HANG	Taxilane	4120	41,757	AC	62	Fair	70	0	30	3	10
HEG	TL NW HANG	Taxilane	4125	11,995	AC	66	Fair	93	0	7	1	3
HEG	TL NW HANG	Taxilane	4130	15,281	AC	94	Good	100	0	0	1	3
HEG	TL T-HANG	Taxilane	905	3,307	AC	41	Poor	91	0	9	1	1
HEG	TL T-HANG	Taxilane	915	20,878	AC	43	Poor	97	0	3	2	5
HEG	TL T-HANG	Taxilane	925	33,188	AC	48	Poor	100	0	0	3	7
HEG	AP FBO	Apron	4215	10,233	AAC	86	Good	100	0	0	1	3
HEG	AP FBO	Apron	4220	22,343	AC	61	Fair	94	0	6	2	6
HEG	AP FBO	Apron	4225	13,370	AC	58	Fair	100	0	0	1	3
HEG	AP N	Apron	4305	72,711	AAC	69	Fair	96	0	4	3	16
HEG	AP N	Apron	4307	22,380	AC	72	Satisfactory	100	0	0	1	4
HEG	AP N	Apron	4310	10,000	AC	42	Poor	100	0	0	1	2
HEG	AP NE	Apron	4410	27,876	PCC	3	Failed	4	77	19	1	3
HEG	AP NW	Apron	4105	110,686	AAC	91	Good	80	0	20	4	24
HEG	AP NW	Apron	4110	39,032	AAC	92	Good	100	0	0	1	8
HEG	AP NW	Apron	4115	60,864	AC	64	Fair	82	0	18	2	12
HEG	AP RU 25	Apron	5110	11,371	AC	77	Satisfactory	100	0	0	1	2
HEG	AP RU 29	Apron	5115	10,993	AC	94	Good	100	0	0	1	2
HEG	AP RU 7	Apron	5105	11,481	AC	71	Satisfactory	95	0	5	1	2

^{*}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.









4.2 Summary of Pavement Condition Evaluation Results

4.2.1 Network-Level Observations

The PCI assessment for Herlong Recreational Airport (HEG) was performed in July 2022. The overall area-weighted average PCI value of the network was 79, representing a condition rating of Satisfactory.

Based on the FAA 5010 Report as of 10/27/2022, the Airport has reported 80,700 operations for 12 months ending 02/06/2018.

4.2.2 Branch-Level Observations

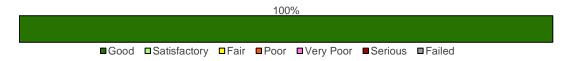
The following branch-level observations are a summary of select pavement facilities identified during the PCI assessment, including a discussion of general conditions and branch characteristics. The summary may not include all branches and/or sections within the Airport's airfield pavement network. Representative 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 11-29

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
RW 11-29	RUNWAY	1	412,753	93	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
6205	AC	412,753	93	Good

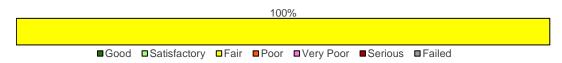
RW 11-29 consists of 1 flexible pavement section, totaling 412,753 sf. The last major construction date for the branch was 2019, resulting in an area-weighted average age at inspection of 3 years old. Overall, RW 11-29 is in Good condition with an area-weighted average PCI of 93.



RW 7-25

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
RW 7-25	RUNWAY	2	399,900	69	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
6105	AAC	268,900	69	Fair
6110	AAC	131,000	69	Fair

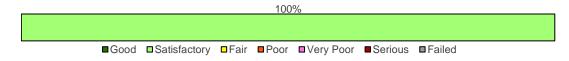
RW 7-25 consists of 2 flexible pavement sections, totaling 399,900 sf. The last major construction date for the branch was 2009, resulting in an area-weighted average age at inspection of 14 years old. Overall, RW 7-25 is in Fair condition with an area-weighted average PCI of 69.

Taxiways

TW A

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
TW A	TAXIWAY	1	153,047	84	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
105	AAC	153,047	84	Satisfactory



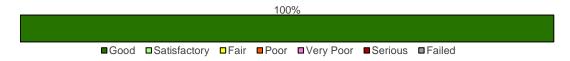
Statewide Airfield Pavement Management Program

TW A consists of 1 flexible pavement section, totaling 153,047 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 10 years old. Overall, TW A is in Satisfactory condition with an area-weighted average PCI of 84.

TW B

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
TW B	TAXIWAY	1	21,515	90	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).



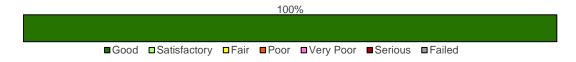
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
305	AAC	21,515	90	Good

TW B consists of 1 flexible pavement section, totaling 21,515 sf. The last major construction date for the branch was 2013, resulting in an area-weighted average age at inspection of 10 years old. Overall, TW B is in Good condition with an area-weighted average PCI of 90.

TW D

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
TW D	TAXIWAY	1	171,329	94	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
205	AC	171,329	94	Good



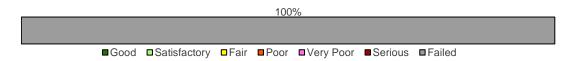
Statewide Airfield Pavement Management Program

TW D consists of 1 flexible pavement section, totaling 171,329 sf. The last major construction date for the branch was 2019, resulting in an area-weighted average age at inspection of 3 years old. Overall, TW D is in Good condition with an area-weighted average PCI of 94.

TW NE AP

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
TW NE AP	TAXIWAY	1	6,535	9	Failed

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% Failed (0-10 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating
1105	PCC	6,535	9	Failed

TW NE AP consists of 1 rigid pavement section, totaling 6,535 sf. The last major construction date for the branch was 1999, resulting in an area-weighted average age at inspection of 23 years old. Overall, TW NE AP is in Failed condition with an area-weighted average PCI of 9.

<u>Aprons</u>

AP FBO

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
AP FBO	APRON	3	45,946	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: 22% Good (86-100 PCI), 78% Fair (56-70 PCI).





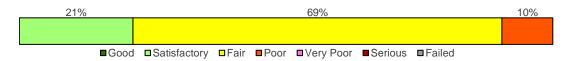
Section Area Condition **Section ID Surface Type** PCI (SF) Rating 4215 AAC 10,233 Good AC 4220 22,343 61 Fair AC 13,370 Fair 4225 58

AP FBO consists of 3 flexible pavement sections, totaling 45,946 sf. The last major construction dates range from 1997 to 2016, resulting in an area-weighted average age at inspection of 20 years old. Overall, AP FBO is in Fair condition with an area-weighted average PCI of 66.

AP N

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
AP N	APRON	3	105,091	67	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: 21% Satisfactory (71-85 PCI), 69% Fair (56-70 PCI), 10% Poor (41-55 PCI).



Section ID	Surface Type Section Area (SF)		PCI	Condition Rating	
4305	AAC	72,711	69	Fair	
4307	AC	22,380	72	Satisfactory	
4310	AC	10,000	42	Poor	

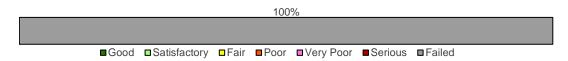
AP N consists of 3 flexible pavement sections, totaling 105,091 sf. The last major construction dates range from 1990 to 2012, resulting in an area-weighted average age at inspection of 13 years old. Overall, AP N is in Fair condition with an area-weighted average PCI of 67.

AP NE

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
AP NE	APRON	1	27,876	3	Failed

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% Failed (0-10 PCI).





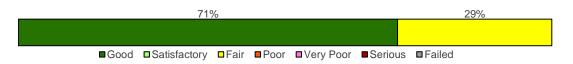
Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating	
4410	PCC	27,876	3	Failed	

AP NE consists of 1 rigid pavement section, totaling 27,876 sf. The last major construction date for the branch was 1999, resulting in an area-weighted average age at inspection of 23 years old. Overall, AP NE is in Failed condition with an area-weighted average PCI of 3.

AP NW

Branch ID	Branch Use	Number of Sections	Branch Area (SF)	Branch Area- Weighted Avg PCI	Branch Condition Rating
AP NW	APRON	3	210,582	83	Satisfactory

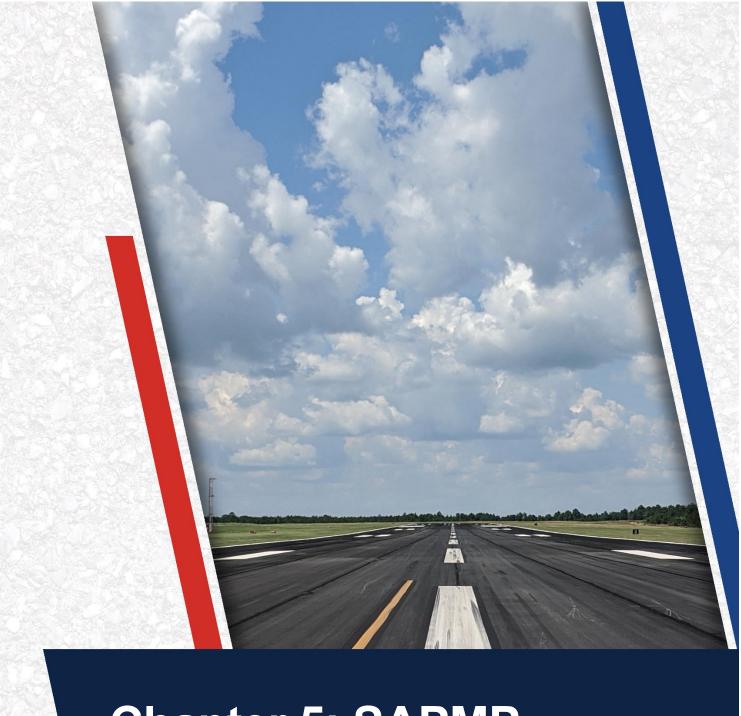
The following bar graph shows proportional distribution (as % of area within branch) of condition categories among sections within the branch. Given the individual section data shown in the subsequent table, the distribution is as follows: 71% Good (86-100 PCI), 29% Fair (56-70 PCI).



Section ID	Surface Type	Section Area (SF)	PCI	Condition Rating	
4105	AAC	110,686	91	Good	
4110	AAC	39,032	92	Good	
4115	AC	60,864	64	Fair	

AP NW consists of 3 flexible pavement sections, totaling 210,582 sf. The last major construction dates range from 2005 to 2016, resulting in an area-weighted average age at inspection of 9 years old. Overall, AP NW is in Satisfactory condition with an area-weighted average PCI of 83.





Chapter 5: SAPMP Customization

Chapter 5 – SAPMP Customization

Once the PAVERTM 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;
 - o "GA" for General Aviation, community airports
 - o "RL" for Regional Relievers
 - o "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.

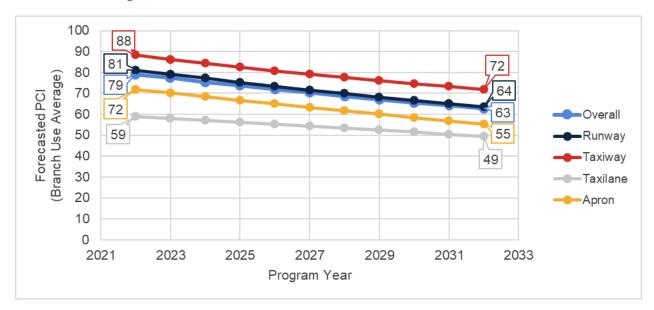


Figure 5.2.3: Forecasted Branch-Level Pavement Performance



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
HEG	RW 7-25	6105	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 7-25	6110	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 11-29	6205	93	91	88	86	84	83	81	79	78	77	75
HEG	TW A	105	84	82	80	79	77	76	74	73	71	70	69
HEG	TW B	305	90	88	86	84	82	80	79	77	76	74	73
HEG	TW C	605	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	610	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	620	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	625	94	92	90	88	86	84	83	81	79	78	76
HEG	TW D	205	94	92	90	88	86	84	83	81	79	78	76
HEG	TW E FBO	710	91	89	87	85	83	81	79	78	76	75	73
HEG	TW N AP	805	74	73	71	70	69	68	67	66	65	64	63
HEG	TW NE AP	1105	9	9	8	8	7	7	6	6	5	5	4
HEG	TW NW AP	405	92	90	88	86	84	82	80	79	77	75	74
HEG	TW NW AP	550	89	87	85	83	81	80	78	76	75	73	72
HEG	TL NW HANG	4120	62	61	61	60	60	59	59	59	58	58	57
HEG	TL NW HANG	4125	66	65	65	64	63	62	62	61	61	60	60
HEG	TL NW HANG	4130	94	92	90	88	86	84	83	81	79	78	76
HEG	TL T-HANG	905	41	40	39	37	36	35	33	32	30	28	26
HEG	TL T-HANG	915	43	42	41	40	39	37	36	35	33	31	30
HEG	TL T-HANG	925	48	47	47	46	45	44	43	42	41	40	38
HEG	AP FBO	4215	86	84	82	80	77	75	73	71	69	66	64
HEG	AP FBO	4220	61	60	59	58	57	57	56	55	55	54	54
HEG	AP FBO	4225	58	57	56	56	55	55	54	53	53	52	52
HEG	AP N	4305	69	67	65	63	60	58	56	54	52	49	47
HEG	AP N	4307	72	70	69	67	66	65	63	62	61	60	59
HEG	AP N	4310	42	41	39	37	35	32	30	27	24	21	18
HEG	AP NE	4410	3	2	1	0	0	0	0	0	0	0	0
HEG	AP NW	4105	91	89	87	85	82	80	78	76	74	71	69
HEG	AP NW	4110	92	90	88	86	83	81	79	77	75	72	70
HEG	AP NW	4115	64	63	62	61	60	59	58	57	56	56	55
HEG	AP RU 25	5110	77	75	74	72	70	69	67	66	65	63	62
HEG	AP RU 29	5115	94	92	90	88	86	84	82	80	78	76	74
HEG	AP RU 7	5105	71	70	68	67	65	64	63	62	61	60	59

5.3 Critical PCI Value

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

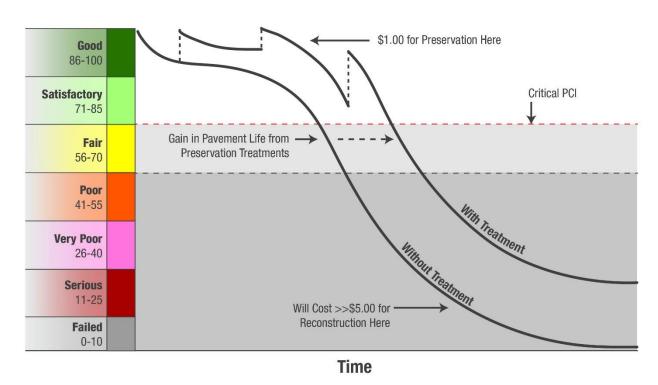


Figure 5.3 (a): Pavement Life and the Effect of Treatments

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



FAA Eligibilty 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.

Statewide Airfield Pavement Management Program

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.



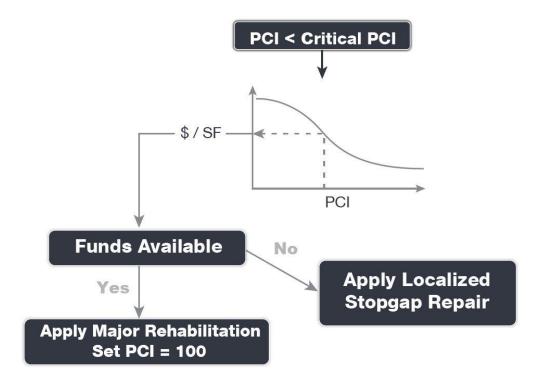
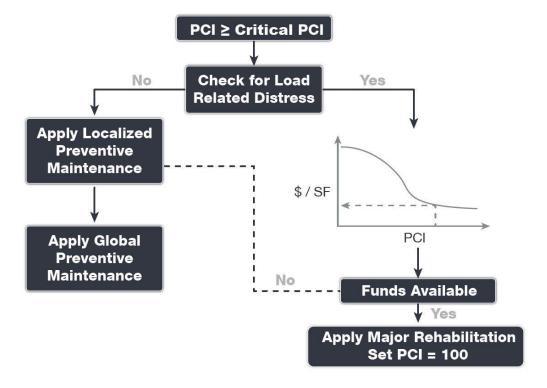


Figure 5.3 (c): Major Rehabilitation Planning Decision Diagram, PCI ≥ Critical PCI



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		Reliever Costs Work Ty		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.



Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

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	
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	

Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

Distress	Severity	Severity Description AC Preventive Work Type		AC Stopgap Work Type
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
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

Distress	Severity	Description	PCC Preventive Work Type PCC Stopgap Work	
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 Pa	
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
AC Reconstruction	
	Pavement Removal
	Unclassified Excavation
Full-depth asphalt pavement section reconstruction. Removal of existing	Subgrade Stabilization (12")
pavement section and construction of a new section.	Limerock Base Course (8")
	Prime Coat
PCI <55	Tack Coat
	P-401 Surface Course (4")
	Excludes any paved shoulder features
AC Rehabilitation	
	15% AC Reconstruction
Combination of apphalt payament milling and replacement averlay with 15%	Mill and Overlay
Combination of asphalt pavement milling and replacement overlay with 15% of the areas subject to full-depth reconstruction.	AC Milling (3")
	Tack Coat
PCI = 55 to 70	P-401 Surface Course (3")
	Excludes any paved shoulder features
PCC Reconstruction	
	Pavement Removal
	Unclassified Excavation
Full-depth rigid pavement section reconstruction.	Subgrade Stabilization (12")
PCI < 55	Limerock Base Course (6")
. 5. 100	P-501 PCC Pavement (14")
	PCC Joint Seal
PCC Rehabilitation	
Rehabilitation of PCC pavement with a combination of crack sealing, joint	15% Slab Replacement
seal replacement, limited patching, and replacement of 15% of slab panels.	Joint and Crack Seal
PCI = 55 to 70	Limited Patching

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

Reconstruction (AC or PCC)

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

AC Rehabilitation

AC Rehabilitation, for the purposes of this SAPMP, is a removal of all or a portion of the asphalt surface through milling and replacing the milled depth with an overlay of asphalt. This rehabilitation activity is typically applied to pavement that does not require a structural improvement and does not display an extensive amount of load-related distresses. However, this work type conservatively accounts for 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

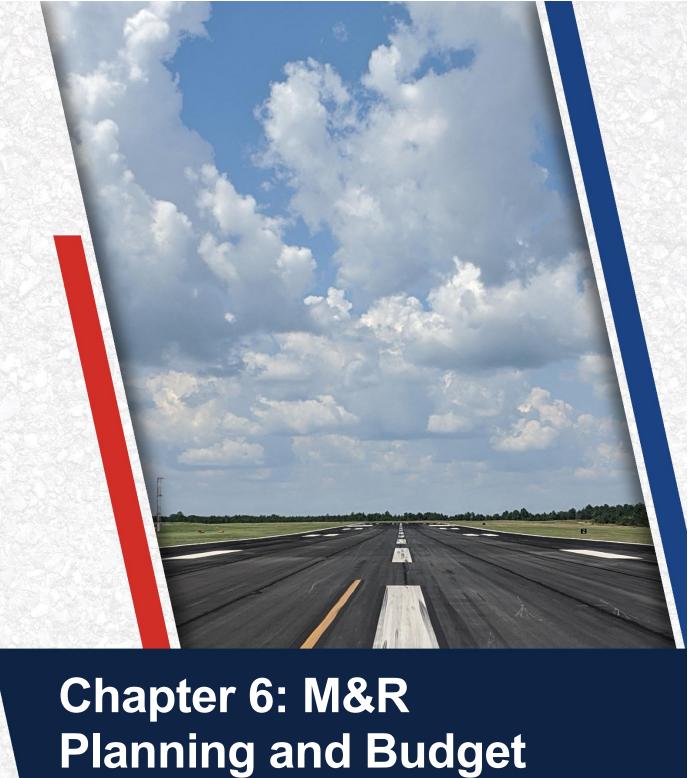
Planning-level opinions of probable construction cost developed for this System Update are based on archived bid tabulations and records from airfield pavement projects provided by participating airports. A review of cost trends and cost factors have been incorporated to assist airports in planning for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





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	Co	ost
Preventive	\$	22,060
Stopgap	\$	207,970
Planning-Level Localized M&R Needs =	\$	230,030

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): Yea	r 1 Localized Mainte	enance by Work Type Summary
--------------------	----------------------	-----------------------------

Localized Maintenance Category	Localized Work Type	Rough Estimate of Work Quantity	Work Units	anning erial Cost
Localized Preventive Maintenance	Surface Seal	29,324	SF	\$ 22,060
	AC Full-Depth Patching	596	SF	\$ 6,870
	PCC Crack Sealing	1,748	LF	\$ 12,250
Localized Stopgap Maintenance	PCC Partial-Depth Patching	53	SF	\$ 9,030
	PCC Full-Depth Patching	152	SF	\$ 9,870
	PCC Slab Replacement	3,300	SF	\$ 169,950

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	
HEG	RW 7-25	6105	268,900	69	69	\$ -	
HEG	RW 7-25	6110	131,000	69	69	\$ -	
HEG	RW 11-29	6205	412,753	93	93	\$ -	
HEG	TW A	105	153,047	84	86	\$ 940	
HEG	TW B	305	21,515	90	94	\$ 280	
HEG	TW C	605	32,373	94	94	\$ -	
HEG	TW C	610	4,869	94	94	\$ -	
HEG	TW C	620	4,869	94	94	\$ -	
HEG	TW C	625	16,303	94	94	\$ -	
HEG	TW D	205	171,329	94	94	\$ -	
HEG	TW E FBO	710	8,877	91	94	\$ 70	
HEG	TW N AP	805	16,073	74	78	\$ 250	
HEG	TW NE AP	1105	6,535	9	29	\$ 9,440	
HEG	TW NW AP	405	4,713	92	94	\$ 80	
HEG	TW NW AP	550	2,186	89	94	\$ 70	
HEG	TL NW HANG	4120	41,757	62	62	\$ -	
HEG	TL NW HANG	4125	11,995	66	66	\$ -	
HEG	TL NW HANG	4130	15,281	94	94	\$ -	
HEG	TL T-HANG	905	3,307	41	41	\$ -	
HEG	TL T-HANG	915	20,878	43	43	\$ -	
HEG	TL T-HANG	925	33,188	48	48	\$ 4,210	
HEG	AP FBO	4215	10,233	86	94	\$ 1,540	
HEG	AP FBO	4220	22,343	61	62	\$ 2,660	
HEG	AP FBO	4225	13,370	58	58	\$ -	
HEG	AP N	4305	72,711	69	69	\$ -	
HEG	AP N	4307	22,380	72	96	\$ 16,790	

•			•
Statewide Airfield	Pavement	Management	Program

Network ID	Branch ID	Section ID	Area (SF)	Start PCI	End PCI	Cost	
HEG	AP N	4310	10,000	42	42	\$	-
HEG	AP NE	4410	27,876	3	33	\$	191,630
HEG	AP NW	4105	110,686	91	93	\$	1,450
HEG	AP NW	4110	39,032	92	94	\$	590
HEG	AP NW	4115	60,864	64	64	\$	-
HEG	AP RU 25	5110	11,371	77	77	\$	-
HEG	AP RU 29	5115	10,993	94	94	\$	-
HEG	AP RU 7	5105	11,481	71	71	\$	-

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.



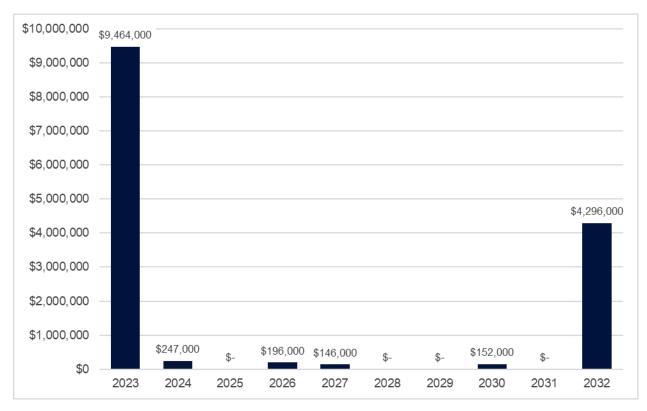
Table 6.2.1 (a) summarizes section-level major rehabilitation needs forecasted for a 10-year period. It should be noted that the following table depicts planning-level costs and has been rounded up to the nearest \$1,000 for planning purposes.

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

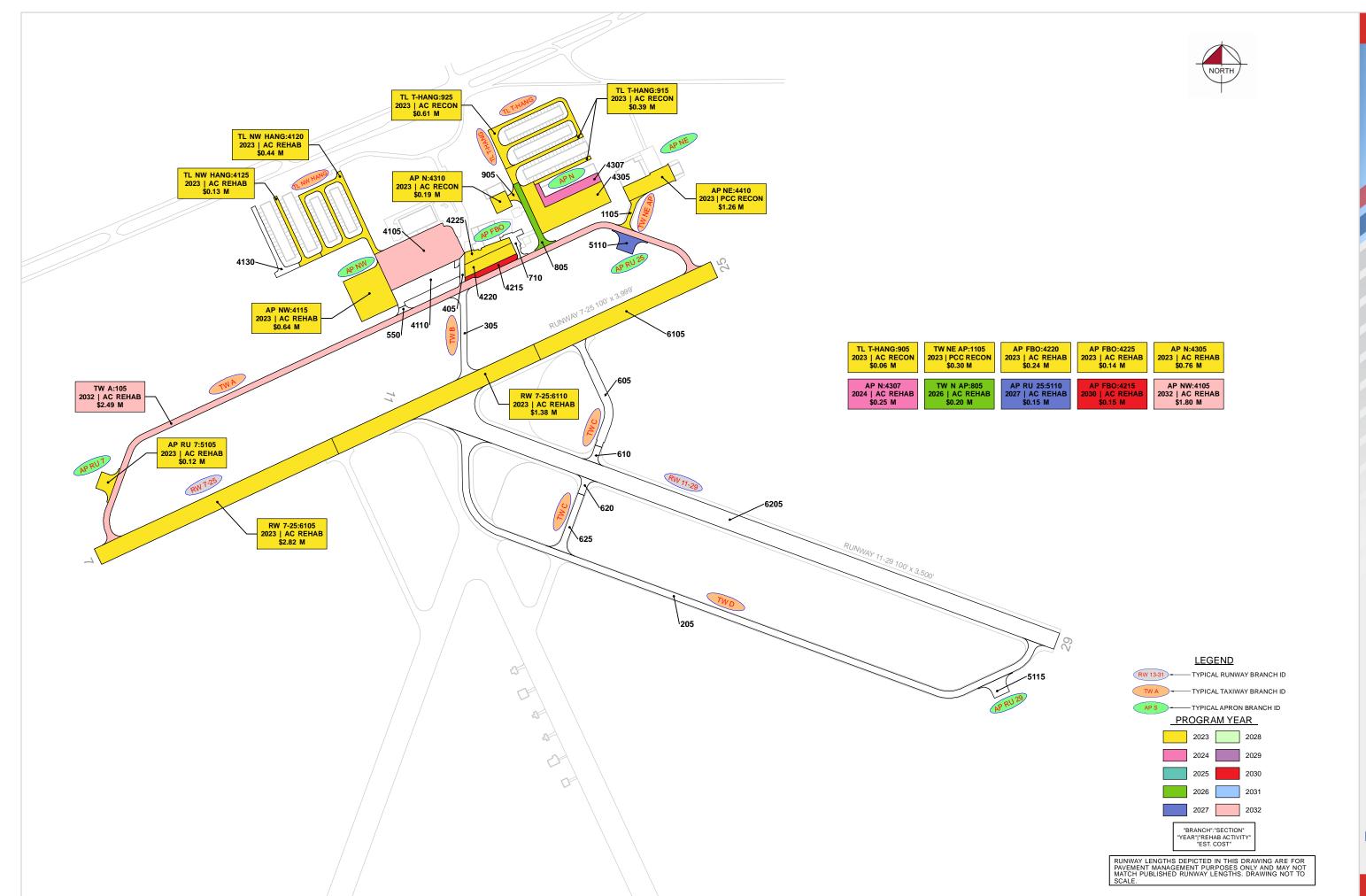
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost Estimate	
2023	HEG	RW 7-25	6105	AAC	268,900	67	AC Rehabilitation	\$	2,824,000
2023	HEG	RW 7-25	6110	AAC	131,000	67	AC Rehabilitation	\$	1,376,000
2023	HEG	TW NE AP	1105	PCC	6,535	9	PCC Reconstruction	\$	295,000
2023	HEG	TL NW HANG	4120	AC	41,757	61	AC Rehabilitation	\$	439,000
2023	HEG	TL NW HANG	4125	AC	11,995	65	AC Rehabilitation	\$	126,000
2023	HEG	TL T-HANG	905	AC	3,307	40	AC Reconstruction	\$	62,000
2023	HEG	TL T-HANG	915	AC	20,878	42	AC Reconstruction	\$	387,000
2023	HEG	TL T-HANG	925	AC	33,188	47	AC Reconstruction	\$	614,000
2023	HEG	AP FBO	4220	AC	22,343	60	AC Rehabilitation	\$	235,000
2023	HEG	AP FBO	4225	AC	13,370	57	AC Rehabilitation	\$	141,000
2023	HEG	AP N	4305	AAC	72,711	67	AC Rehabilitation	\$	764,000
2023	HEG	AP N	4310	AC	10,000	41	AC Reconstruction	\$	185,000
2023	HEG	AP NE	4410	PCC	27,876	2	PCC Reconstruction	\$	1,255,000
2023	HEG	AP NW	4115	AC	60,864	63	AC Rehabilitation	\$	640,000
2023	HEG	AP RU 7	5105	AC	11,481	70	AC Rehabilitation	\$	121,000
2024	HEG	AP N	4307	AC	22,380	69	AC Rehabilitation	\$	247,000
2026	HEG	TW N AP	805	AAC	16,073	69	AC Rehabilitation	\$	196,000
2027	HEG	AP RU 25	5110	AC	11,371	69	AC Rehabilitation	\$	146,000
2030	HEG	AP FBO	4215	AAC	10,233	69	AC Rehabilitation	\$	152,000
2032	HEG	TW A	105	AAC	153,047	69	AC Rehabilitation	\$	2,493,000
2032	HEG	AP NW	4105	AAC	110,686	69	AC Rehabilitation	\$	1,803,000

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









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 PAVERTM 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.





Pavement Analysis

Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

Table A.1: Pavement System Inventory Details

Network ID	Branch ID	Branch Use	Section ID	Area (SF)	Surface Type	Estimate of Last Construction Date
HEG	RW 7-25	Runway	6105	268,900	AAC	1/1/2009
HEG	RW 7-25	Runway	6110	131,000	AAC	1/1/2009
HEG	RW 11-29	Runway	6205	412,753	AC	6/1/2019
HEG	TW A	Taxiway	105	153,047	AAC	1/1/2013
HEG	TW B	Taxiway	305	21,515	AAC	1/1/2013
HEG	TW C	Taxiway	605	32,373	AC	6/1/2019
HEG	TW C	Taxiway	610	4,869	AC	6/1/2019
HEG	TW C	Taxiway	620	4,869	AC	6/1/2019
HEG	TW C	Taxiway	625	16,303	AC	6/1/2019
HEG	TW D	Taxiway	205	171,329	AC	6/1/2019
HEG	TW E FBO	Taxiway	710	8,877	AAC	7/1/2016
HEG	TW N AP	Taxiway	805	16,073	AAC	1/1/2012
HEG	TW NE AP	Taxiway	1105	6,535	PCC	12/25/1999
HEG	TW NW AP	Taxiway	405	4,713	AAC	7/1/2016
HEG	TW NW AP	Taxiway	550	2,186	AAC	1/1/2013
HEG	TL NW HANG	Taxilane	4120	41,757	AC	1/1/2001
HEG	TL NW HANG	Taxilane	4125	11,995	AC	12/25/2006
HEG	TL NW HANG	Taxilane	4130	15,281	AC	7/1/2019
HEG	TL T-HANG	Taxilane	905	3,307	AC	1/1/1990
HEG	TL T-HANG	Taxilane	915	20,878	AC	1/1/1990
HEG	TL T-HANG	Taxilane	925	33,188	AC	1/1/1996
HEG	AP FBO	Apron	4215	10,233	AAC	7/1/2016
HEG	AP FBO	Apron	4220	22,343	AC	12/25/1999
HEG	AP FBO	Apron	4225	13,370	AC	1/1/1997
HEG	AP N	Apron	4305	72,711	AAC	1/1/2012
HEG	AP N	Apron	4307	22,380	AC	12/25/2009
HEG	AP N	Apron	4310	10,000	AC	1/1/1990
HEG	AP NE	Apron	4410	27,876	PCC	12/25/1999
HEG	AP NW	Apron	4105	110,686	AAC	7/1/2016
HEG	AP NW	Apron	4110	39,032	AAC	7/1/2016
HEG	AP NW	Apron	4115	60,864	AC	1/1/2005
HEG	AP RU 25 Apron 5110 11,371 AC		AC	1/1/1999		
HEG	AP RU 29	Apron	5115	10,993	AC	6/1/2019
HEG	AP RU 7	Apron	5105	11,481	AC	1/1/1999



Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

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
HEG	RW 7-25	Runway	6105	268,900	69	Fair
HEG	RW 7-25	Runway	6110	131,000	69	Fair
HEG	RW 11-29	Runway	6205	412,753	93	Good
HEG	TW A	Taxiway	105	153,047	84	Satisfactory
HEG	TW B	Taxiway	305	21,515	90	Good
HEG	TW C	Taxiway	605	32,373	94	Good
HEG	TW C	Taxiway	610	4,869	94	Good
HEG	TW C	Taxiway	620	4,869	94	Good
HEG	TW C	Taxiway	625	16,303	94	Good
HEG	TW D	Taxiway	205	171,329	94	Good
HEG	TW E FBO	Taxiway	710	8,877	91	Good
HEG	TW N AP	Taxiway	805	16,073	74	Satisfactory
HEG	TW NE AP	Taxiway	1105	6,535	9	Failed
HEG	TW NW AP	Taxiway	405	4,713	92	Good
HEG	TW NW AP	Taxiway	550	2,186	89	Good
HEG	TL NW HANG	Taxilane	4120	41,757	62	Fair
HEG	TL NW HANG	Taxilane	4125	11,995	66	Fair
HEG	TL NW HANG	Taxilane	4130	15,281	94	Good
HEG	TL T-HANG	Taxilane	905	3,307	41	Poor
HEG	TL T-HANG	Taxilane	915	20,878	43	Poor
HEG	TL T-HANG	Taxilane	925	33,188	48	Poor
HEG	AP FBO	Apron	4215	10,233	86	Good
HEG	AP FBO	Apron	4220	22,343	61	Fair
HEG	AP FBO	Apron	4225	13,370	58	Fair
HEG	AP N	Apron	4305	72,711	69	Fair
HEG	AP N	Apron	4307	22,380	72	Satisfactory
HEG	AP N	Apron	4310	10,000	42	Poor
HEG	AP NE	Apron	4410	27,876	3	Failed
HEG	AP NW	Apron	4105	110,686	91	Good
HEG	AP NW	Apron	4110	39,032	92	Good
HEG	AP NW	Apron	4115	60,864	64	Fair
HEG	AP RU 25	Apron	5110	11,371	77	Satisfactory
HEG	AP RU 29	Apron	5115	10,993	94	Good
HEG	AP RU 7	Apron	5105	11,481	71	Satisfactory



Airport Pavement Evaluation Report Statewide Airfield Pavement Management Program

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
HEG	RW 7-25	6105	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 7-25	6110	69	67	66	64	62	60	59	57	55	53	52
HEG	RW 11-29	6205	93	91	88	86	84	83	81	79	78	77	75
HEG	TW A	105	84	82	80	79	77	76	74	73	71	70	69
HEG	TW B	305	90	88	86	84	82	80	79	77	76	74	73
HEG	TW C	605	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	610	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	620	94	92	90	88	86	84	83	81	79	78	76
HEG	TW C	625	94	92	90	88	86	84	83	81	79	78	76
HEG	TW D	205	94	92	90	88	86	84	83	81	79	78	76
HEG	TW E FBO	710	91	89	87	85	83	81	79	78	76	75	73
HEG	TW N AP	805	74	73	71	70	69	68	67	66	65	64	63
HEG	TW NE AP	1105	9	9	8	8	7	7	6	6	5	5	4
HEG	TW NW AP	405	92	90	88	86	84	82	80	79	77	75	74
HEG	TW NW AP	550	89	87	85	83	81	80	78	76	75	73	72
HEG	TL NW HANG	4120	62	61	61	60	60	59	59	59	58	58	57
HEG	TL NW HANG	4125	66	65	65	64	63	62	62	61	61	60	60
HEG	TL NW HANG	4130	94	92	90	88	86	84	83	81	79	78	76
HEG	TL T-HANG	905	41	40	39	37	36	35	33	32	30	28	26
HEG	TL T-HANG	915	43	42	41	40	39	37	36	35	33	31	30
HEG	TL T-HANG	925	48	47	47	46	45	44	43	42	41	40	38
HEG	AP FBO	4215	86	84	82	80	77	75	73	71	69	66	64
HEG	AP FBO	4220	61	60	59	58	57	57	56	55	55	54	54
HEG	AP FBO	4225	58	57	56	56	55	55	54	53	53	52	52
HEG	AP N	4305	69	67	65	63	60	58	56	54	52	49	47
HEG	AP N	4307	72	70	69	67	66	65	63	62	61	60	59
HEG	AP N	4310	42	41	39	37	35	32	30	27	24	21	18
HEG	AP NE	4410	3	2	1	0	0	0	0	0	0	0	0
HEG	AP NW	4105	91	89	87	85	82	80	78	76	74	71	69
HEG	AP NW	4110	92	90	88	86	83	81	79	77	75	72	70
HEG	AP NW	4115	64	63	62	61	60	59	58	57	56	56	55
HEG	AP RU 25	5110	77	75	74	72	70	69	67	66	65	63	62
HEG	AP RU 29	5115	94	92	90	88	86	84	82	80	78	76	74
HEG	AP RU 7	5105	71	70	68	67	65	64	63	62	61	60	59

Page 1 of 6

Pavement Database: FDOT

Network:	HERLON	G RECREA Branch: AP F	BO FBO	APRON	Section:	4215 Surface: AAC
L.C.D. 7/1/2		se: APRON Rank: P	Length: 388	.00 (Ft) Wi	dth: 25.0	0 (Ft) True Area: 10233.00000 (SqFt
	Work		T T	Thickness	Major	
Work Date	Code	Work Description	Cost	(in)	M&R	Comments
7/1/2016		Mill and Overlay	0.00	0.00	V :	
1/1/1980	NU-IN	New Construction - Initial	0.00	0.00	~	
N. d J.	HEDI OM	C DECDEA D L. ADE	DO EDO	PRON	S	4330 E - 6 A C
		G RECREA Branch: AP F se: APRON Rank: P		APRON	Section:	
L.C.D. 12/25	Work	se: APRON Rank: P	Length: 330	.00 (Ft) Wi	dth: 70.0 Major	0 (Ft) True Area: 22343.00000 (SqFt
Work Date	Code	Work Description	Cost	(in)	Major M&R	Comments
7/1/2016	ST-SC	Surface Treatment - Seal Coat	0.00	0.00		Slurry Seal
12/25/1999	NU-IN	New Construction - Initial	0.00	0.00		
		G RECREA Branch: AP F		APRON	Section:	
L.C.D. 1/1/1		se: APRON Rank: P	Length: 320			0 (Ft) True Area: 13370.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2016	ST-SC	Surface Treatment - Seal Coat	0.00	0.00		Slurry Seal
1/1/1997	NU-IN	New Construction - Initial	0.00	0.00		
	•	·	•			
Network:	HERLONG	G RECREA Branch: AP N	I NORT	'H APRON	G	1205
		o ne one in a contract of the	NORI	n Arkon	Section:	4305 Surface: AAC
L.C.D. 1/1/2	012 Us	se: APRON Rank: P				4303 Surrace: AAC 0 (Ft) True Area: 72711.00002 (SqFt
L.C.D. 1/1/2	Work			.00 (Ft) Wi	dth: 299.0 Major	
	Work Code	se: APRON Rank: P	Length: 479	.00 (Ft) Wi	dth: 299.0 Major M&R	0 (Ft) True Area: 72711.00002 (SqFt
Work Date	Work Code	se: APRON Rank: P Work Description	Length: 479	.00 (Ft) Wi	dth: 299.0 Major	0 (Ft) True Area: 72711.00002 (SqFt Comments
Work Date 1/1/2012	Work Code ML-OVL	work Description Mill and Overlay	Cost 0.00	Thickness (in)	Major M&R	0 (Ft) True Area: 72711.00002 (SqFt Comments
Work Date 1/1/2012 1/1/1990	Work Code ML-OVL NU-IN	work Description Mill and Overlay	Cost 0.00 0.00 NORT	Thickness (in) 0.00 0.00 0.00 TH APRON	Major M&R	0 (Ft) True Area: 72711.00002 (SqFt Comments 2.5" MILL & OVERLAY, REWORK
Work Date 1/1/2012 1/1/1990	Work Code ML-OVL NU-IN	Work Description Mill and Overlay New Construction - Initial	Cost 0.00 0.00 NORT	Thickness (in) 0.00 0.00 0.00 TH APRON	Major M&R	0 (Ft) True Area: 72711.00002 (SqFt Comments 2.5" MILL & OVERLAY, REWORK
Work Date 1/1/2012 1/1/1990 Network:	Work Code ML-OVL NU-IN HERLONG 5/200 Us	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP N	Cost 0.00 0.00 NORT	Thickness (in) 0.00 0.00 0.00 TH APRON 0.00 (Ft) Wi Thickness	Major M&R Section: dth: 50.0 Major	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface: AC
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25	Work Code ML-OVL NU-IN HERLONG	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P	Cost 0.00 0.00 NORT Length: 410	0.00 (Ft) Wi Thickness (in) 0.00 0.00 0.00 TH APRON 0.00 (Ft) Wi	Major M&R Section: dth: 50.0	0 (Ft) True Area: 72711.00002 (SqFt Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description	Cost	Thickness (in) O.00 (Ft) Wi O.00 O.00 O.00 TH APRON O.00 (Ft) Wi Thickness (in)	Major M&R Section: dth: 50.0 Major M&R	0 (Ft) True Area: 72711.00002 (SqFt Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description	Cost	Thickness (in) O.00 (Ft) Wi O.00 O.00 O.00 TH APRON O.00 (Ft) Wi Thickness (in)	Major M&R Section: dth: 50.0 Major M&R	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN	Work Description Mill and Overlay New Construction - Initial GRECREA Branch: AP Note: APRON Rank: P Work Description New Construction - Initial	Cost	Thickness (in) O.00 (Ft) Wi O.00 O.00 O.00 O.00 (Ft) Wi Thickness (in) O.00	Major M&R Section: dth: 50.0 Major M&R Section:	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Rese: APRON Rank: P	Cost	Thickness (in) 0.00 0.00 TH APRON 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) Thickness	Section: dth: 299.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC 0 (Ft) True Area: 10000.00000 (SqFt
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1 Work Date	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description	Cost	Thickness (in) O.00 O.00 O.00 TH APRON O.00 Thickness (in) O.00 Thickness (in) O.00 Thickness (in)	Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Rese: APRON Rank: P	Cost	Thickness (in) 0.00 0.00 TH APRON 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) Thickness	Section: dth: 299.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC 0 (Ft) True Area: 10000.00000 (SqFt
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1 Work Date 1/1/1990	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code NU-IN	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP N See: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP N See: APRON Rank: P Work Description New Construction - Initial	Cost	Thickness (in) O.00 O.00 TH APRON O.00 Thickness (in) O.00 Thickness (in) O.00 Thickness (in) Thickness (in)	Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC 0 (Ft) True Area: 10000.00000 (SqFt Comments
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1 Work Date 1/1/1990	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code NU-IN	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial	Cost	Thickness (in) 0.00 0.00 0.00 TH APRON 0.00 (Ft) Wi Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in)	Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R	Comments
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1 Work Date 1/1/1990 Network: L.C.D. 12/25	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code NU-IN	Work Description Mill and Overlay New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial	Cost	Thickness (in) 0.00 0.00 0.00 TH APRON 0.00 (Ft) Wi Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in) 0.00 Thickness (in)	Section: Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R Section:	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC 0 (Ft) True Area: 10000.00000 (SqFt Comments 4410 Surface:PCC 0 (Ft) True Area: 27876.00000 (SqFt
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/19 Work Date 1/1/1990 Network: L.C.D. 12/25 Work Date	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code NU-IN HERLONG 5/199 Us Work Code	Work Description Mill and Overlay New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial G RECREA Branch: AP Nose: APRON Rank: P Work Description	Cost	Thickness (in) O.00 O.	Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R Section: dth: 100.0 Major M&R	Comments
Work Date 1/1/2012 1/1/1990 Network: L.C.D. 12/25 Work Date 12/25/2009 Network: L.C.D. 1/1/1 Work Date 1/1/1990 Network: L.C.D. 12/25	Work Code ML-OVL NU-IN HERLONG 5/200 Us Work Code NU-IN HERLONG 990 Us Work Code NU-IN HERLONG 5/199 Us Work	Work Description Mill and Overlay New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial GRECREA Branch: AP Nose: APRON Rank: P Work Description New Construction - Initial	Cost	Thickness (in) O.00 O.	Section: dth: 200.0 Major M&R Section: dth: 50.0 Major M&R Section: dth: 200.0 Major M&R Section: dth: 100.0 Major	Comments 2.5" MILL & OVERLAY, REWORK 4307 Surface:AC 0 (Ft) True Area: 22380.00000 (SqFt Comments UNKNOWN PAVEMENT SECTION 4310 Surface:AC 0 (Ft) True Area: 10000.00000 (SqFt Comments 4410 Surface:PCC 0 (Ft) True Area: 27876.00000 (SqFt

Page 2 of 6

Pavement Database: FDOT

Ī	Network:	HERLONG	G RECREA	Branch: AP NW	NORT	HWEST AP	Section:	4105 Surface:AAC
	L.C.D. 7/1/20	016 Us	e: APRON	Rank: P L	ength: 483	.00 (Ft) Wi	dth: 233.0	0 (Ft) True Area: 110686.0000 (SqFt
	Work Date	Work Code	Work I	Description	Cost	Thickness (in)	Major M&R	Comments
	7/1/2016	ML-OVL	Mill and Over	lay	0.00	0.00	V	Mill Old Pavement. Overlay 2" P-403.
	1/1/1984	NU-IN	New Construc	etion - Initial	0.00	0.00		

Branch: AP NW Section: 4110 Network: HERLONG RECREA NORTHWEST AP Surface: AAC **L.C.D.** 7/1/2016 Use: APRON Rank: P Length: 395.00 (Ft) Width: 93.00 (Ft) True Area: 39032.00001 (SqFt Thickness Work Major **Work Date Work Description** Cost **Comments** Code (in) M&R 7/1/2016 ML-OVL Mill and Overlay 0.00 0.00 Mill Old Pavement. Overlay 2' P-403. 1/1/1981 NU-IN New Construction - Initial 0.00 0.00 ~

Network: HERLONG RECREA Branch: AP NW NORTHWEST AP Section: 4115 Surface: AC **L.C.D.** 1/1/2005 Use: APRON Rank: P Length: 234.00 (Ft) Width: 259.00 (Ft) True Area: 60864.00001 (SqFt Thickness Work Major Work Date **Work Description** Cost Comments Code (in) M&R 1/1/2005 NU-IN New Construction - Initial 0.00 0.00

Network: HERLONG RECREA Branch: AP RU 25 **RUN-UP APRON** Section: 5110 Surface: AC **L.C.D.** 1/1/1999 Use: APRON Rank: P Length: 100.00 (Ft) Width: 100.00 (Ft) True Area: 11371.00000 (SqFt Thickness Work Major **Work Date Work Description** Cost Comments M&R Code (in) 7/1/2016 ST-SC Surface Treatment - Seal Coat 0.00 0.00 Slurry Seal

1/1/1999 NU-IN New Construction - Initial 0.00 0.00V **Network: HERLONG RECREA** Branch: AP RU 29 RUN-UP APRON Section: 5115 Surface: AC **L.C.D.** 6/1/2019 Use: APRON Width: 95.00 (Ft) True Area: 10993.00000 (SqFt Rank: P Length: 98.00 (Ft)

Thickness Work Major **Work Date Work Description** Cost Comments M&R Code (in) 4" P-401 OVER LIMEROCK BASE 6/1/2019 CR-AC Complete Reconstruction - AC 0.00 0.00 1/1/1999 NU-IN New Construction - Initial 0.00 0.00V

RUN-UP APRON Network: HERLONG RECREA Branch: AP RU 7 Section: 5105 Surface: AC **L.C.D.** 1/1/1999 Use: APRON 100.00 (Ft) Width: 100.00 (Ft) True Area: 11481.00000 (SqFt Rank: P Length: Thickness Work Major **Work Date** Work Description Cost Comments Code (in) M&R 7/1/2016 Surface Treatment - Seal Coat ST-SC 0.00 0.00 Slurry Seal 1/1/1999 NU-IN New Construction - Initial 0.00 0.00

 Network:
 HERLONG RECREA
 Branch:
 RW 11-29
 RUNWAY 11-29
 Section:
 6205
 Surface:AC

 L.C.D. 6/1/2019
 Use:
 RUNWAY
 Rank:
 S
 Length:
 4,083.00 (Ft)
 Width:
 100.00 (Ft)
 True Area:
 412753.0001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2019	CR-AC	Complete Reconstruction - AC	0.00	0.00	V	4" P-401 OVER LIMEROCK BASE
1/1/1984	OL-AS	Overlay - AC Structural	0.00	0.00		
1/1/1963	NC-AC	New Construction - AC	0.00	0.00		

NU-IN

New Construction - Initial

New Construction - Initial

12/25/2006

1/1/1996

NU-IN

Work History Report

Page 3 of 6

Pavement Database: FDOT

Network:	HERLONG	G RECREA	Branch: RW 7-2	25 RUNW	/AY 7-25	Section:	6105	Surface:AAC
L.C.D. 1/1/2	009 Us	e: RUNWAY	Rank: P L	ength: 2,700	.00 (Ft) Wie	dth: 100.0	0 (Ft) True	Area: 268900.0000 (SqFt
Work Date	Work Code	Work I	Description	Cost	Thickness (in)	Major M&R		Comments
1/1/2009	ML-OVL	Mill and Overl	ay	0.00	0.00	~		
1/1/1981	NU-IN	New Construc	tion - Initial	0.00	0.00			

 Network: HERLONG RECREA
 Branch: RW 7-25
 RUNWAY 7-25
 Section: 6110
 Surface:AAC

 L.C.D. 1/1/2009
 Use: RUNWAY
 Rank: P
 Length: 1,300.00 (Ft)
 Width: 100.00 (Ft)
 True Area: 131000.0000 (SqFt

 Work Date
 Work Code
 Work Description
 Cost
 Thickness (in)
 Major M&R
 Comments

l	Work Date	Code	Work Description	Cost	(in)	M&R	Comments
	1/1/2009	ML-OVL	Mill and Overlay	0.00	0.00	V	
	1/1/1997	NU-IN	New Construction - Initial	0.00	0.00		
Ξ							

Network: HERLONG RECREA Branch: TL NW HAN NORTHWEST T-Section: 4120 Surface: AC **L.C.D.** 1/1/2001 Use: TAXILAN Rank: P Length: 1,800.00 (Ft) Width: 25.00 (Ft) True Area: 41757.00001 (SqFt Work Thickness Major Work Date **Work Description** Cost Comments Code M&R (in) 1/1/2001 NU-IN 2" AC/6" P-211/6" Stab subgrade New Construction - Initial 0.00 2.00

Network: HERLONG RECREA Branch: TL NW HAN NORTHWEST T-Section: 4125 Surface: AC Use: TAXILAN Rank: P **L.C.D.** 12/25/200 400.00 (Ft) Width: 25.00 (Ft) True Area: 11995.00000 (SqFt Length: Work **Thickness** Major **Work Date Work Description** Cost **Comments** Code (in) M&R

0.00

0.00

UNKNOWN SECTION HISTORY

Network: HERLONG RECREA Branch: TL NW HAN NORTHWEST T-Section: 4130 Surface: AC **L.C.D.** 7/1/2019 Use: TAXILAN Rank: P 560.00 (Ft) Width: 25.00 (Ft) True Area: 15281.00000 (SqFt Length: Thickness Work Major **Work Description Work Date** Cost Comments Code (in) M&R 7/1/2019 NC-AC New Construction - AC 0.00 0.00

Network: HERLONG RECREA Branch: TL T-HANG T-HANGAR TAX Section: 905 Surface: AC

L.C.D. 1/1/1990 Use: TAXILAN Rank: P Length: 50.00 (Ft) Width: 40.00 (Ft) True Area: 3307.000001 (SqFt

Work Date Work

Work Description Cost Thickness Major Comments

Work DateWork CodeWork DescriptionCostThickness (in)Major M&RComments1/1/1990NU-INNew Construction - Initial0.000.00Image: Comments of the comments of th

Network: HERLONG RECREA Branch: TL T-HANG T-HANGAR TAX Section: 915 Surface: AC L.C.D. 1/1/1990 Use: TAXILAN 949.00 (Ft) Width: 103.00 (Ft) True Area: 20878.00000 (SqFt Rank: P Length: Work Thickness Major **Work Date Work Description** Cost **Comments** M&R Code (in) 1/1/1990 NU-IN New Construction - Initial 0.00 0.00 ~

Network: HERLONG RECREA Branch: TL T-HANG T-HANGAR TAX Section: 925 Surface: AC L.C.D. 1/1/1996 Use: TAXILAN Rank: P Length: 1,575.00 (Ft) Width: 20.00 (Ft) True Area: 33188.00001 (SqFt Thickness Work Major **Work Date Work Description** Cost Comments Code M&R (in)

Pavement Management System PAVER 7.0 TM

0.00

0.00

Page 4 of 6

Pavement Database: FDOT

	Network:	HERLONG	G RECREA	Branch: TW A	TAXIV	WAY A	Section:	105 Surface:AAC
L	.C.D. 1/1/20	013 Us	se: TAXIWAY	Rank: P L	ength: 4,350	.00 (Ft) Wi	dth: 40.0	00 (Ft) True Area: 153047.0000 (SqFt
,	Work Date	Work Code	Work D	escription	Cost	Thickness (in)	Major M&R	Comments
1	/1/2013	ML-OVL	Mill and Overl	ay	0.00	0.00	V	MILL AC, ADD LIMEROCK & REG
1	/1/1981	NU-IN	New Construct	ion - Initial	0.00	0.00		

Network: HERLONG RECREA Branch: TW B TAXIWAY B Section: 305 Surface: AAC Use: TAXIWAY Rank: P **L.C.D.** 1/1/2013 Length: 420.00 (Ft) Width: 50.00 (Ft) True Area: 21515.00000 (SqFt Work Thickness Major **Work Date Work Description** Cost Comments Code M&R (in) 1/1/2013 ML-OVL Mill and Overlay 0.00 0.00 MILL AC, ADD LIMEROCK & REG ~ 1/1/1969 NU-IN New Construction - Initial 0.00 0.00 ~

Network: HERLONG RECREA Branch: TW C TAXIWAY C Section: 605 Surface: AC **L.C.D.** 6/1/2019 Use: TAXIWAY Rank: P Length: 739.00 (Ft) Width: 40.00 (Ft) True Area: 32373.00000 (SqFt Work Thickness Major **Work Date Work Description** Cost Comments Code (in) M&R 6/1/2019 4" P-401 OVER LIMEROCK BASE Complete Reconstruction - AC CR-AC 0.00 0.00 ~ 1/1/1997 0.00 0.00 NU-IN New Construction - Initial **V**

Network: HERLONG RECREA Branch: TW C TAXIWAY C Section: 610 Surface: AC L.C.D. 6/1/2019 Use: TAXIWAY Rank: P Length: 100.00 (Ft) Width: 47.00 (Ft) True Area: 4869.000001 (SqFt Work Thickness Major **Work Date Work Description** Cost **Comments** Code M&R (in) 6/1/2019 4" P-401 OVER LIMEROCK BASE CR-AC Complete Reconstruction - AC 0.00 0.00 1/1/1984 OL-AS Overlay - AC Structural 0.000.00 ~ 1/1/1963 NC-AC New Construction - AC 0.00 0.00 **V**

Network: HERLONG RECREA Branch: TW C TAXIWAY C Section: 620 Surface:AC

L.C.D. 6/1/2019 Use: TAXIWAY Rank: P Length: 100.00 (Ft) Width: 47.00 (Ft) True Area: 4869.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2019	CR-AC	Complete Reconstruction - AC	0.00	0.00	V	4" P-401 OVER LIMEROCK BASE
1/1/1984	OL-AS	Overlay - AC Structural	0.00	0.00		
1/1/1963	NC-AC	New Construction - AC	0.00	0.00		

Network: HERLONG RECREA Branch: TW C TAXIWAY C Section: 625 Surface:AC

L.C.D. 6/1/2019 Use: TAXIWAY Rank: P Length: 360.00 (Ft) Width: 47.00 (Ft) True Area: 16303.00000 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2019	CR-AC	Complete Reconstruction - AC	0.00	0.00	V	4" P-401 OVER LIMEROCK BASE
1/1/1997	NU-IN	New Construction - Initial	0.00	0.00		

Page 5 of 6

Pavement Database: FDOT

Netw	vork:	HERLONG	G RECREA Branch: TW D	TAXIV	WAY D	Section:	205 Surface:AC
L.C.D.	6/1/20	019 Us	se: TAXIWAY Rank: P L	ength: 4,118	.00 (Ft) Wi	dth: 40.0	0 (Ft) True Area: 171329.0000 (SqFt
Work	Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/201	19	CR-AC	Complete Reconstruction - AC	0.00	0.00	V	4" P-401 OVER LIMEROCK BASE
1/1/198	34	OL-AS	Overlay - AC Structural	0.00	0.00		
1/1/196	53	NC-AC	New Construction - AC	0.00	0.00		

Branch: TW E FBO Network: HERLONG RECREA EAST FBO TAXI Section: 710 Surface: AAC **L.C.D.** 7/1/2016 Use: TAXIWAY Rank: P Length: 158.00 (Ft) Width: 42.00 (Ft) True Area: 8877.000002 (SqFt Work Thickness Major **Work Date Work Description** Cost **Comments** Code M&R (in) 7/1/2016 ML-OVL Mill and Overlay 0.00 0.00 ~ 7/1/2016 ST-SC Surface Treatment - Seal Coat 0.00 0.00 Coal Tar Seal 1/1/1960 NU-IN New Construction - Initial 0.00 0.00 V

Network: HERLONG RECREA Branch: TW N AP NORTH APRON Section: 805 Surface: AAC **L.C.D.** 1/1/2012 Use: TAXIWAY Rank: P 90.00 (Ft) Width: 30.00 (Ft) True Area: 16073.00000 (SqFt Length: Work Thickness Major Work Date **Work Description** Cost **Comments** Code M&R (in) 1/1/2012 ML-OVL Mill and Overlay 0.00 0.00 2.5" MILL & OVERLAY, REWORK V 1/1/1990 NU-IN New Construction - Initial 0.00 0.00 ~

Network: HERLONG RECREA Branch: TW NE AP NORTHEAST AP Section: 1105 Surface:PCC **L.C.D.** 12/25/199 175.00 (Ft) Width: 30.00 (Ft) True Area: 6535.000001 (SqFt Use: TAXIWAY Rank: P Length: Work Thickness Major Work Date **Work Description** Cost **Comments** Code (in) M&R 12/25/1999 NU-IN New Construction - Initial 0.00 0.00

Network: HERLONG RECREA Branch: TW NW AP NORTHWEST AP Section: 405 Surface:AAC

L.C.D. 7/1/2016 Use: TAXIWAY Rank: P Length: 150.00 (Ft) Width: 32.00 (Ft) True Area: 4713.000001 (SqFt

Work Description Control Thickness Major Company

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2016	ML-OVL	Mill and Overlay	0.00	0.00	V	Mill Old Pavement. Overlay 2" P-403.
1/1/1981	NU-IN	New Construction - Initial	0.00	0.00		

Network: HERLONG RECREA Branch: TW NW AP NORTHWEST AP Section: 550 Surface:AAC

L.C.D. 1/1/2013 Use: TAXIWAY Rank: P Length: 124.00 (Ft) Width: 33.00 (Ft) True Area: 2186.000000 (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	V	MILL AC, ADD LIMEROCK & REG		
1/1/1981	NU-IN	New Construction - Initial	0.00	0.00				

Page 6 of 6

Pavement Database: FDOT

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Complete Reconstruction - AC	7	653,489.00	0.00	0.00
Mill and Overlay	12	838,973.00	0.00	0.00
New Construction - AC	5	609,101.00	0.00	0.00
New Construction - Initial	29	1,195,987.00	0.07	0.36
Overlay - AC Structural	4	593,820.00	0.00	0.00
Surface Treatment - Seal Coat	5	67,442.00	0.00	0.00

		12.		

Branch Condition Report

Page 1 of 2

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 FBO	3	1,038.00	65.00	45,946.00	APRON	68.33	12.55	65.69
AP N	3	939.00	183.00	105,091.00	APRON	61.00	13.49	67.07
AP NE	1	300.00	100.00	27,876.00	APRON	3.00	0.00	3.00
AP NW	3	1,112.00	195.00	210,582.00	APRON	82.33	12.97	83.38
AP RU 25	1	100.00	100.00	11,371.00	APRON	77.00	0.00	77.00
AP RU 29	1	98.00	95.00	10,993.00	APRON	94.00	0.00	94.00
AP RU 7	1	100.00	100.00	11,481.00	APRON	71.00	0.00	71.00
RW 11-29	1	4,083.00	100.00	412,753.00	RUNWAY	93.00	0.00	93.00
RW 7-25	2	4,000.00	100.00	399,900.00	RUNWAY	69.00	0.00	69.00
TL NW HA	3	2,760.00	25.00	69,033.00	TAXILANE	74.00	14.24	69.78
TL T-HANG	3	2,574.00	54.33	57,373.00	TAXILANE	44.00	2.94	45.78
TW A	1	4,350.00	40.00	153,047.00	TAXIWAY	84.00	0.00	84.00
TW B	1	420.00	50.00	21,515.00	TAXIWAY	90.00	0.00	90.00
TW C	4	1,299.00	45.25	58,414.00	TAXIWAY	94.00	0.00	94.00
TW D	1	4,118.00	40.00	171,329.00	TAXIWAY	94.00	0.00	94.00
TW E FBO	1	158.00	42.00	8,877.00	TAXIWAY	91.00	0.00	91.00
TW N AP	1	90.00	30.00	16,073.00	TAXIWAY	74.00	0.00	74.00
TW NE AP	1	175.00	30.00	6,535.00	TAXIWAY	9.00	0.00	9.00
TW NW AP	2	274.00	32.50	6,899.00	TAXIWAY	90.50	1.50	91.05

11/17/2022	Branch Condition Report	Page 2 of 2
	Pavement Database: FDOT	

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average STD PCI	Weighted Average PCI
APRON	13	423,340.00	67.69	23.66	71.89
RUNWAY	3	812,653.00	77.00	11.31	81.19
TAXILANE	6	126,406.00	59.00	18.18	58.88
TAXIWAY	12	442,689.00	83.25	23.08	88.26
ALL	34	1,805,088.00	72.47	23.56	79.18

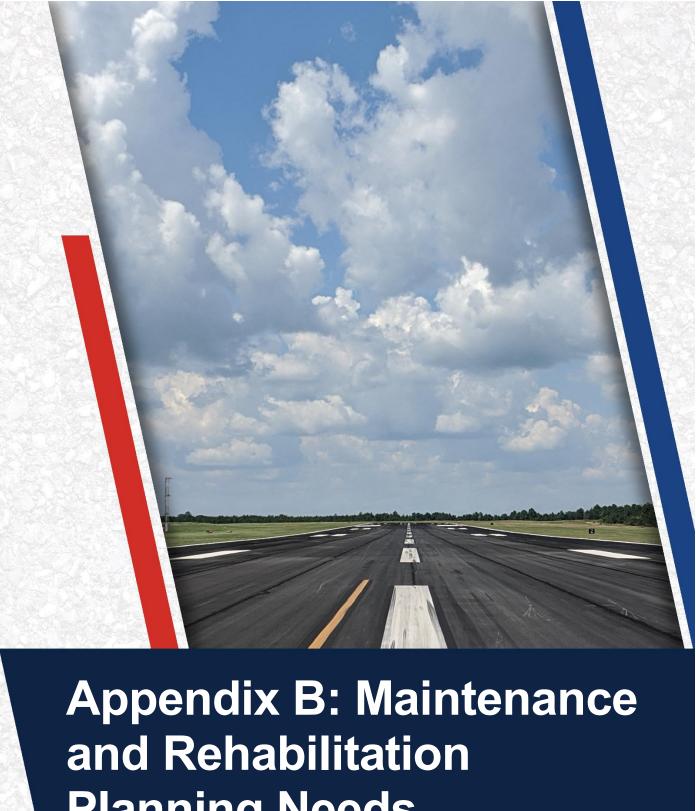
Pavement Database: FDOT

NetworkId: HEG

Tuvement Data	iouse. I DOI				11011	ornin.	IILU			
Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspec tion	
AP FBO	4215	7/1/2016	AAC	APRON	Р	0	10,233.00	7/20/2022	6	86
AP FBO	4220	12/25/1999	AC	APRON	Р	0	22,343.00	7/20/2022	23	61
AP FBO	4225	1/1/1997	AC	APRON	Р	0	13,370.00	7/20/2022	25	58
AP N	4305	1/1/2012	AAC	APRON	Р	0	72,711.00	7/20/2022	10	69
AP N	4307	12/25/2009	AC	APRON	Р	0	22,380.00	7/20/2022	13	72
AP N	4310	1/1/1990	AC	APRON	Р	0	10,000.00	7/20/2022	32	42
AP NE	4410	12/25/1999	PCC	APRON	Р	0	27,876.00	7/20/2022	23	3
AP NW	4105	7/1/2016	AAC	APRON	Р	0	110,686.00	7/20/2022	6	91
AP NW	4110	7/1/2016	AAC	APRON	Р	0	39,032.00	7/20/2022	6	92
AP NW	4115	1/1/2005	AC	APRON	Р	0	60,864.00	7/20/2022	17	64
AP RU 25	5110	1/1/1999	AC	APRON	Р	0	11,371.00	7/20/2022	23	77
AP RU 29	5115	6/1/2019	AC	APRON	Р	0	10,993.00	7/20/2022	3	94
AP RU 7	5105	1/1/1999	AC	APRON	Р	0	11,481.00	7/20/2022	23	71
RW 11-29	6205	6/1/2019	AC	RUNWAY	S	0	412,753.00	7/20/2022	3	93
RW 7-25	6105	1/1/2009	AAC	RUNWAY	Р	0	268,900.00	7/20/2022	13	69
RW 7-25	6110	1/1/2009	AAC	RUNWAY	Р	0	131,000.00	7/20/2022	13	69
TL NW HANG	4120	1/1/2001	AC	TAXILANE	Р	0	41,757.00	7/20/2022	21	62
TL NW HANG	4125	12/25/2006	AC	TAXILANE	Р	0	11,995.00	7/20/2022	16	66
TL NW HANG	4130	7/1/2019	AC	TAXILANE	Р	0	15,281.00	7/20/2022	3	94
TL T-HANG	905	1/1/1990	AC	TAXILANE	Р	0	3,307.00	7/20/2022	32	41
TL T-HANG	915	1/1/1990	AC	TAXILANE	Р	0	20,878.00	7/20/2022	32	43
TL T-HANG	925	1/1/1996	AC	TAXILANE	Р	0	33,188.00	7/20/2022	26	48
TW A	105	1/1/2013	AAC	TAXIWAY	Р	0	153,047.00	7/20/2022	9	84
TW B	305	1/1/2013	AAC	TAXIWAY	Р	0	21,515.00	7/20/2022	9	90
TW C	605	6/1/2019	AC	TAXIWAY	Р	0	32,373.00	7/20/2022	3	
TW C	610	6/1/2019	AC	TAXIWAY	Р	0	4,869.00	7/20/2022	3	94
TW C	620	6/1/2019	AC	TAXIWAY	Р	0	4,869.00	7/20/2022	3	94
TW C	625	6/1/2019	AC	TAXIWAY	Р	0	16,303.00	7/20/2022	3	94
TW D	205	6/1/2019	AC	TAXIWAY	Р	0	171,329.00	7/20/2022	3	94
TW E FBO	710	7/1/2016	AAC	TAXIWAY	Р	0	8,877.00	7/20/2022	6	91
TW N AP	805	1/1/2012	AAC	TAXIWAY	Р	0	16,073.00	7/20/2022	10	74
TW NE AP	1105	12/25/1999	PCC	TAXIWAY	Р	0	6,535.00	7/20/2022	23	9
TW NW AP	405	7/1/2016	AAC	TAXIWAY	Р	0	4,713.00	7/20/2022	6	
TW NW AP	550	1/1/2013	AAC	TAXIWAY	Р	0	2,186.00	7/20/2022	9	89

Pavement Database: FDOT

Age Category	Average Age at Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
03-05	3	668,770.00	8	93.88	0.33	93.38
06-10	8	439,073.00	10	85.80	7.64	84.22
11-15	13	422,280.00	3	70.00	1.41	69.16
16-20	17	72,859.00	2	65.00	1.00	64.33
21-25	23	134,733.00	7	48.71	27.72	48.69
26-30	26	33,188.00	1	48.00	0.00	48.00
31-35	32	34,185.00	3	42.00	0.82	42.51
ALL	13	1,805,088.00	34	72.47	23.56	79.18



Planning Needs

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

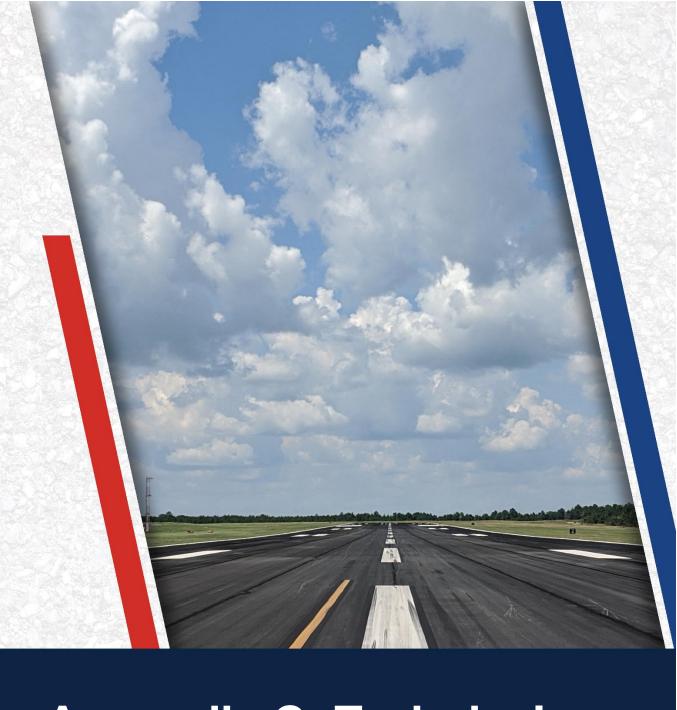
Network ID	Branch ID	Section ID	Description	Severity	Distress Qty	Distress Unit	Distress Density	Policy Type	Localized Work Type	Work Qty	Work Unit	Ur	nit Cost	W	ork Cost
HEG	TW A	105	RAVELING	Low	1,241	SF	0.8%	Preventive	Surface Seal	1,241	SF	\$	0.75	\$	940
HEG	TW B	305	RAVELING	Low	369	SF	1.7%	Preventive	Surface Seal	369	SF	\$	0.75	\$	280
HEG	TW E FBO	710	RAVELING	Low	90	SF	1.0%	Preventive	Surface Seal	89	SF	\$	0.75	\$	70
HEG	TW N AP	805	RAVELING	Low	320	SF	2.0%	Preventive	Surface Seal	320	SF	\$	0.75	\$	250
HEG	TW NW AP	405	WEATHERING	Medium	94	SF	2.0%	Preventive	Surface Seal	94	SF	\$	0.75	\$	80
HEG	TW NW AP	550	RAVELING	Low	87	SF	4.0%	Preventive	Surface Seal	87	SF	\$	0.75	\$	70
HEG	AP FBO	4215	WEATHERING	Medium	2,045	SF	20.0%	Preventive	Surface Seal	2,045	SF	\$	0.75	\$	1,540
HEG	AP N	4307	RAVELING	Low	3,357	SF	15.0%	Preventive	Surface Seal	3,357	SF	\$	0.75	\$	2,520
HEG	AP N	4307	WEATHERING	Medium	19,023	SF	85.0%	Preventive	Surface Seal	19,023	SF	\$	0.75	\$	14,270
HEG	AP NW	4105	WEATHERING	Medium	1,922	SF	1.7%	Preventive	Surface Seal	1,921	SF	\$	0.75	\$	1,450
HEG	AP NW	4110	WEATHERING	Medium	777	SF	2.0%	Preventive	Surface Seal	777	SF	\$	0.75	\$	590
HEG	TW NE AP	1105	CORNER BREAK	Medium	2	Slabs	10.0%	Stopgap	PCC Full-Depth Patching	55	SF	\$	65.00	\$	3,570
HEG	TW NE AP	1105	LINEAR CR	Medium	7	Slabs	40.0%	Stopgap	PCC Crack Sealing	136	LF	\$	7.00	\$	960
HEG	TW NE AP	1105	SHAT. SLAB	Medium	7	Slabs	40.0%	Stopgap	PCC Crack Sealing	272	LF	\$	7.00	\$	1,910
HEG	TW NE AP	1105	JOINT SPALL	Medium	2	Slabs	10.0%	Stopgap	PCC Partial-Depth Patching	11	SF	\$	169.00	\$	1,860
HEG	TW NE AP	1105	JOINT SPALL	High	1	Slabs	5.0%	Stopgap	PCC Partial-Depth Patching	7	SF	\$	169.00	\$	1,160
HEG	TL T-HANG	925	L&TCR	High	112	LF	0.3%	Stopgap	AC Full-Depth Patching	366	SF	\$	11.50	\$	4,210
HEG	AP FBO	4220	L&TCR	High	70	LF	0.3%	Stopgap	AC Full-Depth Patching	230	SF	\$	11.50	\$	2,660
HEG	AP NE	4410	CORNER BREAK	Medium	3	Slabs	5.9%	Stopgap	PCC Full-Depth Patching	97	SF	\$	65.00	\$	6,300
HEG	AP NE	4410	LINEAR CR	Medium	15	Slabs	29.4%	Stopgap	PCC Crack Sealing	352	LF	\$	7.00	\$	2,470
HEG	AP NE	4410	SMALL PATCH	High	6	Slabs	11.8%	Stopgap	PCC Partial-Depth Patching	16	SF	\$	169.00	\$	2,730
HEG	AP NE	4410	SHAT. SLAB	Medium	21	Slabs	41.2%	Stopgap	PCC Crack Sealing	987	LF	\$	7.00	\$	6,910
HEG	AP NE	4410	SHAT. SLAB	High	6	Slabs	11.8%	Stopgap	PCC Slab Replacement	3,300	SF	\$	51.50	\$	169,950
HEG	AP NE	4410	JOINT SPALL	Medium	3	Slabs	5.9%	Stopgap	PCC Partial-Depth Patching	19	SF	\$	169.00	\$	3,280

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

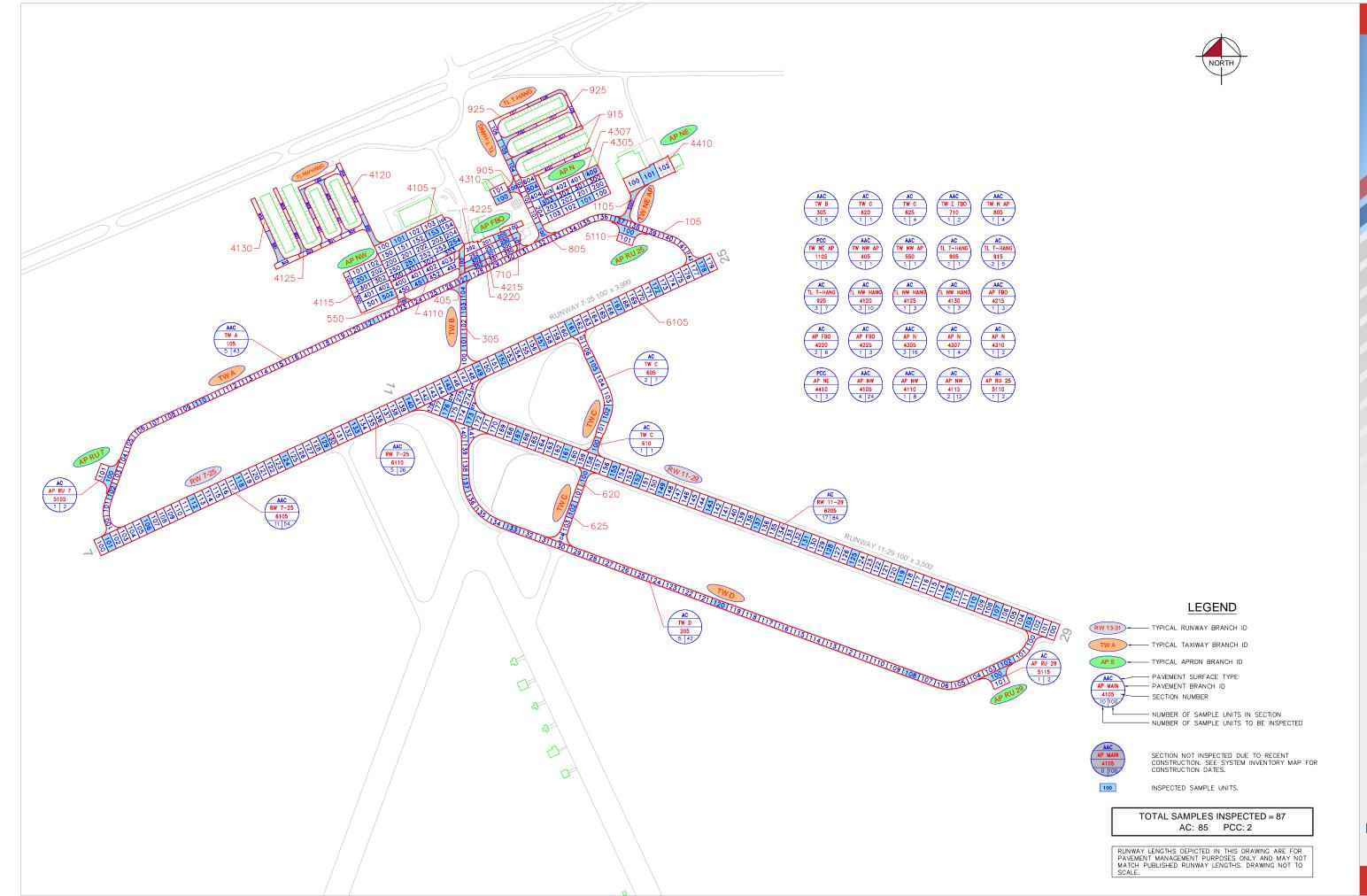
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type		nning Cost Estimate
2023	HEG	RW 7-25	6105	AAC	268,900	67	AC Rehabilitation	\$	2,824,000
2023	HEG	RW 7-25	6110	AAC	131,000	67	AC Rehabilitation	\$	1,376,000
2023	HEG	TW NE AP	1105	PCC	6,535	9	PCC Reconstruction	\$	295,000
2023	HEG	TL NW HANG	4120	AC	41,757	61	AC Rehabilitation	\$	439,000
2023	HEG	TL NW HANG	4125	AC	11,995	65	AC Rehabilitation	\$	126,000
2023	HEG	TL T-HANG	905	AC	3,307	40	AC Reconstruction	\$	62,000
2023	HEG	TL T-HANG	915	AC	20,878	42	AC Reconstruction	\$	387,000
2023	HEG	TL T-HANG	925	AC	33,188	47	AC Reconstruction	\$	614,000
2023	HEG	AP FBO	4220	AC	22,343	60	AC Rehabilitation	\$	235,000
2023	HEG	AP FBO	4225	AC	13,370	57	AC Rehabilitation	\$	141,000
2023	HEG	AP N	4305	AAC	72,711	67	AC Rehabilitation	\$	764,000
2023	HEG	AP N	4310	AC	10,000	41	AC Reconstruction	\$	185,000
2023	HEG	AP NE	4410	PCC	27,876	2	PCC Reconstruction	\$	1,255,000
2023	HEG	AP NW	4115	AC	60,864	63	AC Rehabilitation	\$	640,000
2023	HEG	AP RU 7	5105	AC	11,481	70	AC Rehabilitation	\$	121,000
2024	HEG	AP N	4307	AC	22,380	69	AC Rehabilitation	\$	247,000
2026	HEG	TW N AP	805	AAC	16,073	69	AC Rehabilitation	\$	196,000
2027	HEG	AP RU 25	5110	AC	11,371	69	AC Rehabilitation	\$	146,000
2030	HEG	AP FBO	4215	AAC	10,233	69	AC Rehabilitation	\$ 152,00	
2032	HEG	TW A	105	AAC	153,047	69	AC Rehabilitation	\$ 2,493,000	
2032	HEG	AP NW	4105	AAC	110,686	69	AC Rehabilitation	\$	1,803,000

^{*}All planning cost values have been rounded up to the nearest thousand dollars.



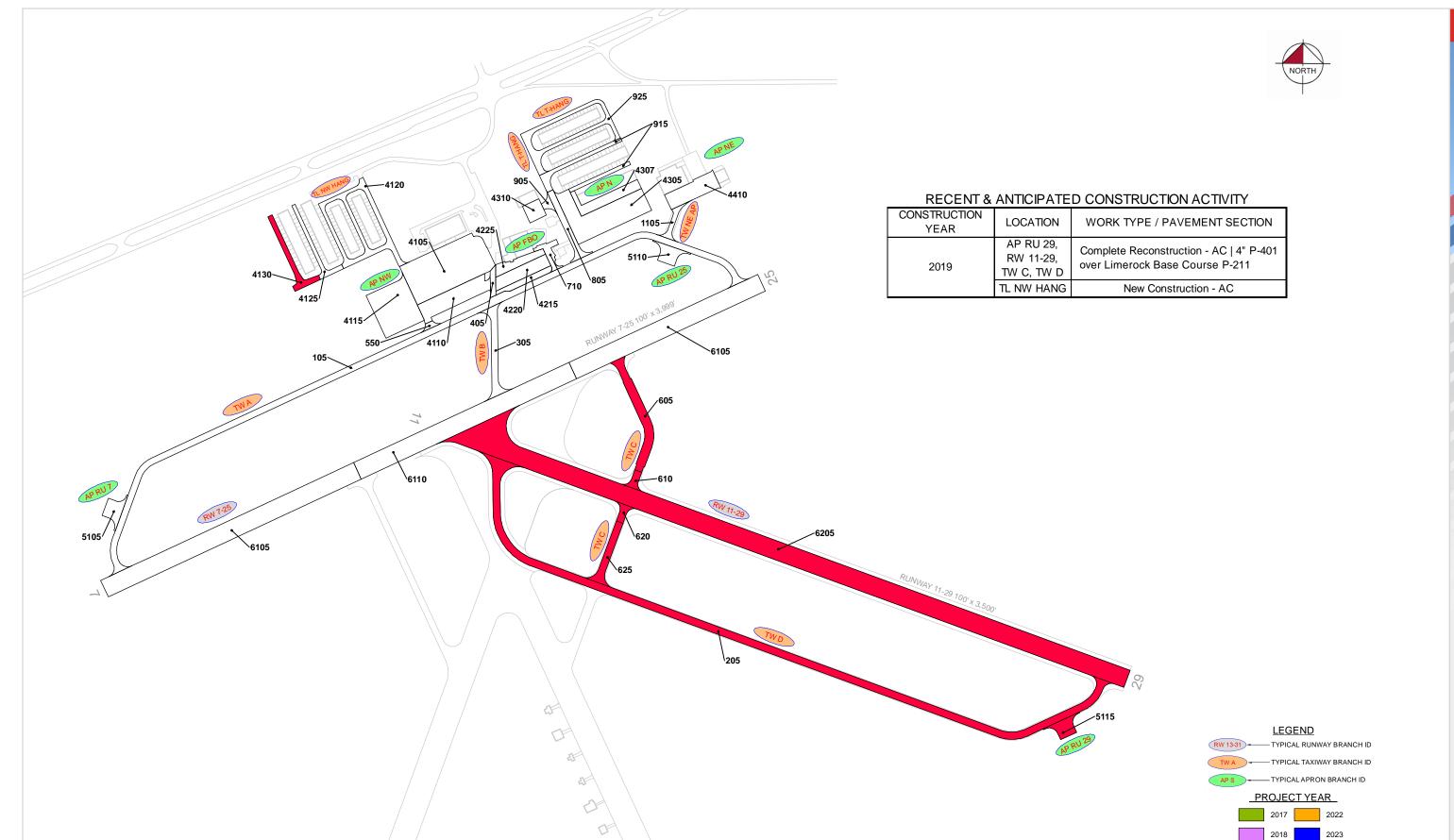


Appendix C: Technical Exhibits

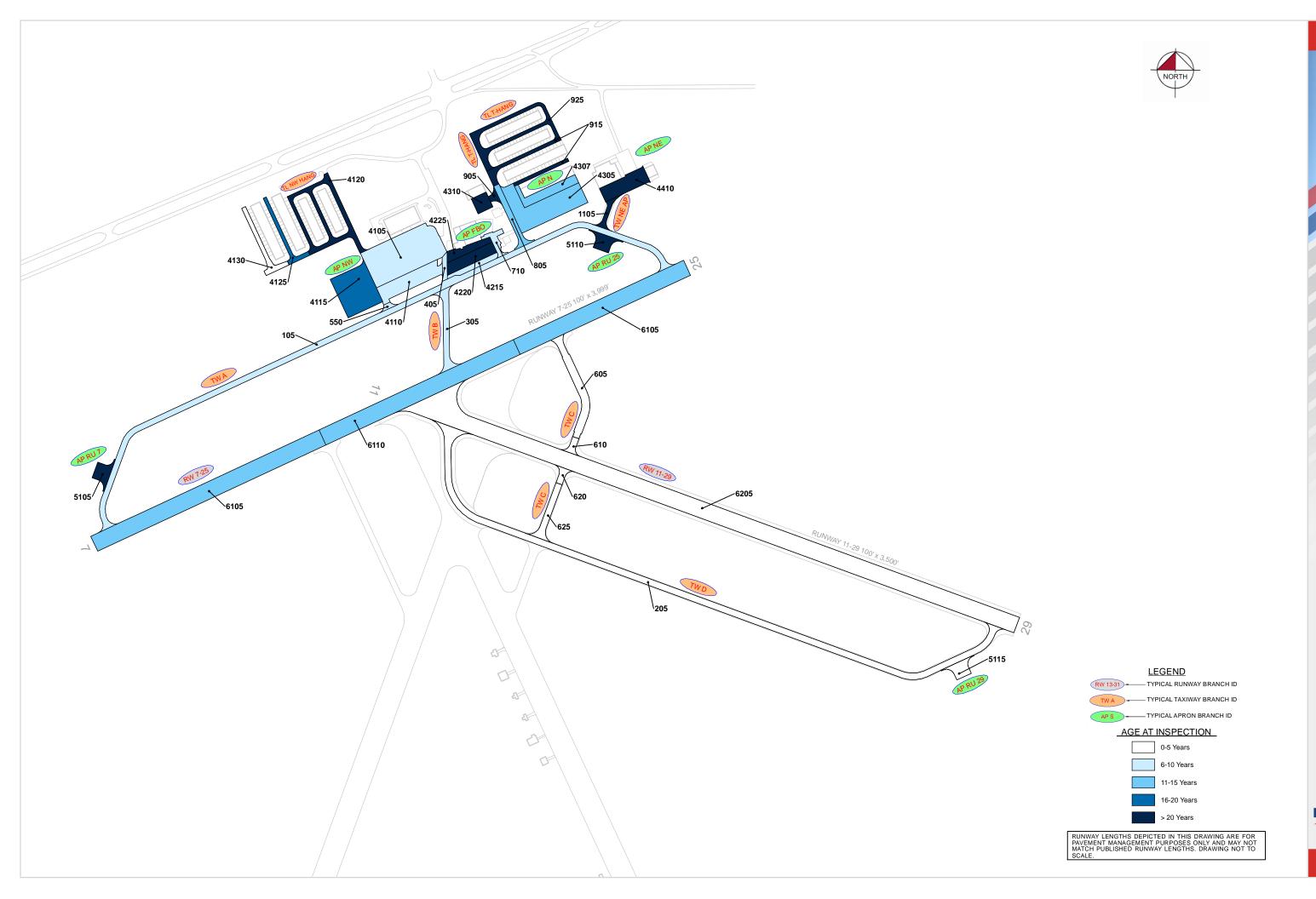


2020

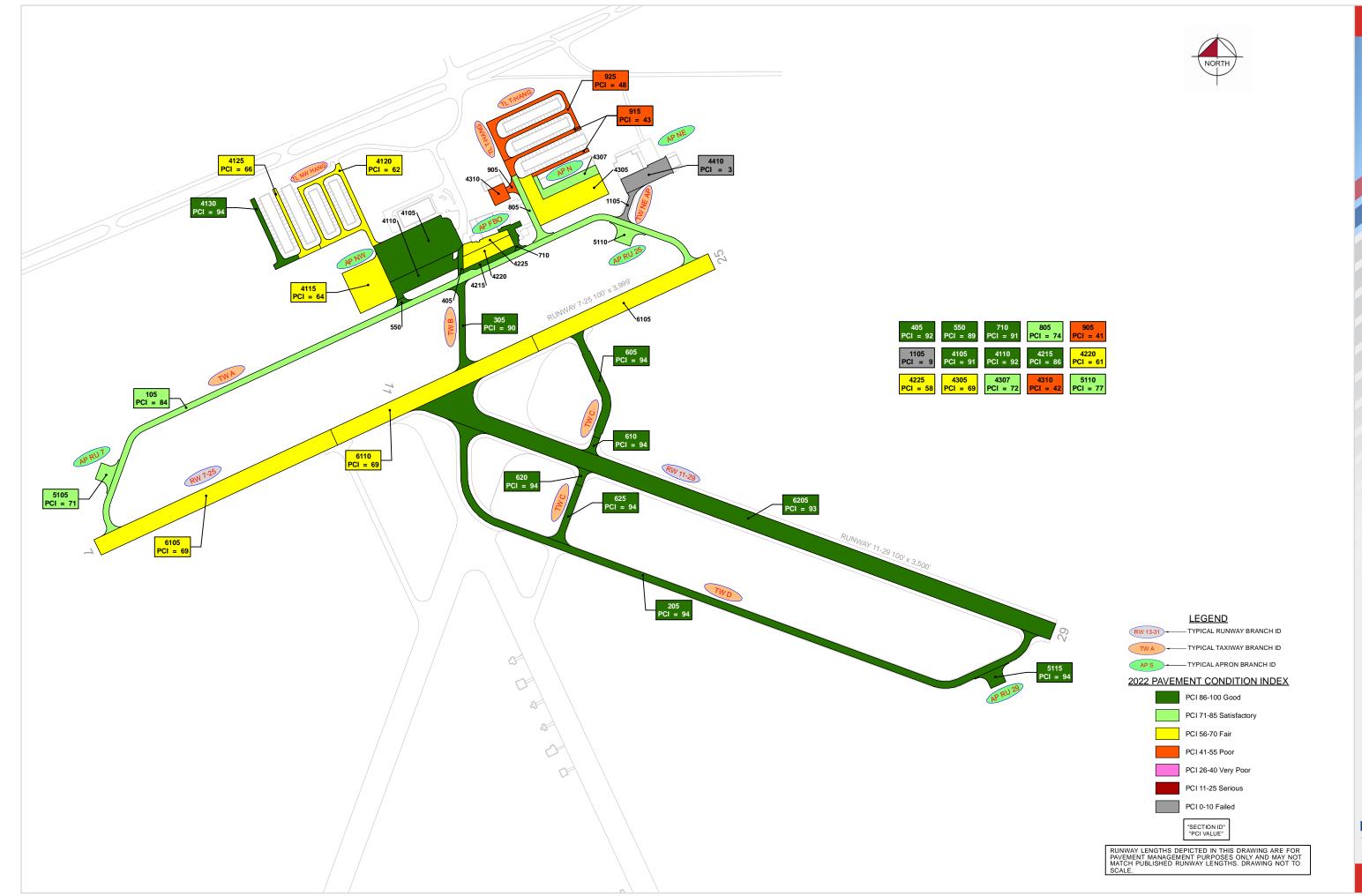
RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS. DRAWING NOT TO SCALE.

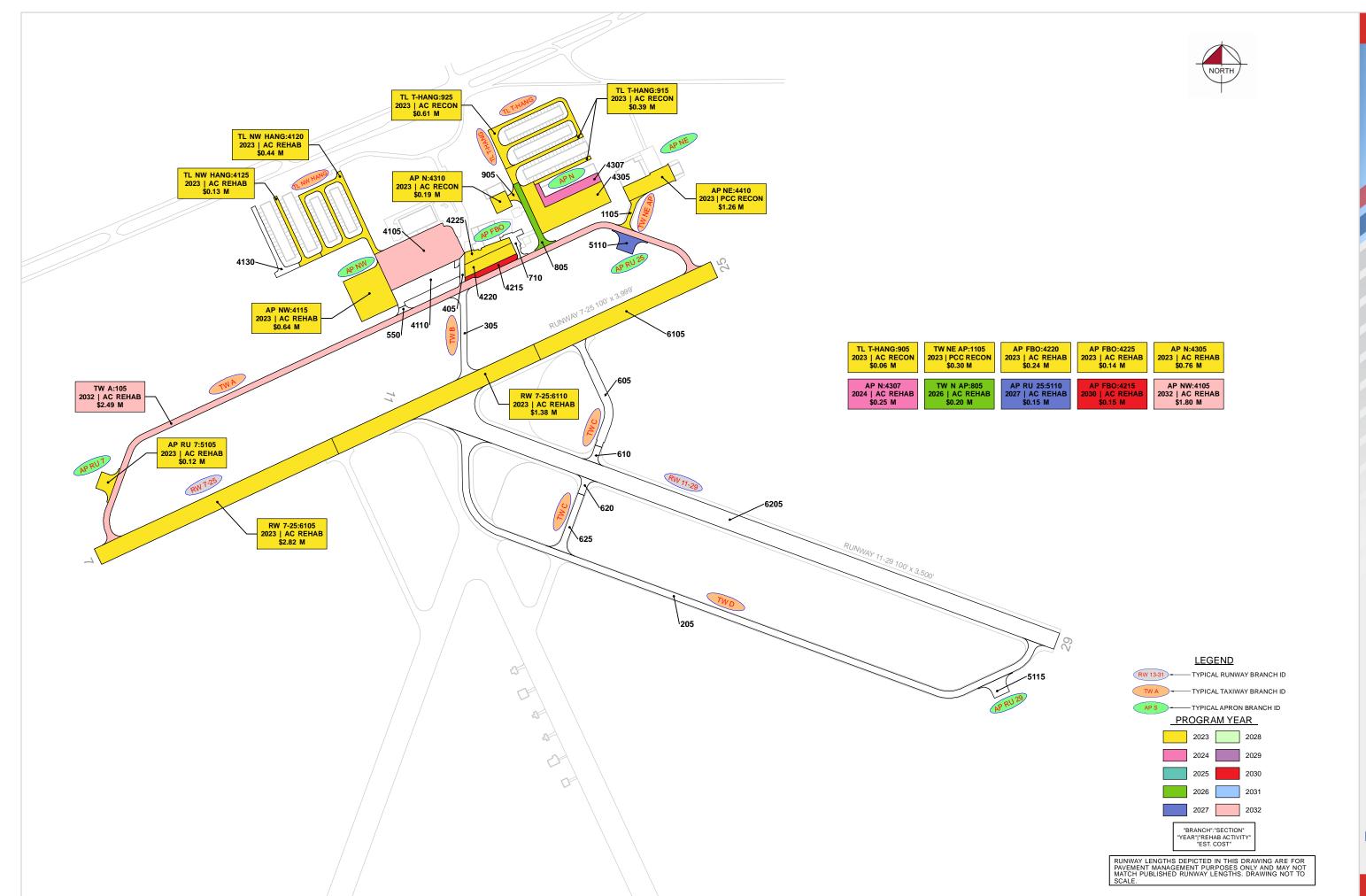


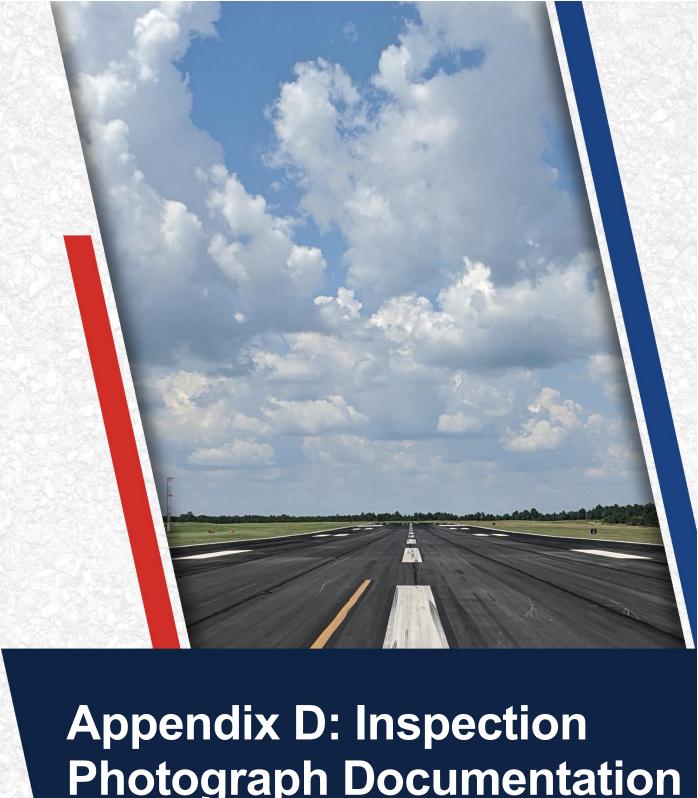












Photograph Documentation



RW 7-25, Section 6105, Sample Unit 161 – Longitudinal & Transverse Cracking and Swelling



RW 7-25, Section 6110, Sample Unit 149 - Swelling





RW 11-29, Section 6205, Sample Unit 143 – Longitudinal & Transverse Cracking



RW 11-29, Section 6205, Sample Unit 173 - Vicinity





TW A, Section 105, Sample Unit 102 – Longitudinal & Transverse Cracking and Patching



TW D, Section 205, Sample Unit 120 - Vicinity





TL T-HANG, Section 915, Sample Unit 300 - Block Cracking



AP FBO, Section 4220, Sample Unit 250 - Longitudinal & Transverse Cracking



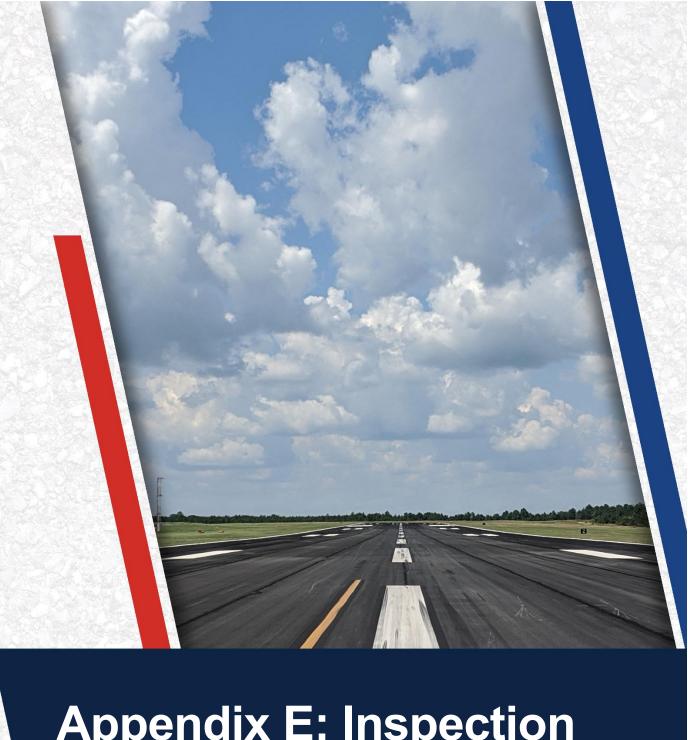


AP NE, Section 4410, Sample Unit 101 - Shattered Slab



AP NW, Section 4115, Sample Unit 502 - Swelling and Weathering





Appendix E: Inspection Distress Details

Re-Inspection Report

FDOT

57

57

WEATHERING

WEATHERING

L

M

3014.00 SqFt

753.00 SqFt

Generated Date 11/17/2022 Page 1 of 36

Generated D	Date		11/17/2022								Page 1 of 36
Network:	HEG				Name:	HERLONG	RECRI	EATIONAL AIRP	PORT		
Branch:	AP FBO		Name:	FBO Al	PRON		Use:	APRON	Area:	45,946 SqFt	
Section: 4	1215	of	3 F1	rom: -				То: -		Last Const.	: 7/1/2016
Surface: A	AAC	Family:	CA653-RL-AP-	AAC-APC	Zone:			Category:		Rank: P	
Area:	10,233	3 SqFt	Length:		388 Ft	Widt	1:	25 Ft			
Slabs:		Slab Leng	gth:	Ft	Slab	Width:		Ft	Joint Lengt	h:	Ft
Shoulder:		Street Ty	pe:		Grad	le: 0			Lanes:	0	
Section Com	iments:										
Work Date:	1/1/1980	Wo	rk Type: New C	Construction	n - Initial		Cod	e: NU-IN	Is Majo	r M&R: True	
Work Date:	7/1/2016	Wo	rk Type: Mill an	nd Overlay			Cod	e: ML-OVL	Is Majo	or M&R: True	
Last Insp. Da	eate: 7/20/2022		TotalSa	mples: 3		Su	rveyed:	1			
Conditions:	PCI: 86										
Inspection C	Comments:										
Sample Num	nber: 352	Туре	e: R	Aı	rea:	3767.00 Sq	Ft	PCI: 86	5		
Sample Com	nments:										

Name: HEG Name: HERLONG RECREATIONAL AIRPORT	
Section: 4220	
Surface: AC Family: CA653-RL-AP-AC Zone: Category: Rank: P Area: 22,343 SqFt Length: 330 Ft Width: 70 Ft To Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: Street Type: Grade: 0 Lanes: 0 Section Comments: Work Date: 7/1/2016 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False Last Insp. Date: 7/20/2022 TotalSamples: 6 Surveyed: 2 Conditions: PCI: 61 Inspection Comments: Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR H 200.00 Ft 48 L & T CR H <	
Area:	12/25/1999
Slab Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: Street Type: Grade: 0 Lanes: 0 Section Comments:	
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: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False Last Insp. Date: 7/20/2022 TotalSamples: 6 Surveyed: 2 Conditions: PCI: 61 Inspection Comments: Sample Number: 250 Type: R Area: 3500.00 SqFt PCI: 57 Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft 48 L & T CR L 15.00 Ft 48	
Section Comments:	
Work Date: 12/25/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False Last Insp. Date: 7/20/2022 TotalSamples: 6 Surveyed: 2 Conditions: PCI: 61 Inspection Comments: Sample Number: 250 Type: R Area: 3500.00 SqFt PCI: 57 Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft 48 L & T CR H 15.00 Ft	
Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False	
Last Insp. Date: 7/20/2022 TotalSamples: 6 Surveyed: 2 Conditions: PCI: 61 Inspection Comments: Sample Number: 250 Type: R Area: 3500.00 SqFt PCI: 57 Sample Comments: 48 L&TCR L 364.00 Ft 48 L&TCR M 200.00 Ft 48 L&TCR H 15.00 Ft	
Conditions: PCI: 61 Inspection Comments: Sample Number: 250	
Conditions: PCI: 61 Inspection Comments: Sample Number: 250	
Sample Number: 250 Type: R Area: 3500.00 SqFt PCI: 57 Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft 48	
Sample Number: 250 Type: R Area: 3500.00 SqFt PCI: 57 Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft 48	
Sample Comments: 48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft	
48 L & T CR L 364.00 Ft 48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft	
48 L & T CR M 200.00 Ft 48 L & T CR H 15.00 Ft	
48 L & T CR H 15.00 Ft	
57 WEATHERING L. 3500.00 Saft	
The state of the s	
Sample Number: 302 Type: R Area: 4447.00 SqFt PCI: 63	
Sample Comments:	
45 DEPRESSION L 45.00 SqFt	
48 L & T CR L 184.00 Ft	
48 L & T CR M 100.00 Ft	
48 L & T CR H 10.00 Ft	
57 WEATHERING L 4447.00 SqFt	

HERLONG RECREATIONAL AIRPORT Network: HEG Name: Branch: AP FBO FBO APRON Use: APRON 45,946 SqFt Name: Area: 4225 of 3 **Last Const.:** 1/1/1997 Section: From: To: -ACFamily: CA653-RL-AP-AC Zone: Category: Rank: P Surface: Area: 13,370 SqFt Length: 320 Ft Width: 100 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1997 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False **Last Insp. Date:** 7/20/2022 **TotalSamples:** 3 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R **PCI:** 58 Sample Number: 200 Type: Area: 3750.00 SqFt **Sample Comments:** L & T CR L 352.00 Ft 48 L & T CR M 200.00 Ft 48 PATCHING 50 L 55.00 SqFt PATCHING 50 M 36.00 SqFt WEATHERING 3659.00 SqFt 57 L

Netw	ork: HEG			Name:	HERLONG RECI	REATIONAL AIR	PORT		
Bran	ch: AP N		Name:	NORTH APRON	Use:	APRON	Area:	105,091 SqFt	
Secti	on: 4305	of 3		From: -		То: -		Last Const.:	1/1/2012
Surfa	ice: AAC	Family: CA	.653-RL-A	AP-AAC-APC Zone:		Category:		Rank: P	
Area	72.71	11 SqFt	Length	: 479 Ft	Width:	299 Ft			
Slabs		Slab Length:	_		o Width:	Ft	Joint L	ength: Ft	
Shou		Street Type:		Gra			Lanes:		
	on Comments:	Street Type.		Gia	. 0		Lanes.	Ü	
Secu	on Comments:								
Worl	Date: 1/1/1990	Work 7	Type: Nev	w Construction - Initial	Co	de: NU-IN	Is !	Major M&R: True	
Worl	Date: 1/1/2012	Work 7	Гуре: Mil	l and Overlay	Co	de: ML-OVL	Is I	Major M&R: True	
Last	Insp. Date: 7/20/2022	2	Total	Samples: 16	Surveyed	l: 3			
	litions: PCI: 69								
Inene	ection Comments:								
		TP	D.	A	5000 00 C E	DCI. (70		
Samı	ole Number: 101	Туре:	R	Area:	5000.00 SqFt	PCI: 6	59		
Samı		Type:	R	Area:	5000.00 SqFt	PCI: 6	59		
Samı	ole Number: 101		R L	422.00 Ft	5000.00 SqFt	PCI: 6	59		
Samı	ole Number: 101		L L	422.00 Ft 25.00 SqFt	5000.00 SqFt	PCI: 6	59		
Samp Samp	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING		L L L	422.00 Ft 25.00 SqFt 4750.00 SqFt	5000.00 SqFt	PCI: 6	59		
Samp Samp 48 56	ole Number: 101 ole Comments: L & T CR SWELLING		L L	422.00 Ft 25.00 SqFt	5000.00 SqFt	PCI: 6	59		
Samp Samp 48 56 57 57	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING		L L L	422.00 Ft 25.00 SqFt 4750.00 SqFt	5000.00 SqFt 3878.00 SqFt	PCI: 6			
Samp Samp 48 56 57 Samp	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING		L L L M	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt					
Samp Samp 48 56 57 57 Samp Samp	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments:	Туре:	L L L M	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area:					
Samp Samp 48 56 57 57 Samp	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303	Туре:	L L L M	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt					
Samp Samp 48 56 57 57 Samp Samp 48	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments: L & T CR	Туре:	L L L M R	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area:					
Samj Samj 48 56 57 57 Samj 48 48	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments: L & T CR L & T CR	Туре:	L L L M R	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft					
Samj 48 56 57 57 Samj 48 48 52	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments: L & T CR L & T CR RAVELING	Туре:	L L M R L M L	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt					
Samp Samp 48 56 57 57 Samp Samp 48 48 48 52 56 57	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments: L & T CR L & T CR RAVELING SWELLING	Туре:	L L M R L M L L	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt 10.00 SqFt			71		
Samp Samp Samp Samp Samp Samp Samp Samp	ble Number: 101 ble Comments: L & T CR SWELLING WEATHERING WEATHERING ble Number: 303 ble Comments: L & T CR L & T CR RAVELING SWELLING WEATHERING	Туре:	L L M R L M L L L	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt 10.00 SqFt 3839.00 SqFt	3878.00 SqFt	PCI: 7	71		
Samp Samp Samp Samp Samp Samp Samp Samp	ble Number: 101 ble Comments: L & T CR SWELLING WEATHERING WEATHERING ble Number: 303 ble Comments: L & T CR L & T CR RAVELING SWELLING WEATHERING ble Number: 504	Туре:	L L M R L M L L L	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt 10.00 SqFt 3839.00 SqFt	3878.00 SqFt	PCI: 7	71		
Samp Samp 48 56 57 57 Samp Samp Samp 48 48 52 56 57 Samp Samp	ble Number: 101 ble Comments: L & T CR SWELLING WEATHERING WEATHERING ble Number: 303 ble Comments: L & T CR L & T CR RAVELING SWELLING WEATHERING ble Number: 504 ble Comments:	Туре:	L L M R L M L L L	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt 10.00 SqFt 3839.00 SqFt Area:	3878.00 SqFt	PCI: 7	71		
Samp Samp 48 56 57 57 Samp Samp 48 48 52 56 57 Samp Samp Samp 48 48	ole Number: 101 ole Comments: L & T CR SWELLING WEATHERING WEATHERING ole Number: 303 ole Comments: L & T CR L & T CR RAVELING SWELLING WEATHERING ole Number: 504 ole Comments: L & T CR	Type:	L L M R L M L L R	422.00 Ft 25.00 SqFt 4750.00 SqFt 250.00 SqFt Area: 196.00 Ft 50.00 Ft 39.00 SqFt 10.00 SqFt 3839.00 SqFt Area: Area:	3878.00 SqFt	PCI: 7	71		

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** AP N NORTH APRON Use: APRON Area: 105,091 SqFt Name: of 3 Section: 4307 To: -**Last Const.:** 12/25/2009 From: Surface: ACFamily: CA653-RL-AP-AC Zone: Category: Rank: P 410 Ft 50 Ft Area: 22,380 SqFt Length: Width: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 12/25/2009 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 4 Surveyed: 1 **Conditions: PCI:** 72 **Inspection Comments:** R 5500.00 SqFt **PCI:** 72 Sample Number: 400 Type: Area: **Sample Comments:** 48 L & T CR L 19.00 Ft 52 RAVELING L 825.00 SqFt

WEATHERING

M

4675.00 SqFt

57

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** AP N NORTH APRON Use: APRON Area: 105,091 SqFt Name: Section: 4310 of 3 **Last Const.:** 1/1/1990 From: To: -Surface: AC Family: CA653-RL-AP-AC Zone: Category: Rank: P Area: 10,000 SqFt Length: 50 Ft Width: 200 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1990 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 7/20/2022 **TotalSamples:** 2 Surveyed: 1 **Conditions: PCI:** 42 **Inspection Comments:** R 5000.00 SqFt **PCI:** 42 Sample Number: 100 Type: Area: **Sample Comments:** 43 BLOCK CR L 4185.00 SqFt 43 BLOCK CR M 738.00 SqFt PATCHING 50 L 53.00 SqFt PATCHING 50 M 24.00 SqFt

4923.00 SqFt

L

RAVELING

52

HERLONG RECREATIONAL AIRPORT Network: HEG Name: Branch: AP NE NORTHEAST APRON APRON 27,876 SqFt Name: Use: Area: 4410 of 1 **Last Const.:** 12/25/1999 Section: From: To: -Surface: PCC Family: CA653-RL-AP-PCC Rank: P Zone: Category: Area: 27,876 SqFt Length: 300 Ft Width: 100 Ft 22 Ft Slab Width: Slab Length: Joint Length: Slabs: 51 25 Ft 2,164 Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 12/25/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 7/20/2022 **TotalSamples:** 3 Surveyed: 1 **Conditions: PCI:** 3 **Inspection Comments:** PCI: 3 Sample Number: 101 Type: R 17.00 Slabs Area: **Sample Comments:** 62 CORNER BREAK L 1.00 Slabs CORNER BREAK M 1.00 Slabs 62 63 LINEAR CR L 1.00 Slabs LINEAR CR 63 M 5.00 Slabs JT SEAL DMG 17.00 Slabs 65 M 66 SMALL PATCH L 1.00 Slabs 66 SMALL PATCH M 2.00 Slabs 66 SMALL PATCH Н 2.00 Slabs 70 SCALING L 8.00 Slabs SHAT. SLAB 72 M 7.00 Slabs 72 SHAT. SLAB Н 2.00 Slabs 73 SHRINKAGE CR Slabs N 8.0074 JOINT SPALL 1.00 Slabs M

75

CORNER SPALL

L

1.00

Slabs

Network: HEG		Name:	HERLONG RECR	EATIONAL AIRPORT	
Branch: AP NW	Name:	NORTHWEST APR	ON Use:	APRON Arc	ea: 210,582 SqFt
Section: 4105	of 3	rom: -		То: -	Last Const.: 7/1/2016
Surface: AAC F	Family: CA653-RL-AP	-AAC-APC Zone:		Category:	Rank: P
Area: 110,686	SqFt Length:	483 Ft	Width:	233 Ft	
Slabs:	Slab Length:	Ft Slab	Width:	Ft	Joint Length: Ft
Shoulder:	Street Type:	Grad	e: 0		Lanes: 0
Section Comments:					
Work Date: 1/1/1984	Work Type: New	Construction - Initial	Coo	de: NU-IN	Is Major M&R: True
Work Date: 7/1/2016	Work Type: Mill a	and Overlay	Coe	de: ML-OVL	Is Major M&R: True
Last Insp. Date: 7/20/2022	TotalSa	amples: 24	Surveyed	: 4	
Conditions: PCI: 91					
Inspection Comments:					
Sample Number: 101	Type: R	Area:	5029.00 SqFt	PCI: 92	
Sample Comments:					
57 WEATHERING	L	4979.00 SqFt			
57 WEATHERING	M	50.00 SqFt			
Sample Number: 153	Type: R	Area:	5000.00 SqFt	PCI: 90	
Sample Comments:					
49 OIL SPILLAGE	N	8.00 SqFt			
57 WEATHERING	L	4900.00 SqFt			
57 WEATHERING	M	100.00 SqFt			
Sample Number: 251	Type: R	Area:	5000.00 SqFt	PCI: 92	
Sample Comments:					
57 WEATHERING	L	4900.00 SqFt			
57 WEATHERING	M	100.00 SqFt			
Sample Number: 254	Type: R	Area:	4150.00 SqFt	PCI: 92	
Sample Comments:					

L 4067.00 SqFt M 83.00 SqFt

57 57

WEATHERING WEATHERING

HERLONG RECREATIONAL AIRPORT Network: HEG Name: **Branch:** AP NW NORTHWEST APRON Use: APRON 210,582 SqFt Name: Area: 4110 of 3 From: Last Const.: 7/1/2016 Section: To: -AAC Family: CA653-RL-AP-AAC-APC Zone: Category: Rank: P Surface: Area: 39,032 SqFt Length: 395 Ft Width: 93 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments: Work Date:** 1/1/1981 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Mill and Overlay Code: ML-OVL Is Major M&R: True **Last Insp. Date:** 7/20/2022 **TotalSamples:** 8 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4271.00 SqFt **PCI:** 92 Sample Number: 451 Type: Area: **Sample Comments:** 57 WEATHERING L 4186.00 SqFt

57

WEATHERING

M

Network:	HEG					ľ	Name: I	IERLONG REC	CREATIONAL A	RPORT			
Branch:	AP NW	,			Name:	NORTHW	EST APRON	Use:	APRON	Area:	2	10,582 SqFt	
Section:	4115		of	3		From: -			То: -			Last Const.	: 1/1/2005
Surface:	AC		Family:	CA	53-RL-A	AP-AC Z	Zone:		Category:			Rank: P	
Area:		60,864	SqFt		Length	: 23	34 Ft	Width:	259 Ft	į			
Slabs:			Slab Len	gth:		Ft	Slab Widt	h:	Ft	Joint	Length:]	Ft
Shoulder:			Street Ty	pe:			Grade:	0		Lane	s: 0		
Section Cor	mments:												
Work Date	: 1/1/2005		Wo	ork T	ype: Nev	w Construction -	Initial	C	ode: NU-IN	I	s Major N	M&R: True	
Last Insp. I	Date: 7/20	0/2022			Total	Samples: 12		Surveye	ed: 2				
-													
Conditions:	: PCI:	64				•							
								·					
Inspection (Comments	:	T.			•		000 00 G F	D.C.I.	(1			
Inspection (Comments mber: 20	:	Тур	e:	R	Area	: 5	000.00 SqFt	PCI:	61			
Inspection (Comments mber: 20	:	Тур	e:		•	: 5	000.00 SqFt	PCI:	61			
Inspection (Sample Num Sample Con	Comments mber: 20	:	Тур	e:	R	•	: 5	000.00 SqFt	PCI:	61			
Inspection Gample Nur Sample Cor 48 L &	Comments mber: 20 mments:	:	Тур		R	Area		000.00 SqFt	PCI:	61			
Inspection (Sample Nur Sample Cor 48 L & 56 SWI	Comments mber: 20 mments: T CR	11	Тур	I	R	Area 679.00 Ft	Ft	000.00 SqFt	PCI:	61			
Sample Num Sample Con 48 L & SWE 56 SWE	Comments mber: 20 mments: T CR ELLING ATHERING	::)1 G	Тур	I I N	R	Area 679.00 Ft 500.00 Sq	Ft Ft	000.00 SqFt 866.00 SqFt	PCI:				
Sample Num Sample Con 48 L & 56 SWE 57 WE Sample Num	mber: 20 mments: T CR ELLING ATHERING mber: 50	::)1 G		I I N	R	Area 679.00 Ft 500.00 Sq 5000.00 Sq	Ft Ft						
56 SWE 57 WEA Sample Nur Sample Con	mber: 20 mments: T CR ELLING ATHERING mber: 50	::)1 G		I I N	R A A R	Area 679.00 Ft 500.00 Sq 5000.00 Sq	Ft Ft						
Sample Num Sample Con 48 L & 56 SWE 57 WE Sample Num Sample Con 48 L &	mber: 20 mments: T CR ELLING ATHERING mber: 50 mments:	::)1 G		I I N	R A R	679.00 Ft 500.00 Sq 5000.00 Sq Area	Ft Ft						
Sample Num Sample Con 48 L & 56 SWE 57 WE Sample Num Sample Con 48 L & 48 L & 48 L &	mber: 20 mments: T CR ELLING ATHERING mber: 50 mments: T CR	::)1 G		I I Ne:	R	Area 679.00 Ft 500.00 Sq 5000.00 Sq Area	Ft Ft: 5						

HEG HERLONG RECREATIONAL AIRPORT Network: Name: Branch: AP RU 25 **RUN-UP APRON 25** Use: APRON 11,371 SqFt Name: Area: 5110 of 1 **Last Const.:** 1/1/1999 Section: From: To: -Surface: ACFamily: CA653-RL-AP-AC Zone: Category: Rank: P Area: 11,371 SqFt Length: 100 Ft Width: 100 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False **Last Insp. Date:** 7/20/2022 **TotalSamples:** 2 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 6466.00 SqFt **PCI:** 77 Sample Number: 100 Type: Area: **Sample Comments:** L & T CR L 433.00 Ft 48

L

6466.00 SqFt

57

WEATHERING

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** AP RU 29 **RUN-UP APRON 29** Use: APRON 10,993 SqFt Name: Area: 5115 of 1 **Last Const.:** 6/1/2019 Section: From: To: -Surface: ACFamily: CA653-RL-AP-AC Zone: Category: Rank: P Area: 10,993 SqFt Length: 98 Ft Width: 95 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 6/1/2019 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **TotalSamples:** 2 **Last Insp. Date:** 7/20/2022 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 6086.00 SqFt **PCI:** 94 Sample Number: 100 Type: Area:

Sample Comments:

57 WEATHERING L 6086.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** AP RU 7 **RUN-UP APRON 7** Use: APRON 11,481 SqFt Name: Area: 5105 of 1 **Last Const.:** 1/1/1999 Section: From: To: -ACFamily: CA653-RL-AP-AC Zone: Category: Rank: P Surface: Area: 11,481 SqFt Length: 100 Ft Width: 100 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 7/1/2016 Work Type: Surface Treatment - Seal Coat Code: ST-SC Is Major M&R: False **Last Insp. Date:** 7/20/2022 **TotalSamples:** 2 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 6477.00 SqFt **PCI:** 71 Sample Number: 100 Type: Area: **Sample Comments:** L & T CR L 606.00 Ft 48 SWELLING L 10.00 SqFt 56 WEATHERING L 6477.00 SqFt 57

Network	: HEG			Name:	HERLONG RE	CREATIONAL AIRPO	ORT	
Branch:	RW 11-29		Name:	RUNWAY 11-29	Use:	RUNWAY	Area:	412,753 SqFt
Section:	6205	of 1		From: -		То: -		Last Const.: 6/1/2019
Surface:	AC	Family: CA	A653-RL-R	W-AC Zone:		Category:		Rank: S
Area:	412,753	3 SqFt	Length:	4,083 Ft	Width:	100 Ft		
Slabs:		Slab Length:		Ft Slab W	idth:	Ft	Joint Length	: Ft
Shoulder	r:	Street Type:		Grade:	0		Lanes: 0	
Section (Comments:							
Work Da	ate: 1/1/1963	Work	Type: Nev	w Construction - AC	(Code: NC-AC	Is Major	M&R: True
Work Da	ate: 1/1/1984	Work	Type: Ove	erlay - AC Structural	(Code: OL-AS	Is Major	M&R: True
Work Da	ate: 6/1/2019	Work	Type: Cor	mplete Reconstruction - AC	(Code: CR-AC	Is Major	M&R: True
Last Insp	p. Date: 7/20/2022		Total	Samples: 84	Survey	ed: 17		
Conditio	ns: PCI: 93							
Inspectio	on Comments:							
Sample N	Number: 103	Type:	R	Area:	5000.00 SqFt	PCI : 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
	Number: 107	Type:	R	Area:	5000.00 SqFt	PCI: 90		
-	Comments:				-			
48 L	& T CR		L	19.00 Ft				
	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 110	Type:	R	Area:	5000.00 SqFt	PCI: 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 113	Type:	R	Area:	5000.00 SqFt	PCI : 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 119	Type:	R	Area:	5000.00 SqFt	PCI: 90		
Sample (Comments:							
48 L	& T CR		L	17.00 Ft				
	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 125	Type:	R	Area:	5000.00 SqFt	PCI: 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 128	Type:	R	Area:	5000.00 SqFt	PCI: 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
Sample N	Number: 131	Type:	R	Area:	5000.00 SqFt	PCI: 94		
Sample (Comments:							
57 W	/EATHERING		L	5000.00 SqFt				
	Number: 137	Type:	R	Area:	5000.00 SqFt	PCI: 94		
-	Comments:	-			-			
	/EATHERING		L	5000.00 SqFt				
	Number: 143	Type:	R	Area:	5000.00 SqFt	PCI: 90		
_	Comments:	- J P***	==			- 32. 70		
	& T CR		ī	21.00 Ft				
→ 0 1.	& I CK /EATHERING		L L	5000.00 SqFt				

Sample Number: 149	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			
Sample Number: 152	Type: R	Area:	5000.00 SqFt	PCI: 90	
Sample Comments:					
48 L & T CR 57 WEATHERING	L L	24.00 Ft 5000.00 SqFt			
			5000 00 C-E4	DCI. 04	
Sample Number: 155	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			
Sample Number: 161	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			
Sample Number: 167	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			
Sample Number: 173	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			
Sample Number: 176	Type: R	Area:	5000.00 SqFt	PCI: 94	
Sample Comments:					
57 WEATHERING	L	5000.00 SqFt			

Netwo	ork: HEG					Name:	HERLONG RE	CREATIONAL A	IRPORT			
Branc	h: RW 7-25			Name:	RUNWA	Y 7-25	Use:	RUNWAY	Are	a: 399.	900 SqFt	
Section	n: 6105	0	f 2		From: -			То: -]	Last Const.:	1/1/2009
Surfac	e: AAC	Family:	CA6	553-RL-R	W-AAC-	Zone:		Category:]	Rank: P	
		v	APC					<i>.</i>				
Area:	268,	900 SqFt		Length:	: 2,7	00 Ft	Width:	100 F	t			
Slabs:		Slab Len	igth:		Ft	Slab W	idth:	Ft		Joint Length:	Ft	
Should	der:	Street T	_			Grade:	0			Lanes: 0		
	n Comments:	507000 1,	, per			01	v			Zanest 0		
		***	T	NI		T '4' 1		C. J. MILIN		T. M M. C	р. т	
work	Date: 1/1/1981	W	ork I	ype: Nev	w Construction -	Initial		Code: NU-IN		Is Major M&	K: Irue	
Work	Date: 1/1/2009	W	ork T	ype: Mil	l and Overlay		•	Code: ML-OVL		Is Major M&	R: True	
Last I	nsp. Date: 7/20/20	22		Total	Samples: 54		Survey	ed: 11				
Condi	tions: PCI: 69)										
Inspec	ction Comments:											
Samnl	e Number: 101	Тур	ne.	R	Are	··	5000.00 SqFt	PCI:	73			
_	e Comments:	1 y l		IX.	AIC	••	2000.00 Bq1 t	ı cı.	, 3			
ampi												
18	L & T CR		L		144.00 Ft							
18 52	L & T CR		N		25.00 Ft							
52 56	RAVELING SWELLING		L L		500.00 Sc 32.00 Sc							
57	WEATHERING		L		4500.00 Sc							
	le Number: 106	Туј		R	Are	•	5000.00 SqFt	PCI:	71			
_		1 y l		IX.	AIC	••	2000.00 Bq1 t	ı cı.	, .			
əampi	e Comments:											
18	L & T CR		L	_	152.00 Ft							
18	L & T CR		N		50.00 Ft							
52	RAVELING		L		500.00 Sc	•						
56 57	SWELLING		L L		50.00 Sc							
	WEATHERING				4500.00 So		5000 00 G F:	D.C.I.	70			
_	e Number: 112	Тур	pe:	R	Are	ı:	5000.00 SqFt	PCI:	70			
Sampl	e Comments:											
48	L & T CR		L		166.00 Ft							
48	L & T CR		N	Л	62.00 Ft							
52	RAVELING		L		500.00 Sc							
56	SWELLING		L		30.00 Sc	•						
57	WEATHERING		L		4500.00 Sc							
_	e Number: 118	Tyl	pe:	R	Are	ı:	5000.00 SqFt	PCI:	72			
Sampl	e Comments:											
18	L & T CR		L	<u>.</u>	168.00 Ft							
18	L & T CR		N		50.00 Ft							
52	RAVELING		L		500.00 Sc							
56	SWELLING		L		15.00 Sc							
57	WEATHERING		L		4500.00 Sc							
Sampl	e Number: 124	Typ	pe:	R	Are	ı:	5000.00 SqFt	PCI:	73			
Sampl	e Comments:											
18	L & T CR		L		139.00 Ft							
18	L&TCR		N		50.00 Ft							
52	RAVELING		L		500.00 Sc							
6	SWELLING		L		5.00 Sc							
7	WEATHERING		L		4500.00 Sc							
Sampl	e Number: 129	Туј	pe:	R	Are	a:	5000.00 SqFt	PCI:	71			
Sampl	e Comments:											
18	L & T CR		L		157.00 Ft							
+8 18	L&TCR L&TCR		L N		50.00 Ft							
+o 52	RAVELING		L		500.00 Ft							
	SWELLING		L		40.00 Sc							
6	SWELLING		,		70.00	Гl						

Samn	ole Number: 157	Type:	R	Area:	5000.00 SqFt	PCI: 75	
_	ole Comments:	JF			1		
48	L & T CR	J	L	147.00 Ft			
52	RAVELING		L	1000.00 SqFt			
56	SWELLING		L	15.00 SqFt			
57	WEATHERING]	L	4000.00 SqFt			
Samp	ole Number: 161	Type:	R	Area:	5000.00 SqFt	PCI: 56	
Samp	ole Comments:						
48	L & T CR]	L	156.00 Ft			
48	L & T CR	I	M	150.00 Ft			
52	RAVELING	1	L	500.00 SqFt			
56	SWELLING	1	L	200.00 SqFt			
56	SWELLING	1	M	35.00 SqFt			
57	WEATHERING]	L	4500.00 SqFt			
Samp	ole Number: 167	Type:	R	Area:	5000.00 SqFt	PCI: 56	
Samp	ole Comments:						
48	L & T CR	1	L	198.00 Ft			
48	L & T CR	1	M	150.00 Ft			
52	RAVELING]	L	500.00 SqFt			
56	SWELLING]	L	150.00 SqFt			
56	SWELLING	1	M	25.00 SqFt			
57	WEATHERING]	L	4500.00 SqFt			
Samp	ole Number: 172	Type:	R	Area:	5000.00 SqFt	PCI: 65	
Samp	ole Comments:						
48	L & T CR	1	L	139.00 Ft			
48	L & T CR	I	M	100.00 Ft			
52	RAVELING	1	L	500.00 SqFt			
56	SWELLING	1	L	86.00 SqFt			
57	WEATHERING]	L	4500.00 SqFt			
Samp	ole Number: 178	Type:	R	Area:	5000.00 SqFt	PCI: 79	
Samp	ole Comments:						
48	L & T CR]	L	92.00 Ft			
52	RAVELING	J	L	500.00 SqFt			
56	SWELLING]	L	15.00 SqFt			
57	WEATHERING]	L	4500.00 SqFt			

Netwo	ork: HEG			Name:	HERLONG RECR	EATIONAL AIRPO	ORT
Branc			Name:	RUNWAY 7-25		RUNWAY	Area: 399,900 SqFt
Section	n: 6110	of 2	2	From: -		То: -	Last Const.: 1/1/2009
Surfa	ce: AAC F		A653-RL-I PC	RW-AAC- Zone:		Category:	Rank: P
Area:	131,000	SqFt	Length	1,300 Ft	Width:	100 Ft	
Slabs	:	Slab Length	:	Ft Slab	Width:	Ft	Joint Length: Ft
Shoul	der:	Street Type:	:	Gra	de: 0		Lanes: 0
Section	n Comments:						
Work	Date: 1/1/1997	Work	Type: Ne	w Construction - Initial	Cod	le: NU-IN	Is Major M&R: True
Work	Date: 1/1/2009	Work	Type: Mi	ll and Overlay	Cod	le: ML-OVL	Is Major M&R: True
Last 1	nsp. Date: 7/20/2022		Tota	lSamples: 26	Surveyed:	5	
	itions: PCI: 69				-		
Inspe	ction Comments:						
Samp	le Number: 133	Type:	R	Area:	5000.00 SqFt	PCI: 67	
Samp	le Comments:						
48	L & T CR		L	218.00 Ft			
48	L & T CR		M	50.00 Ft			
52	RAVELING		L	500.00 SqFt			
56	SWELLING		L	125.00 SqFt			
57	WEATHERING		L	4500.00 SqFt			
_	le Number: 140	Type:	R	Area:	5000.00 SqFt	PCI: 72	
Samp	le Comments:						
48	L & T CR		L	139.00 Ft			
48	L & T CR		M	50.00 Ft			
52	RAVELING		L	500.00 SqFt			
56	SWELLING WEATHERING		L L	20.00 SqFt			
57	le Number: 145	Type:	R	4500.00 SqFt Area:	5000.00 SqFt	PCI: 68	
_	le Comments:	Type.	K	Alea.	3000.00 Sqrt	101. 08	
Samp							
48	L & T CR		L	182.00 Ft			
48 52	L & T CR RAVELING		M L	75.00 Ft 500.00 SqFt			
56	SWELLING		L L	50.00 SqFt			
57	WEATHERING		L	4500.00 SqFt			
Samp	le Number: 149	Type:	R	Area:	5000.00 SqFt	PCI: 69	
Samp	le Comments:						
48	L & T CR		L	132.00 Ft			
48	L & T CR		M	50.00 Ft			
52	RAVELING		L	500.00 SqFt			
56 57	SWELLING		L	120.00 SqFt			
57 Samm	WEATHERING	Т	L	4500.00 SqFt	5000 00 S-E4	DCI. 71	
_	le Number: 152	Type:	R	Area:	5000.00 SqFt	PCI: 71	
_	le Comments:						
48	L & T CR		L	146.00 Ft			
48	L & T CR		M	50.00 Ft			
52 56	RAVELING SWELLING		L L	500.00 SqFt 55.00 SqFt			
57	WEATHERING		L L	4500.00 SqFt			
				- 1-			

Network:	HEG			Name:	HERL	ONG REC	REATIONAL A	IRPORT	Γ	
Branch:	TL NW HAN	G	Name:	NORTHWEST TAXILANE	T-HANGAR	Use:	TAXILANE	A	rea:	69,033 SqFt
Section:	4120	of 3	3	From: -			То: -			Last Const.: 1/1/2001
Surface:	AC	Family: C	A653-RL-TV	V-AC Zone:			Category:			Rank: P
Area:	41,75	57 SqFt	Length:	1,800 Ft	•	Width:	25 F	t		
Slabs:		Slab Length	:	Ft S	lab Width:		Ft		Joint Lengtl	ı: Ft
Shoulder:		Street Type:		G	rade: 0				Lanes: 0	
Section Co	omments:									
Work Dat	re: 1/1/2001	Work	Type: New	Construction - Initial		C	ode: NU-IN		Is Major	r M&R: True
Last Insp.	Date: 7/20/2022	2	TotalS	amples: 10		Surveye	ed: 3			
Condition	s: PCI: 62									
Inspection	Comments:									
Sample N	umber: 200	Type:	R	Area:	5524.0	00 SqFt	PCI:	65		
Sample Co		2, per		111000	002	, o 541 t	101.			
45 DE	PRESSION		L	96.00 SqFt						
	& T CR		L	122.00 Ft						
52 RA	VELING		L	552.00 SqFt						
57 WI	EATHERING		M	4972.00 SqFt						
Sample Nu	umber: 403	Type:	R	Area:	4136.0	00 SqFt	PCI:	67		
Sample Co	omments:									
48 L &	& T CR		L	193.00 Ft						
52 RA	VELING		L	414.00 SqFt						
	/ELLING		L	50.00 SqFt						
57 WI	EATHERING		M	3722.00 SqFt						
Sample N	umber: 603	Type:	R	Area:	3943.0	00 SqFt	PCI:	51		
Sample Co	omments:									
48 L &	& T CR		L	427.00 Ft						
	VELING		L	392.00 SqFt						
52 RA	VELING		M	20.00 SqFt						
	/ELLING		L	265.00 SqFt						
	/ELLING		M	10.00 SqFt						
57 WI	EATHERING		M	3531.00 SqFt						

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** TL NW HANG Name: NORTHWEST T-HANGAR TAXILANE 69,033 SqFt Use: Area: TAXILANE Section: 4125 of 3 From: To: -**Last Const.:** 12/25/2006 AC Family: CA653-RL-TW-AC Rank: P Surface: Zone: Category: 11,995 SqFt 400 Ft Width: Area: Length: 25 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Date: 12/25/2006 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **TotalSamples:** 3 **Last Insp. Date:** 7/20/2022 Surveyed: 1 **Conditions: PCI:** 66 **Inspection Comments:** PCI: 66 Sample Number: 801 Type: R Area: 4220.00 SqFt **Sample Comments:** 48 L & T CR L 234.00 Ft L & T CR M 25.00 Ft 48

SWELLING

WEATHERING

56 57 L

M

50.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** TL NW HANG Name: NORTHWEST T-HANGAR Use: TAXILANE 69,033 SqFt Area: TAXILANE Section: 4130 of 3 From: To: -Last Const.: 7/1/2019 AC Family: CA653-RL-TW-AC Rank: P Surface: Zone: Category: 15,281 SqFt Length: 560 Ft Width: 25 Ft Area: Ft Slabs: Slab Length: Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Type: New Construction - AC Work Date: 7/1/2019 Code: NC-AC Is Major M&R: True **TotalSamples:** 3 **Last Insp. Date:** 7/20/2022 Surveyed: 1 **Conditions: PCI:** 94 **Inspection Comments: PCI:** 94 Sample Number: 901 Type: R Area: 5372.00 SqFt

Sample Comments:

WEATHERING

57

L 5372.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** TL T-HANG T-HANGAR TAXILANE Use: TAXILANE 57,373 SqFt Name: Area: Section: 905 of 3 **Last Const.:** 1/1/1990 From: To: Surface: ACFamily: CA653-RL-TW-AC Zone: Category: Rank: P Area: 3,307 SqFt Length: 50 Ft Width: 40 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1990 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions: PCI:** 41 **Inspection Comments:** R 3307.00 SqFt **PCI:** 41 Sample Number: 100 Type: Area: **Sample Comments:** 43 BLOCK CR L 2646.00 SqFt 43 BLOCK CR M 661.00 SqFt DEPRESSION 45 L 45.00 SqFt

RAVELING

52

L

11001101	·k: HEG				Name:	HER	LONG REC	REATIONAL A	IRPORT			
Branch	: TL T-HA	NG	Name	: T-HA	NGAR TAXI	LANE	Use:	TAXILANE	Area	:	57,373 SqFt	
Section	: 915	oi	f 3	From:	_			То: -			Last Const.:	1/1/1990
Surface	e: AC	Family:	CA653-RI	L-TW-AC	Zone:			Category:			Rank: P	
Area:	2	20,878 SqFt	Leng	gth:	949 Ft		Width:	103 F	t			
Slabs:		Slab Len	gth:	Ft	Slab	Width:		Ft		Joint Length:	F	t
Should	er:	Street Ty	pe:		Gra	de: 0				Lanes: 0		
Section	Comments:											
Work I	Date: 1/1/1990	W	ork Type:	New Construction	on - Initial		Co	ode: NU-IN		Is Major	M&R: True	
Last In	sp. Date: 7/20/	/2022	To	talSamples:	5		Surveye	d: 2				
				-								
Conditi	ions: PCI:	43										
Inspect	ion Comments:		no. D		wood	2605	00 SaEt	DCI.	27			
Inspect Sample	ion Comments: Number: 104		oe: R	A	area:	3605.	00 SqFt	PCI:	37			
Inspect Sample	ion Comments:		oe: R	A	area:	3605.	00 SqFt	PCI:	37			
Inspect Sample Sample	ion Comments: Number: 104		oe: R	A 2523.00		3605.	00 SqFt	PCI:	37			
Inspect Sample Sample 43	Number: 104 e Comments:				SqFt	3605.	00 SqFt	PCI:	37			
Inspect Sample Sample 43 43	Number: 104 Comments: BLOCK CR		L	2523.00	SqFt SqFt	3605.	00 SqFt	PCI;	37			
Sample Sample 43 43 45	Number: 104 Comments: BLOCK CR BLOCK CR		L M	2523.00 1082.00	SqFt SqFt SqFt	3605.	00 SqFt	PCI:	37			
Sample Sample 43 43 45 52	Number: 104 Comments: BLOCK CR BLOCK CR DEPRESSION		L M L	2523.00 1082.00 48.00	SqFt SqFt SqFt SqFt	3605.	00 SqFt	PCI:	37			
Sample	Number: 104 Comments: BLOCK CR BLOCK CR DEPRESSION RAVELING	Тур	L M L L M	2523.00 1082.00 48.00 3245.00 360.00	SqFt SqFt SqFt SqFt		00 SqFt 00 SqFt	PCI:				
Inspect Sample Sample 43 43 45 52 52 Sample	Number: 104 Comments: BLOCK CR BLOCK CR DEPRESSION RAVELING RAVELING	Тур	L M L L M	2523.00 1082.00 48.00 3245.00 360.00	SqFt SqFt SqFt SqFt SqFt							
Sample Sample 43 43 45 52 52 Sample Sample	Number: 104 Comments: BLOCK CR BLOCK CR DEPRESSION RAVELING RAVELING Number: 300	Тур	L M L L M	2523.00 1082.00 48.00 3245.00 360.00	SqFt SqFt SqFt SqFt SqFt							
Sample Sample 43 43 45 52 52 Sample Sample 43	Number: 104 Comments: BLOCK CR BLOCK CR DEPRESSION RAVELING RAVELING Number: 300 Comments:	Тур	L M L L M	2523.00 1082.00 48.00 3245.00 360.00	SqFt SqFt SqFt SqFt Area:							

Netw	ork: HEG			Nai	ne: HE	RLONG REC	CREATIONAL A	IRPORT	
Bran	ch: TL T-HANG		Name:	T-HANGAR	TAXILANE	Use:	TAXILANE	Area:	57,373 SqFt
Secti	on: 925	of 3		From: -			То: -		Last Const.: 1/1/199
Surfa	nce: AC	Family: CA	A653-RL-T	W-AC Zoi	ie:		Category:		Rank: P
Area	: 33,18	8 SqFt	Length:	: 1,575	Ft	Width:	20 F	t	
Slabs	: :	Slab Length:	:	Ft	Slab Width:		Ft	Join	t Length: Ft
Shou	lder:	Street Type:			Grade: 0			Lan	es: 0
Secti	on Comments:								
Worl	k Date: 1/1/1996	Work	Type: Nev	v Construction - Ini	tial	C	Code: NU-IN		Is Major M&R: True
Last	Insp. Date: 7/20/2022	<u> </u>	Total	Samples: 7		Surveye	ed: 3		
Cond	litions: PCI: 48								
Inspe	ection Comments:								
	ole Number: 105	Type:	R	Area:	450	9.00 SqFt	PCI:	53	
_		Type.	K	Al ca.	430	9.00 Sqrt	TCI.	33	
Samp	ole Comments:								
48	L & T CR		L	229.00 Ft					
48	L & T CR		M	350.00 Ft					
52	RAVELING		L	451.00 SqFt					
57	WEATHERING		L	4058.00 SqFt					
Samp	ole Number: 108	Type:	R	Area:	500	4.00 SqFt	PCI:	47	
Samp	ole Comments:								
43	BLOCK CR		L	660.00 SqFt					
48	L & T CR		L	435.00 Ft					
48	L & T CR		M	300.00 Ft					
52	RAVELING		L	1001.00 SqFt					
57	WEATHERING		M	4003.00 SqFt					
Samp	ole Number: 200	Type:	R	Area:	536	6.00 SqFt	PCI:	45	
Samp	ole Comments:								
48	L & T CR		L	276.00 Ft					
48	L & T CR		M	500.00 Ft					
48	L & T CR		H	50.00 Ft					
52	RAVELING		L	1073.00 SqFt					
57	WEATHERING		M	4293.00 SqFt					

Networ	rk: HEG			Nai	me: HER	LONG REC	REATIONAL AI	RPORT			
Branch	TW A		Name:	TAXIWAY A	A	Use:	TAXIWAY	Area:	15	3,047 SqFt	
Section	n: 105	of 1		From: -			То: -			Last Const.:	1/1/2013
Surface	e: AAC	Family: CA	A653-RL-TV PC	W-AAC- Zoi	ne:		Category:			Rank: P	
Area:	153,04	17 SqFt	Length:	4,350	Ft	Width:	40 Ft				
Slabs:		Slab Length:		Ft	Slab Width:		Ft	Jo	int Length:	Ft	:
Should	ler:	Street Type:			Grade: 0			La	nnes: 0		
Section	Comments:										
Work l	Date: 1/1/1981	Work '	Type: New	Construction - Ini	tial	C	ode: NU-IN		Is Major M	&R: True	
Work l	Date: 1/1/2013	Work	Type: Mill	and Overlay		C	ode: ML-OVL		Is Major M	&R: True	
Last In	nsp. Date: 7/20/2022	2	TotalS	amples: 43		Surveye	d: 5				
Condit	ions: PCI: 84										
Inspect	tion Comments:										
Sample	e Number: 102	Type:	R	Area:	3500	.00 SqFt	PCI:	79			
Sample	e Comments:										
48	L & T CR		L	114.00 Ft							
	PATCHING		L	70.00 SqFt							
	WEATHERING		L	3430.00 SqFt	2500	00 G E	D.C.I.	0.6			
_	e Number: 110	Type:	R	Area:	3500	.00 SqFt	PCI:	86			
_	e Comments:										
	L & T CR RAVELING		L	62.00 Ft 35.00 SqFt							
	WEATHERING		L L	3465.00 SqFt							
Sample	e Number: 121	Type:	R	Area:	3500	.00 SqFt	PCI:	84			
Sample	e Comments:					-					
48	L & T CR		L	30.00 Ft							
	PATCHING		L	22.00 SqFt							
52	RAVELING		L	35.00 SqFt							
57	WEATHERING		L	3443.00 SqFt							
Sample	e Number: 127	Type:	R	Area:	4370	.00 SqFt	PCI:	84			
Sample	e Comments:										
42	BLEEDING		N	11.00 SqFt							
48	L & T CR		L	22.00 Ft							
	PATCHING		L	3.00 SqFt							
	RAVELING		L	44.00 SqFt							
57	WEATHERING		L	4323.00 SqFt							
Sample	e Number: 137	Type:	R	Area:	3500	.00 SqFt	PCI:	89			
Sample	e Comments:										
48	L & T CR		L	2.00 Ft							
	RAVELING		L	35.00 SqFt							
57	WEATHERING		L	3465.00 SqFt							

Network: HEG			Name: H	ERLONG REC	REATIONAL AI	RPORT			
Branch: TW B	N	Name: TAXIV	VAY B	Use:	TAXIWAY	Area:	21,5	515 SqFt	
Section: 305	of 1	From: -	-		То: -		L	ast Const.:	1/1/2013
Surface: AAC	Family: CA65 APC	33-RL-TW-AAC-	Zone:		Category:		R	ank: P	
Area: 21,5	515 SqFt	Length:	420 Ft	Width:	50 Ft				
Slabs:	Slab Length:	Ft	Slab Width	:	Ft	Joint I	Length:	Ft	
Shoulder:	Street Type:		Grade:	0		Lanes:	: 0		
Section Comments:									
Work Date: 1/1/1969	Work Ty	pe: New Constructio	n - Initial	Со	ode: NU-IN	Is	Major M&	R: True	
Work Date: 1/1/2013	Work Ty	pe: Mill and Overlay	7	Со	ode: ML-OVL	Is	Major M&	R: True	
Last Insp. Date: 7/20/202	22	TotalSamples:	5	Surveyed	d: 3				
Last Insp. Date: 7/20/202 Conditions: PCI: 90		TotalSamples:	5	Surveyed	d: 3				
		TotalSamples:	5	Surveyed	d: 3				
Conditions: PCI: 90		-		Surveyed	d: 3 PCI:	91			
Conditions: PCI: 90 Inspection Comments:		-				91			
Conditions: PCI: 90 Inspection Comments: Sample Number: 101		-	rea: 35			91			
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments:	Туре:	R A	rea: 35			91			
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING	Type:	R A 35.00 3465.00	rea: 35 SqFt SqFt						
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING	Type:	R A 35.00 3465.00	rea: 35 SqFt SqFt	00.00 SqFt	PCI:				
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING Sample Number: 103 Sample Comments:	Type: L L Type:	R A 35.00 3465.00	rea: 35 SqFt SqFt rea: 35	00.00 SqFt	PCI:				
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING Sample Number: 103 Sample Comments:	Type:	R A 35.00 3465.00	rea: 35 SqFt SqFt SqFt 35 SqFt 35	00.00 SqFt	PCI:				
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING Sample Number: 103 Sample Comments: 52 RAVELING 57 WEATHERING	Type: L L Type:	R 35.00 3465.00 R A 70.00 3430.00	rea: 35 SqFt SqFt SqFt SqFt rea: 35 SqFt SqFt SqFt SqFt	00.00 SqFt	PCI:	90			
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING Sample Number: 103 Sample Comments: 52 RAVELING	Type: L L Type:	R 35.00 3465.00 R A 70.00 3430.00	rea: 35 SqFt SqFt SqFt SqFt rea: 35 SqFt SqFt SqFt SqFt	00.00 SqFt	PCI:	90			
Conditions: PCI: 90 Inspection Comments: Sample Number: 101 Sample Comments: 52 RAVELING 57 WEATHERING Sample Number: 103 Sample Comments: 52 RAVELING 57 WEATHERING 58 WEATHERING 59 WEATHERING Sample Number: 104	Type: L L Type:	R 35.00 3465.00 R A 70.00 3430.00	SqFt SqFt	00.00 SqFt	PCI:	90			

Network:	HEG				Name:	HERLONG RE	CREATIONA	AL AIRPO	RT	
Branch:	TW C		Name:	TAXIWA	Y C	Use:	TAXIWA	Y	Area:	58,414 SqFt
Section: 6	605	of	f 4	From: -			To:	-		Last Const.: 6/1/201
Surface:	AC	Family:	CA653-RL-T	W-AC	Zone:		Catego	ory:		Rank: P
Area:	3	2,373 SqFt	Length	: 7:	39 Ft	Width:		40 Ft		
Slabs:		Slab Len	gth:	Ft	Slab W	idth:	Ft		Joint Length	: Ft
Shoulder:		Street Ty	pe:		Grade:	0			Lanes: 0	
Section Con	nments:									
Work Date:	: 1/1/1997	W	ork Type: Nev	w Construction -	Initial	(Code: NU-I	N	Is Major	M&R: True
Work Date:	: 6/1/2019	W	ork Type: Cor	nplete Reconstru	iction - AC	(Code: CR-A	ıC.	Is Major	M&R: True
Last Insp. D	Date: 7/20/2	2022	Total	Samples: 7		Survey	ved: 2			
Conditions:	PCI:	94								
Inspection (Comments:									
Sample Nur	mber: 102	Тур	e: R	Area	ı:	5047.00 SqFt	P	PCI: 94		
Sample Con	mments:									
57 WEA	ATHERING		L	5047.00 Sq	Ft					
Sample Nur	mber: 105	Тур	e: R	Area	ı:	5000.00 SqFt	P	PCI: 94		
Sample Con	mments:									

L

57

WEATHERING

HEG HERLONG RECREATIONAL AIRPORT Network: Name: Branch: TW C TAXIWAY C Use: TAXIWAY 58,414 SqFt Name: Area: 610 of 4 Last Const.: 6/1/2019 Section: From: To: ACFamily: CA653-RL-TW-AC Zone: Category: Rank: P Surface: Area: 4,869 SqFt Length: 100 Ft Width: 47 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1963 Work Type: New Construction - AC Code: NC-AC Is Major M&R: True Work Date: 1/1/1984 Work Type: Overlay - AC Structural Code: OL-AS Is Major M&R: True Work Date: 6/1/2019 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4869.00 SqFt PCI: 94 Sample Number: 100 Type: Area:

Sample Comments:57 WEATHERING

L 4869.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: Branch: TW C TAXIWAY C Use: TAXIWAY 58,414 SqFt Name: Area: 620 of 4 Last Const.: 6/1/2019 Section: From: To: ACFamily: CA653-RL-TW-AC Zone: Category: Rank: P Surface: Area: 4,869 SqFt Length: 100 Ft Width: 47 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1963 Work Type: New Construction - AC Code: NC-AC Is Major M&R: True Work Date: 1/1/1984 Work Type: Overlay - AC Structural Code: OL-AS Is Major M&R: True Work Date: 6/1/2019 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4869.00 SqFt PCI: 94 Sample Number: 100 Type: Area:

Sample Comments:

57 WEATHERING L 4869.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: **Branch:** TW C TAXIWAY C Use: TAXIWAY Area: 58,414 SqFt Name: 625 of 4 **Last Const.:** 6/1/2019 Section: From: To: Surface: ACFamily: CA653-RL-TW-AC Zone: Category: Rank: P Area: 16,303 SqFt Length: 360 Ft Width: 47 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1997 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 6/1/2019 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True TotalSamples: 4 **Last Insp. Date:** 7/20/2022 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4000.00 SqFt **PCI:** 94 Sample Number: 102 Type: Area:

Sample Comments:

57

WEATHERING L 4000.00 SqFt

Network: HEG		Name:	HERLONG RECR	EATIONAL AIRPO	PRT	
Branch: TW D	Name:	TAXIWAY D	Use:	TAXIWAY	Area: 171,329 SqFt	
Section: 205	of 1	From: -		То: -	Last Cons	t.: 6/1/2019
Surface: AC	Family: CA653-RL-TV	W-AC Zone:		Category:	Rank: P	
Area: 171,329	SqFt Length:	4,118 Ft	Width:	40 Ft		
Slabs:	Slab Length:	Ft Slab W	idth:	Ft	Joint Length:	Ft
Shoulder:	Street Type:	Grade:	: 0		Lanes: 0	
Section Comments:						
Work Date: 1/1/1963	Work Type: New	Construction - AC	Cod	le: NC-AC	Is Major M&R: True	
Work Date: 1/1/1984	Work Type: Over	rlay - AC Structural	Cod	le: OL-AS	Is Major M&R: True	
Work Date: 6/1/2019	Work Type: Com	plete Reconstruction - AC	Cod	le: CR-AC	Is Major M&R: True	
Last Insp. Date: 7/20/2022	TotalS	Samples: 42	Surveyed:	5		
Conditions: PCI: 94						
Inspection Comments:						
Sample Number: 102	Type: R	Area:	4000.00 SqFt	PCI: 94		
Sample Comments:						
57 WEATHERING	L	4000.00 SqFt				
Sample Number: 108	Type: R	Area:	4000.00 SqFt	PCI: 94		
Sample Comments:						
57 WEATHERING	L	4000.00 SqFt				
Sample Number: 120	Type: R	Area:	4000.00 SqFt	PCI: 94		
Sample Comments:						
57 WEATHERING	L	4000.00 SqFt				
Sample Number: 133	Type: R	Area:	4000.00 SqFt	PCI: 94		
Sample Comments:						
57 WEATHERING	L	4000.00 SqFt				
Sample Number: 137	Type: R	Area:	4000.00 SqFt	PCI: 94		
Sample Comments:						
57 WEATHERING	L	4000.00 SqFt				

Network:	HEG				Name:	HERLONG	RECR	EATIONAL AIRI	PORT		
Branch:	TW E FBO		Name:	EAST	FBO TAXIWA	Y	Use:	TAXIWAY	Area:	8,877 SqFt	
Section:	710	0	f 1	From:	-			То: -		Last Const.:	7/1/2016
Surface:	AAC	Family:	CA653-RL- APC	ΓW-AAC-	Zone:			Category:		Rank: P	
Area:	8,8	377 SqFt	Lengtl	ı:	158 Ft	Widt	1:	42 Ft			
Slabs:		Slab Len	ngth:	Ft	Slab W	Vidth:		Ft	Joint Len	gth: Ft	
Shoulder:		Street T	ype:		Grade	: 0			Lanes:	0	
Section Co	mments:										
Work Date: 1/1/1960 Work Type: New Construction				on - Initial		Coc	de: NU-IN	Is Ma	jor M&R: True		
Work Date	e: 7/1/2016	W	ork Type: M	ill and Overla	y		Coc	de: ML-OVL	Is Ma	jor M&R: True	
Work Date	e: 7/1/2016	W	ork Type: Su	rface Treatme	ent - Seal Coat		Coc	de: ST-SC	Is Ma	jor M&R: False	
Last Insp.	Date: 7/20/20	22	Tota	lSamples:	2	Su	rveyed	: 1			
Conditions	s: PCI : 91										
Inspection	Comments:										
Sample Nu	ımber: 101	Туј	pe: R	A	Area:	4156.00 Sq	Ft	PCI: 9	1		
Sample Co	omments:										
52 RA	VELING		L	42.00	SqFt						
57 WE	EATHERING		L	4114.00	1						

HERLONG RECREATIONAL AIRPORT Network: HEG Name: Branch: TW N AP NORTH APRON TAXIWAY TAXIWAY 16,073 SqFt Name: Use: Area: Section: 805 of 1 **Last Const.:** 1/1/2012 From: To: -Surface: AAC Family: CA653-RL-TW-AAC-Zone: Category: Rank: P APC Width: 16,073 SqFt Length: 90 Ft 30 Ft Area: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: **Section Comments:** Work Date: 1/1/1990 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2012 Work Type: Mill and Overlay Code: ML-OVL Is Major M&R: True **Last Insp. Date:** 7/20/2022 **TotalSamples:** 4 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** PCI: 74 Sample Number: 100 R Type: Area: 5323.00 SqFt **Sample Comments:** 48 L & T CR L 209.00 Ft RAVELING L 106.00 SqFt 52 56 SWELLING L 156.00 SqFt

57

WEATHERING

L

HERLONG RECREATIONAL AIRPORT Network: HEG Name: 6,535 SqFt Branch: TW NE AP NORTHEAST APRON TAXIWAY Name: Use: Area: **TAXIWAY** Section: 1105 of 1 To: -**Last Const.:** 12/25/1999 From: PCC CA653-RL-TW-PCC Rank: P Surface: Family: Zone: Category: 6,535 SqFt Length: 175 Ft Width: 30 Ft Area: Slabs: 17 Slab Length: 15 Ft Slab Width: 25 Ft Joint Length: 355 Ft **Street Type:** 0 Shoulder: Grade: Lanes: **Section Comments:** Work Date: 12/25/1999 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions: PCI:** 9 **Inspection Comments:** Sample Number: 500 Type: R 20.00 Slabs PCI: 9 Area: **Sample Comments:** CORNER BREAK L 2.00 Slabs 62 CORNER BREAK 62 M 2.00 Slabs 63 LINEAR CR L 3.00 Slabs LINEAR CR 8.00 M Slabs 63 20.00 JT SEAL DMG Slabs 65 M 1.00 SMALL PATCH L Slabs 66 LARGE PATCH L 1.00 67 Slabs 67 LARGE PATCH M 1.00 Slabs 72 SHAT. SLAB M 8.00 Slabs 73 SHRINKAGE CR N 12.00 Slabs 74 JOINT SPALL L 1.00 Slabs

74

74

JOINT SPALL

JOINT SPALL

M

Н

2.00

Slabs

1.00 Slabs

HEG HERLONG RECREATIONAL AIRPORT Network: Name: 6,899 SqFt **Branch:** TW NW AP NORTHWEST APRON Use: TAXIWAY Name: Area: TAXIWAY Section: 405 of 2 To: -**Last Const.:** 7/1/2016 From: CA653-RL-TW-AAC-Rank: P Surface: AAC Family: Zone: Category: APC 4,713 SqFt Length: 150 Ft Width: 32 Ft Area: Slab Width: Slabs: Slab Length: Ft Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Date: 1/1/1981 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Type: Mill and Overlay Work Date: 7/1/2016 Code: ML-OVL Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: 92 **Inspection Comments:** Sample Number: 100 4713.00 SqFt PCI: 92 Type: R Area: **Sample Comments:**

WEATHERING

WEATHERING

57

L

M

4619.00 SqFt

HEG HERLONG RECREATIONAL AIRPORT Network: Name: 6,899 SqFt **Branch:** TW NW AP NORTHWEST APRON Use: TAXIWAY Name: Area: TAXIWAY Section: 550 of 2 To: -**Last Const.:** 1/1/2013 From: CA653-RL-TW-AAC-Rank: P Surface: AAC Family: Zone: Category: APC 33 Ft 2,186 SqFt Length: 124 Ft Width: Area: Slab Width: Slabs: Slab Length: Ft Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Date: 1/1/1981 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Type: Mill and Overlay Work Date: 1/1/2013 Code: ML-OVL Is Major M&R: True **Last Insp. Date:** 7/20/2022 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments: PCI:** 89 Sample Number: 100 Type: R Area: 2186.00 SqFt **Sample Comments:**

RAVELING

WEATHERING

57

L

L

87.00 SqFt



FLORIDA DEPARTMENT OF TRANSPORTATION | AVIATION OFFICE

