

**FLORIDA DEPARTMENT OF TRANSPORTATION  
AVIATION AND SPACEPORTS OFFICE**



**Statewide Airfield  
Pavement Management Program**

**DISTRICT 3**  
NOVEMBER 2019



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*Florida Department of Transportation*

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# Statewide Airfield Pavement Management Program

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OFFICE OF FREIGHT, LOGISTICS & PASSENGER OPERATIONS

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# Executive Summary

# Executive Summary

## *Program Background*

Airport airfield pavement infrastructure facilities represent a large capital investment in the Florida Airport System. Timely and appropriate maintenance and strategic rehabilitation are essential as repair costs increase significantly in proportion to deterioration. Airport pavement distresses can also contribute to the development of loose debris and decreased ride quality, which can be a safety concern for aircraft operations.

In 2016, the Florida Department of Transportation (FDOT) Aviation and Spaceports Office (ASO) selected Kimley-Horn and Associates, Inc. with subconsultants Airfield Pavement Management Systems, LLC and AVCON, Inc. to provide professional services in support of FDOT in the continued efforts of performing a system update to the Statewide Airfield Pavement Management Program (SAPMP). This work is to be completed from fiscal year 2016 through fiscal year 2019. The SAPMP has 95 public use airport facilities throughout the seven FDOT Districts that participate in the system update. The results of this system update 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 the FAA Advisory Circular **150/5380-7B “Airfield Pavement Management Program (PMP)”** using the documented procedures set forth by ASTM **D5340-12 “Standard Test Method for Airport Pavement Condition Index Surveys.”**

Pavement deterioration, in accordance with the ASTM D5340-12, was characterized in terms of distinct distress types, severity level of distress, and quantity of distress. This information is utilized to calculate a PCI numeric that represents the overall condition of the pavement in a numeric index that ranges from 0 (a condition category of FAILED) to 100 (GOOD). The PCI methodology analyzes an overall measure of the pavement condition and provides an indication of the degree of maintenance, repair, or rehabilitation efforts that will be required to sustain functional pavement.

The tasks required for the system update at each participating airport consist of the following:

- Obtain recent and anticipated airfield pavement construction work data.
- Update airport airfield pavement system inventory records (construction history, identification, geometry, and facility classification).
- Perform PCI Survey Inspections at each participating airport.
- Update the FDOT SAPMP PAVER™ database system.
- Update the FDOT SAPMP GIS Airfield Navigation GPS enabled Maps.
- Update airfield pavement performance models and pavement condition forecasting.
- Identification of planning-level maintenance, repair, and major rehabilitation to address pavement needs based on functional PCI analysis.
- Development of planning-level opinion of probable construction costs for pavement rehabilitation.

*Summary of Results*

PAVEMENT CONDITION INDEX (LATEST INSPECTION)

*Table E-1 Pavement Condition Index Summary (Last Inspection) –by Airport*

Network ID	Airport Type	Area-Weighted Pavement Condition Index (PCI)				
		Runway PCI	Taxiway PCI	Taxilane PCI	Apron PCI	Overall Airfield PCI
1J0	GA	98	89	79	79	92
2J9	GA	56	75	-	-	63
2R4	GA	100	68	-	68	75
54J	GA	82	81	87	78	81
AAF	GA	69	61	-	54	64
CEW	GA	78	83	-	62	75
DTS	GA	94	51	-	43	62
ECP	PR	96	82	77	87	88
F95	GA	85	100	-	73	85
MAI	GA	72	54	-	32	49
PNS	PR	80	74	-	81	78
TLH	PR	75	67	-	86	76
VPS	PR	-	100	-	85	88
X13	GA	58	49	-	62	58
<b>OVERALL DISTRICT</b>		<b>79</b>	<b>72</b>	<b>78</b>	<b>71</b>	<b>74</b>

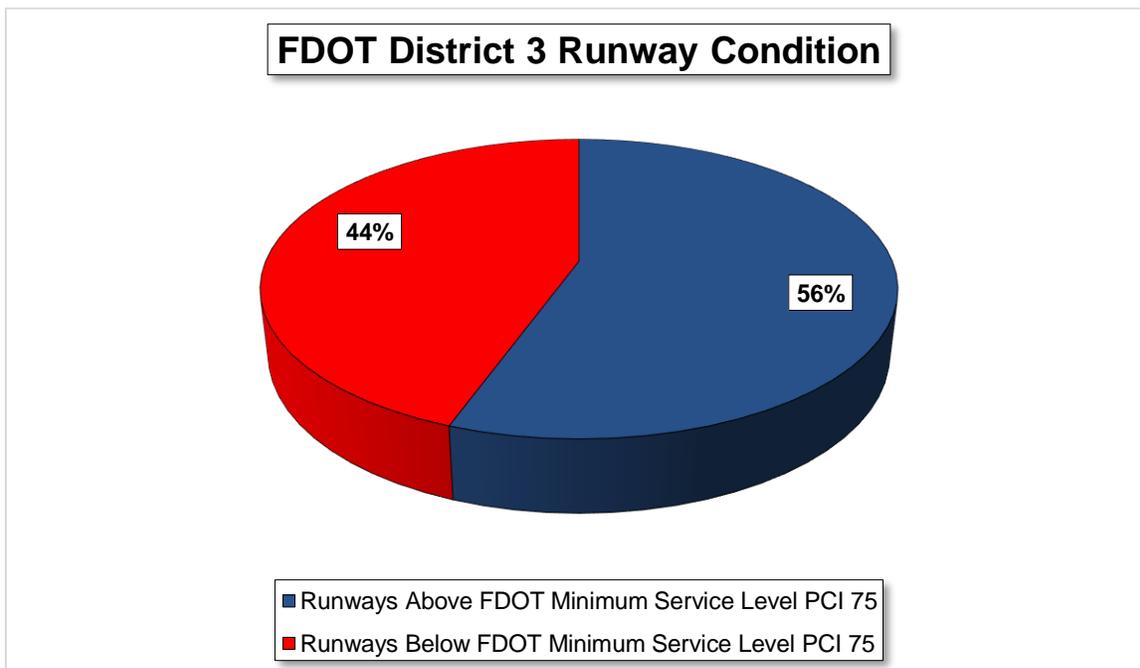
PCI Rating Scale	Good	Satisfactory	Fair	Poor	Very Poor	Serious	Failed
PCI Values	100-86	85-71	70-56	55-41	40-26	25-11	10-0

**RUNWAY PAVEMENT CONDITION INDEX**

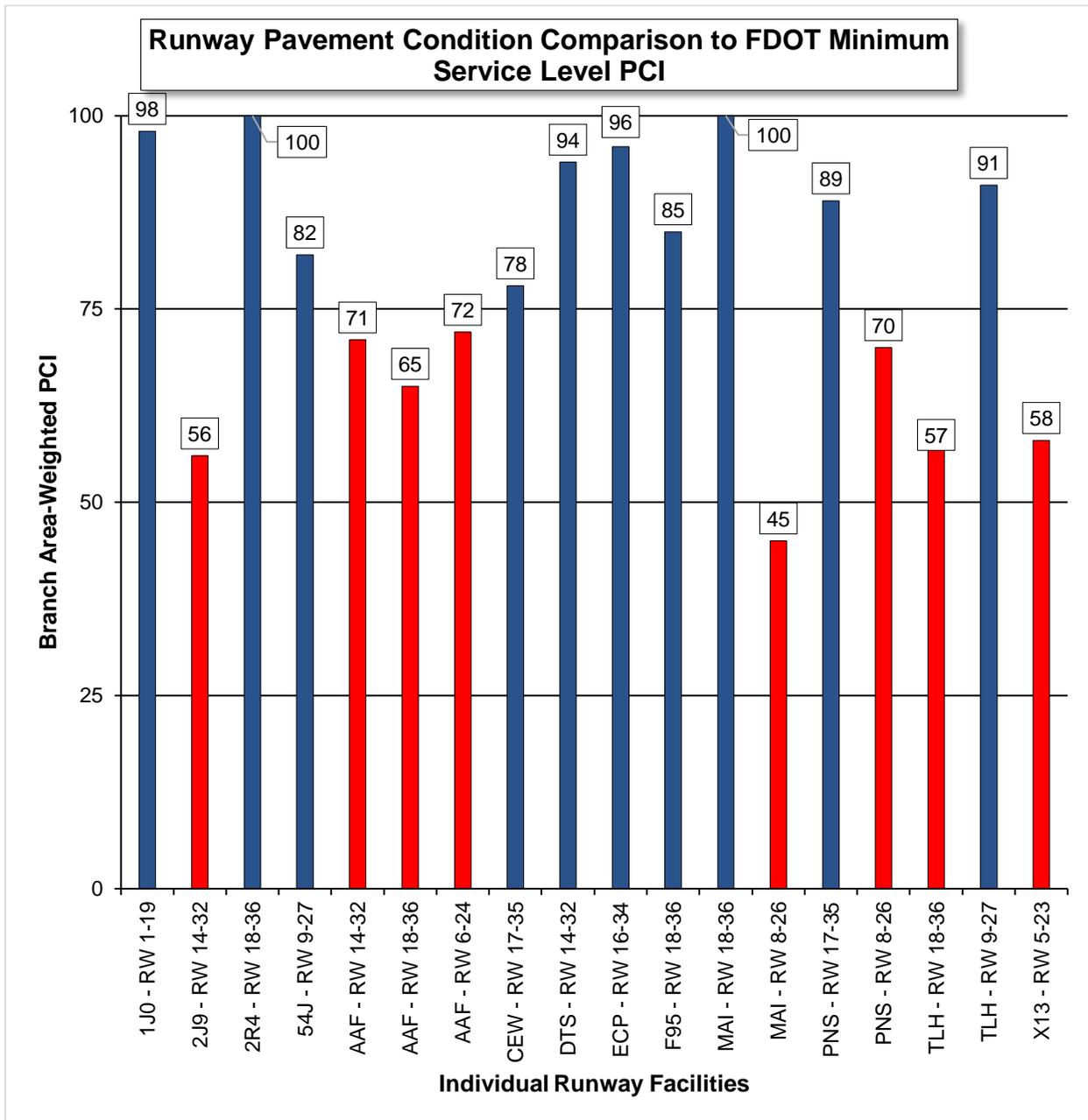
*Table E-2 Runway Pavement Condition Index by Airport*

Network ID	Airport Type	Branch ID	Branch Name	Length (Feet)	Width (Feet)	Area-Weighted PCI	PCI Rating	Below FDOT Minimum PCI of 75
1J0	GA	RW 1-19	RUNWAY 1-19	4,000	75	98	GOOD	
2J9	GA	RW 14-32	RUNWAY 14-32	2,964	75	56	FAIR	X
2R4	GA	RW 18-36	RUNWAY 18-36	3,701	75	100	GOOD	
54J	GA	RW 9-27	RUNWAY 9-27	4,146	60	82	SATISFACTORY	
AAF	GA	RW 14-32	RUNWAY 14-32	5,425	150	71	SATISFACTORY	X
AAF	GA	RW 18-36	RUNWAY 18-36	5,251	150	65	FAIR	X
AAF	GA	RW 6-24	RUNWAY 6-24	5,271	150	72	SATISFACTORY	X
CEW	GA	RW 17-35	RUNWAY 17-35	8,005	150	78	SATISFACTORY	
DTS	GA	RW 14-32	RUNWAY 14-32	5,001	100	94	GOOD	
ECP	PR	RW 16-34	RUNWAY 16-34	10,000	150	96	GOOD	
F95	GA	RW 18-36	RUNWAY 18-36	3,100	75	85	SATISFACTORY	
MAI	GA	RW 18-36	RUNWAY 18-36	4,896	100	100	GOOD	
MAI	GA	RW 8-26	RUNWAY 8-26	4,895	100	45	POOR	X
PNS	PR	RW 17-35	RUNWAY 17-35	7,004	150	89	GOOD	
PNS	PR	RW 8-26	RUNWAY 8-26	7,000	150	70	FAIR	X
TLH	PR	RW 18-36	RUNWAY 18-36	7,000	150	57	FAIR	X
TLH	PR	RW 9-27	RUNWAY 9-27	8,000	150	91	GOOD	
X13	GA	RW 5-23	RUNWAY 5-23	4,000	75	58	FAIR	X

*Figure E-3 Runway Condition*



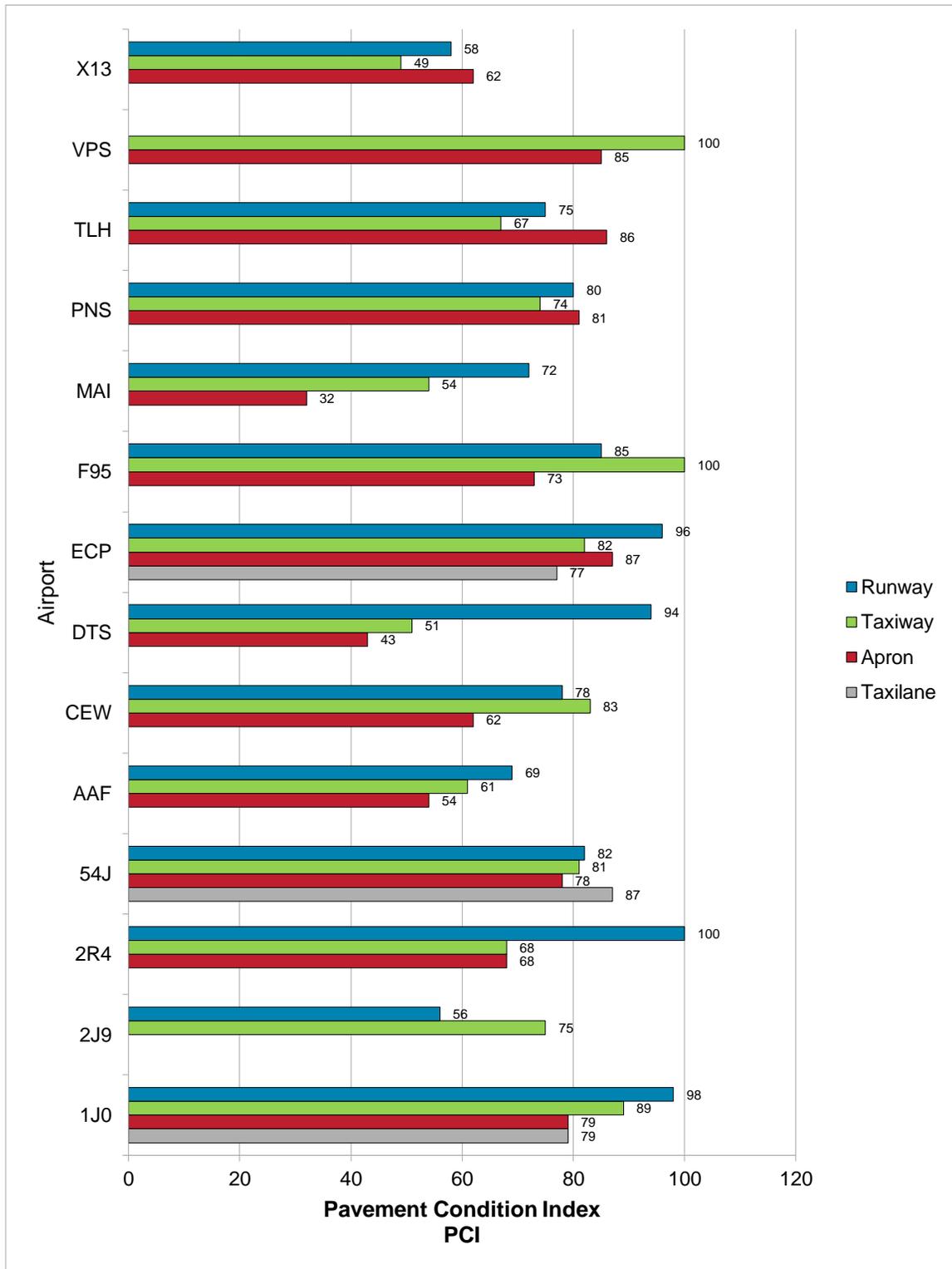
*Figure E-4 Runway Pavement Condition Index Comparison to FDOT Minimum PCI*



*Table E-5 District Summary of Area by Use by Airport*

Network ID	Airport Type	Pavement Area (Square Feet)				Overall
		Runway	Taxiway	Taxilane	Apron	
1J0	GA	406,178	239,702	33,062	98,648	777,590
2J9	GA	223,200	142,046	-	-	365,246
2R4	GA	277,500	330,346	-	607,749	1,215,595
54J	GA	250,077	261,708	27,418	191,841	731,044
AAF	GA	2,303,994	966,994	-	979,973	4,250,961
CEW	GA	1,200,000	1,108,186	-	865,787	3,173,973
DTS	GA	500,084	384,712	-	568,955	1,453,751
ECP	PR	1,500,000	1,301,990	153,255	1,287,248	4,242,493
F95	GA	279,750	171,778	-	245,220	696,748
MAI	GA	970,373	584,559	-	1,488,818	3,043,750
PNS	PR	2,078,396	2,401,917	-	2,497,209	6,977,522
TLH	PR	2,251,050	3,296,868	-	3,075,779	8,623,697
VPS	PR	-	197,645	-	694,321	891,966
X13	GA	302,918	9,699	-	77,479	390,096
<b>OVERALL DISTRICT</b>		<b>12,543,520</b>	<b>11,398,150</b>	<b>213,735</b>	<b>12,679,027</b>	<b>36,834,432</b>

*Figure E-6 PCI by Pavement Functional Use by Airport*



MAJOR REHABILITATION PLANNING

*Table E-7 Major Rehabilitation Planning Year 1*

Network ID	Airport Type	Weighted-Average PCI	Average Rating	Year 1 Major Rehabilitation
1J0	GA	92	GOOD	\$ 191,000
2J9	GA	63	FAIR	\$ 2,077,000
2R4	GA	75	SATISFACTORY	\$ 4,411,000
54J	GA	81	SATISFACTORY	\$ 173,000
AAF	GA	64	FAIR	\$ 18,490,000
CEW	GA	75	SATISFACTORY	\$ 3,119,000
DTS	GA	62	FAIR	\$ 7,326,000
ECP	PR	88	GOOD	\$ 92,000
F95	GA	85	SATISFACTORY	\$ 472,000
MAI	GA	49	POOR	\$ 31,389,000
PNS	PR	78	SATISFACTORY	\$ 16,175,000
TLH	PR	76	SATISFACTORY	\$ 33,014,000
VPS	PR	88	GOOD	\$ 1,452,000
X13	GA	58	FAIR	\$ 2,744,000
<b>OVERALL DISTRICT</b>		<b>74</b>	<b>SATISFACTORY</b>	<b>\$ 121,125,000</b>

*\*All planning cost values have been rounded to the nearest thousand-dollar.*

*Table E-8 Major Rehabilitation Planning 10-Year (2018-2029)*

Network ID	Airport Type	Weighted-Average PCI	Average Rating	10-Year Major Rehabilitation
1J0	GA	92	GOOD	\$ 724,000
2J9	GA	63	FAIR	\$ 2,077,000
2R4	GA	75	SATISFACTORY	\$ 5,094,000
54J	GA	81	SATISFACTORY	\$ 2,806,000
AAF	GA	64	FAIR	\$ 37,909,000
CEW	GA	75	SATISFACTORY	\$ 9,422,000
DTS	GA	62	FAIR	\$ 7,326,000
ECP	PR	88	GOOD	\$ 2,241,000
F95	GA	85	SATISFACTORY	\$ 3,745,000
MAI	GA	49	POOR	\$ 31,389,000
PNS	PR	78	SATISFACTORY	\$ 41,574,000
TLH	PR	76	SATISFACTORY	\$ 53,406,000
VPS	PR	88	GOOD	\$ 1,452,000
X13	GA	58	FAIR	\$ 2,744,000
<b>OVERALL DISTRICT</b>		<b>74</b>	<b>SATISFACTORY</b>	<b>\$ 201,909,000</b>

*\*All planning cost values have been rounded to the nearest thousand-dollar.*

*Table E-9 Major Rehabilitation Needs by Airport (2018-2029)*

Network ID	Major Rehabilitation (\$ in Millions)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	0.19M	0M	0M	0M	0M	0M	0.48M	0M	0M	0.06M	-	-
2J9	2.08M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
2R4	4.41M	0M	0.62M	0M	0M	0.07M	0M	0M	0M	0M	-	-
54J	0.17M	0M	0.46M	0.33M	0M	0M	0.14M	0.18M	0.07M	1.45M	-	-
AAF	18.49M	2.32M	2.56M	0M	8.61M	0M	0.35M	0M	0.46M	5.12M	-	-
CEW	3.12M	0M	0.08M	2.1M	0M	1.61M	0M	0.33M	1.27M	0.92M	-	-
DTS	7.33M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
ECP	-	-	0.09M	0.27M	0M	0M	0.12M	0M	0M	0M	0M	1.76M
F95	-	-	0.47M	0M	0.28M	0M	0M	0.78M	0.04M	0M	1.89M	0.28M
MAI	31.39M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
PNS	-	-	16.18M	1.43M	1.24M	3.41M	0.58M	2.37M	5.4M	1.8M	4.48M	4.69M
TLH	-	-	33.01M	0.3M	0.58M	1.69M	3.66M	0M	3.42M	4.01M	1.17M	5.57M
VPS	-	-	1.45M	0M	0M	0M	0M	0M	0M	0M	0M	0M
X13	2.74M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
<b>DISTRICT</b>	<b>69.92M</b>	<b>2.32M</b>	<b>54.92M</b>	<b>4.43M</b>	<b>10.71M</b>	<b>6.78M</b>	<b>5.32M</b>	<b>3.66M</b>	<b>10.65M</b>	<b>13.37M</b>	<b>7.54M</b>	<b>12.31M</b>

*Additional design-level investigation in accordance to the FAA Advisory Circulars will be required to identify specific areas within each section that are subject to reconstruction, mill and overlay, and PCC restoration. The work and budgets identified are intended for the planning level not the design level. Areas identified as mill and overlay may in fact require select areas of reconstruction should load-based distresses observed warrant it. It is important to state that the project specific design level efforts are necessary in determining the final rehabilitative construction activity and project limits. In certain cases, adjacent or nearby Sections may not have deteriorated to a PCI level that would warrant “major rehabilitation” but are deteriorated enough to be considered for inclusion as a combined project.*

## District Airfield Pavement Evaluation Report

Runway projects, based on pavement conditions at or below the Critical PCI of 65, which the District should consider as immediate needs, are listed as follows. These are not all the needs at each participating airport within the District and may not be the individual airport's priority but should be considered in development of funding programs. **Table E-10** below highlights Runway pavement sections that have current PCI values at or below the Critical PCI of 65.

*Table E-10 Year 1 Runway Major Rehabilitation Needs*

Network ID	Branch Name	Sections with Major Rehabilitation in Year 1	Major Rehabilitation Cost
1J0	RUNWAY 1-19	***No Major Rehabilitation***	\$ -
2J9	RUNWAY 14-32	6105, 6110	\$ 1,580,000
2R4	RUNWAY 18-36	***No Major Rehabilitation***	\$ -
54J	RUNWAY 9-27	***No Major Rehabilitation***	\$ -
AAF	RUNWAY 14-32	***No Major Rehabilitation***	\$ -
AAF	RUNWAY 18-36	6310	\$ 2,627,000
AAF	RUNWAY 6-24	***No Major Rehabilitation***	\$ -
CEW	RUNWAY 17-35	***No Major Rehabilitation***	\$ -
DTS	RUNWAY 14-32	***No Major Rehabilitation***	\$ -
ECP	RUNWAY 16-34	***No Major Rehabilitation***	\$ -
F95	RUNWAY 18-36	***No Major Rehabilitation***	\$ -
MAI	RUNWAY 18-36	***No Major Rehabilitation***	\$ -
MAI	RUNWAY 8-26	6105	\$ 3,968,000
PNS	RUNWAY 17-35	***No Major Rehabilitation***	\$ -
PNS	RUNWAY 8-26	6215, 6225, 6235, 6245, 6255	\$ 4,607,000
TLH	RUNWAY 18-36	6105, 6110	\$ 10,168,000
TLH	RUNWAY 9-27	***No Major Rehabilitation***	\$ -
X13	RUNWAY 5-23	6105	\$ 2,121,000

*\*All planning cost values have been rounded to the nearest thousand-dollar.*

### *Summary of District 3*

Pavement Condition Index surveys were performed for airfield pavement facilities for the following airports located in District 3.

- 1J0, Tri-County Airport
- 2J9, Quincy Municipal Airport
- 2R4, Peter Prince Field
- 54J, DeFuniak Springs Airport
- AAF, Apalachicola Regional—Cleve Randolph Field
- CEW, Bob Sikes Airport
- DTS, Destin Executive Airport
- ECP, Northwest Florida Beaches International Airport
- F95, Calhoun County Airport
- MAI, Marianna Municipal Airport
- PNS, Pensacola International Airport
- TLH, Tallahassee International Airport
- VPS, Destin-Fort Walton Beach Airport
- X13, Carrabelle-Thompson Airport

District 3's overall area-weighted Pavement Condition Index (PCI) is at a 74, a condition rating of "Satisfactory". **Table E-1: Condition Summary by Airport** above represents the results of the PCI inspection at each airport within the District. The overall area-weighted average PCI values for the participating airport facilities in District 3 ranged from 49 (Poor) to 92 (Good). Specific individual airport results are identified in the individual Airport Pavement Evaluation Reports provided to each airport.



# Chapter 1

# Chapter 1 – Introduction

## 1.1 Background

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

There are millions of square feet of pavement infrastructure that consists of runways, taxiways, aprons, ramps, and other areas of airports that are vital to the support and safety of aircraft operations. Timely pavement maintenance, repair and major rehabilitation of these pavements will support the airport in operating safely, efficiently, economically and without excessive down time.

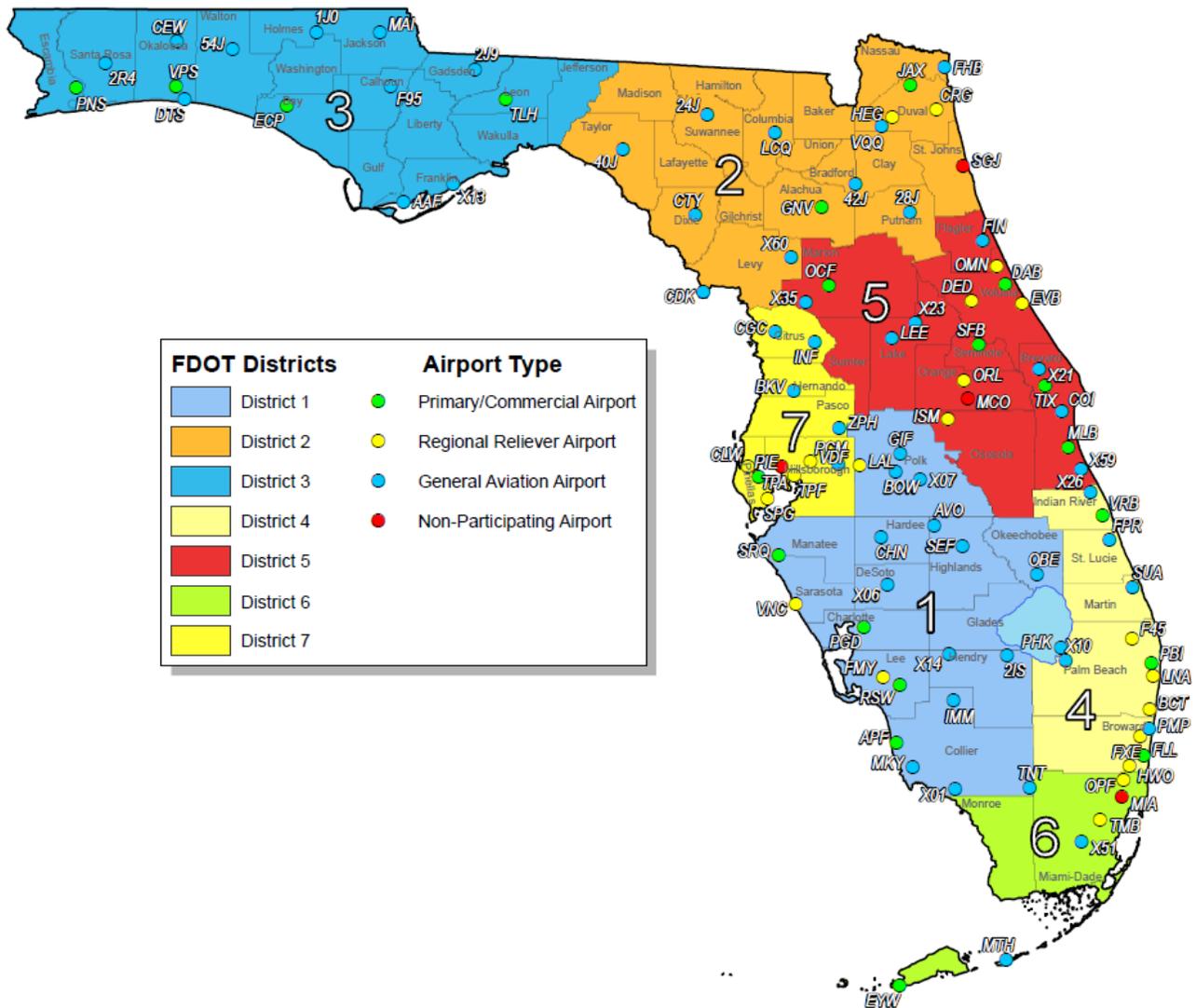
In general, adherence to the FAA Advisory Circulars are mandatory for all projects funded with federal grant monies through the Airport Improvement Program (AIP) and with revenue from the Passenger Facilities Charges (PFC) Program. Further information is detailed in FAA Grant Assurance No. 11 “Pavement Maintenance,” No. 34 “Policies, Standards, and Specifications,” and PFC Assurance No. 9 “Standards and Specifications.” The Florida Department of Transportation (FDOT) performs the Statewide Airfield Pavement Management Program (SAPMP) System Updates for the benefit of participating public-use and publicly owned airports through the Aviation and Spaceports Office (ASO).

The SAPMP addresses the requirements of maintaining an effective pavement management program for the 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 pavement facilities that are subject for project consideration. A network-level evaluation can be supportive in the identification of maintenance, repair, and major rehabilitation needs and budgetary planning-level opinions of probable construction costs.

## 1.2 Statewide Airfield Pavement Management Program (SAPMP) Update

In 1992, the FDOT established the Statewide Airfield Pavement Management Program (SAPMP) to provide program managers, District Aviation and Spaceports Offices, and airport operators a system to proactively manage airport airfield pavement infrastructure within the Florida Aviation System. The SAPMP performs network-level Pavement Condition Index (PCI) survey inspections for airport facilities that are categorized as General Aviation (GA), Reliever (RL), and Commercial (PR). Currently, the program consists of 95 actively participating public-use airports with pavement facilities and provides users with comprehensive data to better manage pavement assets.

*Figure 1.2 Florida Aviation System (Facilities with Pavement) and FDOT Districts*



In 2016, the Florida Department of Transportation Aviation and Spaceports Office contracted Kimley-Horn and Associates, Inc. along with subconsultants Airfield Pavement Management Systems, LLC and AVCON, Inc. to provide professional services in support of FDOT in the continued efforts of performing a system update to the SAPMP. This work is to be completed from fiscal year 2016 through fiscal year 2019.

### 1.3 Organization

#### 1.3.1 FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION AND SPACEPORTS OFFICE PROGRAM MANAGER

The FDOT Aviation and Spaceports Office (ASO) Aviation Engineering Manager serves as the Program Manager (ASO-PM) for the SAPMP. The ASO-PM monitors the work performed by the designated Consultant for the program. The ASO-PM has review and

approval authority for each program task and manages the program's day-to-day details and pertinent updates.

The ASO-PM reports updates and milestones to the FDOT State Aviation and Spaceports Manager and Development Administrator.

### 1.3.2 PARTICIPATING FLORIDA PUBLIC-USE AND PUBLICLY OWNED AIRPORTS

The airports are the end-user and beneficiary of the SAPMP. The SAPMP provides a specific Airport Pavement Evaluation Report that meets the requirements of the FAA Advisory Circular **150/5380-7B "Airport Pavement Management Program (PMP)."** Individual participating airports will be provided a final Airport Pavement Evaluation Report by the designated Consultant that is specific to each airport's airfield pavement condition index survey. The ASO-PM has full authority and final approval of each report prior to finalization. In advance of each PCI survey and prior to completion of each Airport Pavement Evaluation Report, participating airports are asked to provide the necessary record documentation for the proper analysis efforts. Relevant record documentation artifacts may consist of but are not limited to: Airport Layout Plans (ALP), Construction Bid Tabulations, As-Built Construction Drawings, Engineer's Reports, and/or field pavement inspection reports.

### 1.3.3 FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT OFFICES

The seven (7) FDOT District Offices, specifically the Aviation representatives (currently the Freight and Logistics personnel), provide essential support to the SAPMP update and the ASO-PM. Each District supports the SAPMP's on-going efforts by providing local construction cost information throughout the State. The construction cost information, typically consisting of plans and bid tabulations, are used as the basis of the development maintenance, repair, and major rehabilitation opinions of probable construction costs for planning purposes. Each District Office receives copies of individual Airport Pavement Evaluation Reports for the participating airport facilities located within their respective Districts.

### 1.3.4 CONSULTANT

The Consultant, Kimley-Horn and Associates, Inc., provides technical and administrative support to the ASO-PM for the SAPMP update. The support consists of airfield pavement system inventory updates, performance of PCI Surveys in accordance with ASTM **D5340-12 "Standard Test Method for Airport Pavement Condition Index Surveys,"** evaluation and reporting of the pavement condition in accordance with the FAA Advisory Circular **150/5380-7B "Airport Pavement Management Program (PMP)."**

The Consultant Team consists of Kimley-Horn, Airfield Pavement Management Systems, LLC., and AVCON, Inc.

A brief description of the general scope of work undertaken to update the SAPMP includes but is not limited to:

- ▶ **Research and evaluation of existing record documentation** was performed to identify construction projects that have taken place since the most recent major update of the SAPMP. This data is used to update the pavement inventory and network definition.
- ▶ **An update to the existing Network Definition Map** was made to reflect geometric changes, pavement composition updates, and section characterization. Furthermore, an update to the PCI Survey sample units were made to reflect the field investigation efforts.
- ▶ **A functional pavement evaluation with PCI Survey inspections** was completed on all airfield pavements maintained by the Airport. The PCI Survey procedure, as defined by ASTM D5340-12, was used as the basis of the functional pavement evaluation. For this specific evaluation, the sample units defined by prior studies were inspected as to better develop performance models for prediction curves. Pavement subject to construction or anticipated construction during scheduled PCI Survey inspection or within 2 years were omitted from inspection based on confirmation of airport personnel.
- ▶ **Condition Analysis** was performed based on the distress data observed, rated, measured, and recorded in accordance with the ASTM D5340-12 for the calculation of PCI values and ratings. The results of the current condition analysis were used in concert with the historic PCI Survey data and construction work history to develop performance models to forecast future PCI values for each section for a 10-year study duration.
- ▶ **Maintenance, Repair, and Rehabilitation Planning** was performed predicated on the results of the condition analysis with updated policies and planning-level unit costs. The policies, or M&R policies, have been updated to reflect standard practices for maintenance, repair, and major rehabilitation as defined by the FAA **AC 150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements.”** Planning-level unit costs were developed based on representative construction bid tabulations provided by participating airports. The bid tabulations consisted of limited airfield pavement construction projects that took place between 2009 and 2015 at participating airports.

### **1.4 Purpose of District Pavement Evaluation Report**

The District pavement evaluation report discusses the work performed, a summary of findings, condition analysis results, and recommendations for maintenance, repair, and major rehabilitation (M&R) planning associated with the SAPMP system update. It also briefly describes the procedures used to ensure that the appropriate engineering and scientific standards of care, quality, budget, schedules, and safety requirements were implemented during the performance of this work.

This document is intended to serve as a summary of the District's participating airports airfield pavement facility condition and long-term major rehabilitation needs. Furthermore, the purpose of this District Summary document is to provide:

- Information on the pavement management principles, objectives, and methods used to update the existing program;
- Provide the average results of the PCI survey and analysis at each District's participating airport.
- Provide the results of the maintenance level activities and major rehabilitation analysis identified for the immediate Year-1 needs and long-term 10-Year project needs on an airport and District-wide basis.

***The identification of rehabilitation needs has been determined at the planning level. Design-level investigation is recommended prior to developing construction-level design documents and budgets.***

In compliance with FAA Grant Assurances 11 and 19; the FDOT SAPMP provides airports with airfield pavement evaluation reports in accordance with FAA **AC 150/5380-7B Airport Pavement Management Program (PMP)** and **AC 150/5380-6C Guidelines and Procedures for Maintenance of Airport Pavements**. The application of the results of a PCI survey are for planning purposes and are limited to the visual observation of deteriorated pavements in limited sampling; design-level investigation is recommended in accordance with the FAA procedures defined in **AC 5320-6F Airport Pavement Design and Evaluation** and **AC 150/5370-11B Use of Nondestructive Testing in the Evaluation of Airport Pavements**. The aforementioned ACs provide the design-level material properties of in-situ pavement and subgrade layers for the determination of appropriate rehabilitation actions. The FDOT Statewide Airfield Pavement Management Program is organized to provide airports with planning-level data and does not intend to preclude the responsible engineer in 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.

### **1.5 History of the Program**

In 1992, the FDOT implemented the SAPMP to understand the pavement conditions at public airports in the FAS, systematically update pavement infrastructure information, and assist airport operators with recommendations of pavement maintenance, repair, and major rehabilitation needs. The 1992 SAPMP implementation provided the FDOT and the

participating airports valuable information for establishing and performing timely and appropriate pavement rehabilitation.

During the 1992-1993 implementation and again during the 1998-1999 updates; the SAPMP performed the development with proprietary software for pavement management system analysis. This development allowed for the creation of pavement management database file system populated with airport attributes and condition data. The pavement management database was used to establish maintenance, repair, and rehabilitation policies; consider planning-level unit costs; and develop recommendations for performing pavement maintenance. This system, known as AIRPAV, was initially developed during the 1992-1993 SAPMP implementation for the analysis of distress data. The AIRPAV system was used again in the 1998-1999 SAPMP update.

In 2004, the SAPMP system update included the review of the AIRPAV software compared to other industry available non-proprietary software packages. As a result of this review, MicroPAVER™ (currently known as PAVER™) was selected for implementation of the system update. MicroPAVER™ was developed by the U.S. Army Corps of Engineers Construction Engineering Research Laboratory for pavement management. Data from the 1998-1999 FDOT SAPMP update, which was built upon the initial 1992-1993 implementation of AIRPAV, was reviewed and converted to be compatible with the MicroPAVER™ system. This data conversion included all documented pavement facilities, classifications, types, histories, geometries, PCI condition data and pertinent attributes gathered from airport feedback at the time. This information was used to develop the inventory of each participating airport's pavement facilities in a consistent format. This was the development of Airfield Pavement Network Definition Exhibits. These inventory exhibits visually depicted the branch, section, and sample units that were based upon the pavement construction history and composition information provided by each airport.

In the 2006-2008 system update, the SAPMP was updated again with continued use of the MicroPAVER™ system. Based on the distress data collected, a maintenance repair and major rehabilitation planning program was developed for each airport. As part of this SAPMP update, the procedures for the inspection and the collection of the pavement distress data were documented, and an interactive website (<http://www.dot.state.fl.us/aviation/pavement.shtm>) was established for input of data.

In the 2010-2012 system update, the SAPMP was updated using new global positioning system (GPS) integrated technology to digitally collect pavement distress data. Interactive geographic information system (GIS) map files were developed from updated Airfield Pavement Network Definition Exhibits to aid pavement condition inspectors in the collection of sample distress data. The data collected was utilized to develop pavement performance models to predict future pavement PCI values and make recommendations for major rehabilitation.

In the 2013-2015 system update, the SAPMP integrated PAVER™ and FieldInspector™ with the use of GPS and GIS capable field tablets. Furthermore, the update included continued adherence to the ASTM **D5340-12 "Standard Test Method for Airport Pavement Condition Index Surveys."** The ASTM update consisted of refinement of

distress definition types and deduction values for select asphalt concrete and Portland Cement Concrete distresses.

## 1.6 Federal Aviation Administration (FAA)

Currently, airports participating in the Airport Improvement Program (AIP) Grant Program are required by the FAA to develop and implement a pavement maintenance program to be eligible for funding (FAA Advisory Circular **150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements”** and **150/5380-7B “Airport Pavement Management Program (PMP)”**). This program requires detailed inspection of airfield pavement conditions by trained personnel. The inspections are required to be performed at least once a year using the PASER method or every three years if the pavement is inspected as defined by the PCI survey procedure in accordance with the ASTM **D5340-12 “Standard Test Method for Airport Pavement Condition Index Surveys.”**

In general, adherence to the Advisory Circulars are mandatory for all 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.”

## 1.7 FDOT SAPMP Objectives and Components

The FDOT SAPMP is a program that provides the FAS support in implementing and/or maintaining a network-level Pavement Management Program in a consistent and regularly scheduled manner.

In accordance with FAA AC **150/5380-7B “Airport Pavement Management Program (PMP)”** an effective Pavement Management Program consists of a system that achieves specific objectives. The FDOT SAPMP objectives are as follows:

### 1.7.1 PROGRAM OBJECTIVES

- 1 A systematic means for collecting and storing information regarding existing pavement structure and condition.
- 2 An objective and repeatable system for evaluating pavement condition.
- 3 Procedures for predicting future pavement condition.
- 4 Procedures for modeling both past and future pavement performance conditions.
- 5 Procedures to determine the budget requirements to meet management objectives, such as the maintenance, repair, and major rehabilitation budget required to keep a pavement at a specified PCI level or the budget required to improve to target PCI level.
- 6 Procedures for formulating and prioritizing maintenance, repair, and major rehabilitation projects.

The objectives are accomplished by the following components:

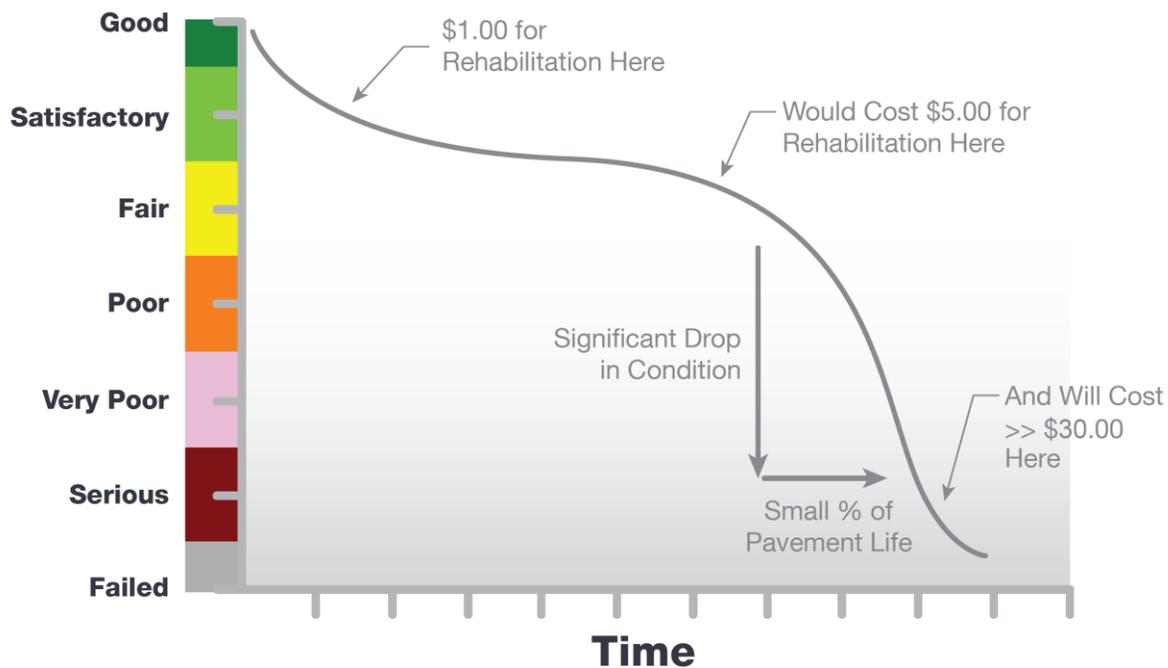
### 1.7.2 PROGRAM COMPONENTS

- A. Database

- B. Pavement Inventory
- C. Pavement Structure
- D. Pavement Work History
- E. Pavement Condition Data
- F. Pavement Performance Modeling for the Prediction/Forecast of PCI
- G. Maintenance, Repair, and Major Rehabilitation Policies and Budget Simulation

A well-maintained network-level pavement management program may provide airport staff a better understanding of the airfield pavement performance for developing and planning for specific maintenance, repair, and major rehabilitation projects. The understanding of specific distress types and severities will assist the airport in addressing pavement maintenance and repair with the appropriate treatments as defined by the FAA Advisory Circular **150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements.”** The development of projects with an understanding of system inventory, deterioration details, and pavement condition forecasts may assist airport staff in developing practical rehabilitation actions and budgets. Furthermore, the understanding of pavements’ past performance and forecasted condition may assist airport staff in addressing pavement rehabilitation in a timely and cost-effective manner. **Figure 1.7.2 (a) Typical Pavement Condition Life Cycle**, which is based on the FAA Advisory Circular **150/5380-7B “Airport Pavement Management Program (PMP).”** **Figure 1.7.2 (a) Typical Pavement Condition Life Cycle**, depicts a general duration of a pavement section and identifies the ideal condition to perform rehabilitative treatments at an optimal cost rather than allowing significant increase in rate of deterioration that would result in increased costs.

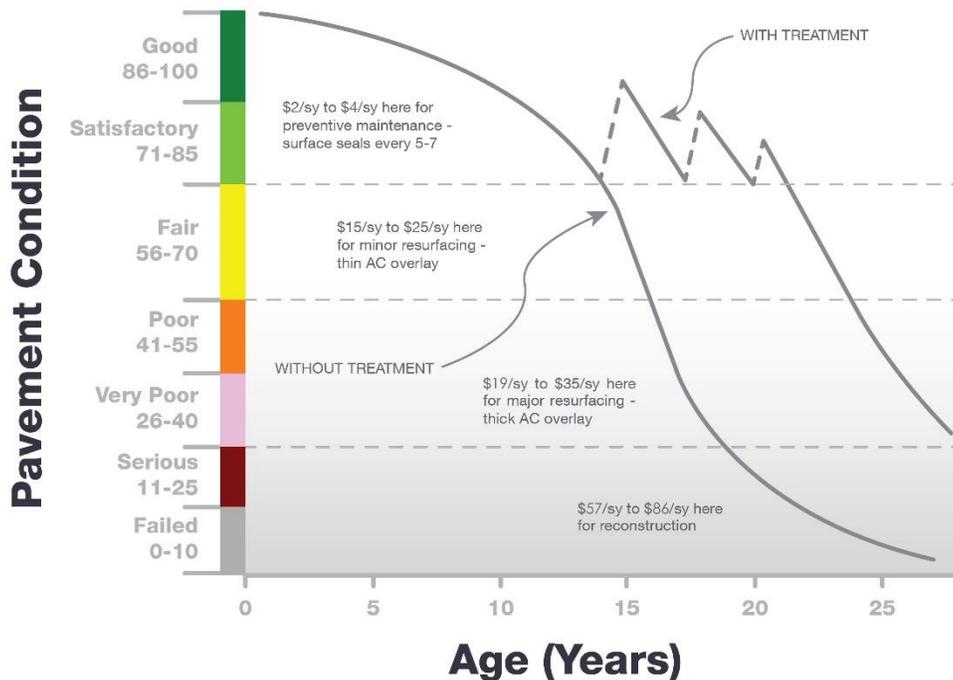
*Figure 1.7.2 (a) Typical Pavement Condition Life Cycle*



*\*Figure is for conceptual purposes only – unit costs are not specific to airfield pavements (AC vs PCC).*

**Figure 1.7.2 (b) General Pavement Treatments by Condition Range** depicts generic flexible asphalt concrete (AC) pavement treatments that are effective at specific condition ranges. This graphic is a general concept and will vary based on pavement surface type and overall composition. The intent is to convey various treatment types that would be effective based on the condition of the pavement along the deterioration model.

*Figure 1.7.2 (b) General Pavement Treatments by Condition Range*



Pavement maintenance, repair, and major rehabilitation would be quite anticipatory if all pavements behaved as depicted in **Figures 1.7.2 (a) and 1.7.2 (b)**, however pavement condition performance vary significantly based on several factors. Factors that contribute to a pavement section’s condition and deterioration performance may include: functional design life, material type, material construction quality, climatic conditions, aircraft loading type and frequency, non-aircraft loading type and frequency, maintenance history, subgrade conditions, and other infrastructure in the vicinity. The list of factors is not all-inclusive of all factors that may contribute to a pavement’s life cycle, it is intended to clarify that unique conditions certainly will affect a pavement’s deterioration.

**Figures 1.7.2 (c) and Figure 1.7.2 (d)** depict visual conditions of pavement facilities, for both AC and PCC respectively, with approximated PCI ranges and corresponding repair and rehabilitation measures.

*Figure 1.7.2 (c) Flexible Asphalt Concrete*

	PCI Range	Representative PCI	Representative Pavement Surface	Rehabilitation Activities
Routine Maintenance	<b>86-100</b>	<b>90</b>		Pavements with PCI values above 85, or 'Good', may require periodic joint/crack sealing and local patching.
Pavement Preservation	<b>65-85</b>	<b>70</b>		Pavements with PCI conditions ranging from 'Fair' to 'Satisfactory' may require surface treatments (seal coat), thin overlays, and/or joint/crack sealing.
Major Rehabilitation	<b>40-64</b>	<b>50</b>		Pavements that have deteriorated below a PCI 65 (but above 39), or within the range of 'Very Poor' to 'Fair' conditions, may require major rehabilitation such as pavement mill and overlay or partial full-depth reconstruction.
Major Reconstruction	<b>0-39</b>	<b>15</b>		Pavements that have deteriorated below a PCI 40, or within the range of 'Failed' to 'Very Poor' conditions, may require major reconstruction.

*Figure 1.7.2 (d) Rigid Portland Cement Concrete*

	PCI Range	Representative PCI	Representative Pavement Surface	Rehabilitation Activities
Routine Maintenance	<b>86-100</b>	<b>90</b>		Pavements with PCI values above 85, or 'Good', may require periodic joint/crack sealing and local patching.
Pavement Preservation	<b>65-85</b>	<b>70</b>		Pavements with PCI conditions ranging from 'Fair' to 'Satisfactory' may require patches and/or joint/crack sealing.
Major Rehabilitation	<b>40-64</b>	<b>50</b>		Pavements that have deteriorated below a PCI 65 (but above 39), or within the range of 'Very Poor' to 'Fair' conditions may require major rehabilitation such as slab replacement and PCC restoration activity.
Major Reconstruction	<b>0-39</b>	<b>15</b>		Pavements that have deteriorated below a PCI 40, or within the range of 'Failed' to 'Very Poor' conditions, may require major reconstruction.

## 1.8 References

The following reference documents were 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, inspection guidelines, and recommended methods of repair:

- ASTM D5340-12 “Standard Test Method for Airport Pavement Condition Index Surveys.”
- FAA Advisory Circular 150/5380-7B “Airport Pavement Management Program.”
- FAA Advisory Circular 150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements.”
- FAA Advisory Circular 150/5320-6F “Airport Pavement Design and Evaluation.”
- Department of the Air Force, Air Force Civil Engineer Center “Engineering Technical Letter (ETL) 14-3: Preventive Maintenance Plan (PMP) for Airfield Pavements.”
- Unified Facilities Criteria (UFC) 3-260-16FA 16 “Airfield Pavement Condition Survey Procedures Pavements.”
- Unified Facilities Criteria (UFC) 3-260-03 “Airfield Pavement Evaluation.”
- Pavement Management for Airports, Roads, and Parking Lots 2<sup>nd</sup> Edition, M.Y. Shahin.



# Chapter 2

## Chapter 2 – Methodology

An effective pavement management program incorporates 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 Advisory Circular *150/5380-7B “Airport Pavement Management Program (PMP).”*

### 2.1 Airfield Pavement Database

The SAPMP program has historically utilized PAVER™ (formerly MicroPAVER™); the current update has maintained the use of the PAVER™ 7.0 version of the software. The PAVER™ software application was developed by the U.S. Army Construction Engineering Research Laboratory sponsored by the FAA, Federal Highway Administration, U.S. Army, U.S. Air Force, and the U.S. Navy to meet the objectives of an effective pavement management system. The SAPMP consists of a network-level database of the airport’s airfield pavement facilities that are part of the program. PAVER™ can achieve the following pavement management objectives: a manageable inventory system, the analysis of the current condition of pavements in accordance with the ASTM D5340, the development of pavement performance models to forecast conditions, and the development of maintenance, repair, and major rehabilitation recommendations based on budgetary scenarios.

PAVER™ inventory management is based on a tiered organizational structure that consists of networks, branches, and sections, with the section being the smallest unit of management. Critical elements of an effective pavement management program are maintained within the network-level PAVER™ database. These elements typically consist of pavement inventory characteristics, pavement structure, work history, historic condition records, and analytical customization.

The SAPMP System Update consisted of the conversion of the previous database from a PAVER™ version 6.5 to a version 7.0.

### 2.2 Airfield Pavement System Inventory

An airfield pavement system inventory typically maintains the location of all runways, taxiways, and aprons; geometric characteristics; type of pavement structure, year of construction and/or last major rehabilitation; and general composition details of the pavement.

The pavement inventory for an airport’s airfield is an assembly of pavement infrastructure information that builds an inventory of branches and sections that codifies the airport’s airfield pavement network. General geometry characteristics, estimated length, width, functional classification, pavement surface type, and operational function are among the characteristics identified at this initial phase in the pavement management process. The development of a pavement inventory that reasonably reflects the airport’s airfield pavement facilities that are maintained by the airport provides a defined scope of the

inspection and analysis efforts. As in the past, the SAPMP scope of work is specific to the airport-maintained airfield pavements as defined in the field network definition exhibits presented to current airport personnel.

A critical input to the pavement system inventory and network definition in the development of the SAPMP update is the date of last major rehabilitation/construction performed on the pavement assets that would set the asset at a PCI of 100 and a condition rating of Good. The airport provided a limited combination of record drawings, reports, and staff input that was pertinent information in developing the construction history of the airport's pavements from inception. Major rehabilitation/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 replace, mill and overlay, new construction, and/or complete reconstruction.

Aerial imagery was obtained through the FDOT Surveying & Mapping Office's *Aerial Photo Look Up System (APLUS)*. This spatially projected imagery was utilized with computer-aided drafting software (AutoCAD) in concert with geographical information system software (ArcGIS) to develop a planning-level representative model that reasonably reflects the pavement assets at the airport.

### 2.2.1 PAVEMENT MANAGEMENT PROGRAM NETWORK DEFINITION TERMINOLOGY

There are several terms that are common in the communication of the results of the SAPMP System Update, these terms are defined as follows:

#### **Pavement Network**

A pavement network is a logical unit for organizing pavements into a structure for pavement management. A network will typically consist of one or more pavement *branches*, which are typically comprised of one or many pavement *sections*. The network is the starting point of the hierarchy of pavement management organization. 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.

The SAPMP System Update consists of research and evaluation of existing record documentation for the participating airports' airfield facilities. The pavement network is typically limited to the pavement facilities subject to aircraft use that is also maintained by the airport owner and eligible for public funding.

#### **Pavement Branch**

A pavement branch, also known as a facility, is a logical unit of generally identifiable pavement of a network with distinct functional classification. For example, within an airfield each runway, taxiway, or apron is considered a branch. A branch must consist of at least one section.

**Pavement Section**

A pavement section, also known as a feature, is the most specific management unit when considering the application and selection of maintenance, repair, and/or major rehabilitation treatments on an area of pavement within a branch. Each branch consists of at least one section but may consist of more if pavement feature characteristics are distinct throughout the branch. Characteristics considered when subdividing branches into sections include, but are not limited to: pavement structure, type, age, condition, and function; traffic composition and frequency (current and future); geometric location; construction history; and other related infrastructure features (e.g. drainage). A pavement section is defined as a subordinate of a pavement branch, which is a subordinate of a “parent” pavement network.

**Pavement Sample Unit**

A pavement sample unit is a subdivision of a pavement section that has a standard size range: twenty (20) continuous slabs (±8 slabs) for Portland Cement Concrete (PCC) pavement and 5,000 contiguous square feet (±2,000 ft<sup>2</sup>) for flexible asphalt concrete (AC) or porous friction course pavements.

*Table 2.2.1 Airfield Pavement Database Network Definition Terminology*

PMS Network Level	Common Definition	Airport Example
Network	Overall pavement assets maintained by the Airport	“Tallahassee International Airport – Airfield Pavements”
Branch Name	Commonly defined asset name as established by Airport and by use	“Runway 18-36”
Branch ID	Codified shorthand name for commonly defined asset established for database identification	“RW 18-36” RW, Branch Use, “Runway” 18-36, Runway Facility
Section ID	Codified identification for pavement asset that is distinct by the following: <ul style="list-style-type: none"> <li>• Pavement Composition</li> <li>• Construction Work History</li> <li>• Aircraft Traffic</li> <li>• Condition Records</li> </ul>	“6105”
Sample Unit	A numeric identification of an area of pavement (5,000±2,000 SF of AC or 20±8 slabs of PCC) that has been inspected in accordance with ASTM D5340-12.	“300”

## **2.3 Airfield Pavement Structure**

### **2.3.1 PAVEMENT STRUCTURE TYPES**

Airport airfield pavements are constructed to provide adequate support for the loads imposed by aircraft and produce a firm, stable, smooth, all-year, all-weather surface free of debris or other particles that may be blown or dislocated by propeller wash or jet blast. Typical pavement planning and design requires coordination of factors that include but are not limited to; subgrade conditions, material layer types, aircraft fleet mix (type, frequency, and traffic growth), and functional use. A pavement structure is composed of constructed layers that consist of subgrade, subbase, base course, structural courses, and surfaces courses. For the FDOT SAPMP, two major pavement structure types are classified for evaluation and analysis: Flexible Asphalt Concrete Surface and Rigid Portland Cement Concrete Surface. Additionally, Composite Structures known as Whitetopping Pavements are also present at limited airports within the Florida Airports System; these unique pavement structures are evaluated separately.

#### **Flexible Asphalt Concrete Surface**

A pavement comprised of aggregate mixture with an asphalt cement binder. The FDOT SAPMP consists of 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)***

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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)***

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A flexible pavement section consisting of aggregate mixture with asphalt cement binder layered on an existing flexible AC pavement section. Flexible airfield pavement sections are AAC when a pavement rehabilitation consists of a pavement milling operation and a resurfacing of asphalt layers; or a direct overlay of asphalt concrete without surface preparation.

##### ***Asphalt Concrete Overlaid on Portland Cement Concrete (APC)***

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

### **Rigid Portland Cement Concrete Surface**

A pavement comprised of aggregate mixture with a Portland Cement binder. The FDOT SAPMP recognizes Portland Cement Concrete (PCC) as the primary rigid pavement section.

#### ***Portland Cement Concrete (PCC)***

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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 must provide a texture of nonskid qualities, prevent the infiltration of surface water into the subgrade, and provide structural support to the airplanes. Rigid pavement construction requires the layout of appropriately designed joint spacing.

### **Composite Structure – Whitetopping Pavement**

A composite pavement comprised of relatively thin Portland Cement Concrete overlaid on an existing flexible asphalt concrete pavement structure. There are three (3) types of Whitetopping Pavements; Conventional (WHT), Thin (TWT), and Ultra-Thin (UTW).

#### ***Conventional Whitetopping (WHT)***

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A composite pavement structure consisting of a modified PCC overlaid on an existing flexible AC pavement section area. The modified PCC layer is typically greater than 8 inches in thickness.

#### ***Thin Whitetopping (TWT)***

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A composite pavement structure consisting of a modified PCC overlaid on an existing flexible asphalt concrete pavement section. The modified PCC layer is typically between 4 and 8 inches in thickness.

#### ***Ultra-Thin Whitetopping (UTW)***

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A composite pavement structure consisting of a modified PCC overlaid on an existing flexible asphalt concrete pavement section. The Portland Cement Concrete layer is typically between 2 and 4 inches in thickness.

## **2.4 Airfield Pavement Work History**

### **2.4.1 AIRFIELD PAVEMENT RECORD KEEPING**

It is strongly recommended that airports maintain records of all airfield construction and maintenance related to the pavement facilities. A history of all maintenance and repair performed and its associated costs (construction and soft costs) can provide valuable information on the effectiveness of various treatments on pavements. An airport should maintain detailed records of maintenance (routine, emergency, and proactive) activities. The records should consist of the following:

1. Location and Limits of Work.
2. Types and Severity of Distresses Repaired.
3. Type of Work.
4. Cost of Work.
5. Supporting Documents (contract documents, construction drawings, specifications, bid tabulations, repair product, photograph records, etc.).

## **2.5 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 through increased roughness and/or fatigue cracking caused by successive and heavy aircraft traffic.

This study does not consist of a study or analysis of each individual airport's airfield aircraft fleet mix or traffic operations. However, it is strongly recommended that airports incorporate the requirements of FAA Advisory Circular **150/5320-6F Airport Pavement Design and Evaluation** when developing design-level rehabilitation activities. The AC provides guidance on incorporation of aircraft traffic fleet mix data.

## **2.6 Airfield Pavement Condition Index (PCI) Survey**

### **2.6.1 PCI SURVEY METHODOLOGY**

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

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 be an indicator of structural distress. The functional condition analysis assesses the rating of the operational surface. A visual PCI Survey Inspection does not predict the remaining structural life of a pavement section, or its ability to support loads. The functional condition

determined by the PCI method can provide a cost-effective means to plan for pavement rehabilitation projects. The 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.

**2.6.2 PAVEMENT DISTRESS TYPES**

For each section, the severity and quantity of defined distresses are recorded and then analyzed in accordance with the ASTM D5340-12 standard. The standard identifies 17 distinct flexible asphalt concrete distress types and 16 distinct rigid Portland Cement Concrete distress types.

*Table 2.6.2 (a) Pavement Distress Types – Flexible Asphalt Concrete-Surfaced Airfields*

<b>Distress</b>	<b>Common Distress Mechanisms</b>
Alligator Cracking	Load / Fatigue
Bleeding	Construction Quality/ Mix Design
Block Cracking	Climate / Age
Corrugation	Load / Construction Quality
Depression	Load / Subsurface
Jet Blast	Aircraft
Joint Reflection - Cracking	Climate / Subsurface Pavement / Traffic Load
Longitudinal/Transverse Cracking	Climate / Construction Quality
Oil Spillage	Aircraft / Vehicle
Patching	Utility / Pavement Repair / Age
Polished Aggregate	Repeated Traffic Loading
Raveling	Climate / Age
Rutting	Load / Fatigue
Shoving	PCC Pavement Growth / Movement
Slippage Cracking	Load / Pavement Bond / Mix Design
Swelling	Climate / Subsurface
Weathering	Climate / Age

*Table 2.6.2 (b) Pavement Distresses Possible Causes – Flexible Asphalt Concrete-Surfaced Airfields*

Classification by Possible Causes			
Load	Climate / Durability	Moisture / Drainage	Others
<ul style="list-style-type: none"> <li>➤ Alligator Cracking</li> <li>➤ Corrugation</li> <li>➤ Depression</li> <li>➤ Patching of Load-based distress</li> <li>➤ Polished Aggregate</li> <li>➤ Rutting</li> <li>➤ Slippage Cracking</li> </ul>	<ul style="list-style-type: none"> <li>➤ Bleeding</li> <li>➤ Block Cracking</li> <li>➤ Joint Reflection Cracking</li> <li>➤ L/T Cracking</li> <li>➤ Patching of climate / durability-caused distresses</li> <li>➤ Shoving from PCC</li> <li>➤ Raveling</li> <li>➤ Weathering</li> <li>➤ Swelling</li> </ul>	<ul style="list-style-type: none"> <li>➤ Alligator Cracking</li> <li>➤ Depression</li> <li>➤ Patching of moisture / drainage caused distress</li> <li>➤ Swelling</li> <li>➤ Raveling</li> <li>➤ Weathering</li> </ul>	<ul style="list-style-type: none"> <li>➤ Oil Spillage</li> <li>➤ Jet Blast Erosion</li> <li>➤ Polished Aggregate</li> </ul>

*Table 2.6.2 (c) Pavement Distresses Possible Effects – Flexible Asphalt Concrete-Surfaced Airfields*

Classification by Possible Effects			
Roughness	Skid / Hydroplaning Potential	FOD Potential	Rate of Deterioration and Maintenance Requirements
<ul style="list-style-type: none"> <li>➤ Corrugation</li> <li>➤ Depression</li> <li>➤ Rutting</li> <li>➤ Shoving of asphalt pavement</li> <li>➤ Swelling</li> <li>➤ Raveling</li> <li>➤ Weathering</li> </ul>	<ul style="list-style-type: none"> <li>➤ Bleeding</li> <li>➤ Depression</li> <li>➤ Polished Aggregate</li> <li>➤ Rutting</li> </ul>	<ul style="list-style-type: none"> <li>➤ Block Cracking</li> <li>➤ Joint Reflection Cracking</li> <li>➤ L/T Cracking</li> <li>➤ Slippage Cracking</li> </ul>	<ul style="list-style-type: none"> <li>➤ All Distresses</li> </ul>

*Table 2.6.2 (d) Pavement Distresses – Rigid Portland Cement Concrete-Surfaced Airfields*

<b>Distress</b>	<b>Common Distress Mechanisms</b>
Blowup	Climate / ASR
Corner Break	Load Repetition / Curling Stresses
Linear Cracking	Load Repetition / Curling Stresses / Shrinkage Stresses
Durability Cracking	Freeze-Thaw Cycling
Joint Seal Damage	Material Deterioration / Construction Quality / Age
Small Patch	Pavement Repair
Large Patch/Utility Cut	Utility / Pavement Repair
Popout	Freeze-Thaw Cycling / ASR / Material Quality
Pumping	Load Repetition / Poor Joint Sealant
Scaling	Construction Quality / Freeze-Thaw Cycling
Faulting	Subgrade Quality / ASR / Inadequate Load Transfer
Shattered Slab	Overloading
Shrinkage Cracking	Construction Quality / Climate
Joint Spalling	Load Repetition / Infiltration of Incompressible Material / Deterioration of Dowel (Load Transfer) Bars
Corner Spalling	Load Repetition / Infiltration of Incompressible Material / Deterioration of Dowel (Load Transfer) Bars
Alkali-Silica Reaction (ASR)	Construction Quality / Climate / Chemical Reaction

*Table 2.6.2 (e) Pavement Distresses Possible Causes – Rigid Portland Cement Concrete-Surfaced Airfields*

Classification by Possible Causes			
Load	Climate / Durability	Moisture / Drainage	Others
<ul style="list-style-type: none"> <li>➤ Corner Break</li> <li>➤ Shattered Slab</li> <li>➤ L/T/D Cracking</li> <li>➤ Pumping</li> <li>➤ Patching of Load-associated distress</li> <li>➤ Spalling</li> </ul>	<ul style="list-style-type: none"> <li>➤ Blowup</li> <li>➤ “D” Cracking</li> <li>➤ Joint Seal Damage</li> <li>➤ Popouts</li> <li>➤ Scaling</li> <li>➤ Patch of Climate/Durability-associated distress</li> <li>➤ Shrinkage Cracking</li> <li>➤ Spalling</li> <li>➤ L/T/D Cracking</li> </ul>	<ul style="list-style-type: none"> <li>➤ Corner Break</li> <li>➤ Shattered Slab</li> <li>➤ Pumping</li> <li>➤ Patching of Moisture/Drainage-associated distress</li> </ul>	<ul style="list-style-type: none"> <li>➤ Settlement / Faulting</li> </ul>

*Table 2.6.2 (f) Pavement Distresses Possible Effects – Rigid Portland Cement Concrete-Surfaced Airfields*

Classification by Possible Effects			
Roughness	Skid / Hydroplaning Potential	FOD Potential	Rate of Deterioration and Maintenance Requirements
<ul style="list-style-type: none"> <li>➤ Blowup</li> <li>➤ Corner Break</li> <li>➤ L/T/D Cracking</li> <li>➤ Shattered Slab</li> <li>➤ Settlement / Faulting</li> <li>➤ Spalling</li> </ul>	<ul style="list-style-type: none"> <li>➤ Settlement / Faulting</li> <li>➤ Spalling</li> </ul>	<ul style="list-style-type: none"> <li>➤ Corner Break</li> <li>➤ L/T/D Cracking</li> <li>➤ “D” Cracking</li> <li>➤ Joint Seal Damage</li> <li>➤ Shattered Slab</li> <li>➤ Popouts</li> <li>➤ Scaling</li> </ul>	<ul style="list-style-type: none"> <li>➤ All distresses</li> </ul>

**2.6.3 PCI SURVEY INSPECTION PROCEDURES**

***Inspection Sampling Rate***

The FDOT SAPMP performs PCI Survey Inspections on sample units defined in the previous update. The sample units are subject to change at the discretion of the inspection personnel and/or to major pavement rehabilitation treatments. Furthermore, access to the sample units based on accessibility or impacts to operations may affect the overall sampling rate effort at each airport. The following **Tables 2.6.3 (a) and (b)** define the sampling criteria used by the FDOT SAPMP. A higher sampling rate may be utilized to achieve a greater statistical confidence should the airport have the available resources to perform PCI Survey Inspections independent of the FDOT SAPMP.

*Table 2.6.3 (a) Recommended Sample Rate Schedule for Flexible Asphalt Concrete*

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

*Table 2.6.3 (b) Recommended Sample Rate Schedule for Rigid Portland Cement Concrete*

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

#### 2.6.4 UPDATES TO THE ASTM D5340-12

Airfield pavement distresses and conditions were surveyed in accordance with the methods outlined in FAA Advisory Circular 150/5380-6C and ASTM D5340-12. These procedures define distress type, severity, and quantity for sampling areas within each defined pavement section area to analyze and determine the PCI value and condition rating. During the 2013-2015 System Update, the incorporation of the significant changes to the ASTM D5340 (version D5340-12) resulted in adjusted pavement condition indices on pavement sections subject to the distress types updated. Furthermore, the revision of the PCI deduction curves and the separation of distress types from the original, such as Weathering and Raveling, have in select cases increased the PCI value of the section without any rehabilitation performed.

##### ***Flexible Asphalt Concrete Pavement Distress Updates***

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The previous methodology which featured “(52) Weathering and Raveling” distress has been separated into two distresses “(52) Raveling” and “(57) Weathering.” Previously, areas that were recorded as “Weathering and Raveling” were considered as one distress with a high deduction. Based on the updated methodology, in certain situations where “Weathering” only exists and does not meet the definition of “Raveling,” the PCI deduction is not as high as the former “Weathering and Raveling.” Therefore, areas identified only as “(57) Weathering” based on current ASTM standards, which were previously identified as “(52) Weathering and Raveling,” may be subject to an improvement in PCI. In instances where pavement PCI has increased due to this update, it is not due to an improvement in actual condition, however indicative of the adjusted distress deterioration effects.

##### ***Rigid Portland Cement Concrete Pavement Distress Updates***

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The previous methodology defined “(70) Scaling” as a distress that consisted of surface deterioration caused by construction defects, material defects, and environmental factors. The distress included Alkali-Silica Reaction, also known as ASR. The current methodology has separated Alkali-Silica Reaction as a distress identified as “(76) Alkali-Silica Reaction / ASR.” As a result, the previous “(70) Scaling” numerical deduction contribution to the PCI has been reduced. Previous inspections that recorded “(70) Scaling,” and currently do not exhibit “(76) Alkali-Silica Reactivity / ASR” may potentially see an increase in PCI. Additionally, “(73) Shrinkage Cracks” has been redefined as “(73) Shrinkage Cracking”. Shrinkage Cracking is characterized in two forms; drying shrinkage and plastic shrinkage. Drying shrinkage occurs over time as moisture leaves the pavement, it develops when hardened pavement continues to shrink as excess water not needed for cement hydration evaporates. It forms when subsurface resistance to the shrinkage is present and may extend through the entire depth of the slab. Plastic shrinkage can be caused by both atmospheric conditions and construction. Plastic shrinkage caused by atmospheric conditions develops when there is rapid loss of water in the surface of recently placed pavement. High winds or low humidity are contributing factors to evaporation. These shrinkage cracks can appear as a series of parallel cracks, usually 1 to 3 feet apart and do not extend very deep into the pavement’s surface. Plastic shrinkage caused by construction can form from over finishing/overworking of the pavement during construction. These shrinkage cracks appear as a series of inter-connected hairline cracks, or pattern cracking, and are often observed throughout most of the slab surface. This condition is also referred to as map cracking or crazing.

*Table 2.6.4 Summary of Updates to ASTM D5340-12*

Distress Updates to Reflect ASTM 5340-12				
Use and Surface Type	Updated Distress	Former Distress in Prior to 5340-10	Deduction Curve	Potential Effect
AC/AAC/ APC Airfield	(52) Raveling - Low	(52) Weathering and Raveling - Low	No Change	N/A
	(52) Raveling - Medium	(52) Weathering and Raveling - Medium	No Change	N/A
	(52) Raveling - High	(52) Weathering and Raveling - High	No Change	N/A
	(57) Weathering - Low	N/A – was part of ‘Weathering and Raveling’	New	Increase in PCI with no maintenance
	(57) Weathering - Medium	N/A – was part of ‘Weathering and Raveling’	New	Increase in PCI with no maintenance
	(57) Weathering - High	N/A – was part of ‘Weathering and Raveling’	New	Increase in PCI with no maintenance
PCC Airfield	(70) Scaling - Low	(70) Scaling, Map Cracking, and Crazing - Low	New	Increase in PCI with no maintenance
	(70) Scaling - Medium	(70) Scaling, Map Cracking, and Crazing - Medium	New	Increase in PCI with no maintenance
	(70) Scaling - High	(70) Scaling, Map Cracking, and Crazing - High	New	Increase in PCI with no maintenance
	(76) Alkali Silica Reaction – Low	N/A – was part of ‘Scaling, Map Cracking, and Crazing’	New	Increase in PCI with no maintenance
	(76) Alkali Silica Reaction – Medium	N/A – was part of ‘Scaling, Map Cracking, and Crazing’	New	Increase in PCI with no maintenance
	(76) Alkali Silica Reaction – High	N/A – was part of ‘Scaling, Map Cracking, and Crazing’	New	Increase in PCI with no maintenance
	(73) Shrinkage Cracking	(73) Shrinkage Cracking	No Change	Prior distress types identified as ‘Scaling, Map Cracking, and Crazing’ may now be identified as ‘Shrinkage Cracking’



# Chapter 3

## Chapter 3 – Airfield Pavement System Inventory

A significant element of an effective airfield pavement management system is the appropriate record keeping of changes due to construction or operational use of the pavement facilities. 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 for 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

A significant element to the development and update of the SAPMP has been to identify recent and anticipated construction activity that affects the pavement composition and performance. With cooperation from airport personnel, the project team was able to gather airport specific information that included changes in pavement geometry, new or reconstructed pavements since the last inspection and anticipated pavement rehabilitation that would negate the findings of a visual inspection done in the short term. At the beginning of each phase for this update, FDOT SAPMP participants responded to the Aviation and Spaceports Office with project specific information on the recent and anticipated work. In addition to the construction activity, updates to pavement facility designators (i.e. re-designation, magnetic declination, and/or decommissioning) were reported. Lastly, the project team leaders performing field inspections confirm with airport staff on site previous, recent, and anticipated construction projects that may affect the airfield pavement facilities.

This information was considered in conjunction with aerial imagery provided by FDOT during the updating of pavement section areas on each airport's Airfield Pavement Network Definition Exhibit. The previous, recent, and anticipated construction activity information provided by airport staff has been graphically depicted relative to the branch, section, and sample unit definition on the Airfield Pavement System Inventory Exhibit for each participating airport. This information was also included in the PAVER database updates for the SAPMP.

The airports provided a limited combination of record drawings, reports, and staff input that was pertinent information in developing the construction history of the airport's pavements from inception. Major rehabilitation/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 replace, mill and overlay, new construction, and/or complete reconstruction. These pavements were not formally subject to a PCI Survey and actual conditions may vary. Furthermore, any localized maintenance

or repair performed that would improve the PCI will be considered in the condition analysis, if performed within inspection areas.

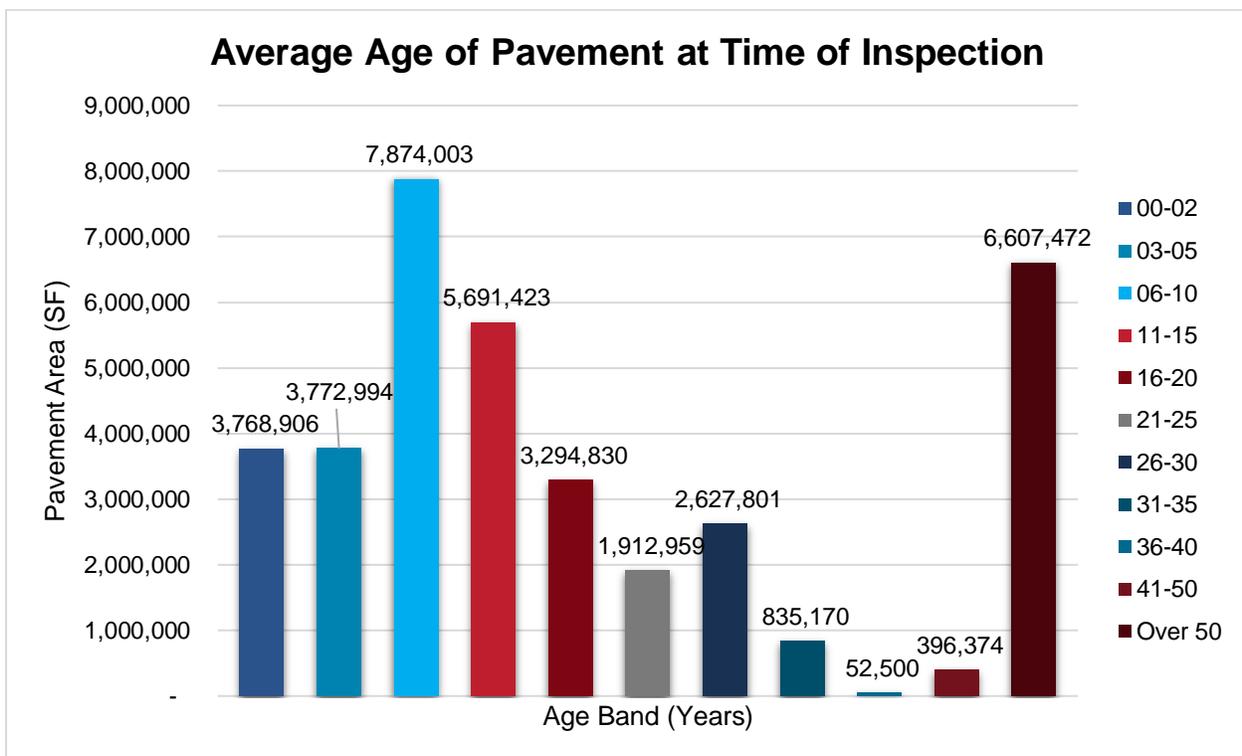
The **Airfield Pavement Network Definition Exhibit** provides details to the PCI Survey inspection efforts. The exhibit identifies the pavement facilities, surface type, section definition, and sample unit delineation.

The **Airfield Pavement System Inventory Exhibit** provides details to the work history updates communicated by each 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 Airports and, if constructed, observed in the field.

### 3.1.2 ESTIMATED PAVEMENT AGE

Standard pavement design practice considers a design life of a 20-year period. Design inputs typically require subgrade soil conditions, pavement section layer material characteristics, and anticipated loading (aircraft fleet mix) for the design-life period. Based on the review of the historic airfield pavement construction, **Figure 3.1.2** summarizes the average age of the pavement sections at the time of the PCI survey inspection. Age is determined to be the number of years since any 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.

*Figure 3.1.2 Average Age of Pavements at Inspection*



The estimation of the pavement age is based on information requested and provided by participating airports. Additionally, data collected in the prior system updates since 1992 have been relied upon.

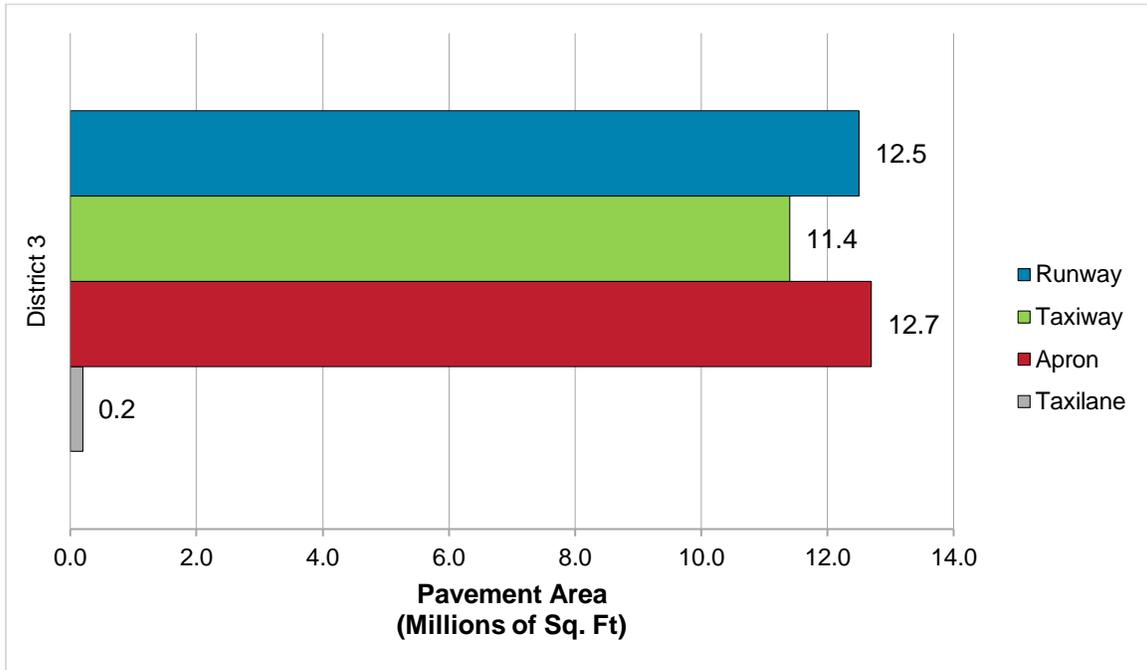
**3.1.3 FUNCTIONAL USE CLASSIFICATION**

Pavements are subject to varying aircraft loading patterns based on utilization and overall operations. For this SAPMP Update, the following categories of airfield functional use have been identified and associated with the following possible pavement branch facilities: Apron, Runway, Taxiway, and Taxilane. **Table 3.1.3** summarizes the identified pavements’ functional use by area by airport. The pavement areas reviewed exclude shoulder pavement facilities. Separately, **Figure 3.1.3 (a)** depicts the district airfield pavement areas by facility use, and **Figure 3.1.3 (b)** provides a breakdown of airfield pavement area by facility use at each participating airport for the District.

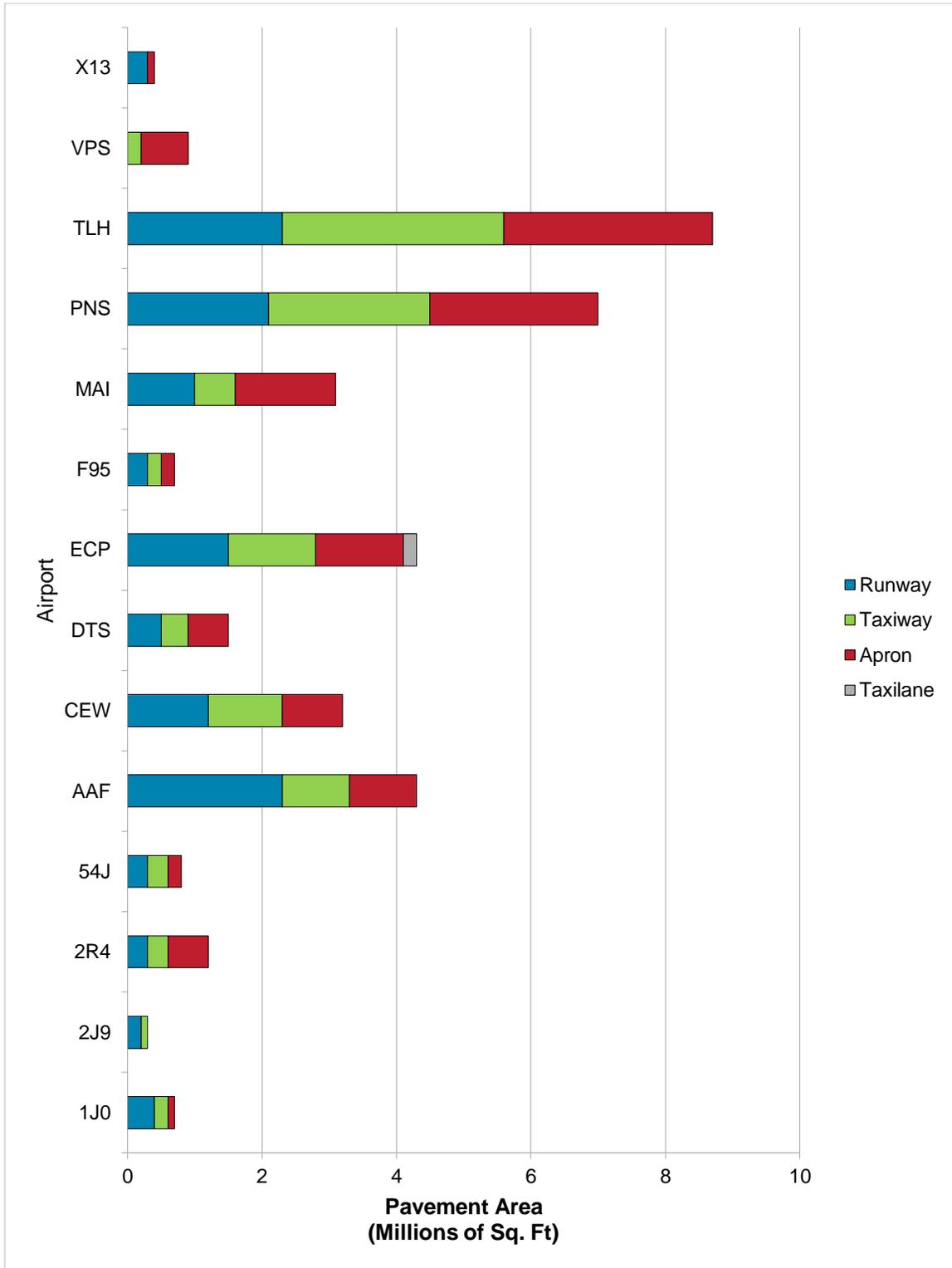
*Table 3.1.3 Functional Classification Use by Area by Airport*

Network ID	Airport Type	Pavement Area (Square Feet)				Overall
		Runway	Taxiway	Taxilane	Apron	
1J0	GA	406,178	239,702	33,062	98,648	777,590
2J9	GA	223,200	142,046	-	-	365,246
2R4	GA	277,500	330,346	-	607,749	1,215,595
54J	GA	250,077	261,708	27,418	191,841	731,044
AAF	GA	2,303,994	966,994	-	979,973	4,250,961
CEW	GA	1,200,000	1,108,186	-	865,787	3,173,973
DTS	GA	500,084	384,712	-	568,955	1,453,751
ECP	PR	1,500,000	1,301,990	153,255	1,287,248	4,242,493
F95	GA	279,750	171,778	-	245,220	696,748
MAI	GA	970,373	584,559	-	1,488,818	3,043,750
PNS	PR	2,078,396	2,401,917	-	2,497,209	6,977,522
TLH	PR	2,251,050	3,296,868	-	3,075,779	8,623,697
VPS	PR	-	197,645	-	694,321	891,966
X13	GA	302,918	9,699	-	77,479	390,096
<b>OVERALL DISTRICT</b>		<b>12,543,520</b>	<b>11,398,150</b>	<b>213,735</b>	<b>12,679,027</b>	<b>36,834,432</b>

*Figure 3.1.3 (a) District Pavement Area by Functional Classification Use*



*Figure 3.1.3 (b) Functional Classification Use by Area by Airport*



*\*All areas are rounded to the nearest 0.1 Million Square Feet.*



# Chapter 4

# Chapter 4 – Airfield Pavement Condition

The examination of specific distress types (with causes attributed to load, climate, or other defined distress mechanism), determination of the severity of distress, and determination of the quantity of distress manifestation are required in the computation of a PCI value. The PCI provides valuable information that can be used to determine the existing condition of the pavement, possible cause of the pavement deterioration, and eventually aid in the planning of the rehabilitation of pavements. It should be noted that the PCI method of pavement condition evaluation is strictly a visual and functional evaluation. Further evaluation of the pavement condition may be necessary for design and/or project-level determination of pavement rehabilitation.

## 4.1 Airfield Pavement Condition Index (Latest Inspection)

### 4.1.1 DISTRICT-LEVEL ANALYSIS

The following **Table 4.1.1** summarizes the pavement condition analysis at each airport within the District based on the most recent PCI Survey inspection results.

*Table 4.1.1 Latest Condition – Summary by Airport*

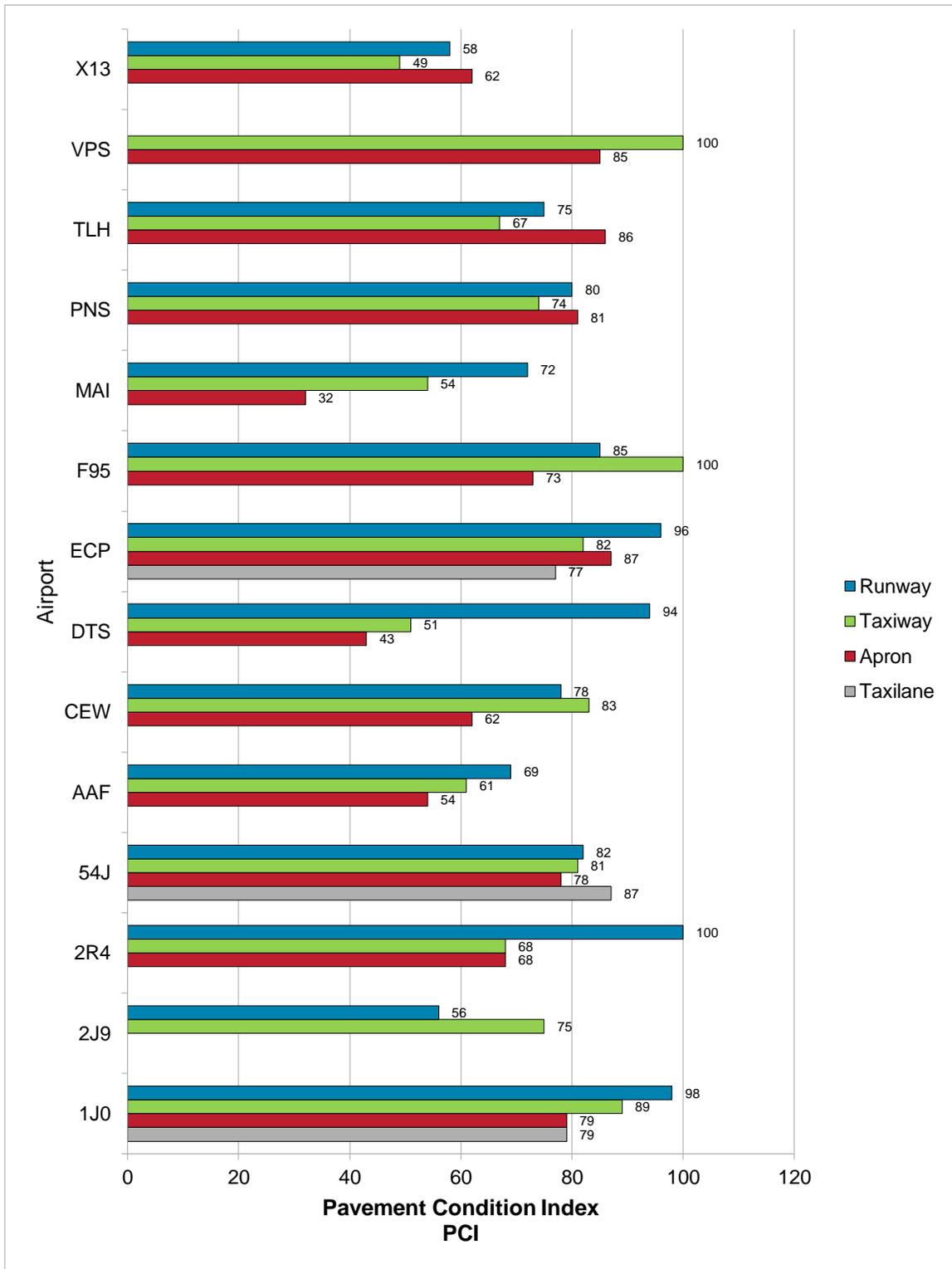
Network ID	Airport Type	Area-Weighted Pavement Condition Index (PCI)					Overall Airfield PCI
		Runway PCI	Taxiway PCI	Taxilane PCI	Apron PCI		
1J0	GA	98	89	79	79	92	
2J9	GA	56	75	-	-	63	
2R4	GA	100	68	-	68	75	
54J	GA	82	81	87	78	81	
AAF	GA	69	61	-	54	64	
CEW	GA	78	83	-	62	75	
DTS	GA	94	51	-	43	62	
ECP	PR	96	82	77	87	88	
F95	GA	85	100	-	73	85	
MAI	GA	72	54	-	32	49	
PNS	PR	80	74	-	81	78	
TLH	PR	75	67	-	86	76	
VPS	PR	-	100	-	85	88	
X13	GA	58	49	-	62	58	
<b>OVERALL DISTRICT</b>		<b>79</b>	<b>72</b>	<b>78</b>	<b>71</b>	<b>74</b>	

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

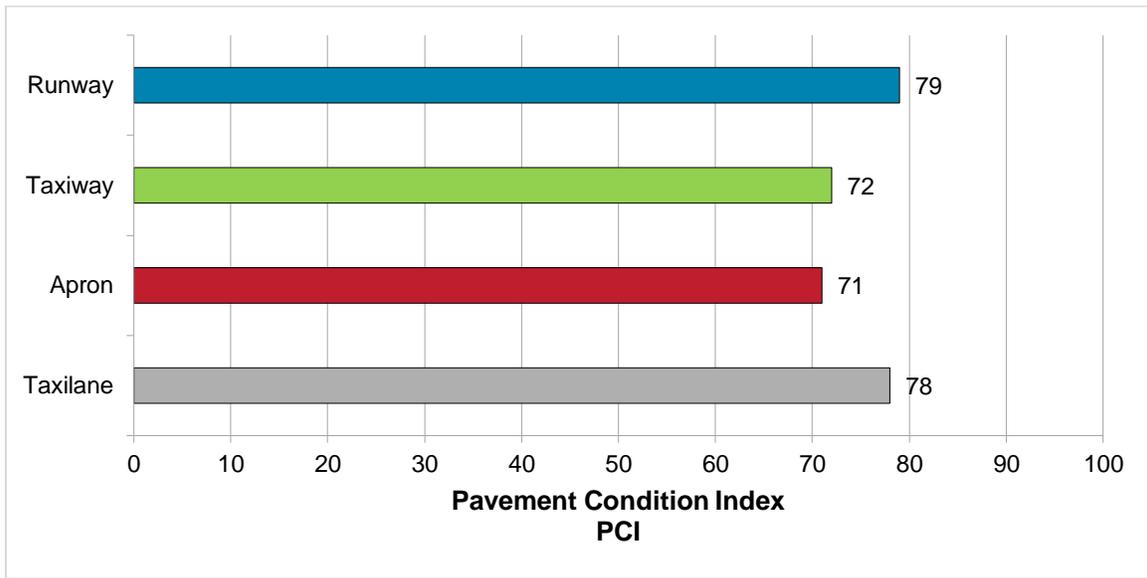
#### 4.1.2 PCI BY FUNCTIONAL USE

Pavements are subject to varying aircraft loading patterns based on utilization and overall operations. For this SAPMP Update, the following categories of airfield functional use have been identified and associated with the following possible pavement branch facilities: Apron, Runway, Taxiway, and Taxilane. **Figure 4.1.2 (a)** graphically depicts the PCI for each pavement functional use (Apron, Runway, Taxiway, and Taxilane) at each participating airport within the District. The pavement areas reviewed exclude shoulder pavement facilities. Separately, **Figure 4.1.2 (b)** depicts the District's area-weighted PCI for each pavement functional use.

*Figure 4.1.2 (a) PCI by Pavement Functional Use by Airport*



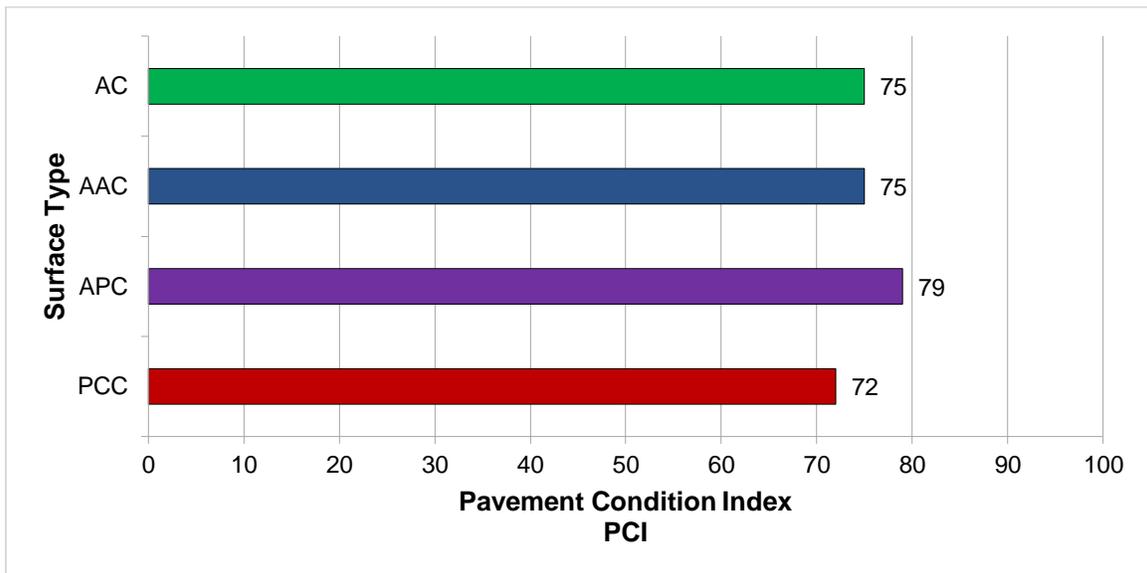
*Figure 4.1.2 (b) PCI by Pavement Functional Use*



**4.1.3 PCI BY SURFACE TYPE**

Pavement facility surface types considered for the SAPMP update consist of the four common types within the Florida Airport System: Portland Cement Concrete (PCC), Asphalt Concrete Overlaid on Portland Cement Concrete Pavement (APC), Asphalt Concrete Pavement (AC), and Asphalt Concrete Overlaid on Asphalt Concrete (AAC). **Figure 4.1.3** summarizes the PCI determined based on the various pavement types within the participating District airports. Whitetopping, a composite pavement type that consists of a thin concrete overlay on asphalt concrete pavement exists at certain airports within the Florida Airport System and is discussed within the specific individual airport pavement evaluation report document for those airports.

*Figure 4.1.3 PCI by Pavement Surface Type*



**4.2 Forecasted Pavement Conditions**

**4.2.1 PERFORMANCE MODELS AND PREDICTION CURVES**

Pavement Performance Models are developed from the distress data and historic construction records collected for the SAPMP. This data is consolidated in a database and organized by inspection/construction date, pavement type, age, and pavement use. The pavement Performance Models are used to develop broad Prediction Curves, alternatively known as deterioration curves or family curves. These Prediction Curves are utilized to developed forecasted PCI values based on historic trends and statistical models.

**4.2.2 NETWORK-LEVEL PAVEMENT CONDITION FORECAST**

The following **Table 4.2.2** depicts the network-level pavement condition forecast for each airport within the District. The forecasted conditions are for a 10-year duration starting in January 2020 through January 2029.

*Table 4.2.2 Forecasted Network Pavement Performance*

Network ID	Program Year									
	Overall Airport Area-Weighted PCI									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	85	83	81	79	77	75	73	71	70	68
2J9	58	56	53	51	48	46	43	41	39	37
2R4	70	69	67	66	64	62	61	59	57	56
54J	75	73	71	69	68	66	65	64	63	62
AAF	61	60	59	58	58	57	56	55	55	54
CEW	70	69	67	66	64	63	61	60	58	57
DTS	58	56	54	53	51	50	48	46	45	43
ECP	87	85	84	83	82	81	80	79	78	77
F95	81	79	76	74	72	70	68	66	65	63
MAI	45	43	42	40	39	37	36	35	33	32
PNS	76	75	74	73	72	70	69	68	67	66
TLH	74	73	71	70	69	67	66	65	64	63
VPS	87	85	84	83	82	80	79	78	77	76
X13	53	50	48	45	42	39	36	34	32	29
<b>DISTRICT</b>	<b>71</b>	<b>70</b>	<b>68</b>	<b>67</b>	<b>66</b>	<b>65</b>	<b>63</b>	<b>62</b>	<b>61</b>	<b>60</b>

**4.2.3 RUNWAY-LEVEL PAVEMENT CONDITION FORECAST**

The following **Table 4.2.3** depicts the runway-level pavement condition forecast for each airport within the District. The forecasted conditions are for a 10-year duration starting in January 2020 through January 2029.

*Table 4.2.3 Forecasted Runway Pavement Performance*

Network ID	Program Year									
	Overall Runway Branch Area-Weighted PCI									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	90	88	86	84	82	79	77	75	73	71
2J9	51	48	46	43	40	37	34	31	29	26
2R4	93	90	88	86	83	81	79	76	74	71
54J	75	73	71	68	67	65	63	62	61	60
AAF	67	66	65	64	63	62	62	61	60	59
CEW	73	71	70	68	67	65	63	62	60	58
DTS	87	85	83	80	78	75	73	71	69	67
ECP	94	93	93	92	92	91	91	90	90	90
F95	82	79	77	74	72	70	68	66	65	64
MAI	67	65	63	61	59	57	55	53	51	49
PNS	79	78	77	76	75	74	73	72	70	69
TLH	74	72	71	69	68	67	65	64	63	61
VPS	-	-	-	-	-	-	-	-	-	-
X13	52	49	46	43	40	37	34	31	29	26
<b>DISTRICT</b>	<b>76</b>	<b>75</b>	<b>73</b>	<b>72</b>	<b>70</b>	<b>69</b>	<b>68</b>	<b>66</b>	<b>65</b>	<b>64</b>

**4.2.4 TAXIWAY-LEVEL PAVEMENT CONDITION FORECAST**

The following **Table 4.2.4** depict the taxiway-level pavement condition forecast for each airport within the District. The forecasted conditions are for a 10-year duration starting in January 2020 through January 2029.

*Table 4.2.4 Forecasted Taxiway Pavement Performance*

Network ID	Program Year									
	Overall Taxiway Branch Area-Weighted PCI									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	82	80	78	76	74	72	71	69	68	67
2J9	69	67	65	63	61	60	58	57	55	54
2R4	64	62	61	59	58	56	55	53	52	50
54J	76	74	73	72	70	69	68	67	66	65
AAF	58	58	57	56	55	54	53	53	52	51
CEW	78	76	75	73	72	71	70	69	68	67
DTS	48	46	45	44	44	43	42	42	41	40
ECP	80	78	77	76	74	73	72	71	70	69
F95	94	91	89	86	84	82	80	78	76	74
MAI	49	47	45	43	42	40	39	38	38	37
PNS	72	71	70	69	68	67	66	65	64	63
TLH	66	65	64	63	62	61	60	59	58	57
VPS	97	94	92	90	87	85	83	81	79	77
X13	44	42	40	39	38	36	35	34	33	32
<b>DISTRICT</b>	<b>70</b>	<b>68</b>	<b>67</b>	<b>66</b>	<b>65</b>	<b>63</b>	<b>62</b>	<b>61</b>	<b>60</b>	<b>59</b>

**4.2.5 APRON-LEVEL PAVEMENT CONDITION FORECAST**

The following **Table 4.2.5** depict the apron-level pavement condition forecast for each airport within the District. The forecasted conditions are for a 10-year duration starting in January 2020 through January 2029.

*Table 4.2.5 Forecasted Apron Pavement Performance*

Network ID	Program Year									
	Overall Apron Branch Area-Weighted PCI									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	74	72	70	69	67	65	64	62	60	58
2J9	-	-	-	-	-	-	-	-	-	-
2R4	64	62	61	60	59	57	56	54	53	51
54J	72	70	69	67	65	64	63	61	60	59
AAF	50	50	49	48	47	47	46	46	45	45
CEW	58	56	54	52	50	48	46	44	43	41
DTS	38	37	36	34	33	32	30	29	27	25
ECP	85	84	82	81	79	78	76	75	73	72
F95	71	69	67	65	64	62	60	59	57	56
MAI	29	28	26	25	24	23	22	21	20	19
PNS	78	77	75	74	73	71	70	69	67	66
TLH	84	82	80	78	77	75	73	72	71	69
VPS	84	83	82	81	80	79	78	77	76	75
X13	57	55	54	52	51	49	48	46	44	42
<b>DISTRICT</b>	<b>68</b>	<b>67</b>	<b>65</b>	<b>64</b>	<b>63</b>	<b>61</b>	<b>60</b>	<b>58</b>	<b>57</b>	<b>56</b>

**4.2.6 FORECASTED PCI CONSIDERATIONS**

As FDOT continues to update the SAPMP with future PCI Survey inspections and assembly of airfield pavement construction work history, the performance models will be further refined. With the refinement of additional PCI and work history data points, the forecasting of pavement conditions will continue to better reflect the performance trends of airfield pavements in the Florida Airports System. Forecasted or predicted pavement conditions for the airport are intended for planning purposes only. Design-level recommendations for pavement rehabilitation and/or reconstruction will require the appropriate application of the procedures defined in FAA **AC 150/5320-6F Airport Pavement Design and Evaluation** and **AC 150/5370-11B Use of Nondestructive Testing in the Evaluation of Airport Pavements** to determine structural and/or functional conditions at the time of project.



# Chapter 5

## Chapter 5 – Localized Maintenance and Repair Planning

General Maintenance and Rehabilitation (M&R) methods are characterized under three broad categories: localized maintenance and repair, global treatments, and major rehabilitation.

- **Localized Maintenance and Repair** includes patching and crack sealing.
- **Global Treatments** include surface seals and rejuvenators for flexible pavements.
- **Major Rehabilitation** includes overlays, significant slab replacement, and reconstruction.

This chapter discusses the FDOT SAPMP Localized Maintenance and Repair Planning approach. Proactive localized maintenance and repair, specifically preservation, is highly recommended to the airports. However, it is certainly recognized that once pavements have deteriorated below a certain condition, the facility would benefit from more substantial rehabilitation in lieu of localized efforts. Chapter 6 Major Rehabilitation Planning discusses the addressing of pavements through timely rehabilitation once it has deteriorated below a critical PCI where localized repairs may not be as cost effective.

### 5.1 Localized Maintenance and Repair

Localized maintenance and repair is best applied as a conservation measure and is oftentimes applied to slow the rate of deterioration of distressed pavements; however, may be applied as a temporary corrective measure in isolated areas. Localized maintenance and repair can be applied either as a safety (“stopgap”) measure or preventive measure. Example distress types subject to localized preventive maintenance and repair may consist of low-severity longitudinal and transverse cracking and low-severity weathering. In many cases however, localized stopgap repair is applied as a safety measure to address high-severity distress manifestations when major rehabilitation is not funded for a given section with a PCI value below critical PCI. Some agencies may elect to define both types; preventative and stopgap, as localized maintenance.

#### Localized Stopgap/Safety Maintenance and Repair

Localized Stopgap or Safety Maintenance and Repair is defined as the localized distress repair needed to keep pavements operational in a safe condition. These activities are typically applied to high-severity distresses or distresses affecting operational activities. Typical pavement section PCIs will range from 0 to 65.

#### Localized Preventive Maintenance and Repair

Localized Preventive Maintenance and Repair is defined as distress maintenance activities performed with the primary objective of slowing the rate of deterioration. These activities typically include crack sealing and patching. Typical pavement section PCIs will be above 65.

**5.2 Localized Maintenance and Repair Policy**

The resulting Localized Maintenance and Repair recommendations are identified based on the policy defined in **Table 5.2 (a)** and **Table 5.2 (b)**, for flexible asphalt concrete and rigid Portland cement concrete pavements, respectively. The activities identified were based on the research of practical pavement treatments in consideration of the FAA **AC 150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements”** and the **FDOT Airfield Pavement Distress Repair Manual**. Additionally, the **Engineering Technical Letter (ETL) 14-3: Preventive Maintenance Plan (PMP) for Airfield Pavements** was referenced for conservative application of pavement treatments. The Localized Maintenance and Repair Policy and associated planning-level unit costs were developed in consideration of a network-level analysis – it is strictly intended to provide a glimpse of the condition of the airport pavements with a limited PCI survey effort.

The developed Localized Maintenance and Repair Policy and associated planning-level unit costs were based on a statewide consideration of pavement treatments and review of state construction costs for both Airfield Pavements and from the FDOT Historical Cost Information archives. Furthermore, a consideration of limited repair quantities was factored in the determination of conservative planning-level unit costs. The identified Localized maintenance activities for both preventive and stopgap activities are based on a statewide network approach; project-specific evaluation and maintenance quantities should be developed prior to any construction.

*Table 5.2 (a) Localized Maintenance and Repair – Flexible Asphalt Concrete*

Distress	Severity	Description	Code	Work Type	Work Unit
41	Low	ALLIGATOR CR	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
41	Medium	ALLIGATOR CR	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
41	High	ALLIGATOR CR	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
42	N/A	BLEEDING	FDOT-MO-PV	FDOT - MONITOR	N/A
43	Low	BLOCK CR	FDOT-MO-PV	FDOT - MONITOR	N/A
43	Medium	BLOCK CR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft
43	High	BLOCK CR	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
44	Low	CORRUGATION	FDOT-ML-AC	FDOT - MILLING - AC	SqFt
44	Medium	CORRUGATION	FDOT-ML-AC	FDOT - MILLING - AC	SqFt
44	High	CORRUGATION	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
45	Low	DEPRESSION	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
45	Medium	DEPRESSION	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
45	High	DEPRESSION	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
46	N/A	JET BLAST	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
47	Low	JT REF. CR	FDOT-MO-PV	FDOT - MONITOR	N/A
47	Medium	JT REF. CR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft
47	High	JT REF. CR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft
48	Low	L & T CR	FDOT-MO-PV	FDOT - MONITOR	N/A
48	Medium	L & T CR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft

Distress	Severity	Description	Code	Work Type	Work Unit
48	High	L & T CR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft
49	N/A	OIL SPILLAGE	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
50	Low	PATCHING	FDOT-MO-PV	FDOT - MONITOR	N/A
50	Medium	PATCHING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
50	High	PATCHING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
51	N/A	POLISHED AG	FDOT-SS-LO	FDOT - SURFACE SEAL	SqFt
52	Low	RAVELING	FDOT-SS-LO	FDOT - SURFACE SEAL	SqFt
52	Medium	RAVELING	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
52	High	RAVELING	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
53	Low	RUTTING	FDOT-MO-PV	FDOT - MONITOR	N/A
53	Medium	RUTTING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
53	High	RUTTING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
54	Low	SHOVING	FDOT-MO-PV	FDOT - MONITOR	N/A
54	Medium	SHOVING	FDOT-ML-AC	FDOT - MILLING - AC	SqFt
54	High	SHOVING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
55	N/A	SLIPPAGE CR	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt
56	Low	SWELLING	FDOT-MO-PV	FDOT - MONITOR	N/A
56	Medium	SWELLING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
56	High	SWELLING	FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt
57	Low	WEATHERING	FDOT-MO-PV	FDOT - MONITOR	N/A
57	Medium	WEATHERING	FDOT-SS-LO	FDOT - SURFACE SEAL	SqFt
57	High	WEATHERING	FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt

*Table 5.2 (b) Localized Maintenance and Repair – Rigid Portland Cement Concrete*

Distress	Severity	Description	Code	Work Type	Work Unit
61	Low	BLOW-UP	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
61	Medium	BLOW-UP	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
61	High	BLOW-UP	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt
62	Low	CORNER BREAK	FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft
62	Medium	CORNER BREAK	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
62	High	CORNER BREAK	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
63	Low	LINEAR CR	FDOT-MO-PV	FDOT - MONITOR	N/A
63	Medium	LINEAR CR	FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft
63	High	LINEAR CR	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
64	Low	DURABIL. CR	FDOT-MO-PV	FDOT - MONITOR	N/A
64	Medium	DURABIL. CR	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
64	High	DURABIL. CR	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt
65	Low	JT SEAL DMG	FDOT-JS-PC	FDOT - JOINT SEAL - PCC	Ft

Distress	Severity	Description	Code	Work Type	Work Unit
65	Medium	JT SEAL DMG	FDOT-JS-PC	FDOT - JOINT SEAL - PCC	Ft
65	High	JT SEAL DMG	FDOT-JS-PC	FDOT - JOINT SEAL - PCC	Ft
66	Low	SMALL PATCH	FDOT-MO-PV	FDOT - MONITOR	N/A
66	Medium	SMALL PATCH	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
66	High	SMALL PATCH	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
67	Low	LARGE PATCH	FDOT-MO-PV	FDOT - MONITOR	N/A
67	Medium	LARGE PATCH	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
67	High	LARGE PATCH	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
68	N/A	POPOUTS	FDOT-PO-FL	FDOT - POPOUT FILLER	SqFt
69	N/A	PUMPING	FDOT-SB-PC	FDOT - SLAB STABILIZATION - PCC	SqFt
70	Low	SCALING	FDOT-MO-PV	FDOT - MONITOR	N/A
70	Medium	SCALING	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
70	High	SCALING	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt
71	Low	FAULTING	FDOT-MO-PV	FDOT - MONITOR	N/A
71	Medium	FAULTING	FDOT-GR-PP	FDOT - GRINDING (LOCALIZED)	Ft
71	High	FAULTING	FDOT-GR-PP	FDOT - GRINDING (LOCALIZED)	Ft
72	Low	SHAT. SLAB	FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft
72	Medium	SHAT. SLAB	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt
72	High	SHAT. SLAB	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt
73	N/A	SHRINKAGE CR	FDOT-MO-PV	FDOT - MONITOR	N/A
74	Low	JOINT SPALL	FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft
74	Medium	JOINT SPALL	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
74	High	JOINT SPALL	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
75	Low	CORNER SPALL	FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft
75	Medium	CORNER SPALL	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
75	High	CORNER SPALL	FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt
76	Low	ASR	FDOT-MO-PV	FDOT - MONITOR	N/A
76	Medium	ASR	FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt
76	High	ASR	FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt

*Table 5.2 (c) Localized M&R Planning-Level Unit Costs – Flexible Asphalt Concrete*

Code	Work Type	Work Unit	GA Airport	Reliever Airport	Primary Airport
			(Cost/Work Unit)	(Cost/Work Unit)	(Cost/Work Unit)
FDOT-SS-LO	FDOT - SURFACE SEAL	SqFt	\$0.55	\$0.55	\$0.55
FDOT-ML-AC	FDOT - MILLING - AC	SqFt	\$2.00	\$2.00	\$2.00
FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft	\$3.00	\$3.00	\$3.00
FDOT-MO-PV	FDOT - MONITOR	N/A	\$0.00	\$0.00	\$0.00
FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH	SqFt	\$6.00	\$9.00	\$12.50
FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	SqFt	\$3.00	\$4.00	\$5.50

*Table 5.2 (d) Localized M&R Planning-Level Unit Costs – Rigid Portland Cement Concrete*

Code	Work Type	Work Unit	GA Airport	Reliever Airport	Primary Airport
			(Cost/Work Unit)	(Cost/Work Unit)	(Cost/Work Unit)
FDOT-PA-PF	FDOT - PATCHING - PCC FULL DEPTH	SqFt	\$100.00	\$150.00	\$185.00
FDOT-SL-PC	FDOT - SLAB REPLACEMENT - PCC	SqFt	\$30.00	\$30.00	\$30.00
FDOT-SB-PC	FDOT - SLAB STABILIZATION - PCC	SqFt	\$30.00	\$30.00	\$30.00
FDOT-PA-PP	FDOT - PATCHING - PCC PARTIAL DEPTH	SqFt	\$72.00	\$72.00	\$72.00
FDOT-PO-FL	FDOT - POPOUT FILLER	SqFt	\$0.05	\$0.05	\$0.05
FDOT-GR-PP	FDOT - GRINDING (LOCALIZED)	Ft	\$2.00	\$2.00	\$2.00
FDOT-CS-PC	FDOT - CRACK SEALING - PCC	Ft	\$4.25	\$4.25	\$4.25
FDOT-MO-PV	FDOT - MONITOR	N/A	\$0.00	\$0.00	\$0.00
FDOT-JS-PC	FDOT - JOINT SEAL - PCC	Ft	\$2.75	\$2.75	\$2.75

\* PCC Patching (Full Depth and Partial Depth) consider high-early-strength and high-performing repair material.

### 5.3 Localized Maintenance and Repair Analysis and Recommendations

The SAPMP provides a planning-level estimation of Localized Maintenance and Repair based on the results of the latest PCI Survey Inspection performed at the airport. Based on the limited sample units inspected, a statistical extrapolation of distresses at the section level is used to estimate the quantities of recommended repair activities based on the policies defined in **5.2 Localized M&R Policy**. The PCI Survey Inspections did not consist of 100% inspection of all sample units; therefore, the section-level distress quantities used to estimate the Localized Maintenance and Repair needs are for conceptual planning purposes. The accuracy of the extrapolated distresses, and therefore work quantities, is subject to the amount of sample units inspected and the concentration of distress types observed in sample units. Localized Preventive Maintenance and Repair is typically applied to pavements that are in a condition at or above the Critical PCI of 65. Localized Stopgap Maintenance and Repair is typically applied to pavements that are below the Critical PCI of 65. It is recommended that airport staff evaluate the application of Localized Maintenance and Repair in concert with the planning of Major Rehabilitation efforts identified in Chapter 6 Major Rehabilitation Planning. Pavements with Stopgap

recommendations that are subject to near-term Major Rehabilitation efforts may remove the need to perform localized maintenance efforts.

The following **Table 5.3** summarizes the anticipated Localized Maintenance and Repair needs based on the PCI Survey Inspection efforts performed at each airport within the District as part of this SAPMP System Update. The following table depicts planning-level costs rounded for summary purposes.

*Table 5.3 Summary of Localized M&R Planning Needs by Airport*

Network ID	Localized Preventive	Localized Stopgap	TOTAL Localized Maintenance
1J0	\$ 9,560	\$ 10,280	\$ 19,840
2J9	\$ 150	\$ 110,380	\$ 110,530
2R4	\$ 17,830	\$ 533,780	\$ 551,610
54J	\$ 57,100	\$ -	\$ 57,100
AAF	\$ 697,090	\$ 1,692,360	\$ 2,389,450
CEW	\$ 18,400	\$ 632,870	\$ 651,270
DTS	\$ -	\$ 1,364,290	\$ 1,364,290
ECP	\$ 200,920	\$ 3,380	\$ 204,300
F95	\$ 64,380	\$ 39,760	\$ 104,140
MAI	\$ -	\$ 2,047,450	\$ 2,047,450
PNS	\$ 551,390	\$ 1,638,010	\$ 2,189,400
TLH	\$ 465,880	\$ 1,570,340	\$ 2,036,220
VPS	\$ 51,230	\$ -	\$ 51,230
X13	\$ 7,400	\$ 277,620	\$ 285,020
<b>DISTRICT</b>	<b>\$ 2,141,330</b>	<b>\$ 9,920,520</b>	<b>\$ 12,061,850</b>



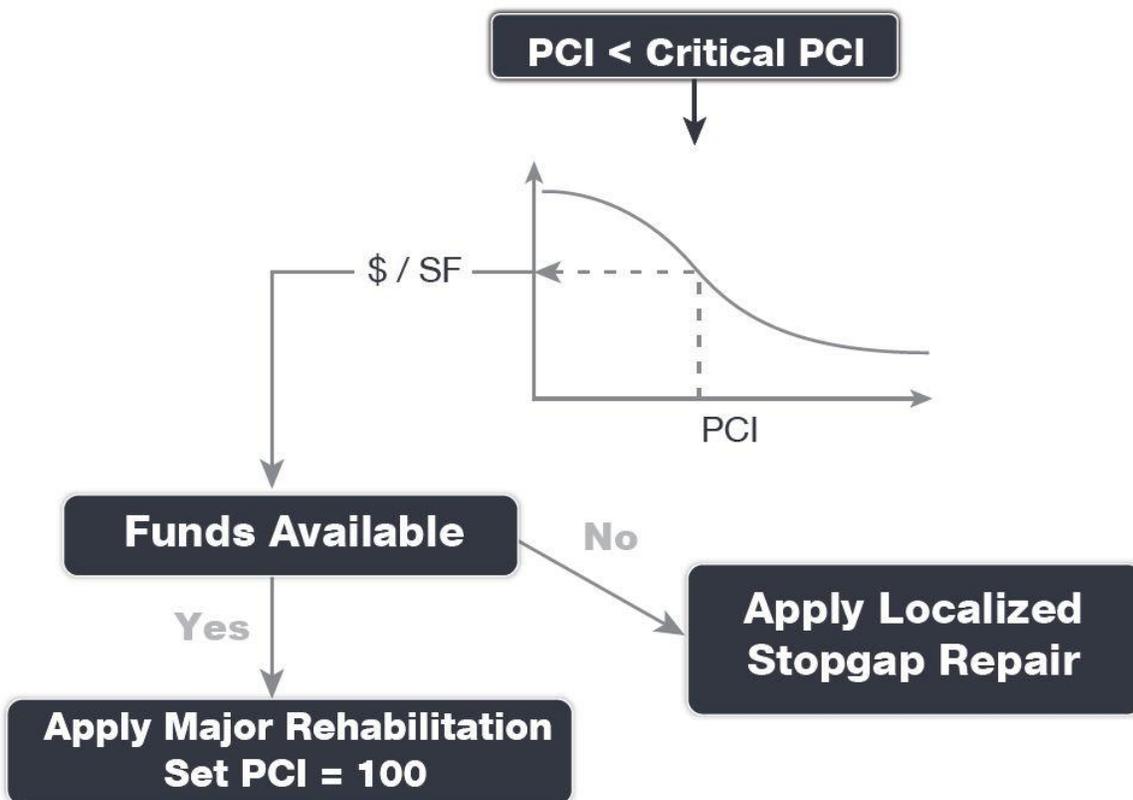
# Chapter 6

# Chapter 6 – Major Rehabilitation Planning

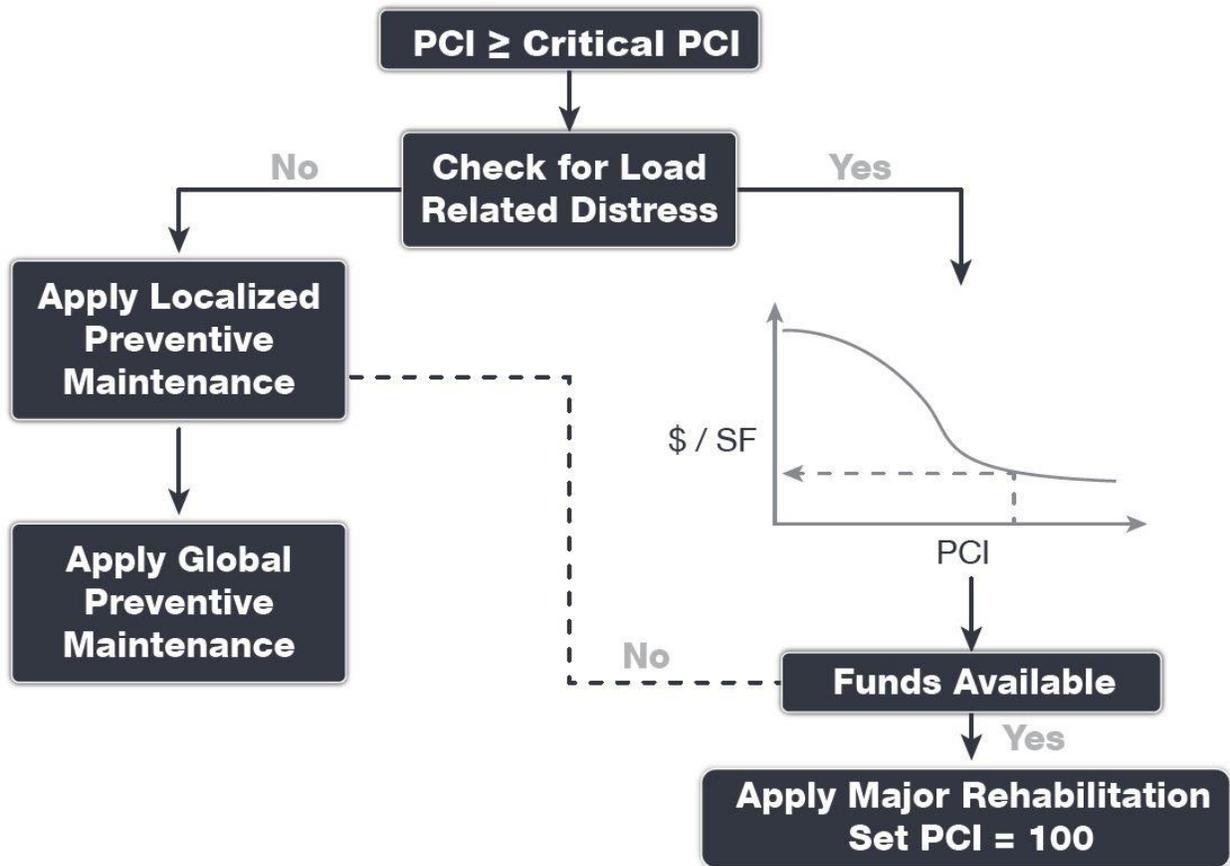
## 6.1 Major Rehabilitation

Major rehabilitation is recommended to correct or improve structural deficiencies and/or functional deterioration for pavement sections within a network. 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 to meet the traffic demand. Major rehabilitation is recommended when a pavement section falls below the Critical PCI value that is defined during the system customization or if a pavement section has a significant observation of load-related distress. Observation of any load-related distress potentially indicates that the section may be structurally deficient or that the aircraft loads being applied to the pavement section are different than what the section was designed for. **Figures 6.1 (a) and 6.1 (b)** depict the decision process for major rehabilitation project identification with the assumption of available funds. Should funding be unavailable for pavement sections in need of major rehabilitation, the airport may elect to apply the appropriate localized stopgap repair.

*Figure 6.1 (a) Major Rehabilitation Planning Decision Diagram,  $PCI \leq \text{Critical PCI}$*



*Figure 6.1 (b) Major Rehabilitation Planning Decision Diagram, PCI > Critical PCI*



**6.1.1 CRITICAL PCI**

For the FDOT SAPMP the development of a major rehabilitation program is based on the Critical PCI concept. The **Critical PCI** concept assumes that it is more cost-effective to maintain pavements above, rather than below their critical PCI. It is assumed that once a pavement section deteriorates to the Critical PCI value that it is more cost-effective to complete a major rehabilitation project rather than continuing to apply preventive maintenance. This method includes defining the Critical PCI and introducing major rehabilitation work types.

Identification of annual and long-range Major Rehabilitation work plans are typically based on the Critical PCI concept. The Critical PCI is defined as the PCI value at which the rate of loss (deterioration) increases with time, or the cost of applying localized maintenance and repair increases or is not effective. A Critical PCI is usually within a range of 55 and 70; the following procedure is standard approach in developing a specific Critical PCI:

1. Develop a pavement performance model and refine a prediction model for the pavements considered.
2. Select a localized maintenance and repair policy to be used in developing a work plan.
3. Apply the selected localized policy to the pavement sections for a range of PCI.
4. Compute the unit cost per area for each PCI range.
5. Plot the cost versus the PCI.
6. Determine the Critical PCI based on the point where the cost is insignificant.

The FDOT SAPMP defines the Critical PCI at 65 – this is based on the historic trends in pavement performance and Statewide planning efforts.

**6.1.2 FDOT RECOMMENDED MINIMUM SERVICE-LEVEL PCI**

The FDOT has recommended **Minimum Service-Level PCI** for airports’ airfield pavements based on the following characteristics; airport type within FDOT SAPMP, branch use, and expected aircraft operations. For the purposes of Major Rehabilitation, the Critical PCI is typically the threshold condition that triggers major construction, however it is recommended that the airports maintain the Minimum Service-Level PCI with a combination of Localized Maintenance and Repair and timely Major Rehabilitation. **Table 6.1.2** summarizes the FDOT Recommended Minimum Service-Level PCI.

*Table 6.1.2 FDOT Recommended Minimum Service-Level PCI*

Use	FDOT Recommended Minimum Service Level PCI			Critical PCI
	Primary Airports	Regional Reliever Airports	General Aviation Airports	
Runway	75	75	75	65
Taxiway	70	65	65	65
Apron	65	65	60	65

**6.2 Major Rehabilitation Policy**

**6.2.1 MAJOR REHABILITATION PAVEMENT SECTION DEVELOPMENT**

The review of the existing as-built record documentation within the participating airports' archives was used as the basis of the conceptual pavement design sections. Refinement of the pavement section layers was performed in consideration of the FAA **AC 150/5320-6F "Airport Pavement Design and Evaluation."** It should be noted that no subsurface geotechnical investigation, ALTA/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. The following **Tables 6.2.1 (a) and (b)** provide details on the conceptual pavement sections developed for this study.

Major rehabilitation is divided into two policy categories as part of this program: Full-Depth Reconstruction (Reconstruction) and Intermediate-Level Major Rehabilitation (Restoration). Based on the pavement type, the general categories are defined as AC Reconstruction and AC Restoration for AC, AAC, and APC flexible pavement types and PCC Reconstruction and PCC Restoration for PCC rigid pavement types. The pavement sections have been based on the average Airport Type requirements; no pavement design has been performed in accordance with AC 150/5320-6F for the determined conceptual sections.

*Table 6.2.1 (a) Conceptual Pavement Section for Major Rehabilitation – Flexible Asphalt Concrete*

Rehabilitation Type	GA Airport	Reliever Airport	Primary Airport
AC Mill and Overlay PCI = 41 to 65	<b>75% Mill and Overlay</b> P-101 AC Milling (2") P-603 Bituminous Tack P-401 (HMA) (2") <b>25% AC Reconstruction</b> P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (6") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (2")	<b>75% Mill and Overlay</b> P-101 AC Milling (3") P-603 Bituminous Tack P-401 (HMA) (3") <b>25% AC Reconstruction</b> P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (8") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (4")	<b>75% Mill and Overlay</b> P-101 AC Milling (4") P-603 Bituminous Tack P-401 (HMA) (4") <b>25% AC Reconstruction</b> P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (8") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (6")
	AC Reconstruction PCI = 40 or less	P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (6") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (2")	P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (8") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (4")

*Table 6.2.1 (b) Conceptual Pavement Section for Major Rehabilitation – Rigid Portland Cement Concrete*

Rehabilitation Type	GA Airport	Reliever Airport	Primary Airport
<b>PCC Restoration</b> PCI = 41 to 65	P-101 Pavement Removal P-605 Joint Seal Repair P-152 Subgrade (6") P-211 Base (if needed, typical) (6") P-501 Rigid PCC (10")  *Select Slabs (25%) **Crack Seal and Limited Patching	P-101 Pavement Removal P-605 Joint Seal Repair P-152 Subgrade (12") P-211 Base (if needed, typical) (6") P-501 Rigid PCC (15")  *Select Slabs (25%) **Crack Seal and Limited Patching	P-101 Pavement Removal P-605 Joint Seal Repair P-152 Subgrade (12") P-211 Base (if needed, typical) (6") P-501 Rigid PCC (16")  *Select Slabs (25%) **Crack Seal and Limited Patching
	<b>PCC Reconstruction</b> PCI = 40 or less	P-101 Pavement Removal P-605 Joint Seal Repair P-152 Subgrade (6") P-211 Base (6") P-501 Rigid PCC (10")	P-101 Pavement Removal P-605 Joint Seal Repair P-152 Subgrade (12") P-211 Base (6") P-501 Rigid PCC (14")

*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.*

In compliance with FAA Grant Assurances 11 and 19, the FDOT SAPMP provides airports with airfield pavement evaluation reports in accordance with **FAA AC 150/5380-7B Airport Pavement Management Program (PMP)** and **AC 150/5380-6C Guidelines and Procedures for Maintenance of Airport Pavements**. The application of the results of a PCI survey are for planning purposes and are limited to the visual observation of deteriorated pavements in limited sampling; design-level investigation is recommended in accordance with the FAA procedures defined in **AC 5320-6F Airport Pavement Design and Evaluation** and **AC 150/5370-11B Use of Nondestructive Testing in the Evaluation of Airport Pavements**. The aforementioned ACs provide the design-level material properties of in-situ pavement and subgrade layers for the determination of appropriate rehabilitation actions. The FDOT SAPMP is organized to provide airports with planning-level data and does not intend to preclude the responsible engineer in 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.

The recommendations identified in the Major Rehabilitation Needs consider the **FAA AC 150/5370-10H Standard Specifications for Construction of Airports** when determining the appropriate materials and methods implemented for construction projects, such as pavement rehabilitation, on airports. It should be noted that the **AC 150/5370-10H**

Standard Specifications for Construction of Airports was updated in December of 2018. Design-level determination of project specific specifications based on the AC should be developed by the Airport when performing applicable construction projects.

### 6.2.2 MAJOR REHABILITATION PLANNING-LEVEL UNIT COSTS

Planning-level opinion of probable construction unit costs developed for this System Update was 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 FDOT nor the Consultant Team has control over the cost of labor, materials, equipment, or over 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 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 6.2.2 Major Rehabilitation Planning-Level Unit Cost by Pavement Type*

Major Rehabilitation	PCI Range	GA Airport	Reliever Airport	Primary Airport
		(Cost per SF)	(Cost per SF)	(Cost per SF)
AC Mill and Overlay	41-65	\$ 7.00	\$ 9.50	\$ 11.00
AC Reconstruction	0-40	\$ 9.00	\$ 12.50	\$ 14.00
PCC Restoration	41-65	\$ 10.00	\$ 13.50	\$ 17.00
PCC Reconstruction	0-40	\$ 15.00	\$ 20.00	\$ 23.00

*Planning-level opinion of probable construction unit costs consider factors for non-pavement improvements, QA/QC testing, and administrative costs.*

**6.3 Major Rehabilitation Needs**

The objective of the major pavement rehabilitation needs analysis is to provide planning-level projects within an airport’s airfield pavement network. 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 the most cost-effective solution. In addition, major rehabilitation is also recommended when the Section PCI is at or above the Critical PCI but the section has significant load-related PCI distresses. Identification of rehabilitation needs is done at the Airfield Pavement Network Definition’s section level. This however does not limit the airport from further refining limits of project planning areas.

Major rehabilitation is identified within the FDOT SAPMP as major construction activity that would result in an improvement or resetting of the pavement section’s PCI to a value of 100. Major rehabilitation recommendations (AC Restoration, AC Reconstruction, PCC Restoration, and PCC Reconstruction) should be considered as planning-level only. Additional design-level investigation in accordance to the FAA Advisory Circulars will be required. Recommendations identified within this planning document do not imply final design. **Table 6.3** identifies the overall planning-level costs for each airport based on the total sections requiring major rehabilitation due to its PCI being below the Critical PCI of 65 or having substantial load-based distresses.

*Table 6.3 Summary of District Year 1 Major Rehabilitation Needs*

Network ID	Airport Type	Weighted-Average PCI	Average Rating	Year 1 Major Rehabilitation
1J0	GA	92	GOOD	\$ 191,000
2J9	GA	63	FAIR	\$ 2,077,000
2R4	GA	75	SATISFACTORY	\$ 4,411,000
54J	GA	81	SATISFACTORY	\$ 173,000
AAF	GA	64	FAIR	\$ 18,490,000
CEW	GA	75	SATISFACTORY	\$ 3,119,000
DTS	GA	62	FAIR	\$ 7,326,000
ECP	PR	88	GOOD	\$ 92,000
F95	GA	85	SATISFACTORY	\$ 472,000
MAI	GA	49	POOR	\$ 31,389,000
PNS	PR	78	SATISFACTORY	\$ 16,175,000
TLH	PR	76	SATISFACTORY	\$ 33,014,000
VPS	PR	88	GOOD	\$ 1,452,000
X13	GA	58	FAIR	\$ 2,744,000
<b>OVERALL DISTRICT</b>		<b>74</b>	<b>SATISFACTORY</b>	<b>\$ 121,125,000</b>

*\*All values have been rounded to the nearest thousand-dollar.*

### 6.3.1 10-YEAR UNCONSTRAINED BUDGET MAJOR REHABILITATION NEEDS

An unconstrained budget (unlimited budget) is performed for a 10-year duration to identify pavement rehabilitation needs based on current or forecasted PCI values deteriorating below the Critical PCI. FDOT recognizes airports are constrained by budgets and does not intend to convey an unrealistic approach of addressing pavement rehabilitation. The intent of the 10-Year Major Rehabilitation Needs analysis is to identify pavements that will warrant rehabilitation. It is highly recommended that airport staff utilize this information in support of the development of a practical Capital Improvement Program based on priorities, further design/project-level investigation, and budgetary constraints. The following **Table 6.3.1 (a) and Table 6.3.1 (b)** summarize all identified major rehabilitation needs for each airport within the District forecasted for the next 10-year period. It should be noted that the following table depicts planning-level costs and have been rounded for planning purposes.

*Table 6.3.1(a) Summary of 10-Year Major Rehabilitation Needs by Airport*

Network ID	Airport Type	Weighted-Average PCI	Average Rating	10-Year Major Rehabilitation
1J0	GA	92	GOOD	\$ 724,000
2J9	GA	63	FAIR	\$ 2,077,000
2R4	GA	75	SATISFACTORY	\$ 5,094,000
54J	GA	81	SATISFACTORY	\$ 2,806,000
AAF	GA	64	FAIR	\$ 37,909,000
CEW	GA	75	SATISFACTORY	\$ 9,422,000
DTS	GA	62	FAIR	\$ 7,326,000
ECP	PR	88	GOOD	\$ 2,241,000
F95	GA	85	SATISFACTORY	\$ 3,745,000
MAI	GA	49	POOR	\$ 31,389,000
PNS	PR	78	SATISFACTORY	\$ 41,574,000
TLH	PR	76	SATISFACTORY	\$ 53,406,000
VPS	PR	88	GOOD	\$ 1,452,000
X13	GA	58	FAIR	\$ 2,744,000
<b>OVERALL DISTRICT</b>		<b>74</b>	<b>SATISFACTORY</b>	<b>\$ 201,909,000</b>

*\*All values have been rounded to the nearest thousand-dollar.*

*Table 6.3.1. (b) 10-Year Major Rehabilitation Needs by Airport*

Network ID	Major Rehabilitation (\$ in Millions)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1J0	0.19M	0M	0M	0M	0M	0M	0.48M	0M	0M	0.06M	-	-
2J9	2.08M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
2R4	4.41M	0M	0.62M	0M	0M	0.07M	0M	0M	0M	0M	-	-
54J	0.17M	0M	0.46M	0.33M	0M	0M	0.14M	0.18M	0.07M	1.45M	-	-
AAF	18.49M	2.32M	2.56M	0M	8.61M	0M	0.35M	0M	0.46M	5.12M	-	-
CEW	3.12M	0M	0.08M	2.1M	0M	1.61M	0M	0.33M	1.27M	0.92M	-	-
DTS	7.33M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
ECP	-	-	0.09M	0.27M	0M	0M	0.12M	0M	0M	0M	0M	1.76M
F95	-	-	0.47M	0M	0.28M	0M	0M	0.78M	0.04M	0M	1.89M	0.28M
MAI	31.39M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
PNS	-	-	16.18M	1.43M	1.24M	3.41M	0.58M	2.37M	5.4M	1.8M	4.48M	4.69M
TLH	-	-	33.01M	0.3M	0.58M	1.69M	3.66M	0M	3.42M	4.01M	1.17M	5.57M
VPS	-	-	1.45M	0M	0M	0M	0M	0M	0M	0M	0M	0M
X13	2.74M	0M	0M	0M	0M	0M	0M	0M	0M	0M	-	-
<b>DISTRICT</b>	<b>69.92M</b>	<b>2.32M</b>	<b>54.92M</b>	<b>4.43M</b>	<b>10.71M</b>	<b>6.78M</b>	<b>5.32M</b>	<b>3.66M</b>	<b>10.65M</b>	<b>13.37M</b>	<b>7.54M</b>	<b>12.31M</b>

*\*All values have been rounded to the nearest ten-thousand-dollar.*



# Chapter 7

## Chapter 7 – Conclusion

### 7.1 Recommendations

#### 7.1.1 CONTINUED PCI SURVEY INSPECTIONS

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

A high priority should be considered for continuous maintenance record keeping and re-inspection of all the airport's maintained pavement facilities to ensure continued safe aircraft operations. 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 completely prevented, applying timely and effective maintenance efforts can slow the anticipated rate of deterioration. Lack of adequate and timely maintenance is the significant factor in pavement deterioration.

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 – Major Rehabilitation Planning identified major pavement rehabilitation project needs from 2018-2029. The identification of the rehabilitation needs was performed at the section level for manageable project areas with the assumption of an unconstrained budget scenario. Given the uncertainty in the airport-specific budget information and prioritization goals, the unconstrained budget scenario was performed to evaluate the worst-case scenario and identify all the inspected pavements' needs in a 10-year period. Certainly, it is understood that most airports are faced with constrained budgets; 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.
- ▶ Further refine and implement the identified 10-year major rehabilitation needs.
- ▶ Maintain detailed records on pavement maintenance, construction, and inspection.

- ▶ Maintain records on major pavement construction projects (year, scope, cost, and construction documents).

## 7.2 Supporting Documents

### AIRFIELD PAVEMENT CONDITION INDEX EXHIBITS

The Airfield Pavement Condition Index Exhibits are located in **Appendix B Pavement Condition Index Exhibits**. The exhibits are a visual summary of the latest conditions calculated from the results of the PCI Survey performed at each airport. The PCI values are identified in the exhibits and are graphically represented using the standard ASTM D5340-12 colors for condition rating categories.

### AIRFIELD PAVEMENT MAJOR REHABILITATION EXHIBITS

The Airfield Pavement Major Rehabilitation Exhibits are located in **Appendix D Major Rehabilitation Exhibits**. The exhibits have been prepared based on the section condition analysis, pavement condition forecasts, and major rehabilitation needs analysis. The exhibits graphically depict the inventory with the associated rehabilitation type activity, program year, and the planning-level costs. The 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 C Airfield Pavement Major Rehabilitation Table**.

## 7.3 Conclusion

The FDOT SAPMP Update 2016-2019 was completed for the airports on behalf of the FDOT ASO in accordance with the Advisory Circulars **150/5380-7B “Airport Pavement Management Program (PMP)”** and **150/5380-6C “Guidelines and Procedures for Maintenance of Airport Pavements.”** FDOT’s implementation of the SAPMP has assisted public airports with this requirement in performing PCI survey inspections and analysis in accordance with the ASTM **D5340-12 “Standard Test Method for Airport Pavement Condition Index Surveys.”**



# Appendix A

## District Section Condition Report

Pavement Database: FDOT

NetworkId: 1J0

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4103	2/1/2013	AC	APRON	P	0	3,171.00	2/28/2017	4	89
AP	4105	2/1/2013	AAC	APRON	P	0	27,552.00	2/28/2017	4	88
AP	4115	1/1/2007	AC	APRON	T	0	67,925.00	2/28/2017	10	75
RW 1-19	6105	1/1/2016	AAC	RUNWAY	P	0	278,678.00	1/1/2016	0	100
RW 1-19	6110	1/1/2016	AAC	RUNWAY	P	0	22,500.00	1/1/2016	0	100
RW 1-19	6115	1/1/2015	AC	RUNWAY	P	0	105,000.00	2/28/2017	2	93
T-HANGAR	4110	1/1/2001	PCC	TAXILANE	T	0	4,895.00	2/28/2017	16	34
T-HANGAR	4120	1/1/2007	AC	TAXILANE	T	0	8,232.00	2/28/2017	10	85
T-HANGAR	4125	3/1/2012	AC	TAXILANE	P	0	9,759.00	2/28/2017	5	86
T-HANGAR	4130	1/1/2014	AC	TAXILANE	P	0	10,176.00	2/28/2017	3	92
TW A	110	7/1/2008	AC	TAXIWAY	P	0	50,342.00	2/28/2017	9	82
TW A	115	1/1/2015	AC	TAXIWAY	P	0	48,748.00	2/28/2017	2	94
TW A	120	1/1/2015	AC	TAXIWAY	P	0	54,867.00	2/28/2017	2	94
TW A	125	1/1/2016	AAC	TAXIWAY	P	0	2,980.00	1/1/2016	0	100
TW A	130	1/1/2017	AC	TAXIWAY	P	0	48,351.00	1/1/2017	0	100
TW A1	105	1/1/1996	AC	TAXIWAY	P	0	16,695.00	2/28/2017	21	64
TW A1	108	1/1/2016	AAC	TAXIWAY	P	0	2,709.00	1/1/2016	0	100
TW A2	205	1/1/2015	AC	TAXIWAY	P	0	6,916.00	2/28/2017	2	86
TW A3	305	1/1/2015	AC	TAXIWAY	P	0	8,094.00	2/28/2017	2	76

*Pavement Database: FDOT*

*NetworkId: 2J9*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
RW 14-32	6105	1/1/1997	AAC	RUNWAY	P	0	192,150.00	1/12/2017	20	58
RW 14-32	6110	1/1/1997	AC	RUNWAY	P	0	31,050.00	1/12/2017	20	49
TW HANGAR	105	1/1/1989	AC	TAXIWAY	P	0	17,773.00	1/12/2017	28	59
TW HANGAR	110	1/1/1989	AC	TAXIWAY	P	0	12,530.00	1/12/2017	28	41
TW HANGAR	115	1/1/1989	AC	TAXIWAY	P	0	4,746.00	1/12/2017	28	59
TW HANGAR	120	1/1/1995	AC	TAXIWAY	P	0	6,000.00	1/12/2017	22	61
TW HANGAR	125	1/1/1997	AC	TAXIWAY	P	0	9,695.00	1/12/2017	20	50
TW HANGAR	130	1/1/1998	AC	TAXIWAY	P	0	4,036.00	1/12/2017	19	54
TW HANGAR	140	1/1/2003	AC	TAXIWAY	P	0	11,703.00	1/12/2017	14	58
TW HANGAR	145	1/1/2010	AC	TAXIWAY	P	0	33,082.00	1/12/2017	7	92
TW HANGAR	150	1/1/2012	AC	TAXIWAY	P	0	32,921.00	1/12/2017	5	94
TW J	160	6/1/2016	AC	TAXIWAY	P	0	9,560.00	6/1/2016	0	100

Pavement Database: FDOT

NetworkId: 2R4

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP E	4205	4/1/2015	AC	APRON	P	0	88,496.00	4/1/2015	0	100
AP W	4105	1/1/1992	AC	APRON	P	0	89,498.00	3/21/2017	25	57
AP W	4110	1/1/2000	AAC	APRON	P	0	72,218.00	3/21/2017	17	54
AP W	4115	1/1/2000	AAC	APRON	P	0	55,812.00	3/21/2017	17	59
AP W	4120	1/1/1995	AC	APRON	P	0	50,545.00	3/21/2017	22	61
AP W	4125	1/1/1996	AC	APRON	P	0	117,425.00	3/21/2017	21	62
AP W	4130	1/1/2007	AC	APRON	P	0	88,086.00	3/21/2017	10	68
RU RW 18	5105	1/1/2011	AC	APRON	P	0	11,805.00	3/21/2017	6	94
RU RW 18	5110	1/1/2011	AC	APRON	P	0	11,199.00	3/21/2017	6	94
RU RW 36	5205	1/1/2011	AC	APRON	P	0	12,428.00	3/21/2017	6	94
RU RW 36	5210	1/1/2011	AC	APRON	P	0	10,237.00	3/21/2017	6	94
RW 18-36	6105	9/1/2016	AAC	RUNWAY	P	0	277,500.00	9/1/2016	0	100
TW A	105	1/1/1992	AC	TAXIWAY	T	0	12,759.00	3/21/2017	25	62
TW A	115	1/1/1995	AC	TAXIWAY	P	0	38,153.00	3/21/2017	22	59
TW A	120	1/1/1996	AC	TAXIWAY	P	0	6,724.00	3/21/2017	21	61
TW A	500	1/1/2007	AC	TAXIWAY	P	0	9,348.00	3/21/2017	10	70
TW A	510	1/1/2001	AC	TAXIWAY	P	0	39,191.00	3/21/2017	16	62
TW B	205	1/1/1992	AC	TAXIWAY	P	0	104,968.00	3/21/2017	25	62
TW B	210	1/1/1992	AC	TAXIWAY	P	0	8,970.00	3/21/2017	25	46
TW B	215	1/1/1996	AC	TAXIWAY	P	0	9,340.00	3/21/2017	21	57
TW B	250	4/1/2015	AC	TAXIWAY	P	0	8,550.00	4/1/2015	0	100
TW C	305	1/1/1968	AC	TAXIWAY	P	0	11,689.00	3/21/2017	49	57
TW D	405	1/1/1992	AAC	TAXIWAY	P	0	7,141.00	3/21/2017	25	56
TW D	410	1/1/1992	AAC	TAXIWAY	P	0	3,148.00	3/21/2017	25	50
TW HANG	605	8/1/2013	AC	TAXIWAY	P	0	70,365.00	3/21/2017	4	94

Pavement Database: FDOT

NetworkId: 54J

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP N	4205	1/1/2006	AAC	APRON	P	0	24,706.00	2/28/2017	11	66
AP N	4210	1/1/2006	AAC	APRON	P	0	21,961.00	2/28/2017	11	72
AP N	4215	1/1/2002	AC	APRON	P	0	27,234.00	2/28/2017	15	86
AP NE	4110	1/1/2011	AAC	APRON	P	0	36,132.00	2/28/2017	6	74
AP S	4305	1/1/2010	AC	APRON	P	0	11,037.00	2/28/2017	7	70
AP S	4310	5/5/2004	AC	APRON	P	0	20,383.00	2/28/2017	13	75
AP W	4405	1/1/2013	AC	APRON	P	0	50,388.00	2/28/2017	4	90
RW 9-27	6110	1/1/2011	AAC	RUNWAY	P	0	207,070.00	2/28/2017	6	85
RW 9-27	6120	1/1/1999	AC	RUNWAY	P	0	43,007.00	2/28/2017	18	69
T-HANG	4410	1/1/2013	AC	TAXILANE	P	0	27,418.00	2/28/2017	4	87
TW A	105	1/1/2011	AAC	TAXIWAY	P	0	2,965.00	2/28/2017	6	92
TW A	110	1/1/2011	AAC	TAXIWAY	P	0	2,043.00	2/28/2017	6	76
TW A	115	1/1/2011	AAC	TAXIWAY	P	0	30,731.00	2/28/2017	6	78
TW A	530	1/1/2007	AC	TAXIWAY	P	0	79,426.00	2/28/2017	10	84
TW A	605	1/1/2002	AC	TAXIWAY	P	0	47,174.00	2/28/2017	15	87
TW A1	305	1/1/2011	AAC	TAXIWAY	P	0	9,946.00	2/28/2017	6	73
TW A2	405	1/1/2011	AAC	TAXIWAY	T	0	5,309.00	2/28/2017	6	87
TW A2	610	1/1/2002	AC	TAXIWAY	P	0	15,636.00	2/28/2017	15	72
TW A3	603	1/1/2002	AC	TAXIWAY	P	0	9,546.00	2/28/2017	15	78
TW A4	525	1/1/2007	AC	TAXIWAY	T	0	10,318.00	2/28/2017	10	73
TW B	710	5/5/2004	AC	TAXIWAY	P	0	48,614.00	2/28/2017	13	81

Pavement Database: FDOT

NetworkId: AAF

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4105	1/1/1940	PCC	APRON	P	0	979,973.00	1/9/2017	77	54
RW 14-32	6105	1/1/1940	PCC	RUNWAY	P	0	512,205.00	1/9/2017	77	73
RW 14-32	6110	1/1/1940	PCC	RUNWAY	P	0	256,102.00	1/9/2017	77	67
RW 18-36	6305	1/1/1940	PCC	RUNWAY	S	0	525,250.00	1/9/2017	77	69
RW 18-36	6310	1/1/1940	PCC	RUNWAY	S	0	262,625.00	1/9/2017	77	58
RW 6-24	6205	1/1/1940	PCC	RUNWAY	P	0	498,541.00	1/9/2017	77	74
RW 6-24	6210	1/1/1940	PCC	RUNWAY	P	0	249,271.00	1/9/2017	77	69
TW A	205	1/1/1940	PCC	TAXIWAY	P	0	31,535.00	1/9/2017	77	61
TW A	210	1/1/1942	PCC	TAXIWAY	P	0	16,092.00	1/9/2017	75	39
TW A	220	1/1/1940	PCC	TAXIWAY	P	0	154,199.00	1/9/2017	77	66
TW A	225	1/1/1942	PCC	TAXIWAY	P	0	75,620.00	1/9/2017	75	69
TW A	345	1/1/1940	PCC	TAXIWAY	P	0	29,764.00	1/9/2017	77	48
TW A	350	1/1/1942	PCC	TAXIWAY	P	0	10,975.00	1/9/2017	75	69
TW A1	230	1/1/1940	PCC	TAXIWAY	P	0	32,807.00	1/9/2017	77	42
TW A1	235	1/1/1942	PCC	TAXIWAY	P	0	11,058.00	1/9/2017	75	60
TW A2	240	1/1/1940	PCC	TAXIWAY	P	0	34,679.00	1/9/2017	77	53
TW A2	245	1/1/1942	PCC	TAXIWAY	P	0	10,796.00	1/9/2017	75	61
TW A3	250	1/1/1940	PCC	TAXIWAY	P	0	35,036.00	1/9/2017	77	60
TW A3	255	1/1/1942	PCC	TAXIWAY	P	0	10,441.00	1/9/2017	75	65
TW B1	305	1/1/1940	PCC	TAXIWAY	P	0	29,556.00	1/8/2017	77	59
TW B1	310	1/1/1942	PCC	TAXIWAY	P	0	15,572.00	1/9/2017	75	52
TW B2	315	1/1/1940	PCC	TAXIWAY	P	0	34,613.00	1/9/2017	77	51
TW B2	320	1/1/1942	PCC	TAXIWAY	P	0	10,600.00	1/9/2017	75	57
TW B3	325	1/1/1940	PCC	TAXIWAY	P	0	34,613.00	1/9/2017	77	59
TW B3	330	1/1/1942	PCC	TAXIWAY	P	0	10,600.00	1/9/2017	75	72
TW C	105	1/1/1940	PCC	TAXIWAY	P	0	153,704.00	1/9/2017	77	66
TW C	110	1/1/1942	PCC	TAXIWAY	P	0	77,718.00	1/9/2017	75	66
TW C1	155	1/1/1942	PCC	TAXIWAY	P	0	10,613.00	1/9/2017	75	57
TW C1	160	1/1/1940	PCC	TAXIWAY	P	0	34,877.00	1/9/2017	77	70
TW C2	145	1/1/1942	PCC	TAXIWAY	P	0	10,646.00	1/9/2017	75	64
TW C2	150	1/1/1940	PCC	TAXIWAY	P	0	34,830.00	1/9/2017	77	72
TW D	335	1/1/1940	PCC	TAXIWAY	P	0	40,968.00	1/9/2017	77	46
TW D	340	1/1/1942	PCC	TAXIWAY	P	0	15,082.00	1/9/2017	75	52

Pavement Database: FDOT

NetworkId: CEW

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4105	1/1/1980	AAC	APRON	P	0	52,500.00	3/20/2017	37	36
AP	4110	1/1/1983	AC	APRON	P	0	98,486.00	3/20/2017	34	28
AP	4115	1/1/1987	AC	APRON	P	0	187,231.00	3/20/2017	30	30
AP	4120	3/1/2012	AAC	APRON	P	0	147,645.00	3/20/2017	5	82
AP	4130	3/1/2012	PCC	APRON	P	0	32,400.00	3/20/2017	5	98
AP HANG	4205	1/1/1994	AC	APRON	P	0	10,698.00	3/20/2017	23	69
AP HANG	4210	1/1/2017	AAC	APRON	P	0	3,840.00	1/1/2017	0	100
AP HANG	4215	1/1/2003	PCC	APRON	P	0	4,841.00	3/20/2017	14	26
AP HANG	4220	6/1/2007	AC	APRON	P	0	19,711.00	3/20/2017	10	91
AP N	4340	11/1/2012	AAC	APRON	P	0	33,816.00	3/20/2017	5	87
AP N	4345	11/1/2012	AC	APRON	P	0	99,461.00	3/20/2017	5	89
AP N	4350	11/1/2012	PCC	APRON	P	0	23,280.00	3/20/2017	5	83
AP N	4355	11/1/2012	AC	APRON	P	0	105,318.00	3/20/2017	5	80
AP RU	5105	11/1/2012	AAC	APRON	P	0	46,560.00	3/20/2017	5	80
RW 17-35	6105	1/1/2008	AC	RUNWAY	P	0	80,000.00	3/20/2017	9	74
RW 17-35	6110	1/1/2008	AC	RUNWAY	P	0	40,000.00	3/20/2017	9	83
RW 17-35	6115	1/1/2008	AC	RUNWAY	P	0	420,000.00	3/20/2017	9	83
RW 17-35	6120	1/1/2008	AC	RUNWAY	P	0	210,000.00	3/20/2017	9	83
RW 17-35	6125	1/1/2008	AC	RUNWAY	P	0	300,000.00	3/20/2017	9	71
RW 17-35	6130	1/1/2008	AC	RUNWAY	P	0	150,000.00	3/20/2017	9	73
TW A	105	11/1/2012	AAC	TAXIWAY	P	0	98,453.00	3/20/2017	5	86
TW A	110	11/1/2012	AAC	TAXIWAY	P	0	303,843.00	3/20/2017	5	81
TW A	125	11/1/2012	AAC	TAXIWAY	P	0	267,093.00	3/20/2017	5	83
TW A	140	11/1/2012	AC	TAXIWAY	P	0	27,340.00	3/20/2017	5	86
TW A	150	11/1/2012	AC	TAXIWAY	P	0	25,816.00	3/20/2017	5	90
TW A	160	11/1/2012	AC	TAXIWAY	P	0	25,973.00	3/20/2017	5	94
TW A2	115	11/1/2012	AAC	TAXIWAY	P	0	54,612.00	3/20/2017	5	87
TW A3	120	11/1/2012	AAC	TAXIWAY	P	0	53,835.00	3/20/2017	5	79
TW A3	330	11/1/2012	AAC	TAXIWAY	P	0	7,151.00	3/20/2017	5	82
TW A4	130	11/1/2012	AAC	TAXIWAY	P	0	53,404.00	3/20/2017	5	80
TW A4	135	11/1/2012	AC	TAXIWAY	P	0	26,609.00	3/20/2017	5	77
TW CONN	310	11/1/2012	AAC	TAXIWAY	P	0	7,038.00	3/20/2017	5	83
TW CONN	320	11/1/2012	AAC	TAXIWAY	P	0	2,982.00	3/20/2017	5	94
TW CONN	335	11/1/2012	AAC	TAXIWAY	P	0	26,207.00	3/20/2017	5	86
TW CONN	340	11/1/2012	AAC	TAXIWAY	P	0	26,273.00	3/20/2017	5	74
TW K	605	3/1/2008	AC	TAXIWAY	P	0	25,848.00	3/20/2017	9	88
TW PMV	505	1/1/2008	AC	TAXIWAY	S	0	75,709.00	3/20/2017	9	92

Pavement Database: FDOT

NetworkId: DTS

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4105	1/1/1985	AAC	APRON	P	0	50,000.00	3/21/2017	32	54
AP	4107	1/1/1985	AAC	APRON	P	0	8,500.00	3/21/2017	32	29
AP	4110	1/1/1974	AC	APRON	P	0	65,028.00	3/21/2017	43	57
AP	4112	1/1/1974	AC	APRON	P	0	10,880.00	3/21/2017	43	34
AP	4115	1/1/1975	AAC	APRON	P	0	52,489.00	3/21/2017	42	57
AP	4120	1/1/1987	AC	APRON	P	0	116,532.00	3/21/2017	30	46
AP	4125	1/1/1983	AC	APRON	P	0	208,083.00	3/21/2017	34	28
AP	4150	1/1/1992	AC	APRON	P	0	57,443.00	3/21/2017	25	57
RW 14-32	6105	3/1/2013	AAC	RUNWAY	P	0	175,000.00	3/21/2017	4	94
RW 14-32	6110	3/1/2013	AAC	RUNWAY	P	0	175,075.00	3/21/2017	4	94
RW 14-32	6115	3/1/2013	AAC	RUNWAY	P	0	55,000.00	3/21/2017	4	94
RW 14-32	6117	3/1/2013	AAC	RUNWAY	P	0	55,000.00	3/21/2017	4	94
RW 14-32	6120	3/1/2013	AAC	RUNWAY	P	0	20,000.00	3/21/2017	4	94
RW 14-32	6122	3/1/2013	AAC	RUNWAY	P	0	20,009.00	3/21/2017	4	94
TW A	115	1/1/1992	AAC	TAXIWAY	P	0	140,000.00	3/21/2017	25	50
TW A	135	1/1/1992	AAC	TAXIWAY	P	0	12,461.00	3/21/2017	25	57
TW A	150	1/1/1992	AAC	TAXIWAY	P	0	41,334.00	3/21/2017	25	53
TW A1	105	1/1/1992	AAC	TAXIWAY	P	0	18,192.00	3/21/2017	25	57
TW A2	110	1/1/1992	AAC	TAXIWAY	P	0	9,346.00	3/21/2017	25	45
TW A3	120	1/1/1992	AAC	TAXIWAY	P	0	9,344.00	3/21/2017	25	45
TW A4	125	1/1/1992	AAC	TAXIWAY	P	0	9,346.00	3/21/2017	25	46
TW A5	130	1/1/1992	AAC	TAXIWAY	P	0	9,341.00	3/21/2017	25	44
TW A6	140	1/1/1992	AAC	TAXIWAY	P	0	18,192.00	3/21/2017	25	59
TW CONN	205	1/1/1992	AAC	TAXIWAY	P	0	7,890.00	3/21/2017	25	50
TW CONN	208	1/1/1992	AC	TAXIWAY	P	0	1,891.00	3/21/2017	25	64
TW CONN	209	1/1/1992	AC	TAXIWAY	P	0	5,014.00	3/21/2017	25	15
TW CONN	212	1/1/1992	AAC	TAXIWAY	P	0	2,951.00	3/21/2017	25	46
TW HANG	305	12/25/1999	AC	TAXIWAY	P	0	56,962.00	3/21/2017	18	56
TW HANG	307	6/1/2011	AC	TAXIWAY	P	0	6,215.00	3/21/2017	6	94
TW HANG	315	12/25/1999	AC	TAXIWAY	P	0	36,233.00	3/21/2017	18	49

Pavement Database: FDOT

NetworkId: ECP

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP CO HANG	4605	1/1/2009	AC	APRON	P	0	32,896.00	1/17/2019	10	87
AP CO HANG	4606	1/1/2009	AC	APRON	P	0	44,645.00	1/17/2019	10	84
AP CO HANG	4607	1/1/2012	AC	APRON	P	0	15,360.00	1/17/2019	7	91
AP CO HANG	4608	1/1/2012	AC	APRON	P	0	12,746.00	1/17/2019	7	89
AP GA	4405	1/1/2009	AC	APRON	P	0	138,600.00	1/17/2019	10	86
AP GA	4406	1/1/2011	AC	APRON	P	0	80,568.00	1/17/2019	8	86
AP GA	4410	1/1/2017	AC	APRON	P	0	197,793.00	1/1/2017	0	100
AP RU S	4505	1/1/2009	AC	APRON	P	0	24,778.00	1/17/2019	10	68
AP RU S	4510	1/1/2009	PCC	APRON	P	0	12,774.00	1/17/2019	10	96
AP TERM	4105	1/1/2009	PCC	APRON	P	0	33,611.00	1/17/2019	10	99
AP TERM	4110	1/1/2009	AC	APRON	P	0	292,956.00	1/17/2019	10	82
AP TERM	4115	1/1/2009	PCC	APRON	P	0	127,372.00	1/17/2019	10	91
AP TERM	4120	1/1/2014	AC	APRON	P	0	43,000.00	1/17/2019	5	87
AP T-HANG	4305	1/1/2009	AC	APRON	P	0	103,415.00	1/17/2019	10	89
AP T-HANG	4310	1/1/2009	AC	APRON	P	0	126,734.00	1/17/2019	10	80
RW 16-34	6105	1/1/2009	PCC	RUNWAY	P	0	750,000.00	1/17/2019	10	96
RW 16-34	6110	1/1/2009	PCC	RUNWAY	P	0	750,000.00	1/17/2019	10	96
TL F	605	1/1/2009	AC	TAXILANE	P	0	153,255.00	1/17/2019	10	77
TW D	405	1/1/2009	AC	TAXIWAY	P	0	750,000.00	1/17/2019	10	78
TW E1	510	1/1/2009	AC	TAXIWAY	P	0	15,240.00	1/17/2019	10	88
TW E2	505	1/1/2009	AC	TAXIWAY	P	0	19,798.00	1/17/2019	10	89
TW J	1005	1/1/2009	PCC	TAXIWAY	P	0	8,143.00	1/17/2019	10	93
TW J	1010	1/1/2009	AC	TAXIWAY	P	0	38,891.00	1/17/2019	10	90
TW J	1015	1/1/2009	AC	TAXIWAY	P	0	15,624.00	1/17/2019	10	89
TW J	1020	1/1/2009	AC	TAXIWAY	P	0	8,297.00	1/17/2019	10	64
TW K	1105	1/1/2009	PCC	TAXIWAY	P	0	10,661.00	1/17/2019	10	96
TW K	1110	1/1/2009	AC	TAXIWAY	P	0	46,845.00	1/17/2019	10	92
TW K	1115	1/1/2009	AC	TAXIWAY	P	0	15,661.00	1/17/2019	10	89
TW K	1120	1/1/2011	AC	TAXIWAY	P	0	10,562.00	1/17/2019	8	69
TW M	1305	1/1/2009	PCC	TAXIWAY	P	0	10,661.00	1/17/2019	10	81
TW M	1310	1/1/2009	AC	TAXIWAY	P	0	46,845.00	1/17/2019	10	87
TW M	1315	1/1/2009	AC	TAXIWAY	P	0	15,502.00	1/17/2019	10	89
TW P	1605	1/1/2009	PCC	TAXIWAY	P	0	10,661.00	1/17/2019	10	97
TW P	1610	1/1/2009	AC	TAXIWAY	P	0	46,845.00	1/17/2019	10	90
TW P	1615	1/1/2009	AC	TAXIWAY	P	0	27,461.00	1/17/2019	10	89
TW Q	1705	1/1/2009	AC	TAXIWAY	P	0	43,410.00	1/17/2019	10	91
TW S	1905	1/1/2009	PCC	TAXIWAY	P	0	10,661.00	1/17/2019	10	85
TW S	1910	1/1/2009	AC	TAXIWAY	P	0	46,845.00	1/17/2019	10	88
TW T	2005	1/1/2009	PCC	TAXIWAY	P	0	10,661.00	1/17/2019	10	82
TW T	2010	1/1/2009	AC	TAXIWAY	P	0	46,276.00	1/17/2019	10	91
TW U	2105	1/1/2009	PCC	TAXIWAY	P	0	8,143.00	1/17/2019	10	88
TW U	2110	1/1/2009	AC	TAXIWAY	P	0	38,297.00	1/17/2019	10	86

Pavement Database: FDOT

NetworkId: F95

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP GA	4105	1/1/2012	PCC	APRON	P	0	78,381.00	9/6/2018	6	76
AP GA	4110	1/1/2003	AC	APRON	P	0	39,362.00	9/6/2018	15	57
AP GA	4115	1/1/2007	AC	APRON	P	0	40,207.00	9/6/2018	11	70
AP GA	4120	1/1/2015	PCC	APRON	P	0	27,973.00	9/6/2018	3	86
AP GA	4150	6/1/2019	AC	APRON	P	0	9,900.00	6/1/2019	0	100
AP GA	4160	6/1/2016	AC	APRON	P	0	9,969.00	6/1/2016	0	100
AP GA	4205	1/1/2003	PCC	APRON	P	0	10,930.00	9/6/2018	15	65
AP HELIPAD	4305	1/1/2003	PCC	APRON	P	0	4,850.00	9/6/2018	15	89
AP T-HANG	805	1/1/2006	AC	APRON	P	0	2,520.00	9/6/2018	12	76
AP T-HANG	806	1/1/2003	AC	APRON	P	0	2,820.00	9/6/2018	15	76
AP T-HANG	810	1/1/2003	AC	APRON	P	0	5,700.00	9/6/2018	15	54
AP T-HANG	905	1/1/2007	AC	APRON	P	0	6,468.00	9/6/2018	11	57
AP T-HANG	910	1/1/2007	AC	APRON	P	0	6,140.00	9/6/2018	11	82
RW 18-36	6105	1/1/2012	AAC	RUNWAY	P	0	269,775.00	9/6/2018	6	85
RW 18-36	6110	6/1/2016	AC	RUNWAY	P	0	9,975.00	6/1/2016	0	100
TW A	120	6/1/2016	AC	TAXIWAY	P	0	93,205.00	6/1/2016	0	100
TW A	125	6/1/2019	AC	TAXIWAY	P	0	60,539.00	6/1/2019	0	100
TW A2	110	6/1/2016	AC	TAXIWAY	P	0	18,034.00	6/1/2016	0	100

*Pavement Database: FDOT*

*NetworkId: MAI*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4105	1/1/1945	PCC	APRON	P	0	1,488,818.	2/27/2017	72	32
RW 18-36	6205	1/1/2016	AAC	RUNWAY	P	0	490,878.00	2/27/2017	1	100
RW 8-26	6105	1/1/1945	AC	RUNWAY	S	0	479,495.00	2/27/2017	72	45
TW A	805	7/1/2012	AC	TAXIWAY	P	0	34,804.00	2/27/2017	5	95
TW B	705	1/1/2016	AAC	TAXIWAY	P	0	28,263.00	2/27/2017	1	100
TW C	605	1/1/2016	AAC	TAXIWAY	P	0	23,537.00	2/27/2017	1	94
TW D	505	1/1/2016	AAC	TAXIWAY	P	0	27,792.00	2/27/2017	1	100
TW E	405	1/1/2016	AAC	TAXIWAY	P	0	81,965.00	2/27/2017	1	100
TW F	305	1/1/1945	AC	TAXIWAY	P	0	22,994.00	2/27/2017	72	21
TW G	105	1/1/1945	AC	TAXIWAY	P	0	99,608.00	2/27/2017	72	22
TW PARALL	150	1/1/1945	PCC	TAXIWAY	P	0	265,596.00	2/27/2017	72	38

Pavement Database: FDOT

NetworkId: PNS

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP E	4405	1/1/2019	AAC	APRON	P	0	255,240.00	1/1/2019	0	100
AP GA	4325	1/1/2017	AAC	APRON	P	0	35,779.00	1/1/2017	0	100
AP GA	4330	1/1/2017	PCC	APRON	P	0	248,103.00	1/1/2017	0	100
AP GA	4335	1/1/2017	AC	APRON	P	0	75,253.00	1/1/2017	0	100
AP S	4505	1/1/1997	AC	APRON	T	0	112,542.00	1/14/2019	22	69
AP S	4510	1/1/1997	AC	APRON	T	0	338,266.00	1/14/2019	22	49
AP S	4515	1/1/1997	AC	APRON	T	0	219,093.00	1/14/2019	22	62
AP TERM	4205	1/1/1988	PCC	APRON	T	0	359,897.00	1/14/2019	31	91
AP TERM	4210	1/1/1977	PCC	APRON	P	0	256,288.00	1/14/2019	42	85
AP TERM	4215	1/1/2010	PCC	APRON	P	0	42,079.00	1/14/2019	9	97
AP TERM	4220	1/1/2010	PCC	APRON	P	0	75,255.00	1/14/2019	9	99
AP TERM	4225	1/1/2010	PCC	APRON	P	0	108,635.00	1/14/2019	9	96
AP TERM	4230	1/1/2001	AC	APRON	P	0	27,735.00	1/14/2019	18	2
AP TERM	4235	12/25/1998	PCC	APRON	P	0	126,857.00	1/14/2019	21	90
AP W	4605	1/1/2002	AC	APRON	P	0	216,187.00	1/14/2019	17	70
RW 17-35	6105	11/1/2007	PCC	RUNWAY	P	0	333,178.00	1/14/2019	12	91
RW 17-35	6110	11/1/2007	PCC	RUNWAY	P	0	110,822.00	1/14/2019	12	93
RW 17-35	6115	11/1/2007	AC	RUNWAY	P	0	52,500.00	1/14/2019	12	73
RW 17-35	6120	11/1/2007	AC	RUNWAY	P	0	26,250.00	1/14/2019	12	76
RW 17-35	6125	11/1/2007	PCC	RUNWAY	P	0	396,211.00	1/14/2019	12	91
RW 17-35	6130	11/1/2007	PCC	RUNWAY	P	0	131,789.00	1/14/2019	12	89
RW 8-26	6205	1/1/2004	AC	RUNWAY	P	0	130,000.00	1/14/2019	15	67
RW 8-26	6210	1/1/2004	AC	RUNWAY	P	0	65,000.00	1/14/2019	15	75
RW 8-26	6215	1/1/2004	AC	RUNWAY	P	0	87,400.00	1/14/2019	15	64
RW 8-26	6217	11/1/2007	AC	RUNWAY	P	0	36,297.00	1/14/2019	12	77
RW 8-26	6220	1/1/2004	AC	RUNWAY	P	0	43,700.00	1/14/2019	15	76
RW 8-26	6225	1/1/2004	AC	RUNWAY	P	0	61,300.00	1/14/2019	15	65
RW 8-26	6227	11/1/2007	AC	RUNWAY	P	0	18,149.00	1/14/2019	12	87
RW 8-26	6230	1/1/2004	AC	RUNWAY	P	0	30,650.00	1/14/2019	15	80
RW 8-26	6235	1/1/2004	AC	RUNWAY	P	0	170,000.00	1/14/2019	15	65
RW 8-26	6240	1/1/2004	AC	RUNWAY	P	0	85,000.00	1/14/2019	15	76
RW 8-26	6245	1/1/2004	AC	RUNWAY	P	0	40,000.00	1/14/2019	15	62
RW 8-26	6250	1/1/2004	AC	RUNWAY	P	0	20,000.00	1/14/2019	15	80
RW 8-26	6255	1/1/2004	AC	RUNWAY	P	0	60,000.00	1/14/2019	15	65
RW 8-26	6260	1/1/2004	AC	RUNWAY	P	0	30,000.00	1/14/2019	15	78
RW 8-26	6265	1/1/2006	AC	RUNWAY	P	0	100,100.00	1/14/2019	13	78
RW 8-26	6270	1/1/2006	AC	RUNWAY	P	0	50,050.00	1/14/2019	13	80
TW A	105	1/1/2001	AC	TAXIWAY	P	0	286,014.00	1/14/2019	18	71
TW A	115	2/1/2001	AC	TAXIWAY	P	0	288,167.00	1/14/2019	18	65
TW A1	120	1/1/2001	AC	TAXIWAY	P	0	47,399.00	1/14/2019	18	37
TW A2	150	1/1/2006	AC	TAXIWAY	P	0	55,331.00	1/14/2019	13	80
TW A3	170	1/1/2006	PCC	TAXIWAY	T	0	50,051.00	1/14/2019	13	88
TW A4	130	1/1/2001	AC	TAXIWAY	P	0	49,968.00	1/14/2019	18	81
TW A5	125	1/1/2001	AC	TAXIWAY	P	0	49,806.00	1/14/2019	18	73
TW A7	215	1/1/2002	AC	TAXIWAY	P	0	72,160.00	1/14/2019	17	65
TW B	205	1/1/2002	AC	TAXIWAY	P	0	213,853.00	1/14/2019	17	75
TW B	210	1/1/2002	AC	TAXIWAY	P	0	51,982.00	1/14/2019	17	70
TW B	217	1/1/2002	AC	TAXIWAY	P	0	11,000.00	1/14/2019	17	74
TW B	220	1/1/2002	AC	TAXIWAY	P	0	256,627.00	1/14/2019	17	73

TW B	230	1/1/2005	AC	TAXIWAY	P	0	124,670.00	1/14/2019	14	84
TW B2	212	1/1/2002	AC	TAXIWAY	P	0	32,535.00	1/14/2019	17	75
TW B2	213	1/1/1988	PCC	TAXIWAY	P	0	10,751.00	1/14/2019	31	90
TW B2	240	1/1/2002	AC	TAXIWAY	P	0	50,378.00	1/14/2019	17	75
TW B3	255	1/1/2002	AC	TAXIWAY	P	0	50,248.00	1/14/2019	17	76
TW B4	260	1/1/2002	AC	TAXIWAY	P	0	50,114.00	1/14/2019	17	68
TW B5	265	1/1/2002	AC	TAXIWAY	P	0	48,322.00	1/14/2019	17	70
TW B7	270	1/1/2002	AC	TAXIWAY	P	0	14,899.00	1/14/2019	17	64
TW B8	280	1/1/2002	AC	TAXIWAY	P	0	13,317.00	1/14/2019	17	70
TW C	315	1/1/1997	AC	TAXIWAY	P	0	67,178.00	1/14/2019	22	76
TW C	320	1/1/1997	AC	TAXIWAY	P	0	13,138.00	1/14/2019	22	71
TW C	325	1/1/2004	AC	TAXIWAY	P	0	33,625.00	1/14/2019	15	72
TW C	330	1/1/2002	AC	TAXIWAY	P	0	16,451.00	1/14/2019	17	70
TW C2	305	1/1/2008	AC	TAXIWAY	P	0	19,288.00	1/14/2019	11	88
TW C2	310	1/1/1997	AC	TAXIWAY	P	0	12,355.00	1/14/2019	22	78
TW D	140	1/1/2001	AC	TAXIWAY	P	0	43,648.00	1/14/2019	18	68
TW D	405	1/1/2000	AC	TAXIWAY	P	0	118,752.00	1/14/2019	19	75
TW D	410	1/1/2005	AC	TAXIWAY	P	0	20,158.00	1/14/2019	14	70
TW D	430	1/1/2005	AC	TAXIWAY	P	0	48,301.00	1/14/2019	14	81
TW D1	415	1/1/2000	AC	TAXIWAY	P	0	13,134.00	1/14/2019	19	80
TW D2	420	1/1/2000	AC	TAXIWAY	P	0	13,134.00	1/14/2019	19	76
TW D3	425	1/1/2006	AC	TAXIWAY	P	0	14,220.00	1/14/2019	13	85
TW E	505	1/1/2018	AC	TAXIWAY	P	0	140,943.00	1/1/2018	0	100

Pavement Database: FDOT

NetworkId: TLH

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP C	4505	1/1/2005	AAC	APRON	P	0	265,932.00	1/14/2019	14	76
AP CARGO	4205	1/1/1990	AC	APRON	P	0	65,663.00	1/14/2019	29	87
AP CARGO	4210	1/1/2007	AC	APRON	P	0	400,242.00	1/14/2019	12	80
AP CARGO	4215	1/1/2007	PCC	APRON	P	0	18,250.00	1/14/2019	12	82
AP N	4405	1/1/2010	AAC	APRON	P	0	77,291.00	1/14/2019	9	85
AP N	4410	1/1/2010	AAC	APRON	P	0	214,663.00	1/14/2019	9	83
AP N	4415	1/1/2010	APC	APRON	P	0	308,039.00	1/14/2019	9	80
AP N	4420	1/1/2010	APC	APRON	P	0	24,514.00	1/14/2019	9	84
AP N	4425	1/1/2010	AC	APRON	P	0	9,973.00	1/14/2019	9	79
AP RU RW18	5505	1/1/2005	AAC	APRON	P	0	25,207.00	1/14/2019	14	64
AP S	4305	1/5/2018	AAC	APRON	P	0	70,348.00	1/5/2018	0	100
AP S	4310	1/5/2018	AAC	APRON	P	0	180,291.00	1/5/2018	0	100
AP S	4313	1/5/2018	PCC	APRON	P	0	11,875.00	1/5/2018	0	100
AP S	4315	1/5/2018	AAC	APRON	P	0	60,505.00	1/5/2018	0	100
AP S	4320	1/5/2018	AAC	APRON	P	0	68,878.00	1/5/2018	0	100
AP S	4325	1/5/2018	PCC	APRON	P	0	4,183.00	1/5/2018	0	100
AP S	4332	1/5/2018	AC	APRON	P	0	401,224.00	1/5/2018	0	100
AP TERM	4105	1/1/1989	PCC	APRON	P	0	855,384.00	1/14/2019	30	85
AP TERM	4110	1/1/2005	APC	APRON	P	0	13,317.00	1/14/2019	14	55
RW 18-36	6105	1/1/1993	AAC	RUNWAY	P	0	569,000.00	1/14/2019	26	46
RW 18-36	6110	1/1/1993	AAC	RUNWAY	P	0	284,500.00	1/14/2019	26	64
RW 18-36	6125	10/1/2012	AC	RUNWAY	P	0	62,300.00	1/14/2019	7	78
RW 18-36	6130	10/1/2012	AC	RUNWAY	P	0	31,150.00	1/14/2019	7	88
RW 18-36	6135	10/1/2012	AAC	RUNWAY	P	0	20,000.00	1/14/2019	7	74
RW 18-36	6140	10/1/2012	AAC	RUNWAY	P	0	10,000.00	1/14/2019	7	83
RW 18-36	6145	10/1/2012	AAC	RUNWAY	P	0	18,000.00	1/14/2019	7	73
RW 18-36	6150	10/1/2012	AAC	RUNWAY	P	0	9,000.00	1/14/2019	7	81
RW 18-36	6155	10/1/2012	AC	RUNWAY	P	0	31,400.00	1/14/2019	7	90
RW 18-36	6160	10/1/2012	AC	RUNWAY	P	0	15,700.00	1/14/2019	7	90
RW 9-27	6205	1/1/2015	AC	RUNWAY	P	0	400,000.00	1/14/2019	4	91
RW 9-27	6210	1/1/2015	AC	RUNWAY	P	0	800,000.00	1/14/2019	4	92
TL AP S	3205	1/1/1994	AAC	TAXIWAY	P	0	5,661.00	1/14/2019	25	67
TL T-HANG	3105	1/1/1998	AC	TAXIWAY	P	0	46,227.00	1/14/2019	21	62
TL T-HANG	3110	1/1/1985	AC	TAXIWAY	P	0	16,646.00	1/14/2019	34	53
TL T-HANG	3115	1/1/1985	AC	TAXIWAY	P	0	63,002.00	1/14/2019	34	48
TW A	103	10/1/2012	AC	TAXIWAY	P	0	62,586.00	1/14/2019	7	84
TW A	105	1/1/2005	AAC	TAXIWAY	P	0	465,433.00	1/14/2019	14	62
TW A	107	10/1/2012	AC	TAXIWAY	P	0	23,925.00	1/14/2019	7	79
TW A1	110	10/1/2012	AC	TAXIWAY	P	0	40,291.00	1/14/2019	7	76
TW A10	195	1/1/2005	AAC	TAXIWAY	P	0	34,774.00	1/14/2019	14	70
TW A10	196	1/1/2010	AAC	TAXIWAY	P	0	6,575.00	1/14/2019	9	90
TW A11	197	1/1/2005	AAC	TAXIWAY	P	0	30,183.00	1/14/2019	14	65
TW A12	199	1/1/2005	AAC	TAXIWAY	P	0	49,099.00	1/14/2019	14	63
TW A2	120	1/1/2005	AAC	TAXIWAY	P	0	42,179.00	1/14/2019	14	71
TW A3	130	1/1/2005	AAC	TAXIWAY	P	0	32,330.00	1/14/2019	14	66
TW A3	135	7/1/2005	AC	TAXIWAY	P	0	34,919.00	1/14/2019	14	78
TW A4	140	1/1/1985	AC	TAXIWAY	P	0	19,805.00	1/14/2019	34	60
TW A5	150	1/1/2005	AAC	TAXIWAY	P	0	21,275.00	1/14/2019	14	67

TW A5	155	1/1/2005	AAC	TAXIWAY	P	0	34,234.00	1/14/2019	14	63
TW A6	160	1/1/2005	AAC	TAXIWAY	P	0	43,815.00	1/14/2019	14	65
TW A7	170	1/1/2005	AAC	TAXIWAY	P	0	31,280.00	1/14/2019	14	61
TW A8	180	1/1/2005	AAC	TAXIWAY	P	0	43,771.00	1/14/2019	14	69
TW A9	190	1/1/2005	AAC	TAXIWAY	P	0	34,544.00	1/14/2019	14	62
TW A9	191	1/1/2005	AAC	TAXIWAY	P	0	95,681.00	1/14/2019	14	63
TW A9	193	1/1/2005	AAC	TAXIWAY	P	0	35,166.00	1/14/2019	14	63
TW B	205	1/1/2005	AAC	TAXIWAY	P	0	581,353.00	1/14/2019	14	57
TW B	207	10/1/2012	AC	TAXIWAY	P	0	116,110.00	1/14/2019	7	83
TW B1	210	1/1/2005	AAC	TAXIWAY	P	0	46,292.00	1/14/2019	14	59
TW B1	215	1/1/2015	AC	TAXIWAY	P	0	4,782.00	1/14/2019	4	94
TW B2	220	1/1/2015	AC	TAXIWAY	P	0	49,156.00	1/14/2019	4	90
TW B3	230	1/1/2015	AC	TAXIWAY	P	0	63,794.00	1/14/2019	4	94
TW B3	235	1/1/2007	AC	TAXIWAY	P	0	83,567.00	1/14/2019	12	87
TW B4	240	1/1/2007	AC	TAXIWAY	P	0	48,156.00	1/14/2019	12	78
TW B5	250	1/1/2005	AAC	TAXIWAY	P	0	24,545.00	1/14/2019	14	44
TW B6	260	1/1/2015	AC	TAXIWAY	P	0	38,862.00	1/14/2019	4	89
TW B6	265	1/1/2005	AAC	TAXIWAY	P	0	17,002.00	1/14/2019	14	63
TW B6	267	1/1/2005	AAC	TAXIWAY	P	0	24,158.00	1/14/2019	14	53
TW B7	270	1/1/2015	AC	TAXIWAY	P	0	39,535.00	1/14/2019	4	86
TW B7	271	1/1/2015	AC	TAXIWAY	P	0	23,946.00	1/14/2019	4	85
TW B7	273	1/1/2005	AAC	TAXIWAY	P	0	38,360.00	1/14/2019	14	70
TW B7	275	1/2/1992	AAC	TAXIWAY	P	0	9,455.00	1/14/2019	27	61
TW B7	277	1/1/1994	AAC	TAXIWAY	P	0	8,669.00	1/14/2019	25	69
TW B8	280	7/1/2003	AC	TAXIWAY	P	0	62,931.00	1/14/2019	16	72
TW B8	285	1/1/2003	AC	TAXIWAY	P	0	61,923.00	1/14/2019	16	78
TW B9	290	1/1/2015	AC	TAXIWAY	P	0	20,199.00	1/14/2019	4	86
TW B9	295	1/1/2005	AAC	TAXIWAY	P	0	123,914.00	1/14/2019	14	64
TW C	305	10/1/2012	AC	TAXIWAY	P	0	96,607.00	1/14/2019	7	84
TW C	307	1/1/2005	AAC	TAXIWAY	P	0	13,381.00	1/14/2019	14	64
TW C	310	1/1/1992	AAC	TAXIWAY	P	0	186,000.00	1/14/2019	27	58
TW C	315	1/1/2003	AAC	TAXIWAY	P	0	66,291.00	1/14/2019	16	73
TW D	405	7/1/2005	AC	TAXIWAY	P	0	33,610.00	1/14/2019	14	74
TW D	410	1/1/1998	AC	TAXIWAY	P	0	10,157.00	1/14/2019	21	73
TW T	2005	12/25/1999	AC	TAXIWAY	P	0	23,143.00	1/14/2019	20	88
TW Z	2605	1/1/1994	AC	TAXIWAY	P	0	62,575.00	1/14/2019	25	75
TW Z	2610	1/1/1994	AC	TAXIWAY	P	0	2,379.00	1/14/2019	25	55
TW Z	2615	1/1/1994	AC	TAXIWAY	P	0	2,615.00	1/14/2019	25	71

*Pavement Database: FDOT*

*NetworkId: VPS*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP TERM	4105	12/25/2003	AC	APRON	P	0	104,350.00	1/17/2019	16	66
AP TERM	4110	1/1/2011	PCC	APRON	P	0	17,866.00	1/17/2019	8	69
AP TERM	4115	5/1/2007	PCC	APRON	P	0	82,476.00	1/17/2019	12	93
AP TERM	4120	3/24/2003	PCC	APRON	P	0	395,113.00	1/17/2019	16	87
AP TERM	4125	1/1/2010	PCC	APRON	P	0	77,044.00	1/17/2019	9	97
AP TERM	4130	1/1/2007	PCC	APRON	P	0	17,472.00	1/17/2019	12	96
TW D1	105	1/1/2019	AC	TAXIWAY	P	0	81,289.00	1/1/2019	0	100
TW D1	110	1/1/2019	AAC	TAXIWAY	P	0	6,239.00	1/1/2019	0	100
TW D2	115	1/1/2019	AAC	TAXIWAY	P	0	104,779.00	1/1/2019	0	100
TW D2	120	1/1/2019	AAC	TAXIWAY	P	0	5,338.00	1/1/2019	0	100

*Pavement Database: FDOT**NetworkId: X13*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP	4115	1/1/1995	AC	APRON	P	0	50,739.00	1/9/2017	22	66
AP	4120	1/1/2004	AC	APRON	T	0	10,671.00	1/9/2017	13	59
AP RU	5105	1/1/1991	AAC	APRON	P	0	7,500.00	1/9/2017	26	48
AP RU	5110	1/1/1991	AAC	APRON	P	0	8,569.00	1/9/2017	26	55
RW 5-23	6105	1/1/1991	AAC	RUNWAY	P	0	302,918.00	1/9/2017	26	58
TW A	105	1/1/1995	AC	TAXIWAY	P	0	9,699.00	1/9/2017	22	49

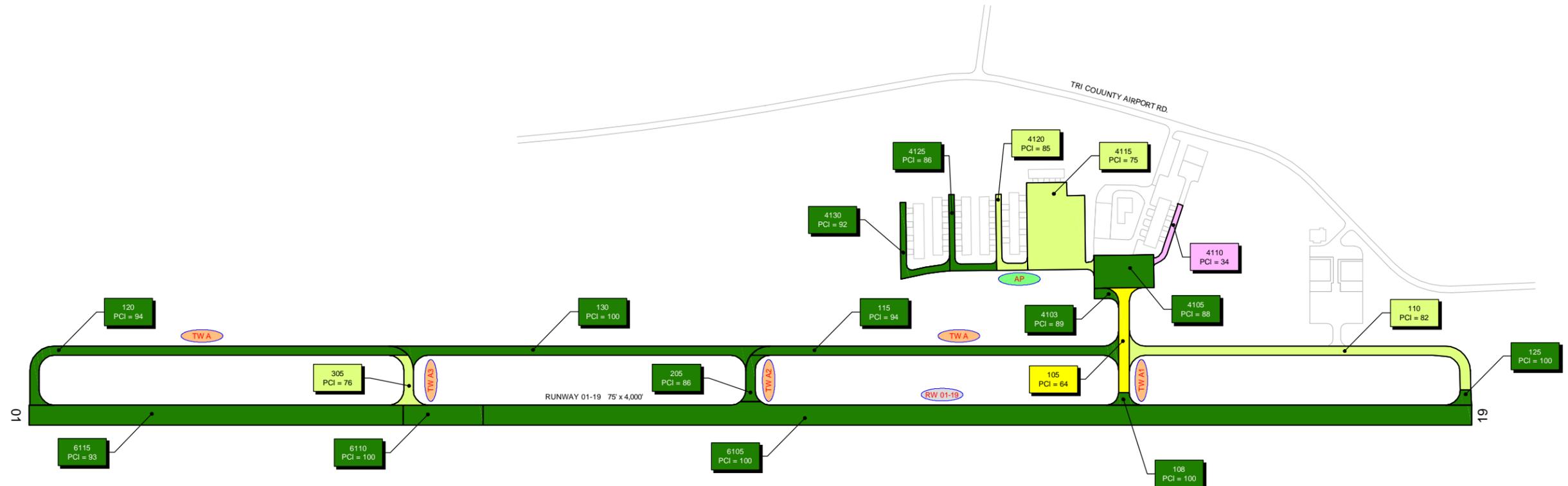
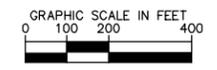
*Pavement Database: FDOT*

Age Category	Average Age at Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
00-02		3,768,906.00	43	98.53	4.41	99.53
03-05	5	3,772,994.00	48	87.92	5.52	88.41
06-10	9	7,874,003.00	96	84.72	8.19	85.13
11-15	14	5,691,423.00	83	71.92	12.06	73.62
16-20	18	3,294,830.00	41	65.39	15.37	69.79
21-25	24	1,912,959.00	44	59.02	12.11	60.93
26-30	28	2,627,801.00	14	56.93	14.81	62.94
31-35	33	835,170.00	9	53.44	22.88	60.28
36-40	37	52,500.00	1	36.00	0.00	36.00
41-50	44	396,374.00	5	58.00	16.17	74.47
50+	76	6,607,472.00	38	56.79	13.34	53.63
ALL	18	36,834,432.01	422	74.88	17.81	74.55



# Appendix B

## Pavement Condition Index Exhibits



**LEGEND**

- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TWA TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

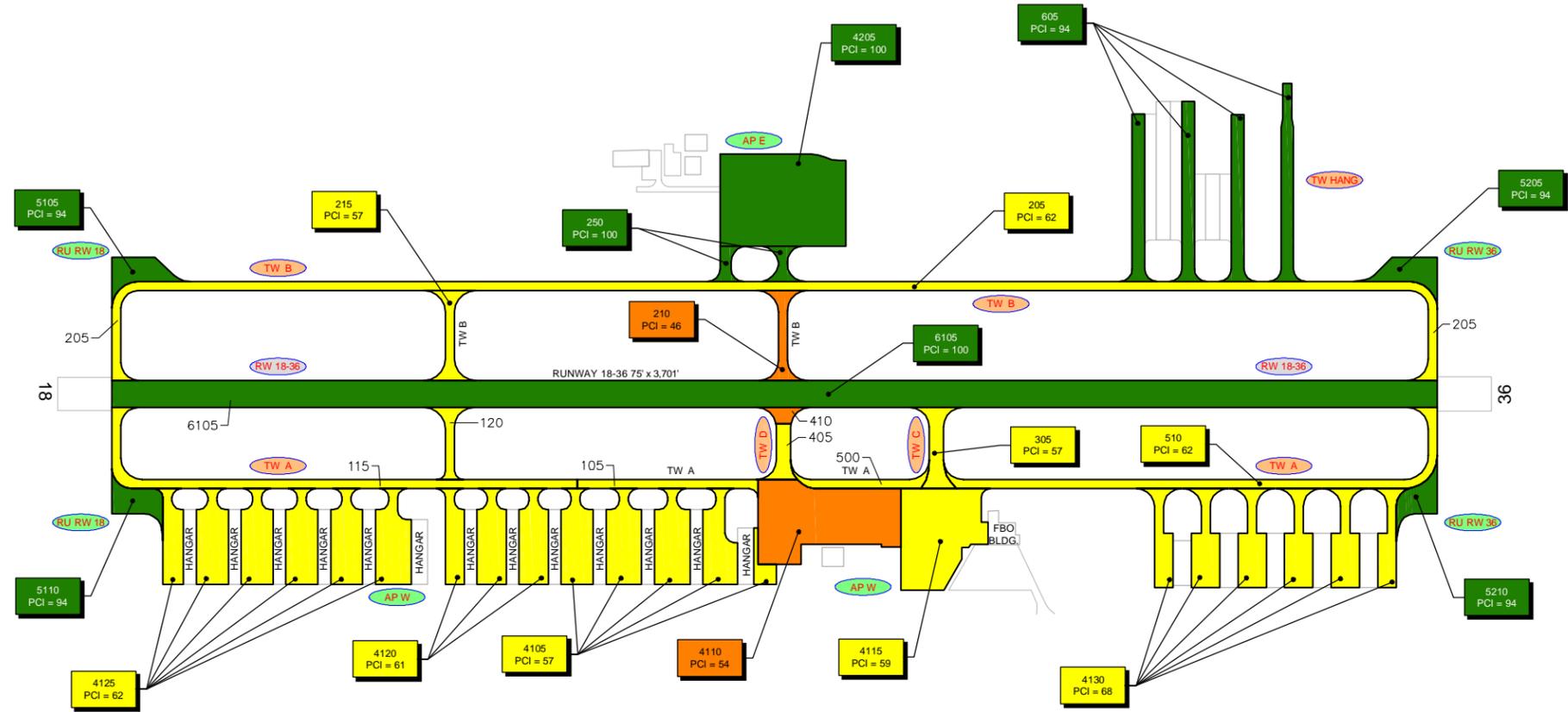
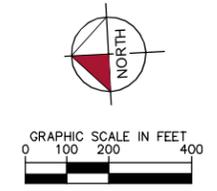
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	PCI 71-85 SATISFACTORY
	PCI 56-70 FAIR
	PCI 41-55 POOR
	PCI 26-40 VERY POOR
	PCI 11-25 SERIOUS
	PCI 0-10 FAILED

\*SECTION NO.\*  
 \*PCI NO.\*

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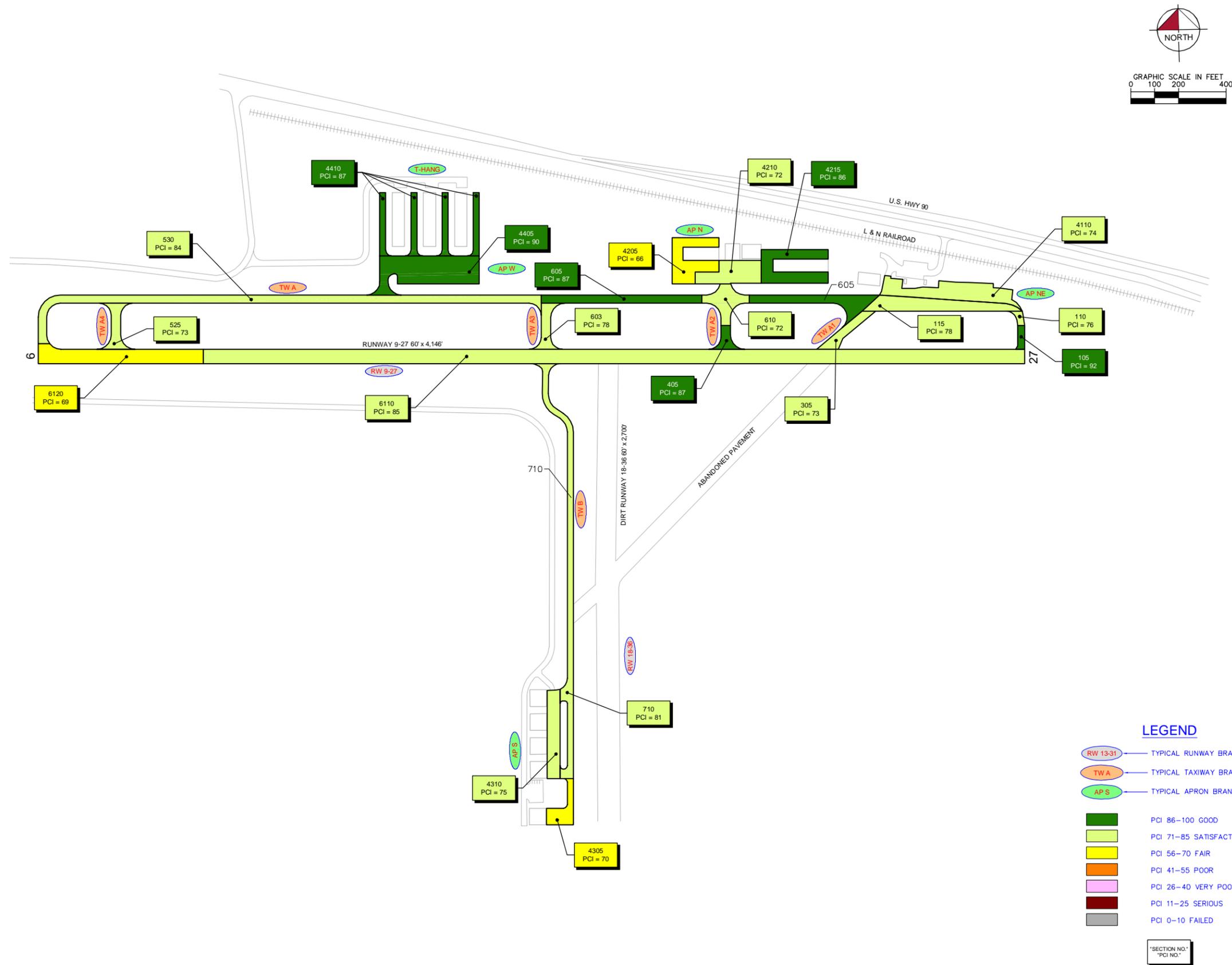


**LEGEND**

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- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID
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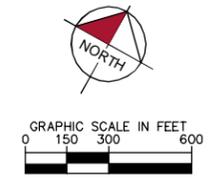
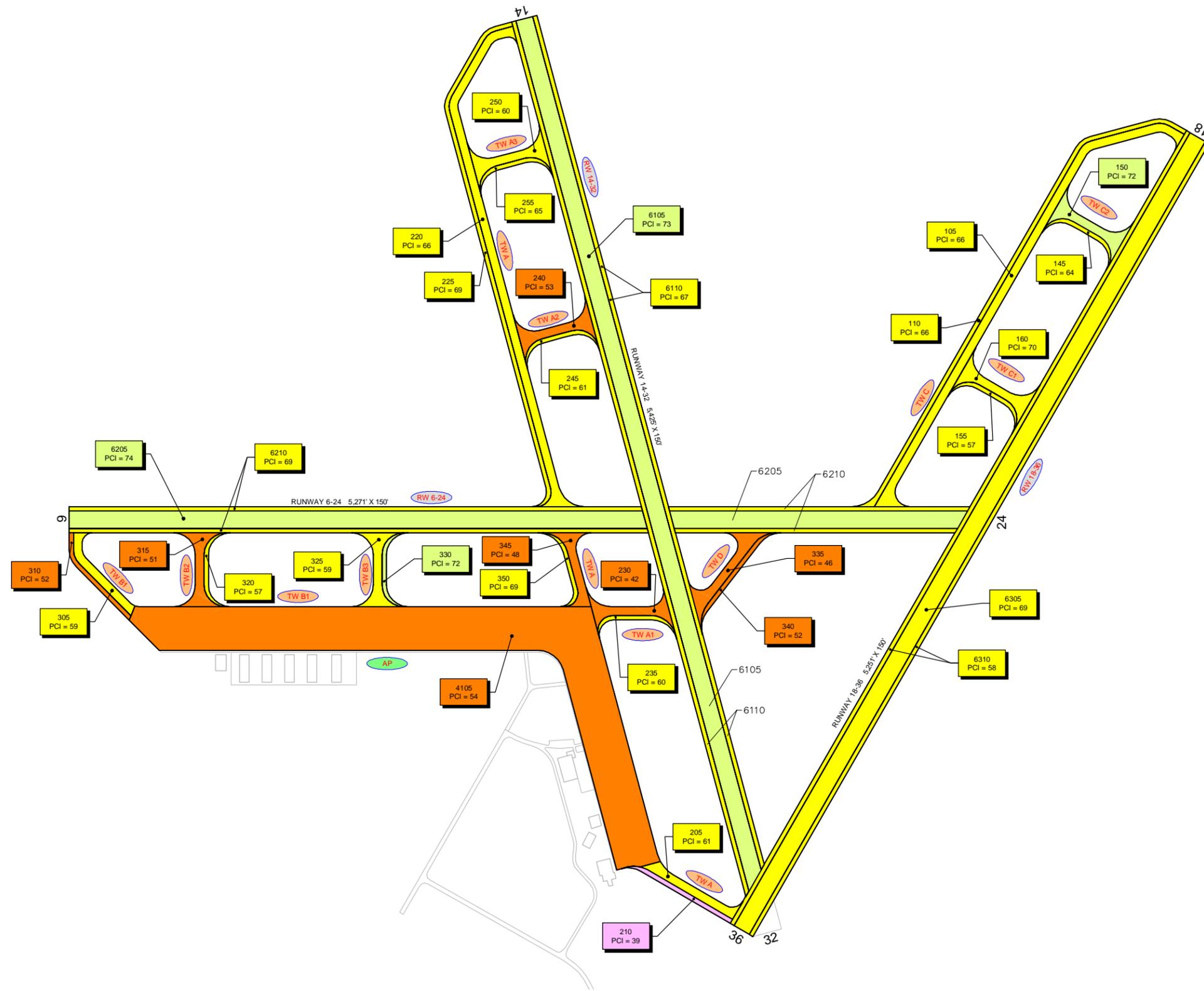


003 - AIRFIELD PAVEMENT  
CONDITION INDEX EXHIBIT

Airport Pavement Evaluation Report  
**2017**

Statewide Airfield Pavement  
Management Program  
DEFUNIAK SPRINGS AIRPORT - 54J





**LEGEND**

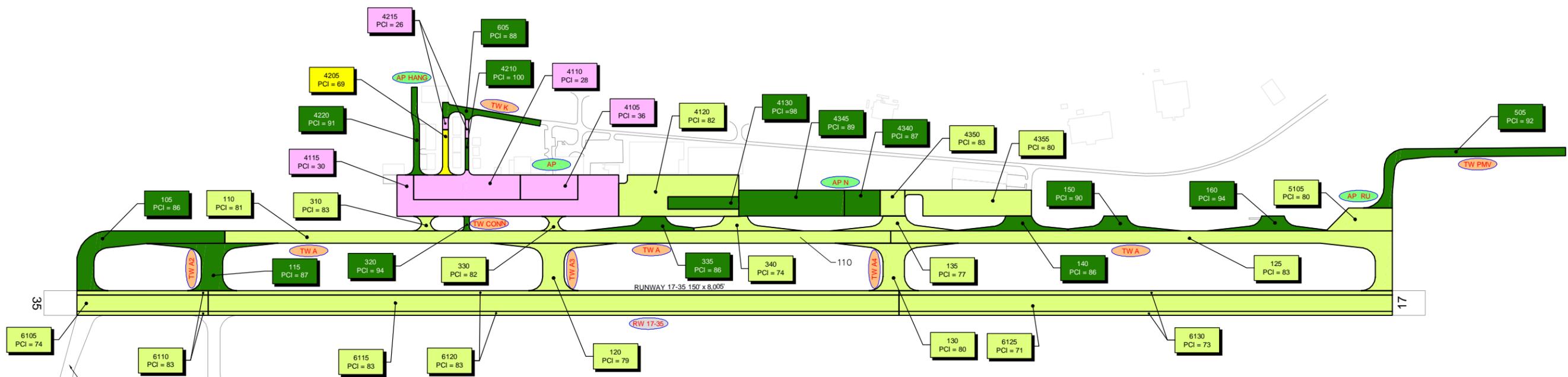
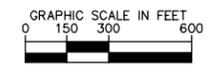
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	PCI 86-100 GOOD
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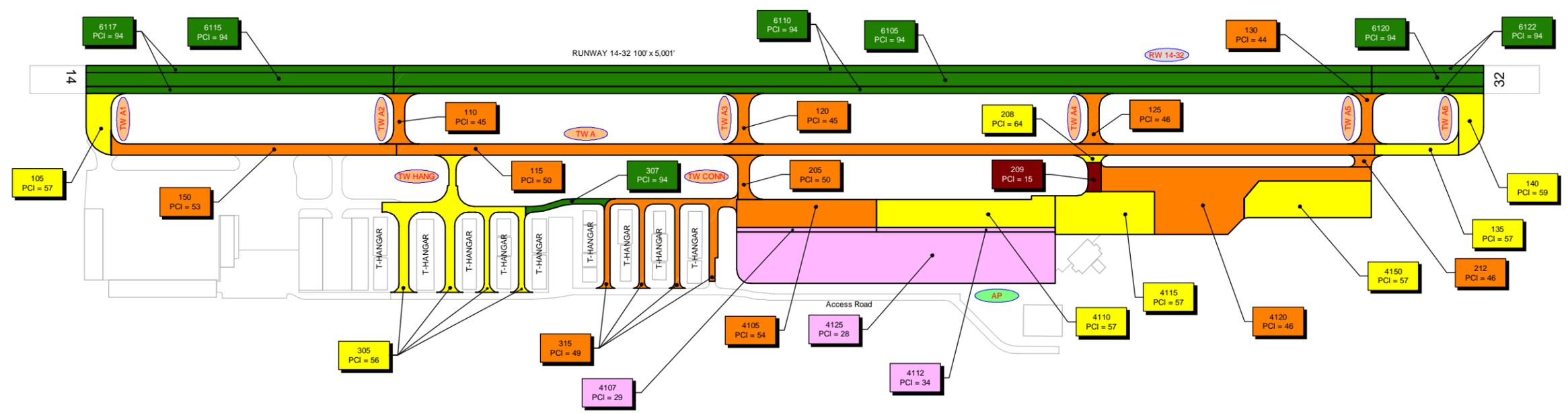
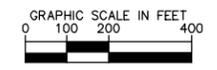
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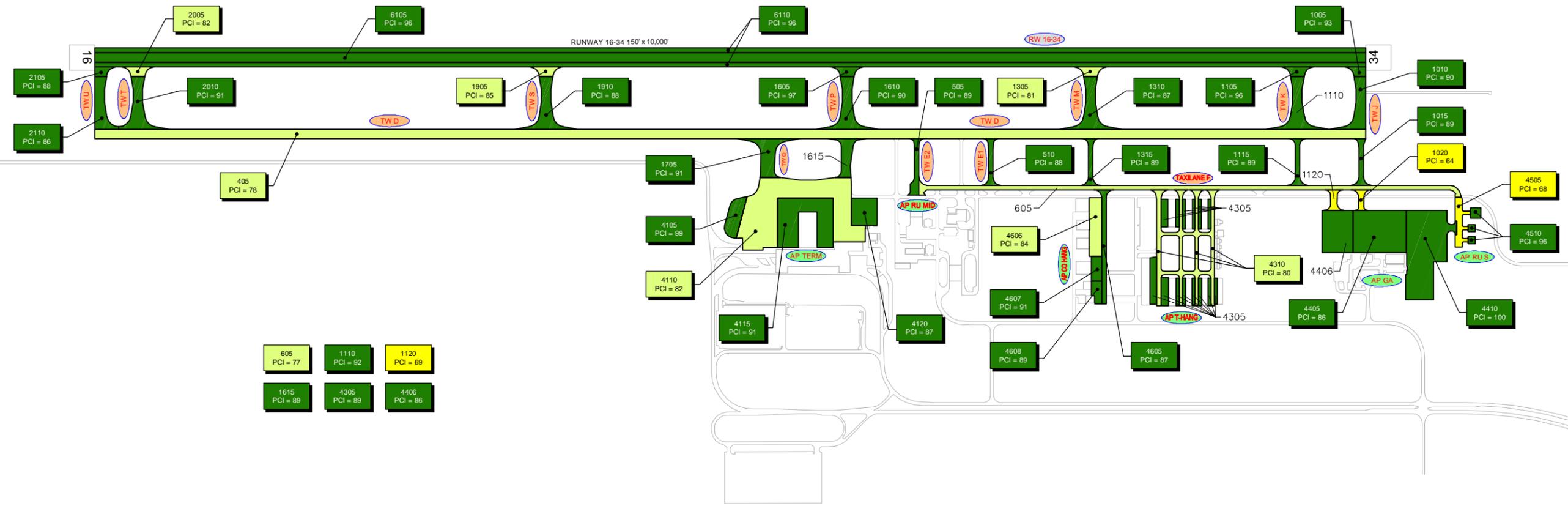
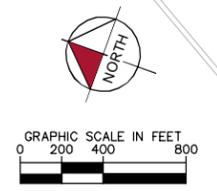
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1615 PCI = 89	4305 PCI = 89	4406 PCI = 86

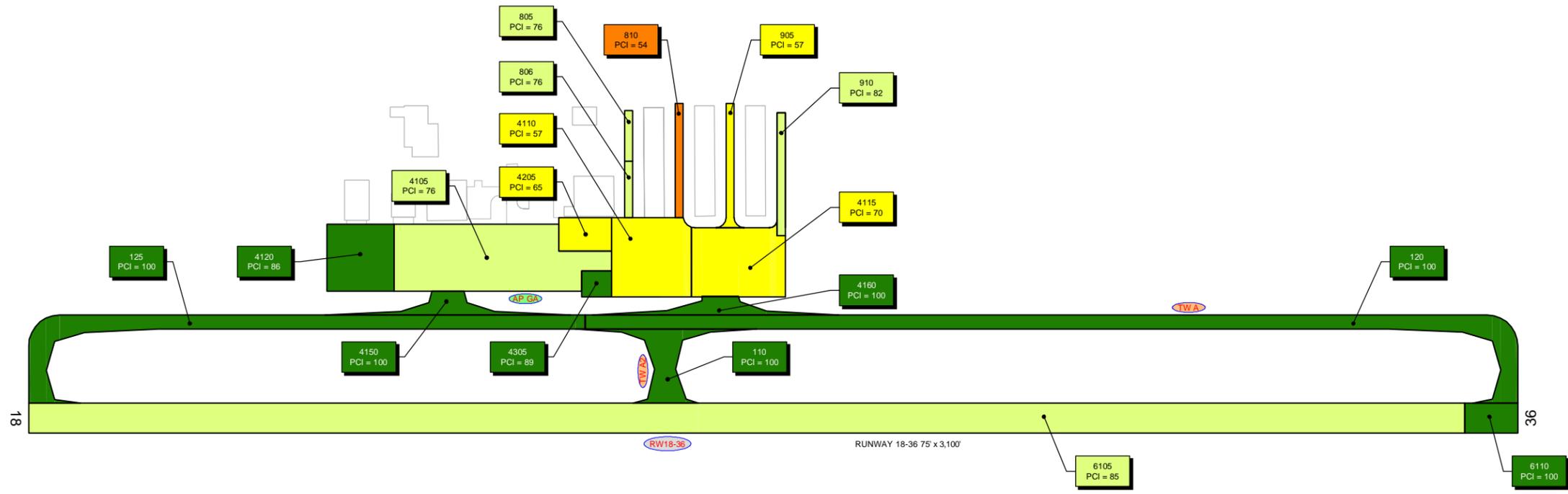
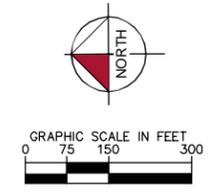
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- RW 13-31 TYPICAL RUNWAY BRANCH ID
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- APS TYPICAL APRON BRANCH ID
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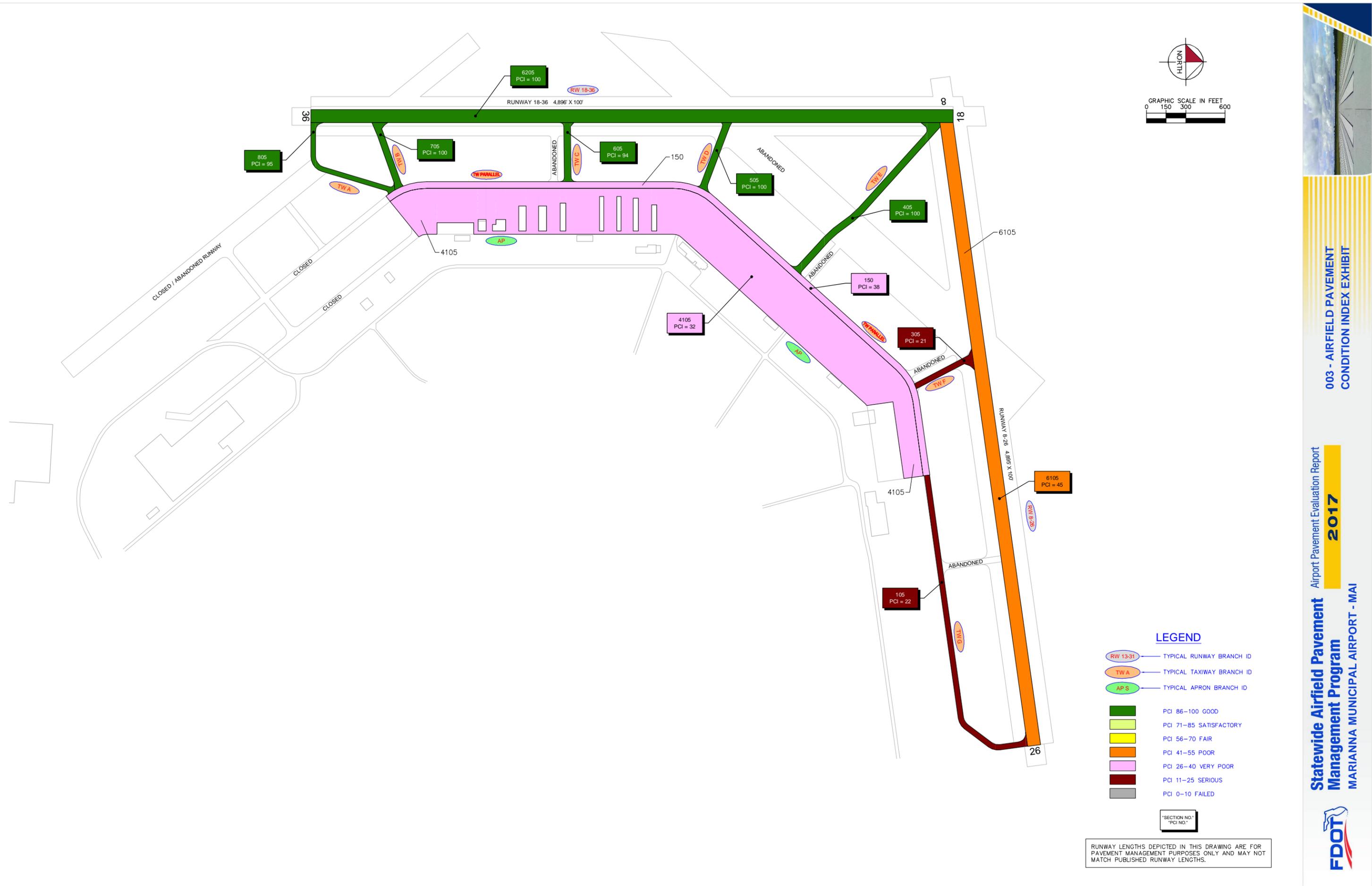


003 - AIRFIELD PAVEMENT  
CONDITION INDEX EXHIBIT

Airport Pavement Evaluation Report  
**2019**

**Statewide Airfield Pavement  
Management Program**  
CALHOUN COUNTY AIRPORT - F95



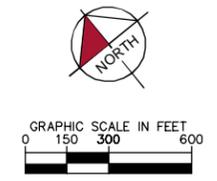
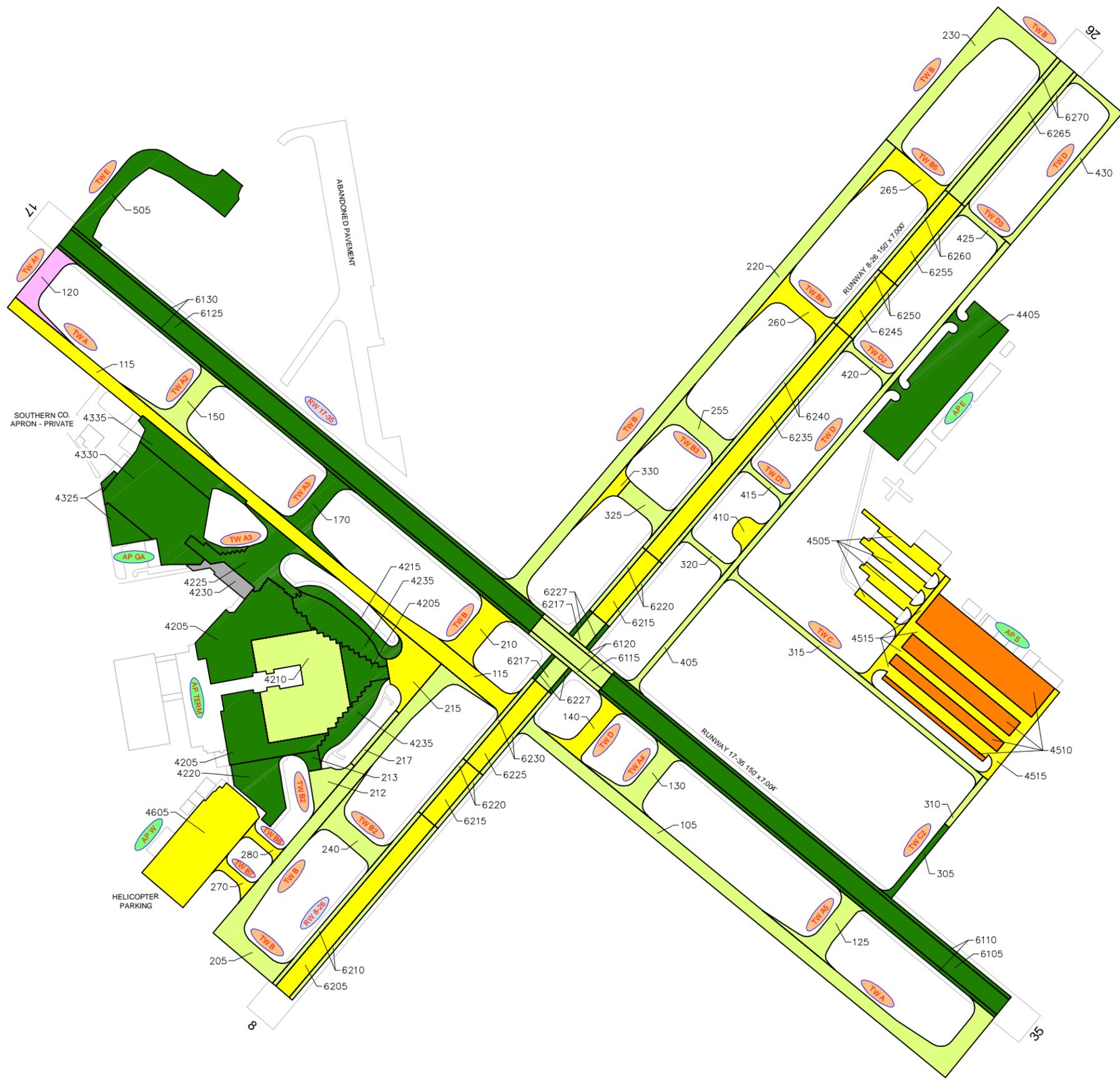


003 - AIRFIELD PAVEMENT  
CONDITION INDEX EXHIBIT

Statewide Airfield Pavement  
Management Program  
2017

Airport Pavement Evaluation Report  
MARIANNA MUNICIPAL AIRPORT - MAI





105 PCI = 71	115 PCI = 65	120 PCI = 37	125 PCI = 73	130 PCI = 81	140 PCI = 68	150 PCI = 80	170 PCI = 88
205 PCI = 75	210 PCI = 70	212 PCI = 75	213 PCI = 90	215 PCI = 65	217 PCI = 74	220 PCI = 73	230 PCI = 84
240 PCI = 75	255 PCI = 76	260 PCI = 68	265 PCI = 70	270 PCI = 64	280 PCI = 70	305 PCI = 88	310 PCI = 78
315 PCI = 76	320 PCI = 71	325 PCI = 72	330 PCI = 70	405 PCI = 75	410 PCI = 70	415 PCI = 80	420 PCI = 76
425 PCI = 85	430 PCI = 81	505 PCI = 100	4205 PCI = 91	4210 PCI = 85	4215 PCI = 97	4220 PCI = 99	4225 PCI = 96
4230 PCI = 2	4235 PCI = 90	4325 PCI = 100	4330 PCI = 100	4335 PCI = 100	4405 PCI = 100	4505 PCI = 69	4510 PCI = 49
4515 PCI = 62	4605 PCI = 70	6105 PCI = 91	6110 PCI = 93	6115 PCI = 73	6120 PCI = 76	6125 PCI = 91	6130 PCI = 89
6205 PCI = 67	6210 PCI = 75	6215 PCI = 64	6217 PCI = 77	6220 PCI = 76	6225 PCI = 65	6227 PCI = 87	6230 PCI = 80
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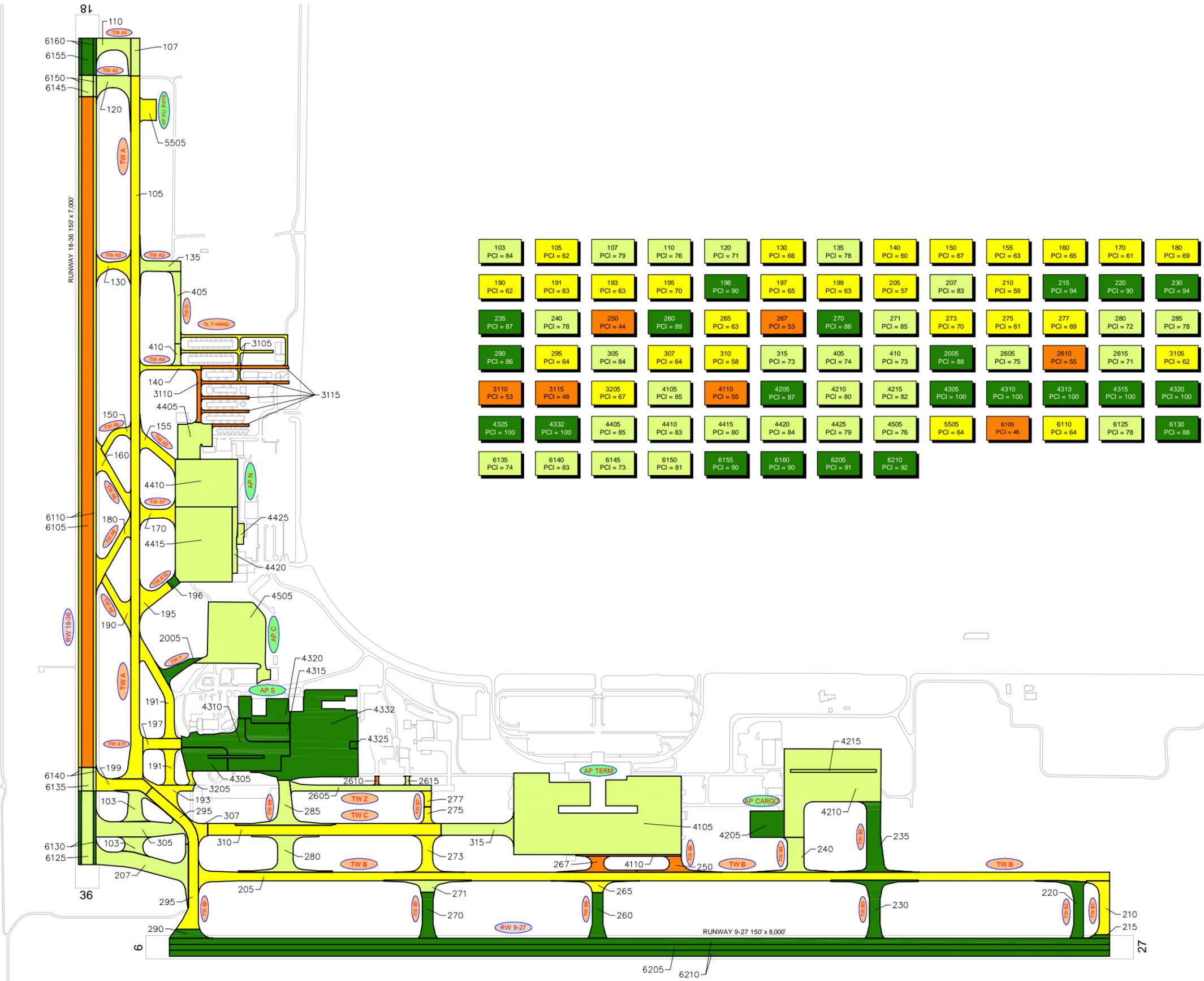
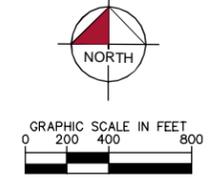
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003 - AIRFIELD PAVEMENT  
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103 PCI = 84	105 PCI = 62	107 PCI = 79	110 PCI = 76	120 PCI = 71	130 PCI = 66	135 PCI = 78	140 PCI = 60	150 PCI = 67	155 PCI = 63	160 PCI = 65	170 PCI = 61	180 PCI = 69
190 PCI = 62	191 PCI = 63	193 PCI = 63	195 PCI = 70	196 PCI = 90	197 PCI = 65	199 PCI = 63	205 PCI = 57	207 PCI = 83	210 PCI = 59	215 PCI = 94	220 PCI = 90	230 PCI = 94
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290 PCI = 86	295 PCI = 64	305 PCI = 84	307 PCI = 64	310 PCI = 58	315 PCI = 73	405 PCI = 74	410 PCI = 73	2005 PCI = 88	2605 PCI = 75	2610 PCI = 55	2615 PCI = 71	3105 PCI = 62
3110 PCI = 53	3115 PCI = 48	3205 PCI = 67	4105 PCI = 85	4110 PCI = 55	4205 PCI = 87	4210 PCI = 80	4215 PCI = 82	4305 PCI = 100	4310 PCI = 100	4313 PCI = 100	4315 PCI = 100	4320 PCI = 100
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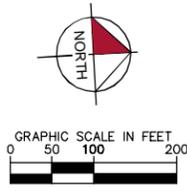
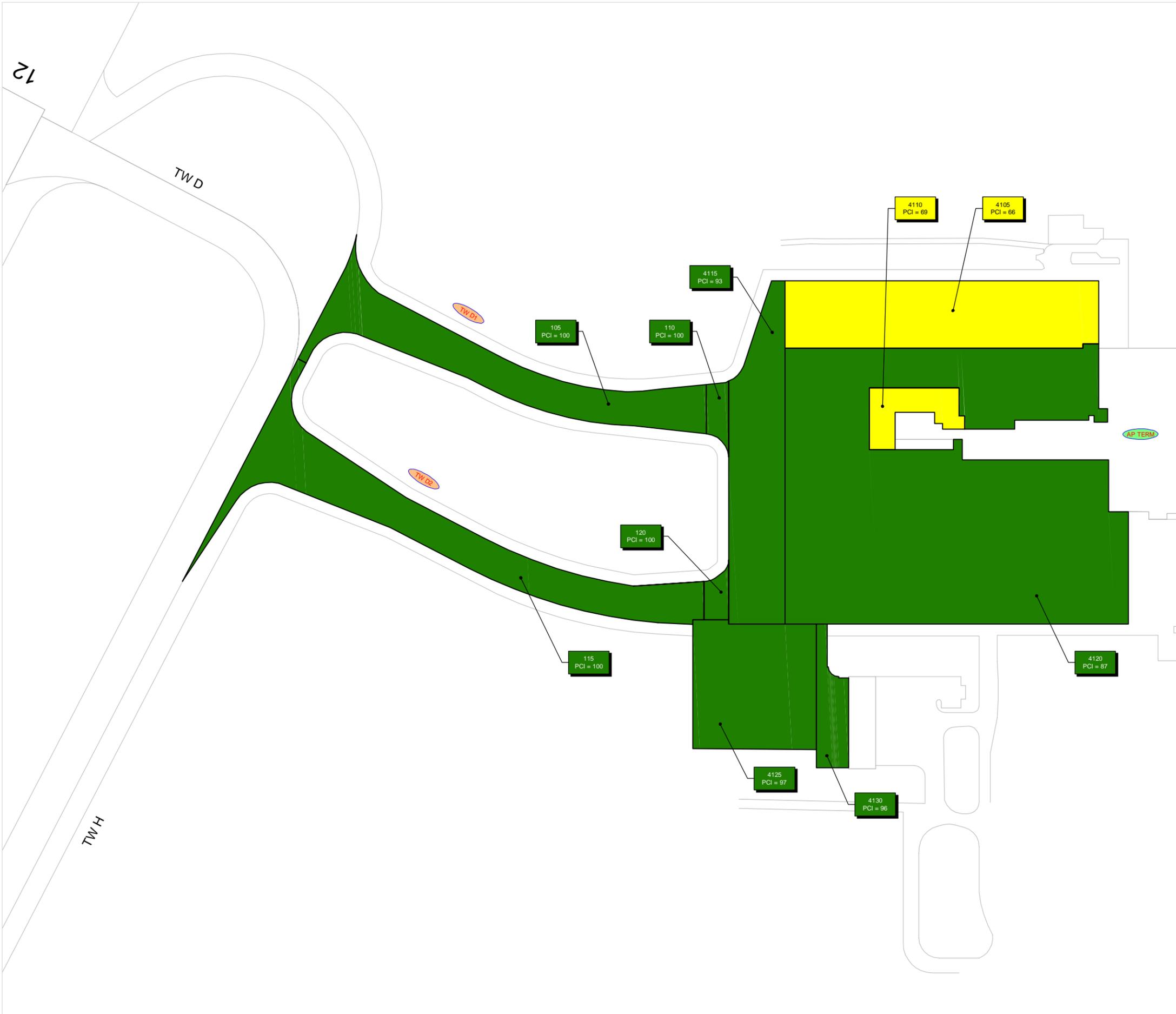
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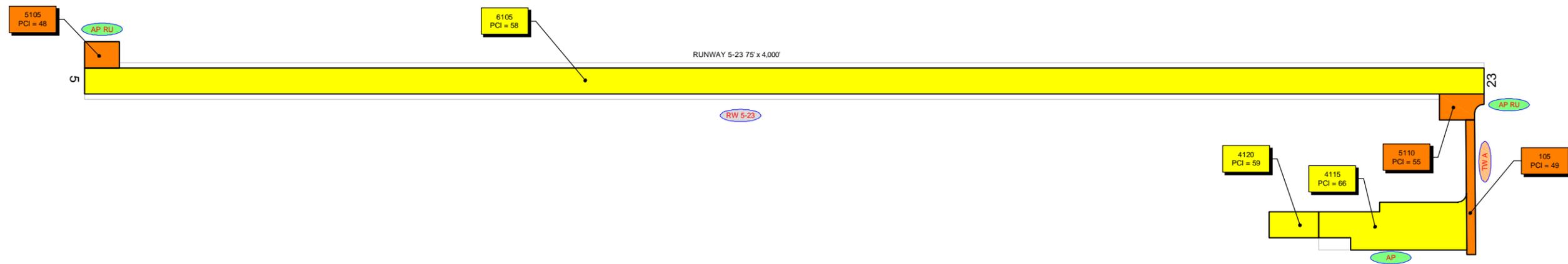
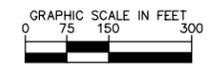


003 - AIRFIELD PAVEMENT  
CONDITION INDEX EXHIBIT

Airport Pavement Evaluation Report  
**2019**

Statewide Airfield Pavement  
Management Program  
DESTIN-FORT WALTON BEACH AIRPORT - VPS





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# Appendix C

## Airfield Pavement Major Rehabilitation Tables

*Table C-1 – 10-Year Major Rehabilitation Planning Needs*

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
<b>Apalachicola Regional-Cleve Randolph Field (AAF)</b>								
2018	AAF	AP	4105	PCC	979,973	54	PCC Restoration	\$ 9,800,000
2018	AAF	RW 18-36	6310	PCC	262,625	58	PCC Restoration	\$ 2,627,000
2018	AAF	TW A	205	PCC	31,535	61	PCC Restoration	\$ 316,000
2018	AAF	TW A	210	PCC	16,092	39	PCC Reconstruction	\$ 242,000
2018	AAF	TW A	220	PCC	154,199	66	PCC Restoration	\$ 1,543,000
2018	AAF	TW A	345	PCC	29,764	48	PCC Restoration	\$ 340,000
2018	AAF	TW A1	230	PCC	32,807	42	PCC Restoration	\$ 473,000
2018	AAF	TW A1	235	PCC	11,058	60	PCC Restoration	\$ 111,000
2018	AAF	TW A2	240	PCC	34,679	53	PCC Restoration	\$ 347,000
2018	AAF	TW A2	245	PCC	10,796	61	PCC Restoration	\$ 108,000
2018	AAF	TW A3	250	PCC	35,036	60	PCC Restoration	\$ 351,000
2018	AAF	TW A3	255	PCC	10,441	65	PCC Restoration	\$ 105,000
2018	AAF	TW B1	305	PCC	29,556	59	PCC Restoration	\$ 296,000
2018	AAF	TW B1	310	PCC	15,572	52	PCC Restoration	\$ 156,000
2018	AAF	TW B2	315	PCC	34,613	51	PCC Restoration	\$ 347,000
2018	AAF	TW B2	320	PCC	10,600	57	PCC Restoration	\$ 107,000
2018	AAF	TW B3	325	PCC	34,613	59	PCC Restoration	\$ 347,000
2018	AAF	TW C1	155	PCC	10,613	57	PCC Restoration	\$ 107,000
2018	AAF	TW C2	145	PCC	10,646	64	PCC Restoration	\$ 107,000
2018	AAF	TW D	335	PCC	40,968	46	PCC Restoration	\$ 509,000
2018	AAF	TW D	340	PCC	15,082	52	PCC Restoration	\$ 151,000
2019	AAF	TW C	105	PCC	153,704	66	PCC Restoration	\$ 1,538,000
2019	AAF	TW C	110	PCC	77,718	66	PCC Restoration	\$ 778,000
2020	AAF	RW 14-32	6110	PCC	256,102	67	PCC Restoration	\$ 2,562,000
2022	AAF	RW 18-36	6305	PCC	525,250	69	PCC Restoration	\$ 5,253,000
2022	AAF	RW 6-24	6210	PCC	249,271	69	PCC Restoration	\$ 2,493,000
2022	AAF	TW A	225	PCC	75,620	69	PCC Restoration	\$ 757,000
2022	AAF	TW A	350	PCC	10,975	69	PCC Restoration	\$ 110,000
2024	AAF	TW C1	160	PCC	34,877	70	PCC Restoration	\$ 349,000
2026	AAF	TW B3	330	PCC	10,600	72	PCC Restoration	\$ 107,000
2026	AAF	TW C2	150	PCC	34,830	72	PCC Restoration	\$ 349,000
2027	AAF	RW 14-32	6105	PCC	512,205	73	PCC Restoration	\$ 5,123,000
<b>Bob Sikes Airport (CEW)</b>								
2018	CEW	AP	4105	AAC	52,500	36	AC Reconstruction	\$ 473,000
2018	CEW	AP	4110	AC	98,486	28	AC Reconstruction	\$ 887,000
2018	CEW	AP	4115	AC	187,231	30	AC Reconstruction	\$ 1,686,000
2018	CEW	AP HANG	4215	PCC	4,841	26	PCC Reconstruction	\$ 73,000
2020	CEW	AP HANG	4205	AC	10,698	69	AC Restoration	\$ 75,000
2021	CEW	RW 17-35	6125	AC	300,000	71	AC Restoration	\$ 2,101,000
2023	CEW	RW 17-35	6105	AC	80,000	74	AC Restoration	\$ 561,000
2023	CEW	RW 17-35	6130	AC	150,000	73	AC Restoration	\$ 1,051,000
2025	CEW	AP RU	5105	AAC	46,560	80	AC Restoration	\$ 326,000
2026	CEW	AP	4120	AAC	147,645	82	AC Restoration	\$ 1,034,000
2026	CEW	AP N	4350	PCC	23,280	83	PCC Restoration	\$ 233,000
2027	CEW	AP N	4355	AC	105,318	80	AC Restoration	\$ 738,000

## District Airfield Pavement Evaluation Report

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
2027	CEW	TW CONN	340	AAC	26,273	74	AC Restoration	\$ 184,000
<b>Calhoun County Airport (F95)</b>								
2020	F95	AP GA	4110	AC	39,362	57	AC Restoration	\$ 276,000
2020	F95	AP GA	4205	PCC	10,930	65	PCC Restoration	\$ 110,000
2020	F95	AP T-HANG	810	AC	5,700	54	AC Restoration	\$ 40,000
2020	F95	AP T-HANG	905	AC	6,468	57	AC Restoration	\$ 46,000
2022	F95	AP GA	4115	AC	40,207	70	AC Restoration	\$ 282,000
2025	F95	AP GA	4105	PCC	78,381	76	PCC Restoration	\$ 784,000
2026	F95	AP T-HANG	805	AC	2,520	76	AC Restoration	\$ 18,000
2026	F95	AP T-HANG	806	AC	2,820	76	AC Restoration	\$ 20,000
2028	F95	RW 18-36	6105	AAC	269,775	85	AC Restoration	\$ 1,889,000
2029	F95	AP GA	4120	PCC	27,973	86	PCC Restoration	\$ 280,000
<b>Carrabelle-Thompson Airport (X13)</b>								
2018	X13	AP	4115	AC	50,739	66	AC Restoration	\$ 356,000
2018	X13	AP	4120	AC	10,671	59	AC Restoration	\$ 75,000
2018	X13	AP RU	5105	AAC	7,500	48	AC Restoration	\$ 59,000
2018	X13	AP RU	5110	AAC	8,569	55	AC Restoration	\$ 60,000
2018	X13	RW 5-23	6105	AAC	302,918	58	AC Restoration	\$ 2,121,000
2018	X13	TW A	105	AC	9,699	49	AC Restoration	\$ 73,000
<b>DeFuniak Springs Airport (54J)</b>								
2018	54J	AP N	4205	AAC	24,706	66	AC Restoration	\$ 173,000
2020	54J	AP N	4210	AAC	21,961	72	AC Restoration	\$ 154,000
2020	54J	RW 9-27	6120	AC	43,007	69	AC Restoration	\$ 302,000
2021	54J	AP NE	4110	AAC	36,132	74	AC Restoration	\$ 253,000
2021	54J	AP S	4305	AC	11,037	70	AC Restoration	\$ 78,000
2024	54J	AP S	4310	AC	20,383	75	AC Restoration	\$ 143,000
2025	54J	TW A2	610	AC	15,636	72	AC Restoration	\$ 110,000
2025	54J	TW A4	525	AC	10,318	73	AC Restoration	\$ 73,000
2026	54J	TW A1	305	AAC	9,946	73	AC Restoration	\$ 70,000
2027	54J	RW 9-27	6110	AAC	207,070	85	AC Restoration	\$ 1,450,000
<b>Destin Executive Airport (DTS)</b>								
2018	DTS	AP	4105	AAC	50,000	54	AC Restoration	\$ 351,000
2018	DTS	AP	4107	AAC	8,500	29	AC Reconstruction	\$ 77,000
2018	DTS	AP	4110	AC	65,028	57	AC Restoration	\$ 456,000
2018	DTS	AP	4112	AC	10,880	34	AC Reconstruction	\$ 98,000
2018	DTS	AP	4115	AAC	52,489	57	AC Restoration	\$ 368,000
2018	DTS	AP	4120	AC	116,532	46	AC Restoration	\$ 938,000
2018	DTS	AP	4125	AC	208,083	28	AC Reconstruction	\$ 1,873,000
2018	DTS	AP	4150	AC	57,443	57	AC Restoration	\$ 403,000
2018	DTS	TW A	115	AAC	140,000	50	AC Restoration	\$ 1,012,000
2018	DTS	TW A	135	AAC	12,461	57	AC Restoration	\$ 88,000
2018	DTS	TW A	150	AAC	41,334	53	AC Restoration	\$ 290,000
2018	DTS	TW A1	105	AAC	18,192	57	AC Restoration	\$ 128,000
2018	DTS	TW A2	110	AAC	9,346	45	AC Restoration	\$ 76,000
2018	DTS	TW A3	120	AAC	9,344	45	AC Restoration	\$ 76,000
2018	DTS	TW A4	125	AAC	9,346	46	AC Restoration	\$ 75,000
2018	DTS	TW A5	130	AAC	9,341	44	AC Restoration	\$ 77,000

## District Airfield Pavement Evaluation Report

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
2018	DTS	TW A6	140	AAC	18,192	59	AC Restoration	\$ 128,000
2018	DTS	TW CONN	205	AAC	7,890	50	AC Restoration	\$ 58,000
2018	DTS	TW CONN	208	AC	1,891	64	AC Restoration	\$ 14,000
2018	DTS	TW CONN	209	AC	5,014	15	AC Reconstruction	\$ 46,000
2018	DTS	TW CONN	212	AAC	2,951	46	AC Restoration	\$ 24,000
2018	DTS	TW HANG	305	AC	56,962	56	AC Restoration	\$ 399,000
2018	DTS	TW HANG	315	AC	36,233	49	AC Restoration	\$ 271,000
<b>Destin-Fort Walton Beach Airport (VPS)</b>								
2020	VPS	AP TERM	4105	AC	104,350	66	AC Restoration	\$ 1,148,000
2020	VPS	AP TERM	4110	PCC	17,866	69	PCC Restoration	\$ 304,000
<b>Marianna Municipal Airport (MAI)</b>								
2018	MAI	AP	4105	PCC	1,488,818	32	PCC Reconstruction	\$ 22,333,000
2018	MAI	RW 8-26	6105	AC	479,495	45	AC Restoration	\$ 3,968,000
2018	MAI	TW F	305	AC	22,994	21	AC Reconstruction	\$ 207,000
2018	MAI	TW G	105	AC	99,608	22	AC Reconstruction	\$ 897,000
2018	MAI	TW PARALL	150	PCC	265,596	38	PCC Reconstruction	\$ 3,984,000
<b>Northwest Florida Beaches International Airport (ECP)</b>								
2020	ECP	TW J	1020	AC	8,297	64	AC Restoration	\$ 92,000
2021	ECP	AP RU S	4505	AC	24,778	68	AC Restoration	\$ 273,000
2024	ECP	TW K	1120	AC	10,562	69	AC Restoration	\$ 117,000
2029	ECP	AP T-HANG	4310	AC	126,734	80	AC Restoration	\$ 1,395,000
2029	ECP	TW M	1305	PCC	10,661	81	PCC Restoration	\$ 182,000
2029	ECP	TW T	2005	PCC	10,661	82	PCC Restoration	\$ 182,000
<b>Pensacola International Airport (PNS)</b>								
2020	PNS	AP S	4510	AC	338,266	49	AC Restoration	\$ 3,977,000
2020	PNS	AP S	4515	AC	219,093	62	AC Restoration	\$ 2,410,000
2020	PNS	AP TERM	4230	AC	27,735	2	AC Reconstruction	\$ 389,000
2020	PNS	RW 8-26	6215	AC	87,400	64	AC Restoration	\$ 962,000
2020	PNS	RW 8-26	6225	AC	61,300	65	AC Restoration	\$ 675,000
2020	PNS	RW 8-26	6235	AC	170,000	65	AC Restoration	\$ 1,870,000
2020	PNS	RW 8-26	6245	AC	40,000	62	AC Restoration	\$ 440,000
2020	PNS	RW 8-26	6255	AC	60,000	65	AC Restoration	\$ 660,000
2020	PNS	TW A	115	AC	288,167	65	AC Restoration	\$ 3,170,000
2020	PNS	TW A1	120	AC	47,399	37	AC Reconstruction	\$ 664,000
2020	PNS	TW A7	215	AC	72,160	65	AC Restoration	\$ 794,000
2020	PNS	TW B7	270	AC	14,899	64	AC Restoration	\$ 164,000
2021	PNS	RW 8-26	6205	AC	130,000	67	AC Restoration	\$ 1,430,000
2022	PNS	AP S	4505	AC	112,542	69	AC Restoration	\$ 1,238,000
2023	PNS	AP W	4605	AC	216,187	70	AC Restoration	\$ 2,378,000
2023	PNS	TW B4	260	AC	50,114	68	AC Restoration	\$ 552,000
2023	PNS	TW D	140	AC	43,648	68	AC Restoration	\$ 481,000
2024	PNS	RW 17-35	6115	AC	52,500	73	AC Restoration	\$ 578,000
2025	PNS	RW 8-26	6210	AC	65,000	75	AC Restoration	\$ 715,000
2025	PNS	TW B	210	AC	51,982	70	AC Restoration	\$ 572,000
2025	PNS	TW B5	265	AC	48,322	70	AC Restoration	\$ 532,000
2025	PNS	TW B8	280	AC	13,317	70	AC Restoration	\$ 147,000
2025	PNS	TW C	330	AC	16,451	70	AC Restoration	\$ 181,000

## District Airfield Pavement Evaluation Report

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
2025	PNS	TW D	410	AC	20,158	70	AC Restoration	\$ 222,000
2026	PNS	RW 17-35	6120	AC	26,250	76	AC Restoration	\$ 289,000
2026	PNS	RW 8-26	6217	AC	36,297	77	AC Restoration	\$ 400,000
2026	PNS	RW 8-26	6220	AC	43,700	76	AC Restoration	\$ 481,000
2026	PNS	RW 8-26	6240	AC	85,000	76	AC Restoration	\$ 935,000
2026	PNS	TW A	105	AC	286,014	71	AC Restoration	\$ 3,147,000
2026	PNS	TW C	320	AC	13,138	71	AC Restoration	\$ 145,000
2027	PNS	RW 8-26	6260	AC	30,000	78	AC Restoration	\$ 330,000
2027	PNS	RW 8-26	6265	AC	100,100	78	AC Restoration	\$ 1,102,000
2027	PNS	TW C	325	AC	33,625	72	AC Restoration	\$ 370,000
2028	PNS	RW 8-26	6230	AC	30,650	80	AC Restoration	\$ 338,000
2028	PNS	RW 8-26	6250	AC	20,000	80	AC Restoration	\$ 220,000
2028	PNS	RW 8-26	6270	AC	50,050	80	AC Restoration	\$ 551,000
2028	PNS	TW A5	125	AC	49,806	73	AC Restoration	\$ 548,000
2028	PNS	TW B	220	AC	256,627	73	AC Restoration	\$ 2,823,000
2029	PNS	TW B	205	AC	213,853	75	AC Restoration	\$ 2,353,000
2029	PNS	TW B	217	AC	11,000	74	AC Restoration	\$ 121,000
2029	PNS	TW B2	212	AC	32,535	75	AC Restoration	\$ 358,000
2029	PNS	TW B2	240	AC	50,378	75	AC Restoration	\$ 555,000
2029	PNS	TW D	405	AC	118,752	75	AC Restoration	\$ 1,307,000

## Peter Prince Field (2R4)

2018	2R4	AP W	4105	AC	89,498	57	AC Restoration	\$ 627,000
2018	2R4	AP W	4110	AAC	72,218	54	AC Restoration	\$ 506,000
2018	2R4	AP W	4115	AAC	55,812	59	AC Restoration	\$ 391,000
2018	2R4	AP W	4120	AC	50,545	61	AC Restoration	\$ 354,000
2018	2R4	AP W	4125	AC	117,425	62	AC Restoration	\$ 823,000
2018	2R4	TW A	105	AC	12,759	62	AC Restoration	\$ 90,000
2018	2R4	TW A	115	AC	38,153	59	AC Restoration	\$ 268,000
2018	2R4	TW A	120	AC	6,724	61	AC Restoration	\$ 48,000
2018	2R4	TW A	510	AC	39,191	62	AC Restoration	\$ 275,000
2018	2R4	TW B	205	AC	104,968	62	AC Restoration	\$ 735,000
2018	2R4	TW B	210	AC	8,970	46	AC Restoration	\$ 73,000
2018	2R4	TW B	215	AC	9,340	57	AC Restoration	\$ 66,000
2018	2R4	TW C	305	AC	11,689	57	AC Restoration	\$ 82,000
2018	2R4	TW D	405	AAC	7,141	56	AC Restoration	\$ 50,000
2018	2R4	TW D	410	AAC	3,148	50	AC Restoration	\$ 23,000
2020	2R4	AP W	4130	AC	88,086	68	AC Restoration	\$ 617,000
2023	2R4	TW A	500	AC	9,348	70	AC Restoration	\$ 66,000

## Quincy Municipal Airport (2J9)

2018	2J9	RW 14-32	6105	AAC	192,150	58	AC Restoration	\$ 1,346,000
2018	2J9	RW 14-32	6110	AC	31,050	49	AC Restoration	\$ 234,000
2018	2J9	TW HANGAR	105	AC	17,773	59	AC Restoration	\$ 125,000
2018	2J9	TW HANGAR	110	AC	12,530	41	AC Restoration	\$ 113,000
2018	2J9	TW HANGAR	115	AC	4,746	59	AC Restoration	\$ 34,000
2018	2J9	TW HANGAR	120	AC	6,000	61	AC Restoration	\$ 43,000
2018	2J9	TW HANGAR	125	AC	9,695	50	AC Restoration	\$ 71,000
2018	2J9	TW HANGAR	130	AC	4,036	54	AC Restoration	\$ 29,000
2018	2J9	TW HANGAR	140	AC	11,703	58	AC Restoration	\$ 82,000

## District Airfield Pavement Evaluation Report

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
<b>Tallahassee International Airport (TLH)</b>								
2020	TLH	AP RU RW18	5505	AAC	25,207	64	AC Restoration	\$ 278,000
2020	TLH	AP TERM	4110	APC	13,317	55	AC Restoration	\$ 147,000
2020	TLH	RW 18-36	6105	AAC	569,000	46	AC Restoration	\$ 7,038,000
2020	TLH	RW 18-36	6110	AAC	284,500	64	AC Restoration	\$ 3,130,000
2020	TLH	TL T-HANG	3105	AC	46,227	62	AC Restoration	\$ 509,000
2020	TLH	TL T-HANG	3110	AC	16,646	53	AC Restoration	\$ 184,000
2020	TLH	TL T-HANG	3115	AC	63,002	48	AC Restoration	\$ 761,000
2020	TLH	TW A	105	AAC	465,433	62	AC Restoration	\$ 5,120,000
2020	TLH	TW A11	197	AAC	30,183	65	AC Restoration	\$ 333,000
2020	TLH	TW A12	199	AAC	49,099	63	AC Restoration	\$ 541,000
2020	TLH	TW A3	130	AAC	32,330	66	AC Restoration	\$ 356,000
2020	TLH	TW A4	140	AC	19,805	60	AC Restoration	\$ 218,000
2020	TLH	TW A5	155	AAC	34,234	63	AC Restoration	\$ 377,000
2020	TLH	TW A6	160	AAC	43,815	65	AC Restoration	\$ 482,000
2020	TLH	TW A7	170	AAC	31,280	61	AC Restoration	\$ 345,000
2020	TLH	TW A9	190	AAC	34,544	62	AC Restoration	\$ 380,000
2020	TLH	TW A9	191	AAC	95,681	63	AC Restoration	\$ 1,053,000
2020	TLH	TW A9	193	AAC	35,166	63	AC Restoration	\$ 387,000
2020	TLH	TW B	205	AAC	581,353	57	AC Restoration	\$ 6,395,000
2020	TLH	TW B1	210	AAC	46,292	59	AC Restoration	\$ 510,000
2020	TLH	TW B5	250	AAC	24,545	44	AC Restoration	\$ 326,000
2020	TLH	TW B6	265	AAC	17,002	63	AC Restoration	\$ 188,000
2020	TLH	TW B6	267	AAC	24,158	53	AC Restoration	\$ 266,000
2020	TLH	TW B7	275	AAC	9,455	61	AC Restoration	\$ 105,000
2020	TLH	TW B9	295	AAC	123,914	64	AC Restoration	\$ 1,364,000
2020	TLH	TW C	307	AAC	13,381	64	AC Restoration	\$ 148,000
2020	TLH	TW C	310	AAC	186,000	58	AC Restoration	\$ 2,046,000
2020	TLH	TW Z	2610	AC	2,379	55	AC Restoration	\$ 27,000
2021	TLH	TL AP S	3205	AAC	5,661	67	AC Restoration	\$ 63,000
2021	TLH	TW A5	150	AAC	21,275	67	AC Restoration	\$ 235,000
2022	TLH	TW A8	180	AAC	43,771	69	AC Restoration	\$ 482,000
2022	TLH	TW B7	277	AAC	8,669	69	AC Restoration	\$ 96,000
2023	TLH	RW 18-36	6135	AAC	20,000	74	AC Restoration	\$ 220,000
2023	TLH	RW 18-36	6145	AAC	18,000	73	AC Restoration	\$ 198,000
2023	TLH	TW A10	195	AAC	34,774	70	AC Restoration	\$ 383,000
2023	TLH	TW A2	120	AAC	42,179	71	AC Restoration	\$ 464,000
2023	TLH	TW B7	273	AAC	38,360	70	AC Restoration	\$ 422,000
2024	TLH	AP C	4505	AAC	265,932	76	AC Restoration	\$ 2,926,000
2024	TLH	TW C	315	AAC	66,291	73	AC Restoration	\$ 730,000
2026	TLH	AP N	4415	APC	308,039	80	AC Restoration	\$ 3,389,000
2026	TLH	TW Z	2615	AC	2,615	71	AC Restoration	\$ 29,000
2027	TLH	AP N	4410	AAC	214,663	83	AC Restoration	\$ 2,362,000
2027	TLH	AP N	4420	APC	24,514	84	AC Restoration	\$ 270,000
2027	TLH	RW 18-36	6125	AC	62,300	78	AC Restoration	\$ 686,000
2027	TLH	TW B8	280	AC	62,931	72	AC Restoration	\$ 693,000
2028	TLH	AP N	4405	AAC	77,291	85	AC Restoration	\$ 851,000
2028	TLH	AP N	4425	AC	9,973	79	AC Restoration	\$ 110,000

**District Airfield Pavement Evaluation Report**

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
2028	TLH	RW 18-36	6150	AAC	9,000	81	AC Restoration	\$ 99,000
2028	TLH	TW D	410	AC	10,157	73	AC Restoration	\$ 112,000
2029	TLH	AP CARGO	4210	AC	400,242	80	AC Restoration	\$ 4,403,000
2029	TLH	RW 18-36	6140	AAC	10,000	83	AC Restoration	\$ 110,000
2029	TLH	TW D	405	AC	33,610	74	AC Restoration	\$ 370,000
2029	TLH	TW Z	2605	AC	62,575	75	AC Restoration	\$ 689,000

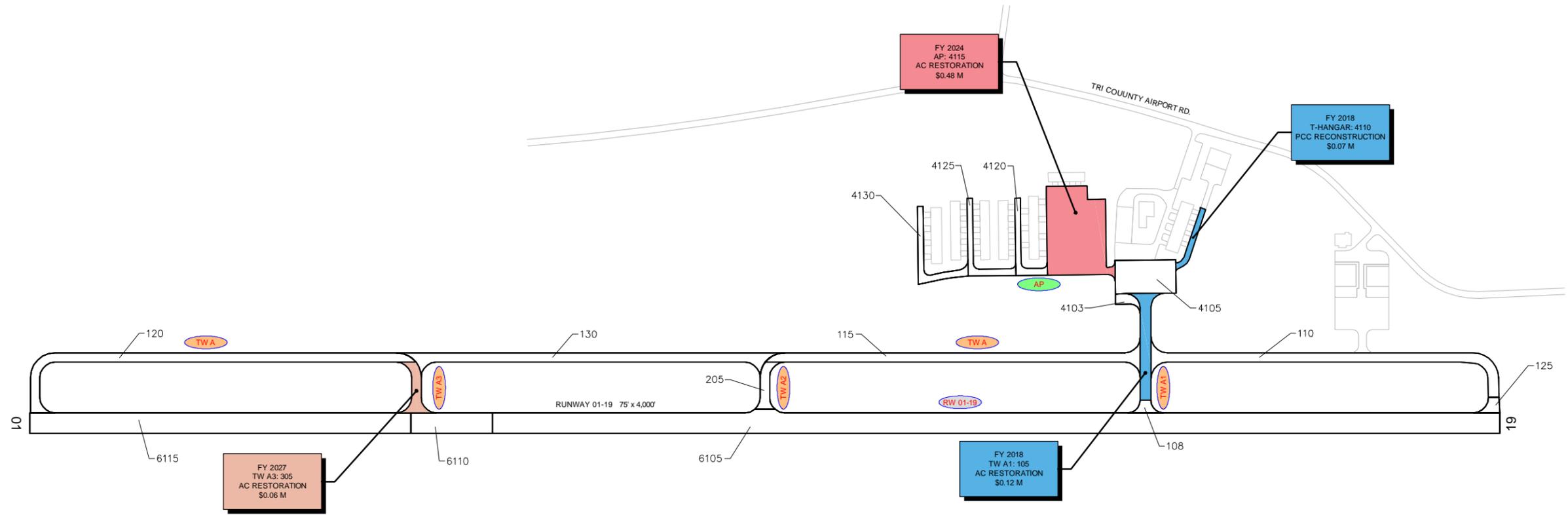
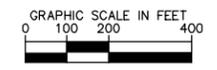
**Tri-County Airport (1J0)**

2018	1J0	T-HANGAR	4110	PCC	4,895	34	PCC Reconstruction	\$ 74,000
2018	1J0	TW A1	105	AC	16,695	64	AC Restoration	\$ 117,000
2024	1J0	AP	4115	AC	67,925	75	AC Restoration	\$ 476,000
2027	1J0	TW A3	305	AC	8,094	76	AC Restoration	\$ 57,000



# Appendix D

## Major Rehabilitation Exhibits



**LEGEND**

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

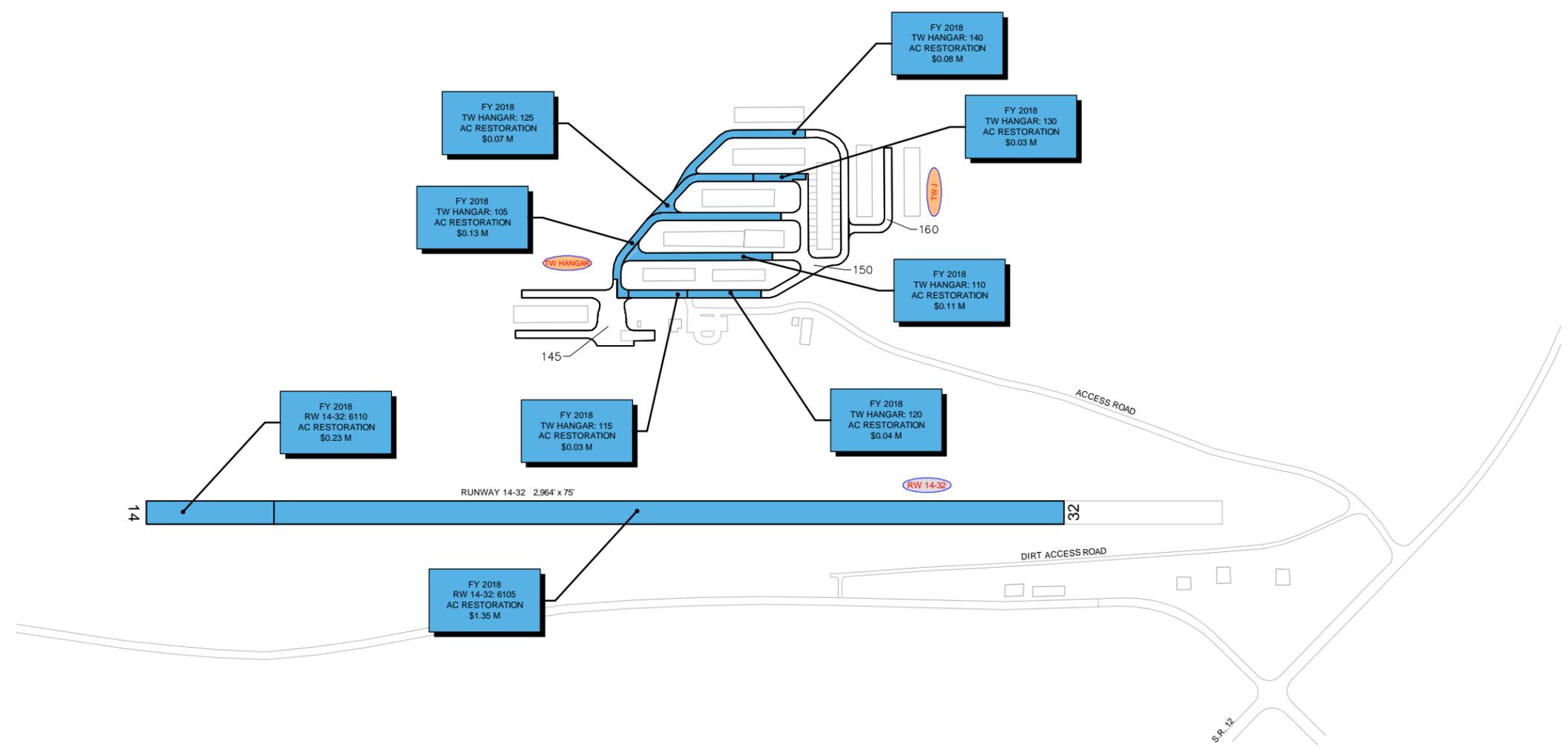
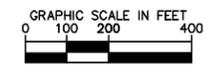
**PROGRAM YEAR**

2018	2023
2019	2024
2020	2025
2021	2026
2022	2027

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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





**LEGEND**

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

**PROGRAM YEAR**

	2018		2023
	2019		2024
	2020		2025
	2021		2026
	2022		2027

*PROGRAM YEAR* *BRANCH*/SECTION* *REHAB ACTIVITY* *EST. COST*
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RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.



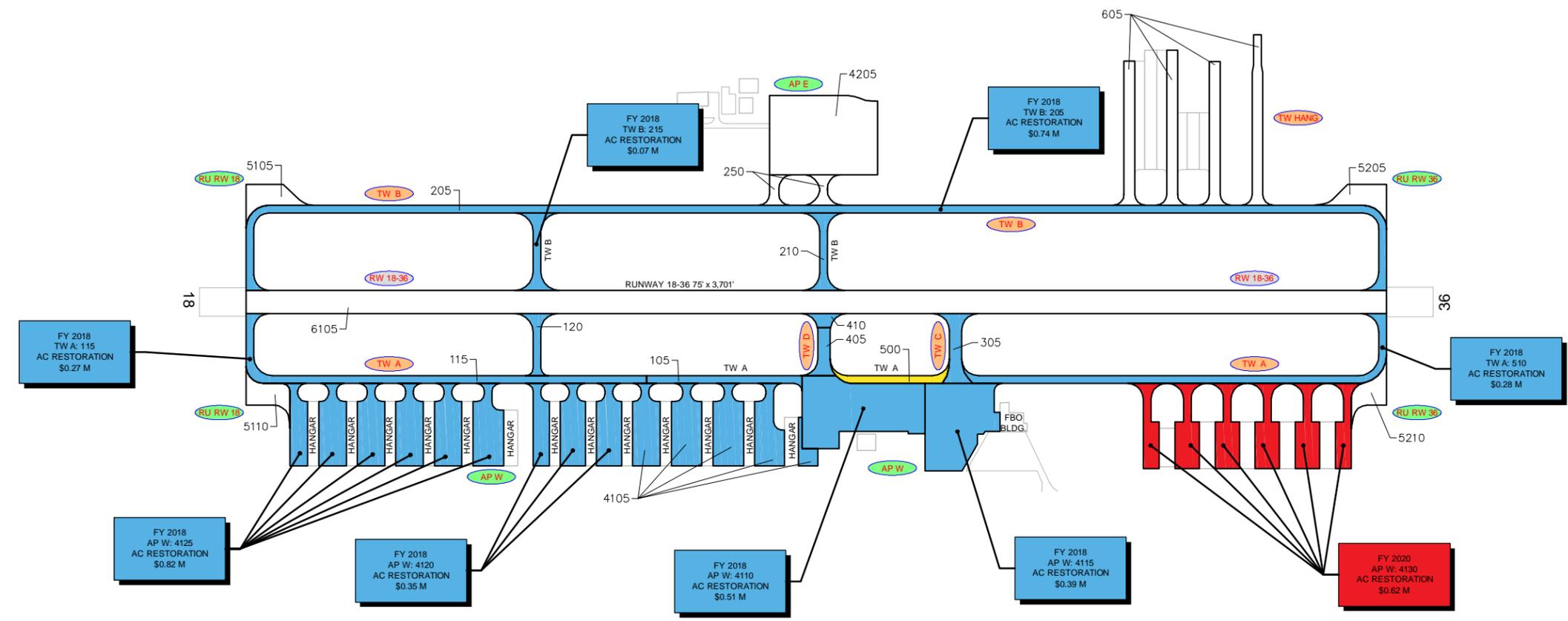
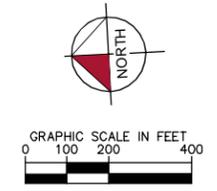
**004 - AIRFIELD PAVEMENT  
MAJOR REHABILITATION EXHIBIT**

Airport Pavement Evaluation Report  
**2017**

**Statewide Airfield Pavement  
Management Program**  
QUINCY MUNICIPAL AIRPORT - 2J9



FY 2018 AP W: 4105 AC RESTORATION \$0.63 M	FY 2018 TW A: 105 AC RESTORATION \$0.09 M	FY 2018 TW A: 120 AC RESTORATION \$0.05 M	FY 2018 TW B: 210 AC RESTORATION \$0.07 M
FY 2018 TW C: 305 AC RESTORATION \$0.08M	FY 2018 TW D: 405 AC RESTORATION \$0.05 M	FY 2018 TW D: 410 AC RESTORATION \$0.02 M	FY 2023 TW A: 500 AC RESTORATION \$0.07 M



**LEGEND**

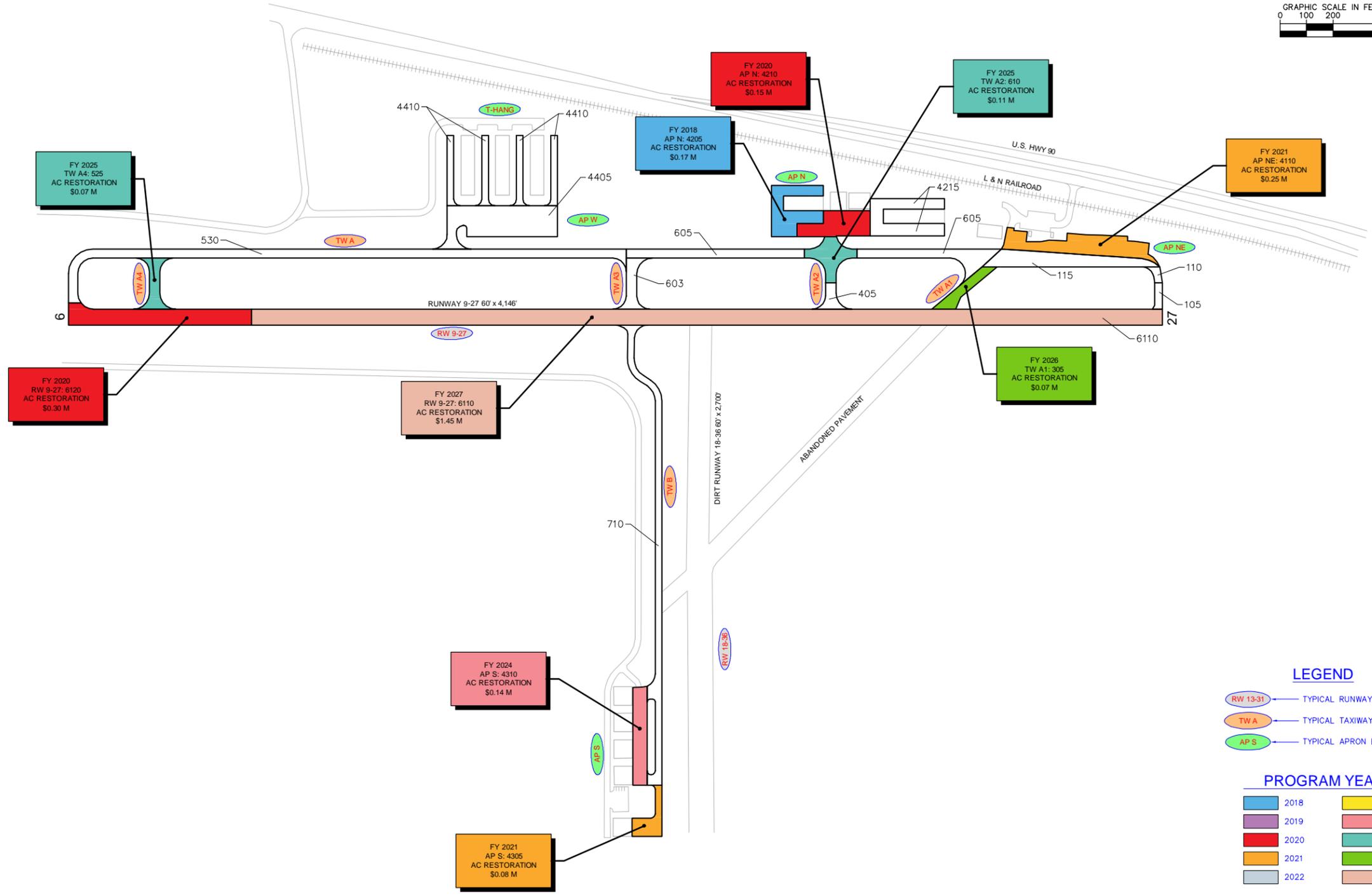
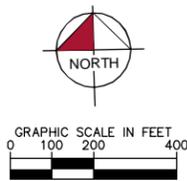
- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

**PROGRAM YEAR**

	2018		2023
	2019		2024
	2020		2025
	2021		2026
	2022		2027

"PROGRAM YEAR"
"BRANCH"/"SECTION"
"REHAB ACTIVITY"
"EST. COST"

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



**LEGEND**

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

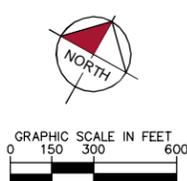
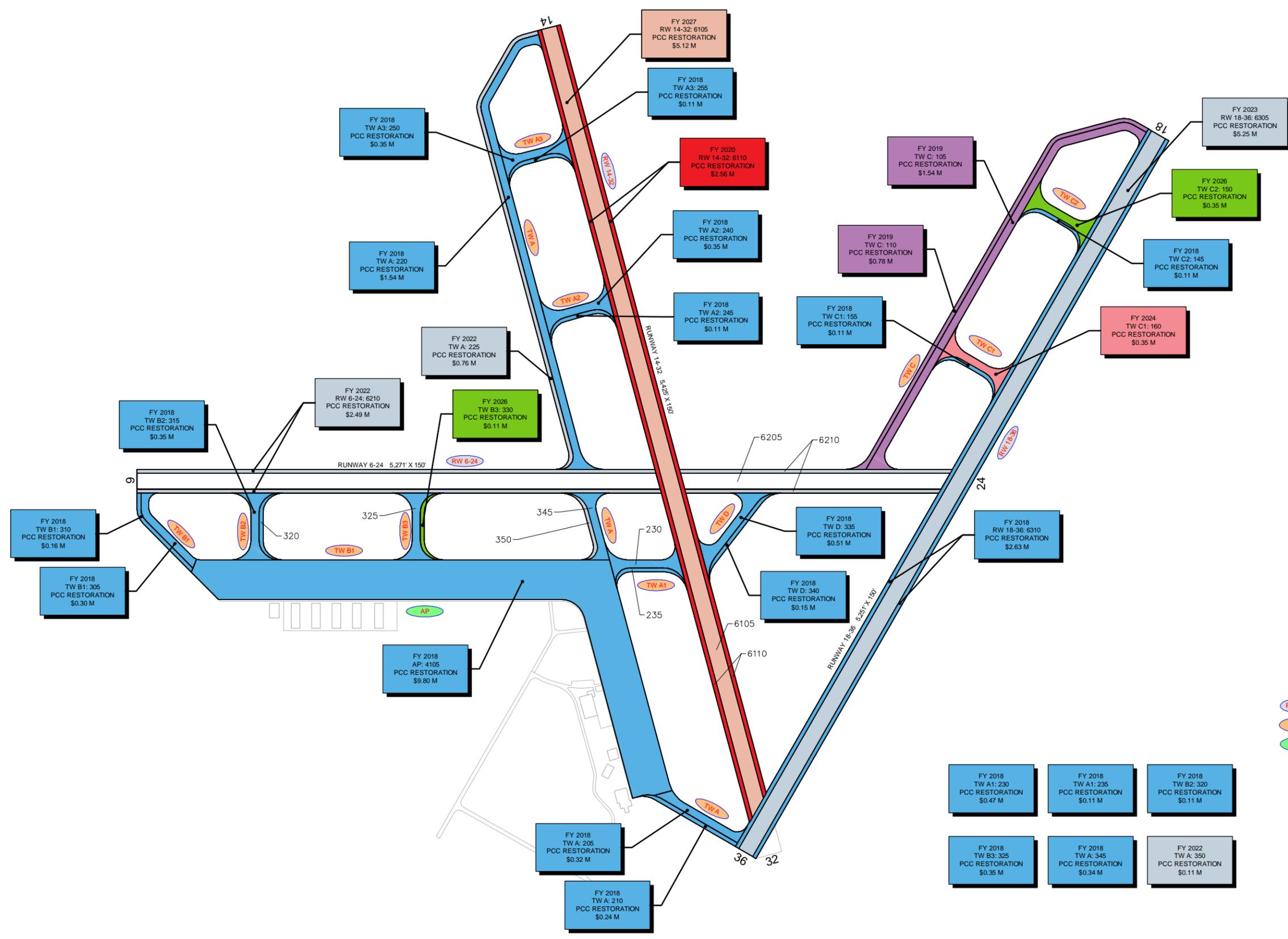
**PROGRAM YEAR**

	2018		2023
	2019		2024
	2020		2025
	2021		2026
	2022		2027

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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





**LEGEND**

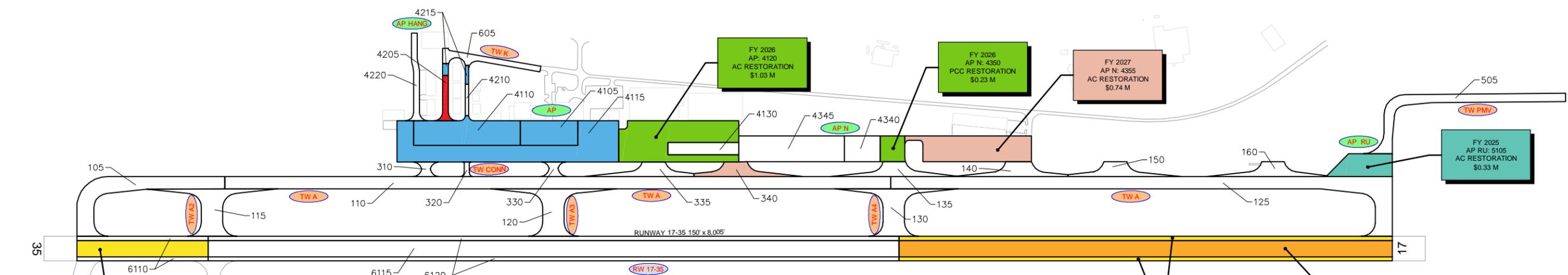
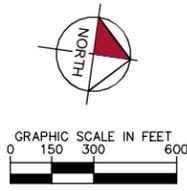
- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

**PROGRAM YEAR**

	2018		2023
	2019		2024
	2021		2025
	2022		2026
			2027

\*PROGRAM YEAR\*  
 \*BRANCH\*/SECTION\*  
 \*REHAB ACTIVITY\*  
 \*EST. COST\*

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



FY 2023  
RW 17-35: 6105  
AC RESTORATION  
\$0.56 M

FY 2018  
AP: 4105  
AC RECONSTRUCTION  
\$0.47 M

FY 2018  
AP: 4110  
AC RECONSTRUCTION  
\$0.89 M

FY 2018  
AP: 4115  
AC RECONSTRUCTION  
\$1.69 M

FY 2018  
AP HANG: 4215  
PCC RECONSTRUCTION  
\$0.07 M

FY 2020  
AP HANG: 4205  
AC RESTORATION  
\$0.08 M

FY 2027  
TW CONN: 340  
AC RESTORATION  
\$0.18 M

FY 2026  
AP: 4120  
AC RESTORATION  
\$1.09 M

FY 2026  
AP N: 4350  
PCC RESTORATION  
\$0.23 M

FY 2027  
AP N: 4355  
AC RESTORATION  
\$0.74 M

FY 2023  
RW 17-35: 6130  
AC RESTORATION  
\$1.05 M

FY 2021  
RW 17-35: 6125  
AC RESTORATION  
\$2.10 M

FY 2025  
AP RU: 5105  
AC RESTORATION  
\$0.33 M

**LEGEND**

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

**PROGRAM YEAR**

- |  |      |  |      |
|--|------|--|------|
|  | 2018 |  | 2023 |
|  | 2019 |  | 2024 |
|  | 2020 |  | 2025 |
|  | 2021 |  | 2026 |
|  | 2022 |  | 2027 |

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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

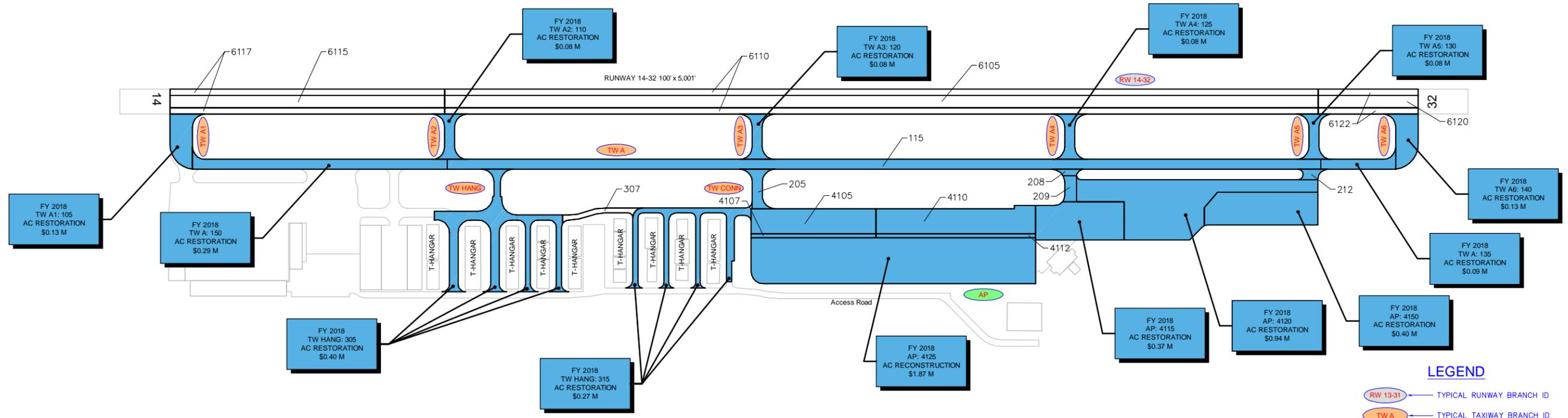




GRAPHIC SCALE IN FEET  
0 100 200 400

- FY 2018 TW A: 115 AC RESTORATION \$1.01 M
- FY 2018 TW CONN: 205 AC RESTORATION \$0.06 M
- FY 2018 TW CONN: 208 AC RESTORATION \$0.01 M
- FY 2018 TW CONN: 209 AC RECONSTRUCTION \$0.05 M
- FY 2018 TW CONN: 212 AC RESTORATION \$0.02 M

- FY 2018 AP: 4105 AC RESTORATION \$0.35 M
- FY 2018 AP: 4107 AC RECONSTRUCTION \$0.08 M
- FY 2018 AP: 4110 AC RESTORATION \$0.46 M
- FY 2018 AP: 4112 AC RECONSTRUCTION \$0.10 M



**LEGEND**

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

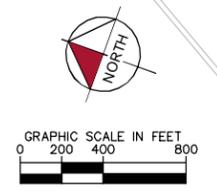
**PROGRAM YEAR**

- 2018
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- 2026
- 2027

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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





FY 2029  
TW T: 2005  
PCC RESTORATION  
\$0.18 M

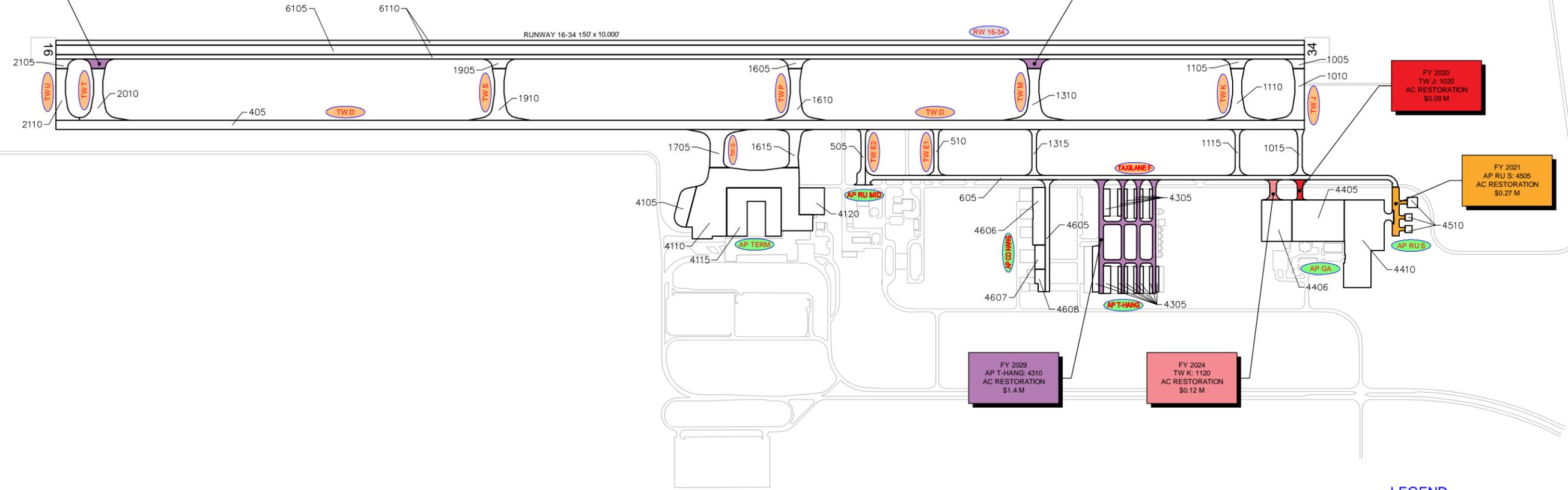
FY 2029  
TW M: 1305  
PCC RESTORATION  
\$0.18 M

FY 2020  
TW J: 1020  
AC RESTORATION  
\$0.09 M

FY 2021  
AP RU S: 4505  
AC RESTORATION  
\$0.27 M

FY 2029  
AP T-HANG: 4310  
AC RESTORATION  
\$1.4 M

FY 2024  
TW K: 1120  
AC RESTORATION  
\$0.12 M



**LEGEND**

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

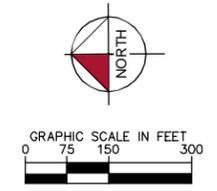
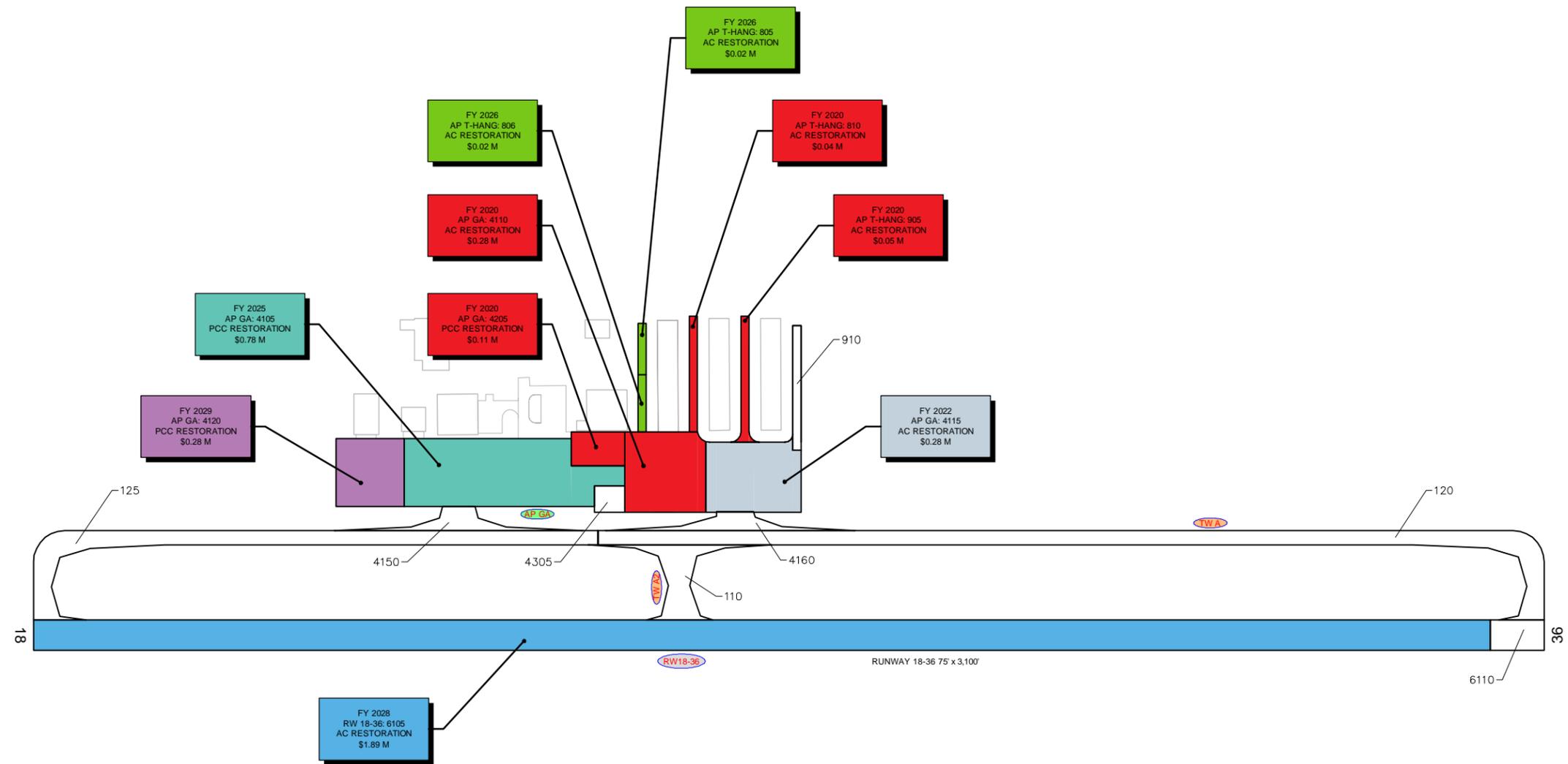
**PROGRAM YEAR**

	2020		2025
	2021		2026
	2022		2027
	2023		2028
	2024		2029

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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





**LEGEND**

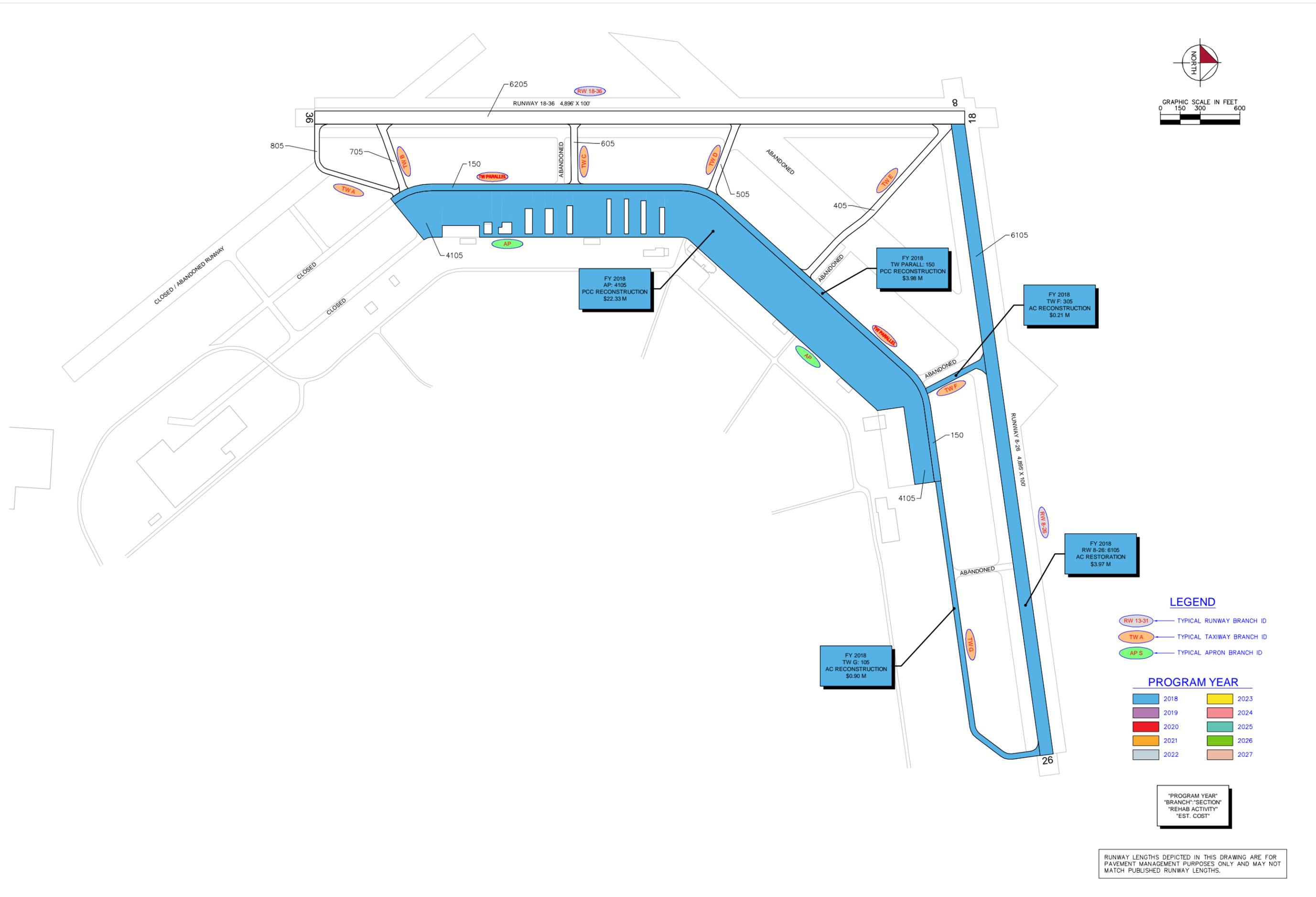
- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TWA TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

**PROGRAM YEAR**

	2020		2025
	2021		2026
	2022		2027
	2023		2028
	2024		2029

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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004 - AIRFIELD PAVEMENT  
MAJOR REHABILITATION EXHIBIT

Airport Pavement Evaluation Report  
**2017**

Statewide Airfield Pavement  
Management Program  
MARIANNA MUNICIPAL AIRPORT - MAI

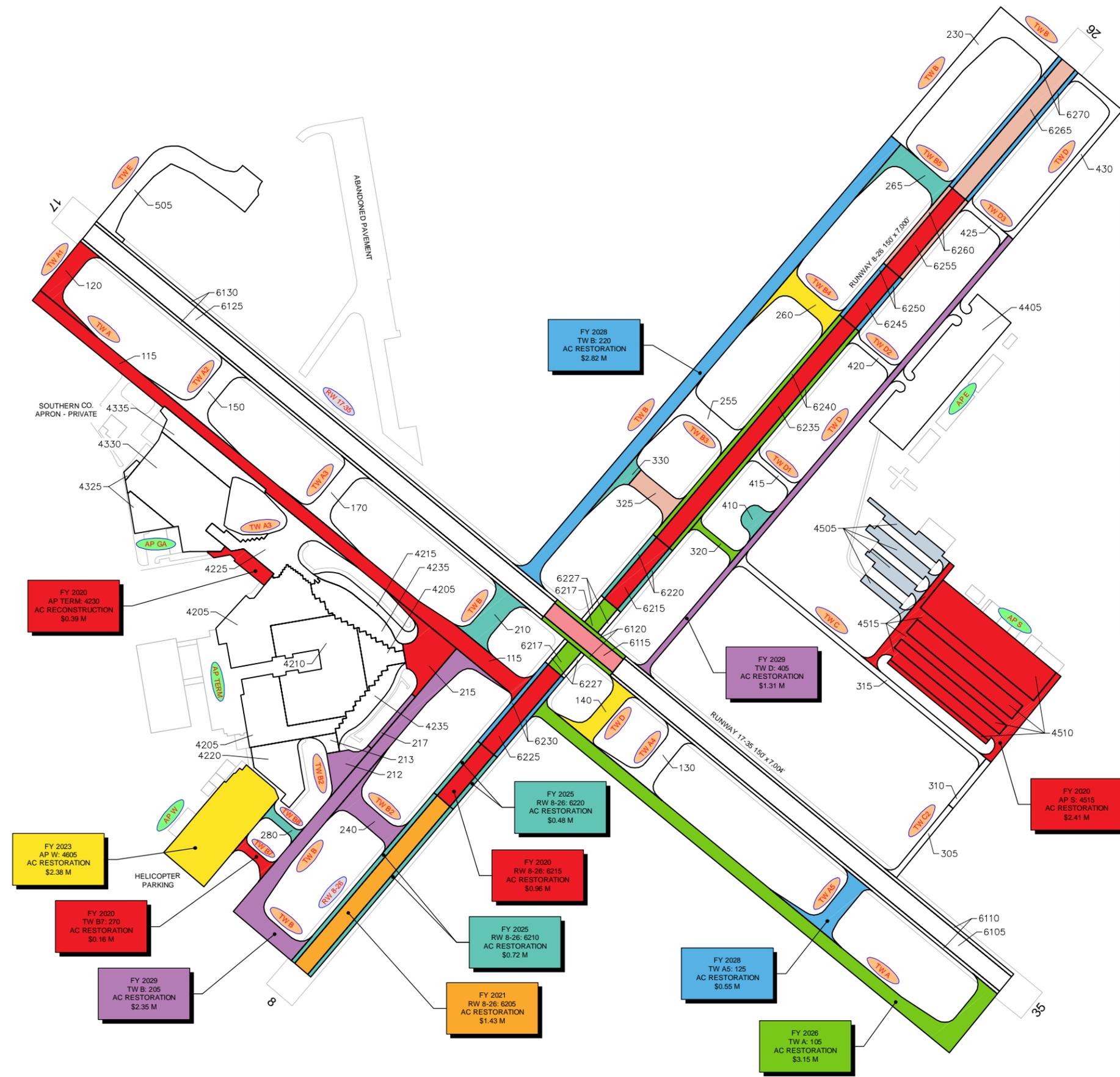




004 - AIRFIELD PAVEMENT  
MAJOR REHABILITATION EXHIBIT



GRAPHIC SCALE IN FEET  
0 150 300 600



FY 2020 AP S: 4510 AC RESTORATION \$3.98 M	FY 2020 RW 8-26: 6225 AC RESTORATION \$0.68 M	FY 2020 RW 8-26: 6235 AC RESTORATION \$1.87 M	FY 2020 RW 8-26: 6245 AC RESTORATION \$0.44 M	FY 2020 RW 8-26: 6255 AC RESTORATION \$0.66 M
FY 2020 TW A: 115 AC RESTORATION \$3.17 M	FY 2020 TW A1: 120 AC RECONSTRUCTION \$0.66 M	FY 2020 TW A7: 215 AC RESTORATION \$0.79 M	FY 2022 AP S: 4505 AC RESTORATION \$1.24 M	FY 2023 TW B4: 260 AC RESTORATION \$0.55 M
FY 2023 TW D: 140 AC RESTORATION \$0.48 M	FY 2024 RW 17-35: 6115 AC RESTORATION \$0.58 M	FY 2025 TW B: 210 AC RESTORATION \$0.57 M	FY 2025 TW B5: 265 AC RESTORATION \$0.53 M	FY 2025 TW B8: 280 AC RESTORATION \$0.15 M
FY 2025 TW C: 330 AC RESTORATION \$0.18 M	FY 2025 TW D: 410 AC RESTORATION \$0.22 M	FY 2026 RW 17-35: 6120 AC RESTORATION \$0.29 M	FY 2026 RW 8-26: 6217 AC RESTORATION \$0.4 M	FY 2026 RW 8-26: 6240 AC RESTORATION \$0.94 M
FY 2026 TW C: 320 AC RESTORATION \$0.15 M	FY 2027 RW 8-26: 6260 AC RESTORATION \$0.33 M	FY 2027 RW 8-26: 6265 AC RESTORATION \$1.1 M	FY 2027 TW C: 325 AC RESTORATION \$0.37 M	FY 2028 RW 8-26: 6230 AC RESTORATION \$0.34 M
FY 2028 RW 8-26: 6250 AC RESTORATION \$0.22 M	FY 2028 RW 8-26: 6270 AC RESTORATION \$0.55 M	FY 2029 TW B: 217 AC RESTORATION \$0.12 M	FY 2029 TW B2: 212 AC RESTORATION \$0.36 M	FY 2029 TW B2: 240 AC RESTORATION \$0.56 M

LEGEND

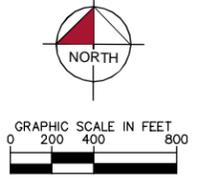
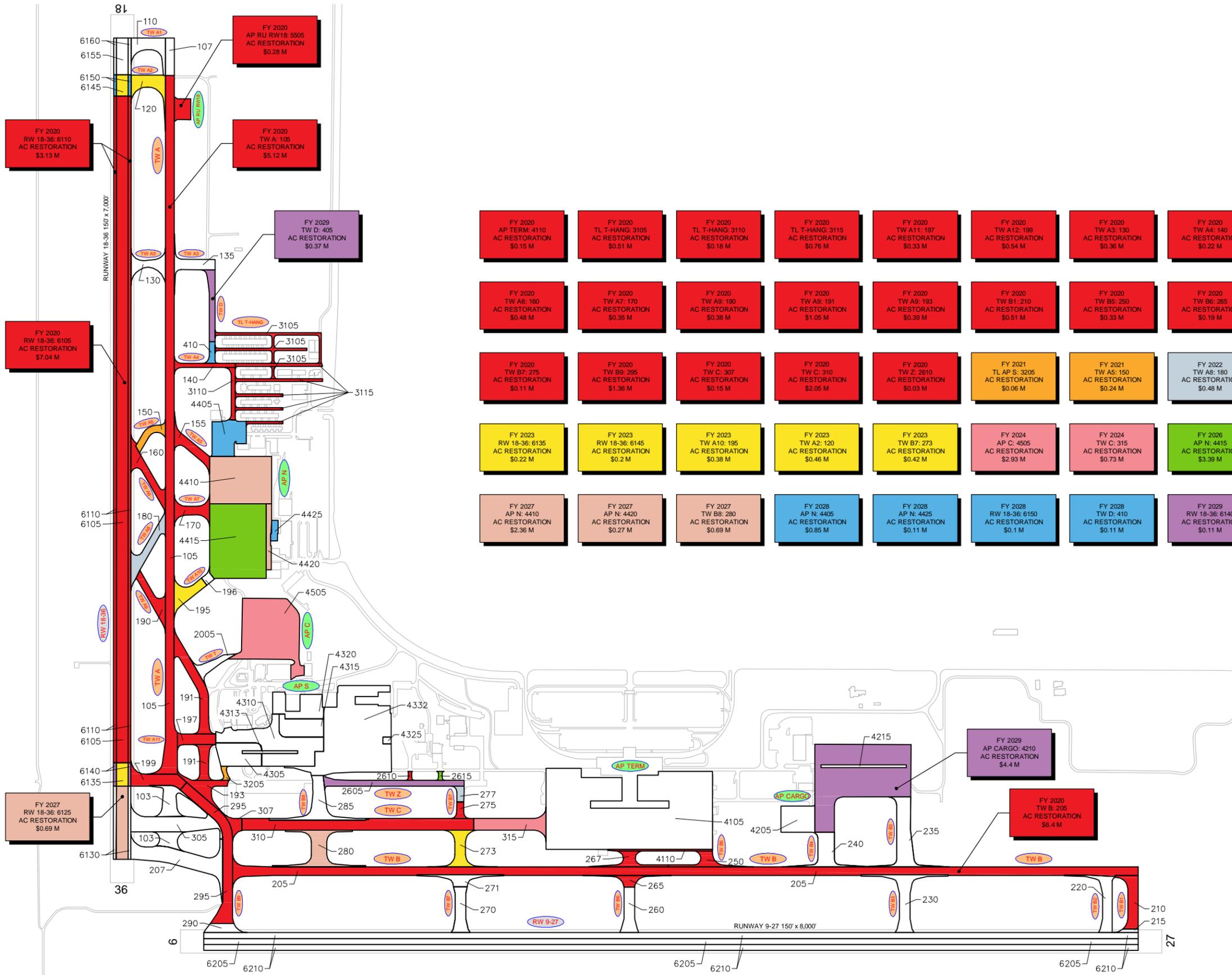
- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

PROGRAM YEAR

- |  |      |  |      |
|--|------|--|------|
|  | 2020 |  | 2025 |
|  | 2021 |  | 2026 |
|  | 2022 |  | 2027 |
|  | 2023 |  | 2028 |
|  | 2024 |  | 2029 |

"PROGRAM YEAR"  
"BRANCH,"SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

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FY 2020 AP TERM: 4110 AC RESTORATION \$0.15 M	FY 2020 TL T-HANG: 3105 AC RESTORATION \$0.51 M	FY 2020 TL T-HANG: 3110 AC RESTORATION \$0.18 M	FY 2020 TL T-HANG: 3115 AC RESTORATION \$0.76 M	FY 2020 TW A11: 197 AC RESTORATION \$0.33 M	FY 2020 TW A12: 199 AC RESTORATION \$0.54 M	FY 2020 TW A3: 130 AC RESTORATION \$0.36 M	FY 2020 TW A4: 140 AC RESTORATION \$0.22 M	FY 2020 TW A5: 155 AC RESTORATION \$0.36 M
FY 2020 TW A6: 160 AC RESTORATION \$0.48 M	FY 2020 TW A7: 170 AC RESTORATION \$0.35 M	FY 2020 TW A9: 190 AC RESTORATION \$0.38 M	FY 2020 TW A9: 191 AC RESTORATION \$1.05 M	FY 2020 TW A9: 193 AC RESTORATION \$0.39 M	FY 2020 TW B1: 210 AC RESTORATION \$0.51 M	FY 2020 TW B5: 250 AC RESTORATION \$0.33 M	FY 2020 TW B6: 265 AC RESTORATION \$0.19 M	FY 2020 TW B6: 267 AC RESTORATION \$0.27 M
FY 2020 TW B7: 275 AC RESTORATION \$0.11 M	FY 2020 TW B9: 295 AC RESTORATION \$1.36 M	FY 2020 TW C: 307 AC RESTORATION \$0.15 M	FY 2020 TW C: 310 AC RESTORATION \$2.05 M	FY 2020 TW Z: 2810 AC RESTORATION \$0.03 M	FY 2021 TL AP S: 3205 AC RESTORATION \$0.06 M	FY 2021 TW A5: 150 AC RESTORATION \$0.24 M	FY 2022 TW A8: 180 AC RESTORATION \$0.48 M	FY 2022 TW B7: 277 AC RESTORATION \$0.1 M
FY 2023 RW 18-36: 6135 AC RESTORATION \$0.22 M	FY 2023 RW 18-36: 6145 AC RESTORATION \$0.2 M	FY 2023 TW A10: 195 AC RESTORATION \$0.38 M	FY 2023 TW A2: 120 AC RESTORATION \$0.46 M	FY 2023 TW B7: 273 AC RESTORATION \$0.42 M	FY 2024 AP C: 4505 AC RESTORATION \$2.93 M	FY 2024 TW C: 315 AC RESTORATION \$0.73 M	FY 2026 AP N: 4415 AC RESTORATION \$3.39 M	FY 2026 TW Z: 2615 AC RESTORATION \$0.03 M
FY 2027 AP N: 4410 AC RESTORATION \$2.36 M	FY 2027 AP N: 4420 AC RESTORATION \$0.27 M	FY 2027 TW B8: 280 AC RESTORATION \$0.69 M	FY 2028 AP N: 4405 AC RESTORATION \$0.85 M	FY 2028 AP N: 4425 AC RESTORATION \$0.11 M	FY 2028 RW 18-36: 6150 AC RESTORATION \$0.1 M	FY 2028 TW D: 410 AC RESTORATION \$0.11 M	FY 2029 RW 18-36: 6140 AC RESTORATION \$0.11 M	FY 2029 TW Z: 2605 AC RESTORATION \$0.69 M

**LEGEND**

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- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID

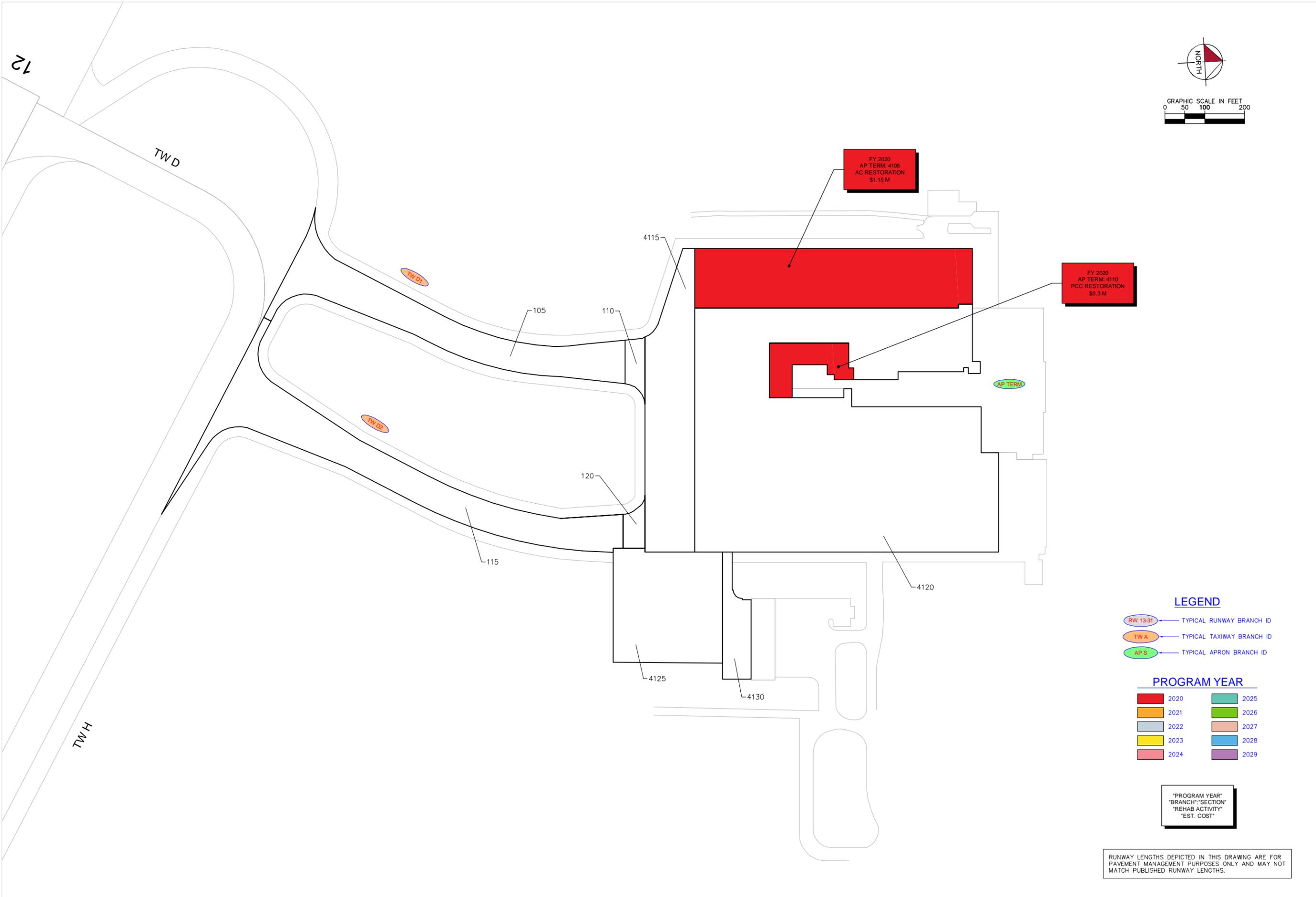
**PROGRAM YEAR**

- |  |      |  |      |
|--|------|--|------|
|  | 2020 |  | 2025 |
|  | 2021 |  | 2026 |
|  | 2022 |  | 2027 |
|  | 2023 |  | 2028 |
|  | 2024 |  | 2029 |

"PROGRAM YEAR"  
"BRANCH," "SECTION"  
"REHAB ACTIVITY"  
"EST. COST"

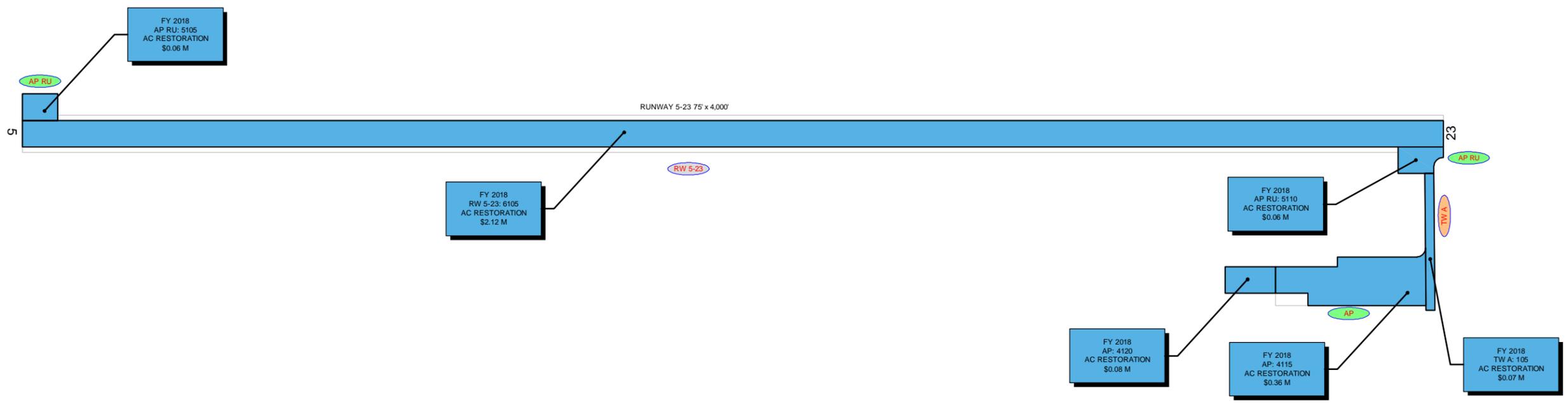
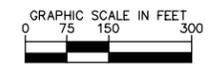
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004 - AIRFIELD PAVEMENT  
MAJOR REHABILITATION EXHIBIT





**LEGEND**

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

**PROGRAM YEAR**

	2018		2023
	2019		2024
	2020		2025
	2021		2026
	2022		2027

\*PROGRAM YEAR\*  
 \*BRANCH\*/SECTION\*  
 \*REHAB ACTIVITY\*  
 \*EST. COST\*

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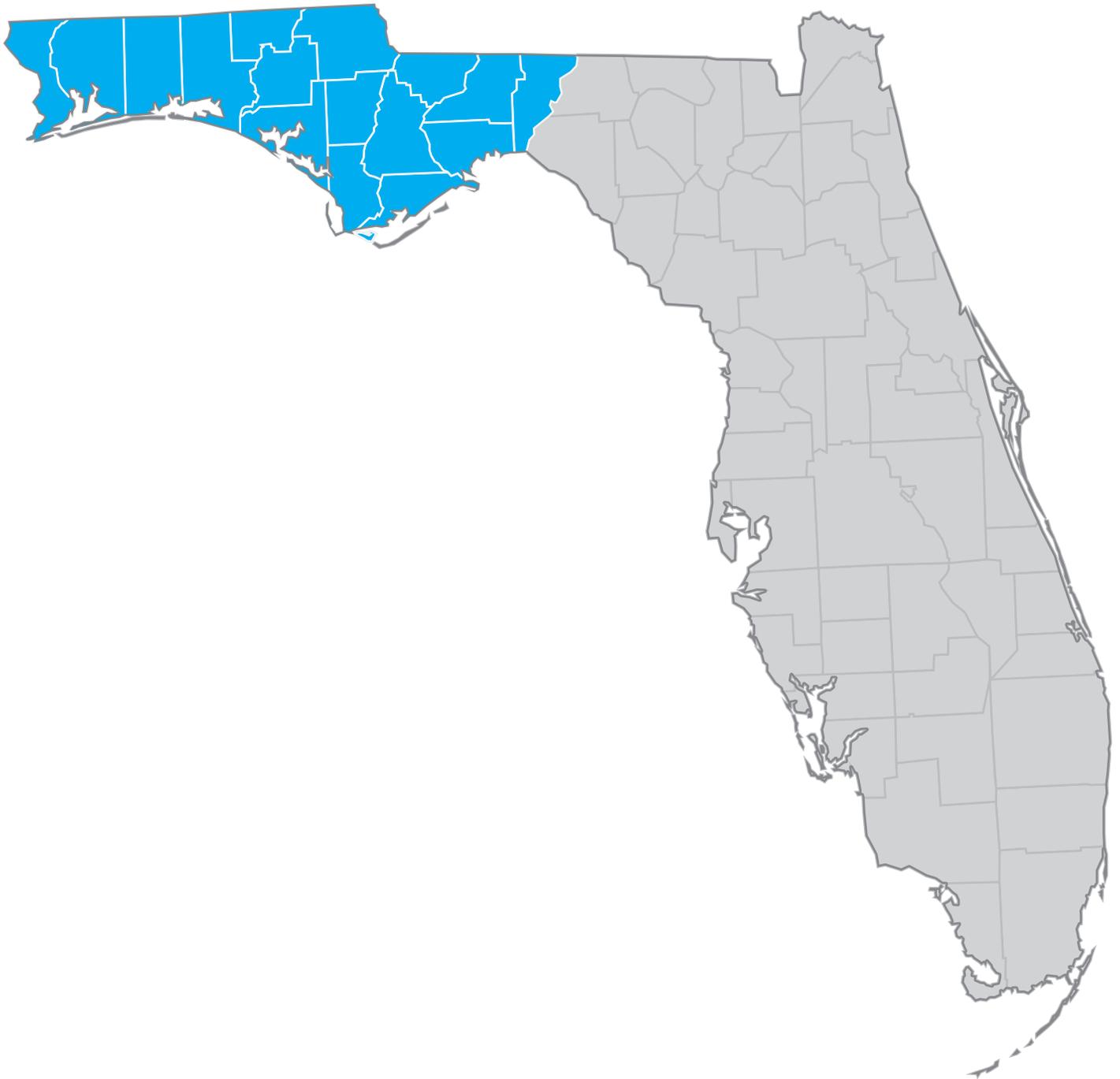
**004 - AIRFIELD PAVEMENT**  
**MAJOR REHABILITATION EXHIBIT**

Airport Pavement Evaluation Report

**2017**

**Statewide Airfield Pavement Management Program**  
 CARRABELLE-THOMPSON AIRPORT - X13





# DISTRICT 3

FLORIDA DEPARTMENT OF TRANSPORTATION  
AVIATION AND SPACEPORTS OFFICE

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