## FLORIDA DEPARTMENT OF TRANSPORTATION

AVIATION AND SPACEPORTS OFFICE







Florida Department of Transportation

## Statewide Airfield Pavement Management Program

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OFFICE OF FREIGHT, LOGISTICS & PASSENGER OPERATIONS



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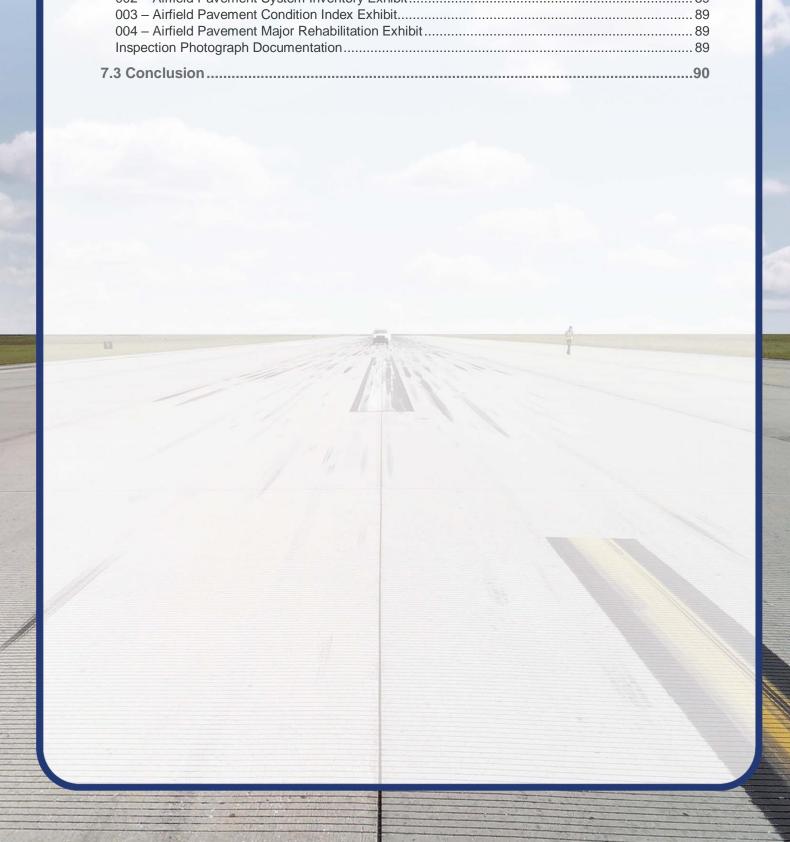
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# **Executive Summary**





## **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 for this specific airport 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 "Airport 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) - Section Level

Network ID	Branch Name	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
TPF	RUNWAY 4-22	RUNWAY	6103	30,300	100	Good
TPF	RUNWAY 4-22	RUNWAY	6105	310,500	100	Good
TPF	RUNWAY 4-22	RUNWAY	6110	17,800	100	Good
TPF	RUNWAY 18-36	RUNWAY	6205	188,847	78	Satisfactory
TPF	RUNWAY 18-36	RUNWAY	6210	3,782	100	Good
TPF	TAXILANE TO EAST HANGARS	TAXIWAY	800	29,552	92	Good
TPF	TAXIWAY A	TAXIWAY	104	9,170	100	Good
TPF	TAXIWAY A	TAXIWAY	105	100,460	100	Good
TPF	TAXIWAY A	TAXIWAY	115	9,703	100	Good
TPF	TAXIWAY A	TAXIWAY	120	5,070	100	Good
TPF	TAXIWAY A1	TAXIWAY	103	5,794	100	Good
TPF	TAXIWAY A2	TAXIWAY	630	4,673	100	Good
TPF	TAXIWAY A3	TAXIWAY	155	3,892	100	Good
TPF	TAXIWAY A4	TAXIWAY	425	5,338	100	Good
TPF	TAXIWAY B	TAXIWAY 205		11,793	82	Satisfactory
TPF	TAXIWAY C	TAXIWAY	305	7,165	74	Satisfactory
TPF	TAXIWAY C	TAXIWAY	310	16,840	100	Good
TPF	TAXIWAY CENTER	TAXIWAY	315	11,056	73	Satisfactory
TPF	TAXIWAY CENTER	TAXIWAY	320	0 11,536		Satisfactory
TPF	TAXIWAY CENTER	TAXIWAY	TAXIWAY 325 3		74	Satisfactory
TPF	TAXIWAY D	TAXIWAY	420	43,147	78	Satisfactory
TPF	TAXIWAY E	TAXIWAY	505	2,353	100	Good
TPF	TAXIWAY E	TAXIWAY	510	8,415	100	Good
TPF	TAXIWAY E	TAXIWAY	515	4,952	82	Satisfactory
TPF	TAXIWAY E	TAXIWAY	520	2,711	100	Good
TPF	TAXIWAY E	TAXIWAY	650	5,471	81	Satisfactory
TPF	TAXIWAY F	TAXIWAY	605	82,680	78	Satisfactory
TPF	TAXIWAY F	TAXIWAY	610	5,824	72	Satisfactory
TPF	TAXIWAY F	TAXIWAY	615	6,836	100	Good
TPF	TAXIWAY F	TAXIWAY	620	3,610	100	Good
TPF	TAXIWAY G	TAXIWAY	750	12,333	89	Good
TPF	TAXILANE TO T-HANGARS	TAXILANE	705	60,798	100	Good
TPF	TAXILANE TO T-HANGARS	TAXILANE	710	11,226	67	Fair
TPF	APRON	APRON	4110	150,952	79	Satisfactory





Network ID	Branch Name	Name Branch Use		Section ID Area (SF)		Condition Rating
TPF	APRON	APRON	4140	14,967	43	Poor
TPF	TIE-DOWN APRON	APRON	4205	23,650	100	Good
TPF	RUNUP APRON	APRON	5105	3,154	67	Fair
TPF	RUNUP APRON	APRON	5110	4,386	75	Satisfactory
TPF	RUNUP APRON	APRON	5115	16,251	100	Good

#### Forecasted Pavement Condition Index 2020-2029

Table E-2 Pavement Condition Index Forecast 2020-2029

Network	Down als ID	Section	Last	t Forecasted PCI									
ID	Branch ID	ID	PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	AP	4110	79	76	74	72	70	68	65	63	61	59	57
TPF	AP	4140	43	41	40	39	38	37	35	34	33	32	31
TPF	AP RU	5105	67	64	62	60	58	56	53	51	49	47	45
TPF	AP RU	5110	75	72	70	68	66	64	61	59	57	55	53
TPF	AP RU	5115	100	95	93	91	89	86	84	82	80	78	76
TPF	AP TIEDOWN	4205	100	95	93	90	88	86	84	81	79	77	75
TPF	RW 18-36	6205	78	76	74	73	72	71	70	69	68	67	66
TPF	RW 18-36	6210	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6103	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6105	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6110	100	96	93	91	89	87	85	82	81	79	77
TPF	TL HANG NW	800	92	90	88	87	85	84	82	81	79	78	76
TPF	TL T-HANG	705	100	96	94	93	91	89	88	86	85	83	82
TPF	TL T-HANG	710	67	66	65	64	63	62	61	60	60	59	58
TPF	TW A	104	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	105	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	115	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	120	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A1	103	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A2	630	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A3	155	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A4	425	100	96	94	93	91	89	88	86	85	83	82
TPF	TW B	205	82	80	78	77	75	74	73	72	70	69	68
TPF	TW C	305	74	72	71	70	69	68	67	66	65	64	63
TPF	TW C	310	100	96	94	93	91	89	88	86	85	83	82
TPF	TW CENTER	315	73	71	70	69	67	66	65	64	62	61	60
TPF	TW CENTER	320	75	73	72	70	69	68	67	65	64	63	62





Network	Branch ID	Section	Last	Forecasted PCI									
ID	Branch ID	ID	PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	TW CENTER	325	74	72	71	69	68	67	66	64	63	62	61
TPF	TW D	420	78	76	75	73	72	71	70	69	68	67	66
TPF	TW E	505	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	510	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	515	82	80	78	77	76	74	73	72	70	69	68
TPF	TW E	520	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	650	81	79	77	76	75	73	72	71	70	69	68
TPF	TW F	605	78	76	75	73	72	71	70	69	68	67	66
TPF	TW F	610	72	70	69	68	67	66	65	64	63	63	62
TPF	TW F	615	100	97	95	92	90	88	86	84	83	81	79
TPF	TW F	620	100	97	95	92	90	88	86	84	83	81	79
TPF	TW G	750	89	87	85	84	82	81	79	78	76	75	74

#### Major Rehabilitation Planning 2020-2029

Table E-3 Major Rehabilitation Planning 2020-2029

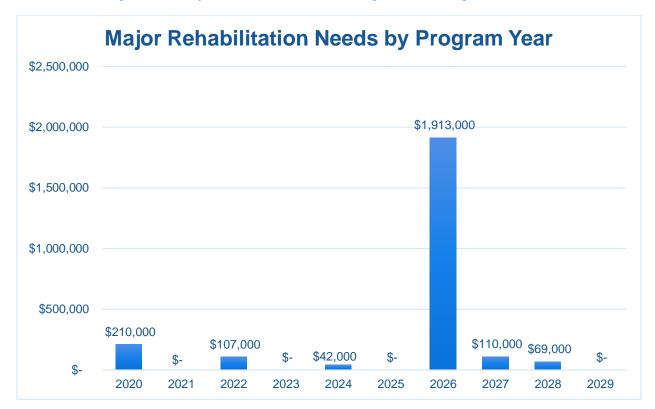
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Pla	anning Cost
2020	TPF	AP	4140	AC	14,967	41	AC Restoration	\$	180,000.00
2020	TPF	AP RU	5105	AAC	3,154	64	AC Restoration	\$	30,000.00
2022	TPF	TL T-HANG	710	AAC	11,226	64	AC Restoration	\$	107,000.00
2024	TPF	AP RU	5110	AAC	4,386	64	AC Restoration	\$	42,000.00
2026	TPF	AP	4110	AAC	150,952	63	AC Restoration	\$	1,435,000.00
2026	TPF	TW CENTER	315	AC	11,056	64	AC Restoration	\$	106,000.00
2026	TPF	TW CENTER	325	AC	33,247	64	AC Restoration	\$	316,000.00
2026	TPF	TW F	610	AAC	5,824	64	AC Restoration	\$	56,000.00
2027	TPF	TW CENTER	320	AC	11,536	64	AC Restoration	\$	110,000.00
2028	TPF	TW C	305	AAC	7,165	64	AC Restoration	\$	69,000.00

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





Figure E-4 Major Rehabilitation Planning Annual Budget 2020-2029



#### Summary of Peter O. Knight Airport

Peter O. Knight Airport was inspected in December 2018 – the overall weighted PCI value was 88, a condition rating of Good. The results of the maintenance, repair, and major rehabilitation analysis identified \$51,680 in localized M&R needs based on current conditions and a 10-Year major rehabilitation need of \$2,451,000 based on forecasted conditions. The current major rehabilitation needs based on the latest inspection consist of \$210,000 for pavements below critical condition.

Localized maintenance and repair identified within this report are categorized as preventive or stopgap; the FDOT SAPMP has defined maintenance policies based on FAA recommendations. 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. Such activities could include: mill and hot-mix asphalt overlay, rigid pavement repair and slab replacement, and full-depth reconstruction. It is recommended that the airport use this as a planning tool for future project development and prioritization – all localized maintenance and repair and major rehabilitation recommendations should be considered as planning-level only. All final localized maintenance, repair, and major rehabilitation is subject to change based on airport prioritization and further design-level evaluation.







## **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).

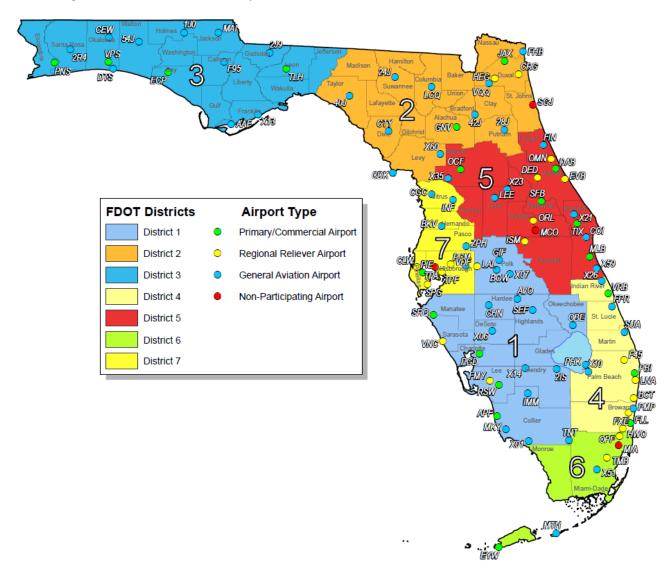
The SAPMP addresses the requirements of maintaining an effective pavement management program for the participating airports at the network level. Network-level management of pavement assets provides insight for short-term and long-term budget needs, understanding of the overall condition of the network (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 2018-2019

In 1992, the FDOT established the Statewide Airfield Pavement Management Program (SAPMP) to provide program managers, District Aviation and Spaceport 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 publicuse 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." Planninglevel 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 Airport Pavement Evaluation Report

The individual airport airfield 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.

The purpose of this Airfield Pavement Evaluation Report is to achieve the following:

- Describe the goals, procedures, and purpose of the SAPMP
- Provide a brief technical explanation of the pavement management methodology, standard practices, and objectives
- Analyze pavement distresses data for the determination of pavement conditions and for identification of airfield pavement maintenance, repair, and major rehabilitation needs based on functional PCI trends

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<sup>™</sup> (currently known as PAVER<sup>™</sup>) was selected for implementation of the system update. MicroPAVER<sup>™</sup> 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<sup>™</sup> 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 AC150/5380-7B "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.
- An objective and repeatable system for evaluating pavement condition.
- Procedures for predicting future pavement condition.
- Procedures for modeling both past and future pavement performance conditions.
- 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 costeffective 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.

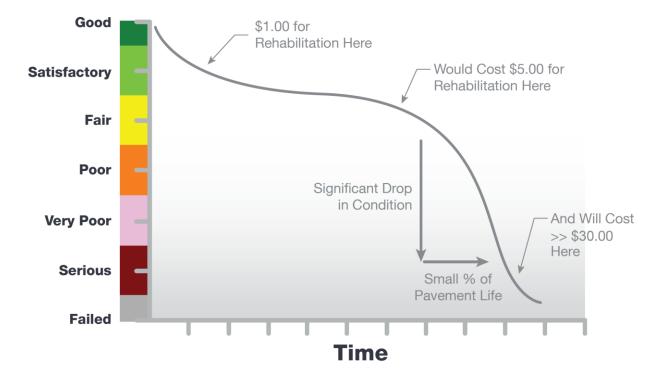


Figure 1.7.2 (a) Typical Pavement Condition Life Cycle

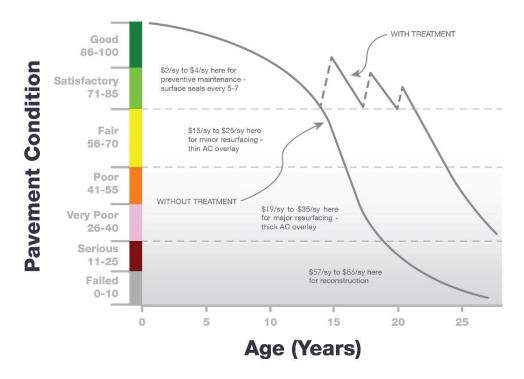
\*Figure is for conceptual purposes only – unit costs are not specific to airfield pavements (AC vs PCC).

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 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.



Figures 1.7.2 (c) Flexible Asphalt Concrete

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

Figures 1.7.2 (d) Rigid Portland Cement Concrete

	PCI Range	Representative PCI	Representative Pavement Surface	Rehabilitation Activities
Routine Maintenance	86-100	90		Pavements with PCl values above 85, or 'Good', may require periodic joint/crack sealing and local patching.
Pavement Preservation	65-85	70		Pavements with PCI conditions ranging from 'Fair' to 'Satisfactory' may require patches and/or joint/crack sealing.
Major Rehabiliation	40-64	50		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	0-39	15		Pavements that have deteriorated below a PCI 40, or within the range of 'Failed' to 'Very Poor' conditions, may require major reconstruction.

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#### 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<sup>TM</sup> (formerly MicroPAVER<sup>TM</sup>); 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<sup>TM</sup> 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<sup>TM</sup> 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 ft²) 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:  Pavement Composition Construction Work History Aircraft Traffic Condition Records	"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)

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

#### Asphalt Concrete Overlaid on Asphalt Concrete (AAC)

A flexible pavement section consisting of aggregate mixture with asphalt cement binder layered on an existing flexible AC pavement section. 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)

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)

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)

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)

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)

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.
- 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

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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

Distress	Common Distress Mechanisms
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





Classification by Possible Causes										
Load	Climate / Durability	Moisture / Drainage	Others							
<ul> <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> <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> <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>	Oil Spillage Jet Blast Erosion Polished Aggregate							

Table 2.6.2 (c) Pavement Distresses Possible Effects - Flexible Asphalt Concrete-Surfaced Air fields

Classification by Possible Effects										
Roughness	Skid / Hydroplaning Potential	FOD Potential	Rate of Deterioration and Maintenance Requirements							
<ul> <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> <li>Bleeding</li> <li>Depression</li> <li>Polished Aggregate</li> <li>Rutting</li> </ul>	Block Cracking     Joint Reflection     Cracking     L/T Cracking     Slippage     Cracking	All Distresses							





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

Distress	Common Distress Mechanisms				
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> <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>	Blowup "D" Cracking Joint Seal Damage Popouts Scaling Patch of Climate/Durability-associated distress Shrinkage Cracking Spalling L/T/D Cracking	<ul> <li>Corner Break</li> <li>Shattered Slab</li> <li>Pumping</li> <li>Patching of Moisture/Drainage- associated distress</li> </ul>	Settlement     / Faulting							

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

	Classification by Possible Effects										
Roughness	Roughness Skid / Hydroplaning Potential		Rate of Deterioration and Maintenance Requirements								
<ul> <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> <li>Settlement / Faulting</li> <li>Spalling</li> </ul>	Corner Break L/T/D Cracking "D" Cracking Joint Seal Damage Shattered Slab Popouts Scaling	All distresses								





## 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 to Inspect						
Sample Units in Section	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	Sample Units to Inspect						
Section	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

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

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 the majority 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

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

Based on information provided by the airport, the following Table 3.1.1 summarizes the airfield pavement construction projects that have been incorporated into the SAPMP database system since the 2013-2015 System Update. Figure 3.1.1 (a) and Figure 3.1.1 (b) provides an inset view of the 2019 Airfield Pavement Network Definition Exhibit and the 2019 Airfield Pavement System Inventory Exhibits that depict the updated network details for the airport reflected in the PAVER Database. Large format exhibits are referenced in Appendix C Technical Exhibits.

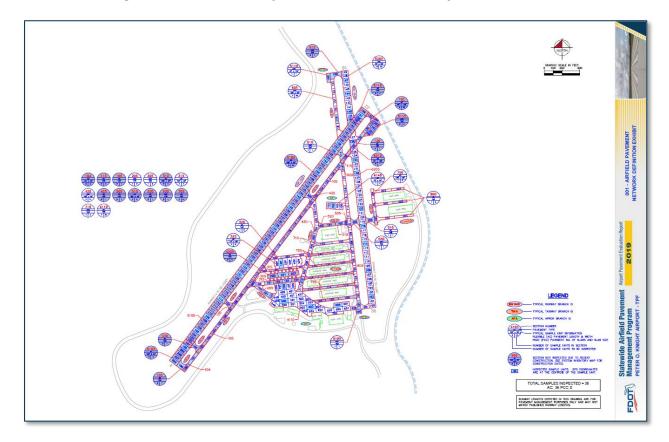
Table 3.1.1 Previous and/or Anticipated Airfield Pavement Construction

Year	General Work Description					
	AP RU - Mill and Overlay: 2" P-403					
	AP TIEDOWN - Reconstruction: 3" P-403, 6" P-219					
2018	<b>RW 18-36, RW 4-22, TL T-HANG, TW A, TW A1, TW A2, TW A4, TW C, TW E</b> - Reconstruction: 3" P-403, Variable P-220					
	TW A3 - New Construction: 3" P-403, 6" P-220					
2019	TW F - Mill and Overlay					

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. 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.



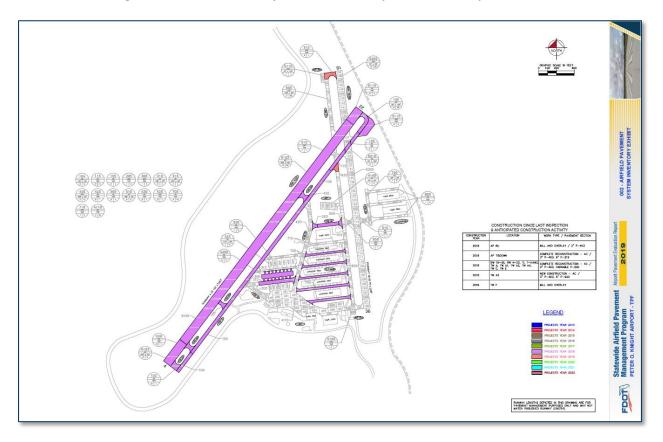
Figure 3.1.1 (a) 2019 Airfield Pavement Network Definition Exhibit



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.



Figure 3.1.1 (b) 2019 Airfield Pavement System Inventory Exhibit



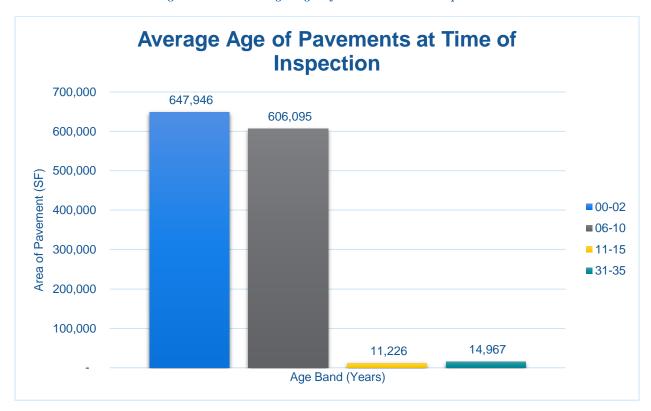
The Airfield Pavement System Inventory Exhibit provides details to the work history updates communicated by the Airport. The Exhibit provides the approximate limits of recent and/or anticipated construction on the airfield pavement facilities. The limits are based on documentation provided by the Airport and, if constructed, 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.

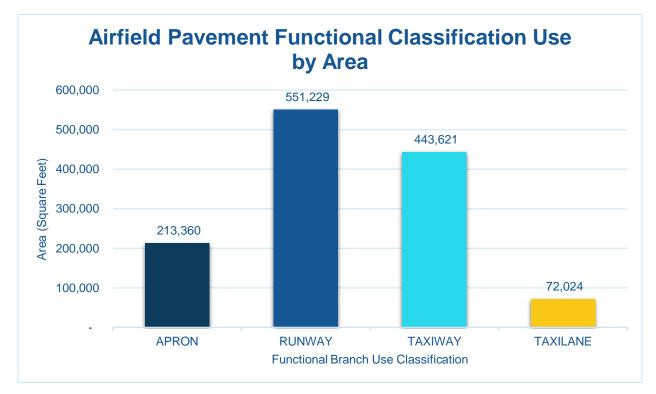




#### 3.1.3 Functional Use Classification

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. Figure 3.1.3 summarizes the identified pavements' functional use by area in square feet. The pavement areas reviewed exclude shoulder pavement facilities.

Figure 3.1.3 Airfield Pavement Functional Classification Use by Area







## 3.1.4 Pavement Surface Type

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

Based on the record documentation incorporated within the SAPMP database throughout the years, the pavement surface types have been assigned to the various pavement sections in accordance to its work history composition. The following Figures 3.1.4 (a) and (b) summarize the applicable pavement types observed at this specific airport's airfield.

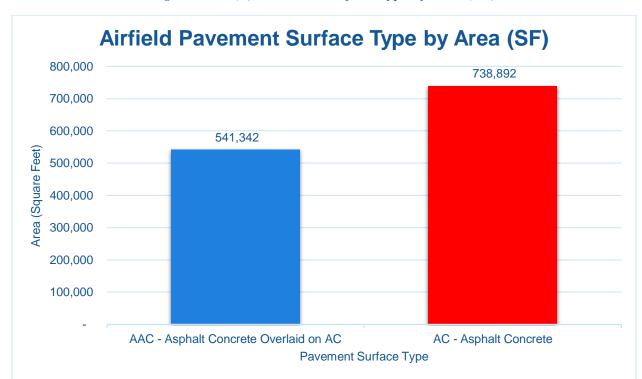
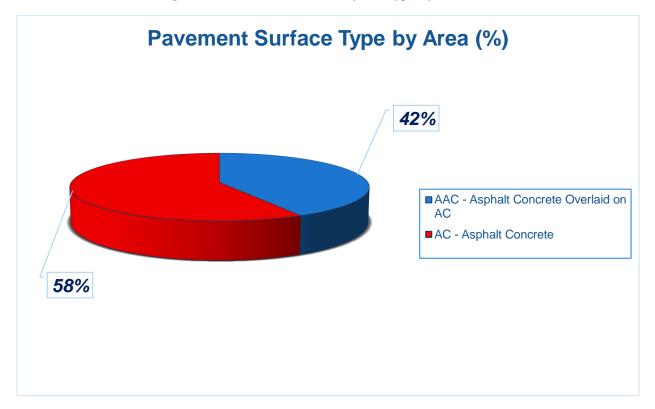


Figure 3.1.4 (a) Pavement Surface Type by Area (SF)



Figure 3.1.4 (b) Pavement Surface Type by Area (%)



## 3.1.5 Pavement System Inventory Details

The following **Table 3.1.5** displays the section-level details assembled as part of this update. The section-level details are based on the record documentation provided by the airports to FDOT and from SAPMP System Updates. The details assembled rely on the accuracy and the adequacy of data provided; however, it should be noted that characteristics such as pavement areas may be based on aerial interpretation of spatially projected imagery. The accuracy of data is presented with the intention of a network planning-level document; should the airport elect to perform rehabilitation work, it is recommended that further investigation be performed at the project level for construction purposes.

In summary, the scope of the pavement inventory update resulted in the updating of select existing pavement geometry and the development of an AutoCAD model with spatial projection for use within GIS. **Appendix A** includes the Airfield Pavement Network Definition Exhibit and the Airfield Pavement System Inventory Exhibit which visually summarize the results of the Airfield Pavement System Inventory analysis and reporting.





#### Table 3.1.5 Pavement System Inventory Details

Network ID	Branch Name	Branch ID	Branch Use	Section ID	Length (FT)	Width (FT)	Area (SF)	Surface Type	Est. Last Construction Date
TPF	APRON	AP	APRON	4110	1,500	100	150,952	AAC	1/1/2011
TPF	APRON	AP	APRON	4140	200	75	14,967	AC	1/1/1986
TPF	RUNUP APRON	AP RU	APRON	5105	15	200	3,154	AAC	1/1/2008
TPF	RUNUP APRON	AP RU	APRON	5110	22	200	4,386	AAC	1/1/2008
TPF	RUNUP APRON	AP RU	APRON	5115	210	73	16,251	AAC	1/1/2018
TPF	TIE-DOWN APRON	AP TIEDOWN	APRON	4205	355	50	23,650	AC	1/1/2018
TPF	RUNWAY 18-36	RW 18-36	RUNWAY	6205	2,443	75	188,847	AAC	1/1/2008
TPF	RUNWAY 18-36	RW 18-36	RUNWAY	6210	50	108	3,782	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6103	303	100	30,300	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6105	3,105	100	310,500	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6110	178	100	17,800	AC	1/1/2018
TPF	TAXILANE TO EAST HANGARS	TL HANG NW	TAXIWAY	800	1,120	25	29,552	AC	1/1/2011
TPF	TAXILANE TO T-HANGARS	TL T-HANG	TAXILANE	705	2,100	25	60,798	AC	1/1/2018
TPF	TAXILANE TO T-HANGARS	TL T-HANG	TAXILANE	710	400	25	11,226	AAC	1/1/2007
TPF	TAXIWAY A	TW A	TAXIWAY	104	262	35	9,170	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	105	2,874	35	100,460	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	115	259	35	9,703	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	120	163	35	5,070	AC	1/1/2018
TPF	TAXIWAY A1	TW A1	TAXIWAY	103	83	65	5,794	AC	1/1/2018
TPF	TAXIWAY A2	TW A2	TAXIWAY	630	100	40	4,673	AC	1/1/2018
TPF	TAXIWAY A3	TW A3	TAXIWAY	155	35	83	3,892	AC	1/1/2018
TPF	TAXIWAY A4	TW A4	TAXIWAY	425	75	40	5,338	AC	1/1/2018
TPF	TAXIWAY B	TW B	TAXIWAY	205	280	40	11,793	AAC	1/1/2011
TPF	TAXIWAY C	TW C	TAXIWAY	305	150	40	7,165	AAC	1/1/2010
TPF	TAXIWAY C	TW C	TAXIWAY	310	425	40	16,840	AC	1/1/2018





Network ID	Branch Name	Branch ID	Branch Use	Section ID	Length (FT)	Width (FT)	Area (SF)	Surface Type	Est. Last Construction Date
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	315	500	20	11,056	AC	1/1/2008
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	320	400	25	11,536	AC	1/1/2008
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	325	300	100	33,247	AC	1/1/2008
TPF	TAXIWAY D	TW D	TAXIWAY	420	1,015	40	43,147	AAC	1/1/2011
TPF	TAXIWAY E	TW E	TAXIWAY	505	50	40	2,353	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	510	240	35	8,415	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	515	100	50	4,952	AC	1/1/2011
TPF	TAXIWAY E	TW E	TAXIWAY	520	56	35	2,711	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	650	100	50	5,471	AAC	1/1/2008
TPF	TAXIWAY F	TW F	TAXIWAY	605	738	35	82,680	AAC	1/1/2008
TPF	TAXIWAY F	TW F	TAXIWAY	610	122	48	5,824	AAC	1/1/2008
TPF	TAXIWAY F	TW F	TAXIWAY	615	130	35	6,836	AAC	1/1/2019
TPF	TAXIWAY F	TW F	TAXIWAY	620	80	35	3,610	AAC	1/1/2019
TPF	TAXIWAY G	TW G	TAXIWAY	750	300	30	12,333	AC	1/1/2011





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# **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 Network-Level Analysis

The following Figure 4.1.1 summarizes the network-level pavement condition analysis based on the most recent PCI Survey inspection results.

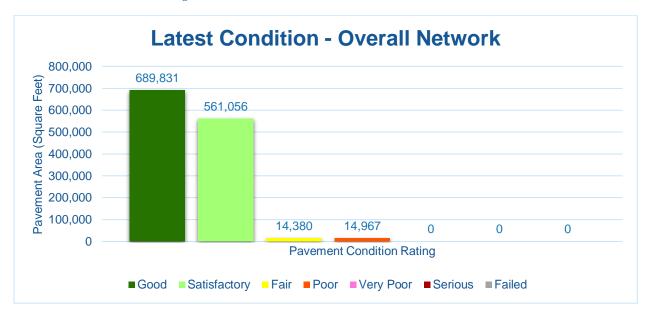


Figure 4.1.1 Latest Condition - Overall Network

#### 4.1.2 Branch-Level Analysis

The following Figures 4.1.2 (a) through (d) summarize the branch-level pavement condition analysis based on the most recent PCI Survey inspection results; the following Figures provide overall branch-level conditions by branch use.



Figure 4.1.2 (a) Latest Condition - Runway Pavements



Figure 4.1.2 (b) Latest Condition - Taxiway Pavements

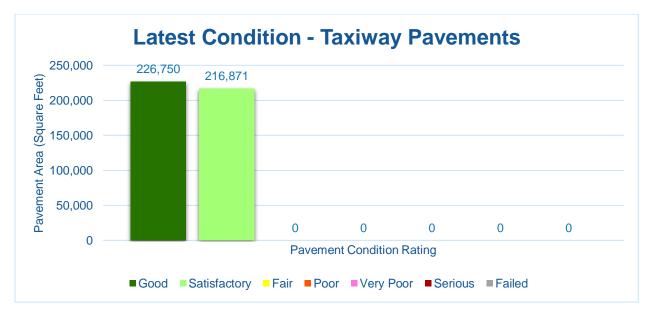




Figure 4.1.2 (c) Latest Condition - Apron Pavements



Figure 4.1.2 (d) Latest Condition - Taxilane Pavements







#### 4.1.3 Section-Level Analysis

The following Table 4.1.3 provides details for each pavement section of its area-weighted average PCI and the percent of distress which is related to load, climate, or other factors. The amount of distress attributed to the various causes provides insight into maintenance, repair, and rehabilitation needs. Load-related distress indicates that pavements are reaching the end of their structural design life, and for those pavements exhibiting a significant amount of these distress types, rehabilitation should be planned to strengthen or reconstruct the pavement. Appendix C Technical Exhibits provides a technical exhibit that graphically depicts the PCI values and ratings determined from this SAPMP System Update.

Any pavement facilities subject to pavement construction within the past 2 years or anticipated for construction within the next year may have been omitted from inspection. Pavement subject to major rehabilitation will be set to a PCI of 100.





Table 4.1.3 Latest Pavement Condition Index Summary

Network ID	Branch ID	Branch Name	Branch Use	Section ID	Area (SF)	Surface	PCI	PCI Rating	PCI % Climate	PCI % Load	PCI % Other	Sample Units Inspected	Total Sample Units in Section
TPF	AP	APRON	APRON	4110	150,952	AAC	79	Satisfactory	82%	0%	18%	4	34
TPF	AP	APRON	APRON	4140	14,967	AC	43	Poor	100%	0%	0%	1	4
TPF	AP RU	RUNUP APRON	APRON	5105	3,154	AAC	67	Fair	79%	0%	21%	1	1
TPF	AP RU	RUNUP APRON	APRON	5110	4,386	AAC	75	Satisfactory	82%	0%	18%	1	1
TPF	AP RU	RUNUP APRON	APRON	5115	16,251	AAC	100	Good	0%	0%	0%	0	5
TPF	AP TIEDOWN	TIE-DOWN APRON	APRON	4205	23,650	AC	100	Good	0%	0%	0%	0	3
TPF	RW 18-36	RUNWAY 18-36	RUNWAY	6205	188,847	AAC	78	Satisfactory	97%	0%	3%	12	50
TPF	RW 18-36	RUNWAY 18-36	RUNWAY	6210	3,782	AC	100	Good	0%	0%	0%	0	1
TPF	RW 4-22	RUNWAY 4-22	RUNWAY	6103	30,300	AC	100	Good	0%	0%	0%	0	6
TPF	RW 4-22	RUNWAY 4-22	RUNWAY	6105	310,500	AC	100	Good	0%	0%	0%	0	63
TPF	RW 4-22	RUNWAY 4-22	RUNWAY	6110	17,800	AC	100	Good	0%	0%	0%	0	4
TPF	TL HANG NW	TAXILANE TO EAST HANGARS	TAXIWAY	800	29,552	AC	92	Good	100%	0%	0%	1	6
TPF	TL T-HANG	TAXILANE TO T-HANGARS	TAXILANE	705	60,798	AC	100	Good	0%	0%	0%	0	14
TPF	TL T-HANG	TAXILANE TO T-HANGARS	TAXILANE	710	11,226	AAC	67	Fair	70%	0%	30%	1	2
TPF	TW A	TAXIWAY A	TAXIWAY	104	9,170	AC	100	Good	0%	0%	0%	0	3
TPF	TW A	TAXIWAY A	TAXIWAY	105	100,460	AC	100	Good	0%	0%	0%	0	28
TPF	TW A	TAXIWAY A	TAXIWAY	115	9,703	AC	100	Good	0%	0%	0%	0	2
TPF	TW A	TAXIWAY A	TAXIWAY	120	5,070	AC	100	Good	0%	0%	0%	0	1
TPF	TW A1	TAXIWAY A1	TAXIWAY	103	5,794	AC	100	Good	0%	0%	0%	0	1
TPF	TW A2	TAXIWAY A2	TAXIWAY	630	4,673	AC	100	Good	0%	0%	0%	0	1
TPF	TW A3	TAXIWAY A3	TAXIWAY	155	3,892	AC	100	Good	0%	0%	0%	0	1
TPF	TW A4	TAXIWAY A4	TAXIWAY	425	5,338	AC	100	Good	0%	0%	0%	0	1
TPF	TW B	TAXIWAY B	TAXIWAY	205	11,793	AAC	82	Satisfactory	93%	0%	7%	1	3
TPF	TW C	TAXIWAY C	TAXIWAY	305	7,165	AAC	74	Satisfactory	91%	0%	9%	1	2
TPF	TW C	TAXIWAY C	TAXIWAY	310	16,840	AC	100	Good	0%	0%	0%	0	4
TPF	TW CENTER	TAXIWAY CENTER	TAXIWAY	315	11,056	AC	73	Satisfactory	100%	0%	0%	1	4
TPF	TW CENTER	TAXIWAY CENTER	TAXIWAY	320	11,536	AC	75	Satisfactory	100%	0%	0%	1	3
TPF	TW CENTER	TAXIWAY CENTER	TAXIWAY	325	33,247	AC	74	Satisfactory	100%	0%	0%	1	6
TPF	TW D	TAXIWAY D	TAXIWAY	420	43,147	AAC	78	Satisfactory	100%	0%	0%	2	11
TPF	TW E	TAXIWAY E	TAXIWAY	505	2,353	AC	100	Good	0%	0%	0%	0	1
TPF	TW E	TAXIWAY E	TAXIWAY	510	8,415	AC	100	Good	0%	0%	0%	0	2
TPF	TW E	TAXIWAY E	TAXIWAY	515	4,952	AC	82	Satisfactory	100%	0%	0%	1	1
TPF	TW E	TAXIWAY E	TAXIWAY	520	2,711	AC	100	Good	0%	0%	0%	0	1
TPF	TW E	TAXIWAY E	TAXIWAY	650	5,471	AAC	81	Satisfactory	100%	0%	0%	1	1
TPF	TW F	TAXIWAY F	TAXIWAY	605	82,680	AAC	78	Satisfactory	95%	0%	5%	4	22
TPF	TW F	TAXIWAY F	TAXIWAY	610	5,824	AAC	72	Satisfactory	100%	0%	0%	1	1
TPF	TW F	TAXIWAY F	TAXIWAY	615	6,836	AAC	100	Good	0%	0%	0%	0	1

Statewide Airfield Pavement Management Program Airport Pavement Evaluation Report

2019

Peter O. Knight Airport (TPF)





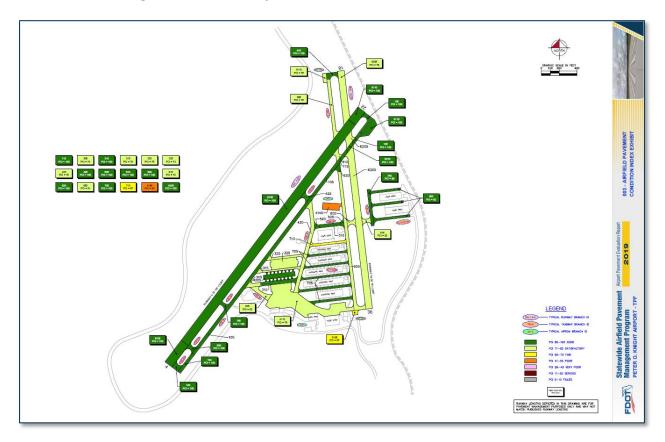
Network ID	Branch ID	Branch Name	Branch Use	Section ID	Area (SF)	Surface	PCI	PCI Rating	PCI % Climate	PCI % Load	PCI % Other	Sample Units Inspected	Total Sample Units in Section
TPF	TW F	TAXIWAY F	TAXIWAY	620	3,610	AAC	100	Good	0%	0%	0%	0	1
TPF	TW G	TAXIWAY G	TAXIWAY	750	12,333	AC	89	Good	100%	0%	0%	1	3





Figure 4.1.3 is an inset view of the 2019 Airfield Pavement Condition Index Exhibit that visually represents the results of the latest PCI Survey inspection. A large format exhibit is located in **Appendix C Technical Exhibits.** 

Figure 4.1.3 2019 Airfield Pavement Condition Index Exhibit







# 4.2 Summary of Pavement Condition Evaluation Results

#### 4.2.1 Network-Level Observations

The field PCI Survey performed at Peter O. Knight Airport was completed on December of 2018. The resulting overall area-weighted average PCI value was 88 representing a condition rating of Good. Peter O. Knight is serviced by two runways; Runway 4-22 is 100-ft wide and 3,583-ft long, and Runway 18-36 is 75-ft wide and 2,687-ft long. Runway 4-22, Taxiway A, and various taxilanes were excluded from inspection due to recent pavement rehabilitation in 2018. The PCI has been set to 100, a condition rating of Good.

Based on the FAA 5010 Report as of 09/12/2019 the Airport has reported 53,800 operations for 12 months ending 12/13/2017.

#### 4.2.2 Branch-Level Observations

The following branch-level observations are intended to be an overall summary of select pavement facilities identified during the PCI Survey; further detail at the section and samplelevel may be referenced for all pavements assessed as part of this System Update. The branchlevel observations discussed are limited to select branches based on use and condition.

#### Runway 18-36

Runway 18-36 consists of 2 sections constructed of AC and AAC. The last construction years range from 2008 to 2018. The area-weighted average PCI for Runway 18-36 is 78 representing a Satisfactory condition rating. The pavement distresses observed were related to Climate and Other distress classifications. Distresses observed on Runway 18-36 consist of Longitudinal & Transverse Cracking, Patching, Raveling, Swelling, and Weathering.

A substantial patching project was completed in by January of 2018 on Runway 18-36.

#### Taxiway F

Taxiway F consists of 4 sections constructed of AAC. The last construction years range from 2008 to 2019. The area-weighted average PCI for Taxiway F is 79 representing a Satisfactory condition rating. The pavement distresses observed were related to Climate and Other distress classifications. Distresses observed on Taxiway F consist of Longitudinal & Transverse Cracking, Raveling, Swelling, and Weathering.

#### Apron

Apron consists of 2 sections constructed of AC and AAC. The last construction years range from 1986 to 2011. The area-weighted average PCI for Apron is 75 representing a Satisfactory condition rating. The pavement distresses observed were related to Climate and Other distress classifications. Distresses observed on Apron consist of Depression, Longitudinal & Transverse Cracking, Oil Spillage, Patching, Raveling, and Weathering.



Figure 4.2.2 Pavement Condition Summary by Facility Use

Facility Use	Area-Weighted Average PCI	Condition Rating
Runway	92	Good
Taxiway	87	Good
Apron	80	Satisfactory
Taxilane	94	Good





#### 4.3 Forecasted Pavement Conditions

#### 4.3.1 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.

#### 4.3.2 Branch-Level Pavement Condition Forecast

The following Figures 4.3.2 (a) through (c) depict the branch-level pavement condition forecast by Branch Use (Runway, Taxiway, and/or Apron). The forecasted conditions are for a 10-year duration starting in January 2020 through January 2029.

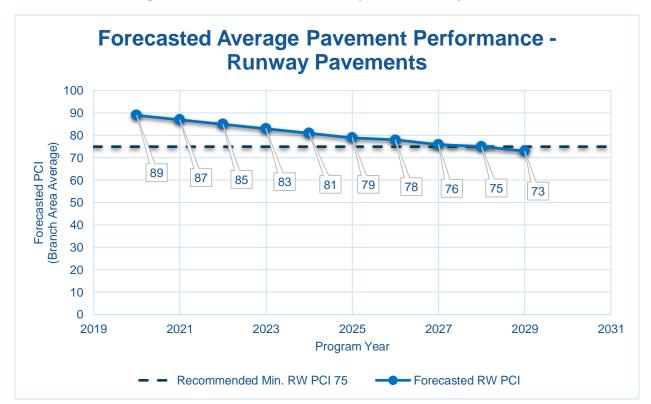


Figure 4.3.2 (a) Forecasted Runway Pavement Performance



Figure 4.3.2 (b) Forecasted Taxiway Pavement Performance

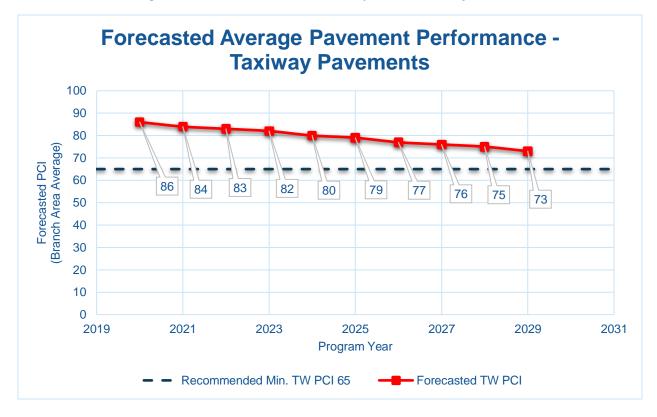
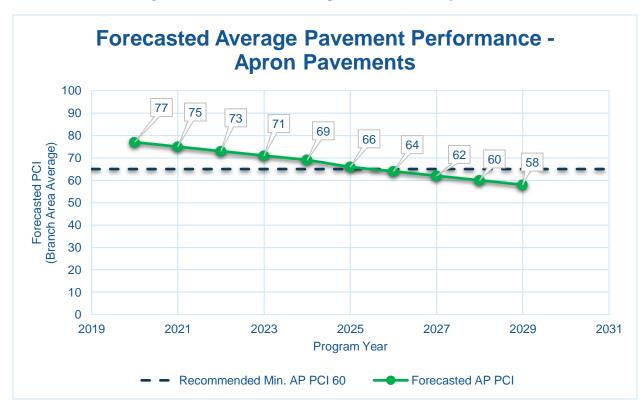


Figure 4.3.2 (c) Forecasted Apron Pavement Performance







#### 4.3.3 Section-Level Pavement Condition Forecast

The following **Table 4.3.3** provides detail to the forecasted PCI values for each section inspected. Please note the forecasted Branch- and Section-Level PCI's are for planning purposes and are subject to the sensitivities in changes in traffic and maintenance frequency. Airport staff should perform annual visual condition assessments to maintain recent understanding of pavement conditions.





#### Table 4.3.3 Forecasted PCI 2020-2029

Network	Branch ID	Section ID	L ( DOI	ast PCI -									
ID			Last PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	AP	4110	79	76	74	72	70	68	65	63	61	59	57
TPF	AP	4140	43	41	40	39	38	37	35	34	33	32	31
TPF	AP RU	5105	67	64	62	60	58	56	53	51	49	47	45
TPF	AP RU	5110	75	72	70	68	66	64	61	59	57	55	53
TPF	AP RU	5115	100	95	93	91	89	86	84	82	80	78	76
TPF	AP TIEDOWN	4205	100	95	93	90	88	86	84	81	79	77	75
TPF	RW 18-36	6205	78	76	74	73	72	71	70	69	68	67	66
TPF	RW 18-36	6210	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6103	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6105	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6110	100	96	93	91	89	87	85	82	81	79	77
TPF	TL HANG NW	800	92	90	88	87	85	84	82	81	79	78	76
TPF	TL T-HANG	705	100	96	94	93	91	89	88	86	85	83	82
TPF	TL T-HANG	710	67	66	65	64	63	62	61	60	60	59	58
TPF	TW A	104	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	105	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	115	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	120	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A1	103	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A2	630	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A3	155	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A4	425	100	96	94	93	91	89	88	86	85	83	82
TPF	TW B	205	82	80	78	77	75	74	73	72	70	69	68
TPF	TW C	305	74	72	71	70	69	68	67	66	65	64	63
TPF	TW C	310	100	96	94	93	91	89	88	86	85	83	82

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Network	Branch ID	Section ID	L POI	Forecasted PCI									
ID			Last PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	TW CENTER	315	73	71	70	69	67	66	65	64	62	61	60
TPF	TW CENTER	320	75	73	72	70	69	68	67	65	64	63	62
TPF	TW CENTER	325	74	72	71	69	68	67	66	64	63	62	61
TPF	TW D	420	78	76	75	73	72	71	70	69	68	67	66
TPF	TW E	505	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	510	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	515	82	80	78	77	76	74	73	72	70	69	68
TPF	TW E	520	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	650	81	79	77	76	75	73	72	71	70	69	68
TPF	TW F	605	78	76	75	73	72	71	70	69	68	67	66
TPF	TW F	610	72	70	69	68	67	66	65	64	63	63	62
TPF	TW F	615	100	97	95	92	90	88	86	84	83	81	79
TPF	TW F	620	100	97	95	92	90	88	86	84	83	81	79
TPF	TW G	750	89	87	85	84	82	81	79	78	76	75	74





#### 4.3.4 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 - 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 a 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





Distress	Severity	Description	Code	Work Type	Work Unit
48	Low	L&TCR	FDOT-MO-PV	FDOT - MONITOR	N/A
48	Medium	L&TCR	FDOT-CS-AC	FDOT - CRACK SEALING - AC	Ft
48	High	L&TCR	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





Distress	Severity	Description	Code	Work Type	Work Unit
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
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 Repair Planning-Level Unit Costs - Flexible Asphalt Concrete

Code	Name	Cost	Units
FDOT-SS-LO	FDOT - SURFACE SEAL	\$0.55	SqFt
FDOT-ML-AC	FDOT - MILLING - AC	\$2.00	SqFt
FDOT-GR-PP	FDOT - GRINDING (LOCALIZED)	\$2.00	Ft
FDOT-CS-AC	FDOT - CRACK SEALING - AC	\$3.00	Ft
FDOT-MO-PV	FDOT - MONITOR		SqFt
FDOT-PA-AF	FDOT - PATCHING - AC FULL DEPTH		SqFt
FDOT-PA-AP	FDOT - PATCHING - AC PARTIAL DEPTH	\$4.00	SqFt

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

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

<sup>\*</sup>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. Appendix B provides the estimated Localized Maintenance and Repair based on this SAPMP's PCI Survey Inspection efforts. 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 nearterm Major Rehabilitation efforts may remove the need to perform localized maintenance efforts.

The following **Table 5.3 (a)** summarizes the anticipated Localized Maintenance and Repair efforts based on the PCI Survey Inspection efforts performed at this airport as part of this SAPMP System Update. The following table depicts planning-level costs rounded to the nearest ten dollars.

Table 5.3 (a) Summary of Airport Localized M&R Planning Cost and Quantity at Network Level

Work Description	Work Category	Rough Estimate of Work Quantity	Work Units	Planni	ng Material Cost
FDOT - SURFACE SEAL	PREVENTIVE	22,285	SqFt	\$	12,260.00
FDOT - PATCHING - AC FULL DEPTH	PREVENTIVE	1,130	SqFt	\$	10,170.00
FDOT - PATCHING - AC PARTIAL DEPTH	PREVENTIVE	105	SqFt	\$	410.00
FDOT - CRACK SEALING - AC	PREVENTIVE	20	Ft	\$	60.00
FDOT - SURFACE SEAL	STOPGAP	8,785	SqFt	\$	4,830.00
FDOT - PATCHING - AC PARTIAL DEPTH	STOPGAP	5,990	SqFt	\$	23,950.00





The following Table 5.3 (b) provides further breakdown of the anticipated planning-level cost at the section level for the pavements exhibiting distresses that would benefit from Localized M&R. The table shows the approximate improved "End Condition" of the section after the application of Localized M&R. The following table depicts planning-level costs rounded to the nearest ten dollars.

Table 5.3 (b) Summary of Airport Localized M&R Planning Cost and Quantity at Section Level

Network ID	Branch ID	Section ID	Area (SF)	Start Condition	End Condition	Cost
TPF	AP	4110	150,952	79	86	\$ 12,990.00
TPF	AP	4140	14,967	43	64	\$ 28,780.00
TPF	AP RU	5105	3,154	67	74	\$ 1,460.00
TPF	AP RU	5110	4,386	75	77	\$ 510.00
TPF	AP RU	5115	16,251	100	100	\$ -
TPF	AP TIEDOWN	4205	23,650	100	100	\$ -
TPF	RW 18-36	6205	188,847	78	81	\$ 1,990.00
TPF	RW 18-36	6210	3,782	100	100	\$ -
TPF	RW 4-22	6103	30,300	100	100	\$ -
TPF	RW 4-22	6105	310,500	100	100	\$ -
TPF	RW 4-22	6110	17,800	100	100	\$ -
TPF	TL HANG NW	800	29,552	92	92	\$ -
TPF	TL T-HANG	705	60,798	100	100	\$ -
TPF	TL T-HANG	710	11,226	67	71	\$ 940.00
TPF	TW A	104	9,170	100	100	\$ -
TPF	TW A	105	100,460	100	100	\$ -
TPF	TW A	115	9,703	100	100	\$ -
TPF	TW A	120	5,070	100	100	\$ -
TPF	TW A1	103	5,794	100	100	\$ -
TPF	TW A2	630	4,673	100	100	\$ -
TPF	TW A3	155	3,892	100	100	\$ -
TPF	TW A4	425	5,338	100	100	\$ -
TPF	TW B	205	11,793	82	88	\$ 900.00
TPF	TW C	305	7,165	74	88	\$ 1,310.00
TPF	TW C	310	16,840	100	100	\$ -
TPF	TW CENTER	315	11,056	73	87	\$ 770.00
TPF	TW CENTER	320	11,536	75	75	\$ -
TPF	TW CENTER	325	33,247	74	74	\$ -
TPF	TW D	420	43,147	78	82	\$ 480.00
TPF	TW E	505	2,353	100	100	\$ -
TPF	TW E	510	8,415	100	100	\$ -
TPF	TW E	515	4,952	82	85	\$ 30.00





Network ID	Branch ID	Section ID	Area (SF)	Start Condition	End Condition	Cost
TPF	TW E	520	2,711	100	100	\$ -
TPF	TW E	650	5,471	81	84	\$ 40.00
TPF	TW F	605	82,680	78	80	\$ 460.00
TPF	TW F	610	5,824	72	87	\$ 1,130.00
TPF	TW F	615	6,836	100	100	\$ -
TPF	TW F	620	3,610	100	100	\$ -
TPF	TW G	750	12,333	89	89	\$ -

The following Table 5.3 (c) provides a summary of the anticipated planning-level costs for Localized Preventive Maintenance and Repair and Localized Stopgap Maintenance and Repair. The following table depicts planning-level costs rounded to the nearest ten dollars.

Table 5.3 (c) Summary of Localized Maintenance

Work Category	Cost
Preventive	\$ 22,900.00
Stopgap	\$ 28,780.00
Planning-Level Localized M&R Needs =	\$ 51,680.00



# **Chapter 6**



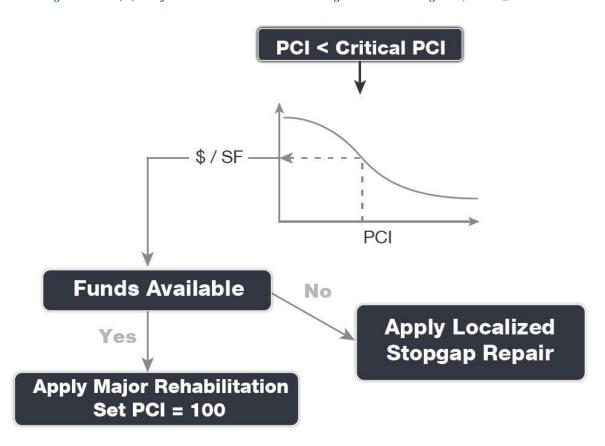


# Chapter 6 – Major Rehabilitation **Planning**

#### 6.1 Major Rehabilitation

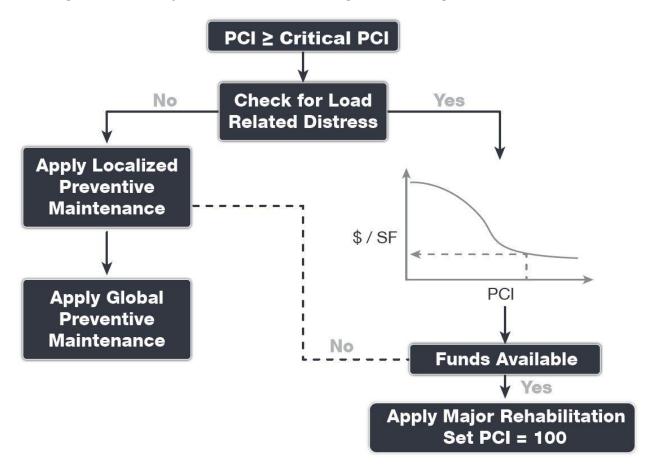
Major rehabilitation is recommended to correct or improve structural deficiencies and/or functional deterioration for pavement sections within a network. Often, when pavements are subject to significant changes in the aircraft fleet mix (frequency and type), major rehabilitation is required to provide 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.

Figures 6.1 (a) Major Rehabilitation Planning Decision Diagram, PCI ≤ Critical PCI





Figures 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
- 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

Branch Use	FDOT Recommended PCI	Additional Consideration	
Runway	75	Aircraft Fleet Mix Changes Primary Runway	
Taxiway / Taxilane	65	Aircraft Fleet Mix Changes Expected Operations	
Aprons / Run-Ups / Ramps	65	Ground Service Equipment Non-Aircraft Operations (e.g. fueling)	





# 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 RL 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	Reliever (RL) Airport
AC Restoration  Combination of asphalt pavement milling and overlay with 25% of the areas subject to full-depth reconstruction.	75% Mill and Overlay P-101 AC Milling (3") P-603 Bituminous Tack P-401 (HMA) (3")
PCI = 41 to 65	25% AC Reconstruction P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (8") P-602 Bituminous Prime P-603 Bituminous Tack P-401 HMA (4") Excludes any paved shoulder features.
AC Reconstruction  Full-depth asphalt pavement section reconstruction.	P-101 Pavement Removal P-152 Subgrade (12") P-211 Base (8") P-602 Bituminous Prime P-603 Bituminous Tack
PCI = 40 or less	P-401 HMA (4")  Excludes any paved shoulder features.





Rehabilitation Type	Reliever (RL) Airport
PCC Restoration  Restoration of PCC pavement with a combination of crack sealing, joint seal replacement, and replacement of 25% of slab panels.  PCI = 41 to 65	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
PCC Reconstruction  Full-depth rigid pavement section reconstruction.  PCI = 40 or less	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 Reliever (RL) Major Rehabilitation Planning-Level Unit Cost by Pavement Type

Rehabilitation Type	PCI Range	le Asphalt Cost Per SF	Rigid Portland Cement Concrete Cost per SF		
Restoration	41 to 65	\$ 9.50	\$	13.50	
Reconstruction	0 to 40	\$ 12.50	\$	20.00	

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 payement 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.

#### 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 summarizes all identified section-level major rehabilitation needs 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 10-Year Major Rehabilitation Needs

Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning C	ost
2020	TPF	AP	4140	AC	14,967	41	AC Restoration	\$ 180,000	0.00
2020	TPF	AP RU	5105	AAC	3,154	64	AC Restoration	\$ 30,000	0.00
2022	TPF	TL T-HANG	710	AAC	11,226	64	AC Restoration	\$ 107,000	0.00
2024	TPF	AP RU	5110	AAC	4,386	64	AC Restoration	\$ 42,000	0.00
2026	TPF	AP	4110	AAC	150,952	63	AC Restoration	\$ 1,435,000	0.00
2026	TPF	TW CENTER	315	AC	11,056	64	AC Restoration	\$ 106,000	0.00
2026	TPF	TW CENTER	325	AC	33,247	64	AC Restoration	\$ 316,000	0.00
2026	TPF	TW F	610	AAC	5,824	64	AC Restoration	\$ 56,000	0.00
2027	TPF	TW CENTER	320	AC	11,536	64	AC Restoration	\$ 110,000	0.00
2028	TPF	TW C	305	AAC	7,165	64	AC Restoration	\$ 69,000	0.00

<sup>\*</sup>All values have been rounded to the nearest thousand-dollar.

The following Figure 6.3.1 (a) summarizes the section-level major rehabilitation needs for a 10year period between 2020 and 2029. Figure 6.3.1 (b) provides an inset view of Airfield Pavement Major Rehabilitation Exhibit, a large format exhibit is located in Appendix C **Technical Exhibits.** The exhibit graphically depicts the Major Rehabilitation Needs with rounded costs.





Figure 6.3.1 (a) 10-Year Major Rehabilitation Needs by Program Year

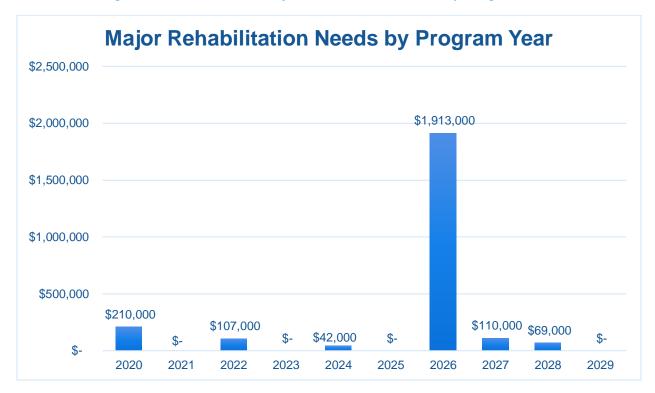
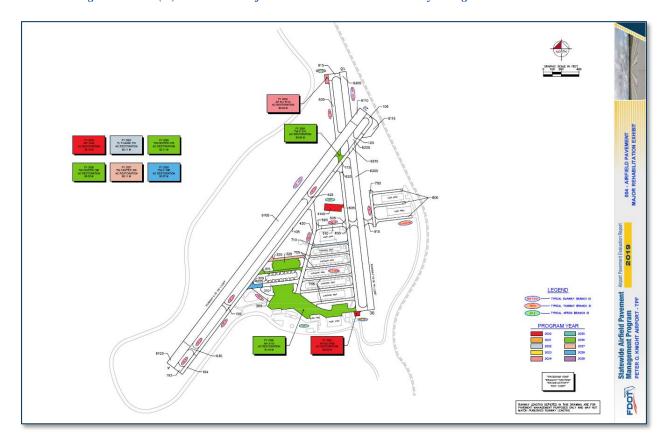


Figure 6.3.1 (b) 10-Year Major Rehabilitation Needs by Program Year Exhibit





# **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 reinspection 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 2020-2029. 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

#### 001 - Airfield Pavement Network Definition Exhibit

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

#### 002 - Airfield Pavement System Inventory Exhibit

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

#### 003 - Airfield Pavement Condition Index Exhibit

The Airfield Pavement Condition Index Exhibit is located in Appendix C Technical Exhibits. The exhibit is a visual summary of the latest conditions calculated from the results of the PCI Survey performed at the airport. The analysis of the distresses surveyed in accordance with the ASTM D5340-12 (referenced in Appendix E Inspection Distress Details) were analyzed using PAVER™ software to determine PCI values. The PCI values are identified in the exhibit and graphically represented using the standard ASTM D5340-12 colors for condition rating categories.

#### 004 - Airfield Pavement Major Rehabilitation Exhibit

The Airfield Pavement Major Rehabilitation Exhibit is located in **Appendix C Technical Exhibits**. The exhibit has been prepared based on the section condition analysis, pavement condition forecasts, and major rehabilitation needs analysis. The exhibit graphically depicts the inventory with the associated rehabilitation type activity, program year, and the planning-level costs. 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 B Airfield Pavement Localized Maintenance and Repair and Major Rehabilitation.

#### Inspection Photograph Documentation

Representative field conditions from the PCI Survey are documented with digital photographs located in Appendix D Inspection Photograph Documentation. Select photographs are provided with limited caption on the distresses observed – the Appendix does not contain photographs for every sample unit.

**Statewide Airfield Pavement Management Program** 

**Airport Pavement Evaluation Report** 

2019

Peter O. Knight Airport (TPF)





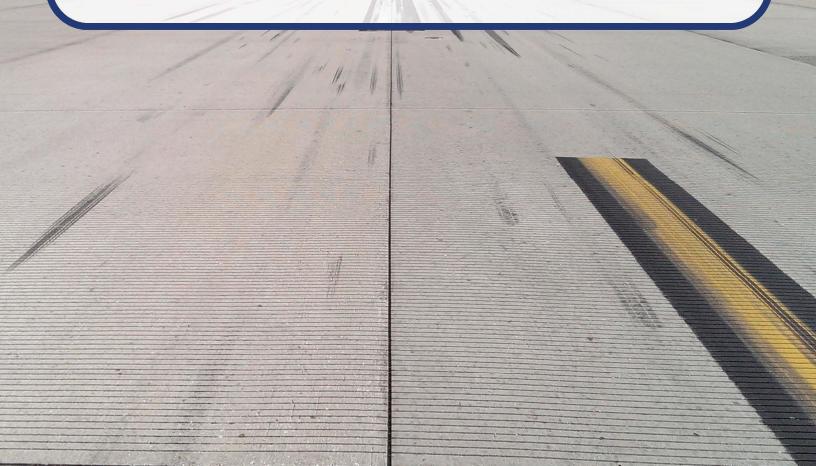
#### 7.3 Conclusion

The FDOT SAPMP Update Phase 2 2018-2019 was completed for the airport 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

Airfield Pavement Analysis Tables







#### Table A-1 Pavement System Inventory Details

Network ID	Branch Name	Branch ID	Branch Use	Section ID	Length (FT)	Width (FT)	Area (SF)	Surface Type	Est. Last Construction Date
TPF	APRON	AP	APRON	4110	1,500	100	150,952	AAC	1/1/2011
TPF	APRON	AP	APRON	4140	200	75	14,967	AC	1/1/1986
TPF	RUNUP APRON	AP RU	APRON	5105	15	200	3,154	AAC	1/1/2008
TPF	RUNUP APRON	AP RU	APRON	5110	22	200	4,386	AAC	1/1/2008
TPF	RUNUP APRON	AP RU	APRON	5115	210	73	16,251	AAC	1/1/2018
TPF	TIE-DOWN APRON	AP TIEDOWN	APRON	4205	355	50	23,650	AC	1/1/2018
TPF	RUNWAY 18-36	RW 18-36	RUNWAY	6205	2,443	75	188,847	AAC	1/1/2008
TPF	RUNWAY 18-36	RW 18-36	RUNWAY	6210	50	108	3,782	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6103	303	100	30,300	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6105	3,105	100	310,500	AC	1/1/2018
TPF	RUNWAY 4-22	RW 4-22	RUNWAY	6110	178	100	17,800	AC	1/1/2018
TPF	TAXILANE TO EAST HANGARS	TL HANG NW	TAXIWAY	800	1,120	25	29,552	AC	1/1/2011
TPF	TAXILANE TO T-HANGARS	TL T-HANG	TAXILANE	705	2,100	25	60,798	AC	1/1/2018
TPF	TAXILANE TO T-HANGARS	TL T-HANG	TAXILANE	710	400	25	11,226	AAC	1/1/2007
TPF	TAXIWAY A	TW A	TAXIWAY	104	262	35	9,170	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	105	2,874	35	100,460	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	115	259	35	9,703	AC	1/1/2018
TPF	TAXIWAY A	TW A	TAXIWAY	120	163	35	5,070	AC	1/1/2018
TPF	TAXIWAY A1	TW A1	TAXIWAY	103	83	65	5,794	AC	1/1/2018
TPF	TAXIWAY A2	TW A2	TAXIWAY	630	100	40	4,673	AC	1/1/2018
TPF	TAXIWAY A3	TW A3	TAXIWAY	155	35	83	3,892	AC	1/1/2018
TPF	TAXIWAY A4	TW A4	TAXIWAY	425	75	40	5,338	AC	1/1/2018
TPF	TAXIWAY B	TW B	TAXIWAY	205	280	40	11,793	AAC	1/1/2011
TPF	TAXIWAY C	TW C	TAXIWAY	305	150	40	7,165	AAC	1/1/2010
TPF	TAXIWAY C	TW C	TAXIWAY	310	425	40	16,840	AC	1/1/2018
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	315	500	20	11,056	AC	1/1/2008
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	320	400	25	11,536	AC	1/1/2008
TPF	TAXIWAY CENTER	TW CENTER	TAXIWAY	325	300	100	33,247	AC	1/1/2008
TPF	TAXIWAY D	TW D	TAXIWAY	420	1,015	40	43,147	AAC	1/1/2011
TPF	TAXIWAY E	TW E	TAXIWAY	505	50	40	2,353	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	510	240	35	8,415	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	515	100	50	4,952	AC	1/1/2011
TPF	TAXIWAY E	TW E	TAXIWAY	520	56	35	2,711	AC	1/1/2018
TPF	TAXIWAY E	TW E	TAXIWAY	650	100	50	5,471	AAC	1/1/2008
TPF	TAXIWAY F	TW F	TAXIWAY	605	738	35	82,680	AAC	1/1/2008
TPF	TAXIWAY F	TW F	TAXIWAY	610	122	48	5,824	AAC	1/1/2008

**Statewide Airfield Pavement Management Program**Airport Pavement Evaluation Report

2019

Peter O. Knight Airport (TPF)





Network ID	Branch Name	Branch ID	Branch Use	Section ID	Length (FT)	Width (FT)	Area (SF)	Surface Type	Est. Last Construction Date
TPF	TAXIWAY F	TW F	TAXIWAY	615	130	35	6,836	AAC	1/1/2019
TPF	TAXIWAY F	TW F	TAXIWAY	620	80	35	3,610	AAC	1/1/2019
TPF	TAXIWAY G	TW G	TAXIWAY	750	300	30	12,333	AC	1/1/2011





Table A-2 Pavement Condition Index Summary (Last Inspection) - Section Level

Network ID	Branch Name	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
TPF	RUNWAY 4-22	RUNWAY	6103	30,300	100	Good
TPF	RUNWAY 4-22	RUNWAY	6105	310,500	100	Good
TPF	RUNWAY 4-22	RUNWAY	6110	17,800	100	Good
TPF	RUNWAY 18-36	RUNWAY	6205	188,847	78	Satisfactory
TPF	RUNWAY 18-36	RUNWAY	6210	3,782	100	Good
TPF	TAXILANE TO EAST HANGARS	TAXIWAY	800	29,552	92	Good
TPF	TAXIWAY A	TAXIWAY	104	9,170	100	Good
TPF	TAXIWAY A	TAXIWAY	105	100,460	100	Good
TPF	TAXIWAY A	TAXIWAY	115	9,703	100	Good
TPF	TAXIWAY A	TAXIWAY	120	5,070	100	Good
TPF	TAXIWAY A1	TAXIWAY	103	5,794	100	Good
TPF	TAXIWAY A2	TAXIWAY	630	4,673	100	Good
TPF	TAXIWAY A3	TAXIWAY	155	3,892	100	Good
TPF	TAXIWAY A4	TAXIWAY	425	5,338	100	Good
TPF	TAXIWAY B	TAXIWAY	205	11,793	82	Satisfactory
TPF	TAXIWAY C	TAXIWAY	305	7,165	74	Satisfactory
TPF	TAXIWAY C	TAXIWAY	310	16,840	100	Good
TPF	TAXIWAY CENTER	TAXIWAY	315	11,056	73	Satisfactory
TPF	TAXIWAY CENTER	TAXIWAY	320	11,536	75	Satisfactory
TPF	TAXIWAY CENTER	TAXIWAY	325	33,247	74	Satisfactory
TPF	TAXIWAY D	TAXIWAY	420	43,147	78	Satisfactory
TPF	TAXIWAY E	TAXIWAY	505	2,353	100	Good
TPF	TAXIWAY E	TAXIWAY	510	8,415	100	Good
TPF	TAXIWAY E	TAXIWAY	515	4,952	82	Satisfactory
TPF	TAXIWAY E	TAXIWAY	520	2,711	100	Good
TPF	TAXIWAY E	TAXIWAY	650	5,471	81	Satisfactory
TPF	TAXIWAY F	TAXIWAY	605	82,680	78	Satisfactory
TPF	TAXIWAY F	TAXIWAY	610	5,824	72	Satisfactory
TPF	TAXIWAY F	TAXIWAY	615	6,836	100	Good
TPF	TAXIWAY F	TAXIWAY	620	3,610	100	Good
TPF	TAXIWAY G	TAXIWAY	750	12,333	89	Good
TPF	TAXILANE TO T-HANGARS	TAXILANE	705	60,798	100	Good
TPF	TAXILANE TO T-HANGARS	TAXILANE	710	11,226	67	Fair
TPF	APRON	APRON	4110	150,952	79	Satisfactory
TPF	APRON	APRON	4140	14,967	43	Poor
TPF	TIE-DOWN APRON	APRON	4205	23,650	100	Good
TPF	RUNUP APRON	APRON	5105	3,154	67	Fair

**Statewide Airfield Pavement Management Program**Airport Pavement Evaluation Report

2019

Peter O. Knight Airport (TPF)





Network ID	Branch Name	Branch Use	Section ID	Area (SF)	PCI	Condition Rating
TPF	RUNUP APRON	APRON	5110	4,386	75	Satisfactory
TPF	RUNUP APRON	APRON	5115	16,251	100	Good





#### Table A-3 Forecasted PCI 2020-2029

Network		Section	Last					Forecas	sted PCI				
ID	Branch ID	ID	PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	AP	4110	79	76	74	72	70	68	65	63	61	59	57
TPF	AP	4140	43	41	40	39	38	37	35	34	33	32	31
TPF	AP RU	5105	67	64	62	60	58	56	53	51	49	47	45
TPF	AP RU	5110	75	72	70	68	66	64	61	59	57	55	53
TPF	AP RU	5115	100	95	93	91	89	86	84	82	80	78	76
TPF	AP TIEDOWN	4205	100	95	93	90	88	86	84	81	79	77	75
TPF	RW 18-36	6205	78	76	74	73	72	71	70	69	68	67	66
TPF	RW 18-36	6210	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6103	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6105	100	96	93	91	89	87	85	82	81	79	77
TPF	RW 4-22	6110	100	96	93	91	89	87	85	82	81	79	77
TPF	TL HANG NW	800	92	90	88	87	85	84	82	81	79	78	76
TPF	TL T-HANG	705	100	96	94	93	91	89	88	86	85	83	82
TPF	TL T-HANG	710	67	66	65	64	63	62	61	60	60	59	58
TPF	TW A	104	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	105	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	115	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A	120	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A1	103	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A2	630	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A3	155	100	96	94	93	91	89	88	86	85	83	82
TPF	TW A4	425	100	96	94	93	91	89	88	86	85	83	82
TPF	TW B	205	82	80	78	77	75	74	73	72	70	69	68
TPF	TW C	305	74	72	71	70	69	68	67	66	65	64	63
TPF	TW C	310	100	96	94	93	91	89	88	86	85	83	82
TPF	TW CENTER	315	73	71	70	69	67	66	65	64	62	61	60
TPF	TW CENTER	320	75	73	72	70	69	68	67	65	64	63	62
TPF	TW CENTER	325	74	72	71	69	68	67	66	64	63	62	61
TPF	TW D	420	78	76	75	73	72	71	70	69	68	67	66
TPF	TW E	505	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	510	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	515	82	80	78	77	76	74	73	72	70	69	68
TPF	TW E	520	100	96	94	93	91	89	88	86	85	83	82
TPF	TW E	650	81	79	77	76	75	73	72	71	70	69	68
TPF	TW F	605	78	76	75	73	72	71	70	69	68	67	66
TPF	TW F	610	72	70	69	68	67	66	65	64	63	63	62
TPF	TW F	615	100	97	95	92	90	88	86	84	83	81	79

**Statewide Airfield Pavement Management Program**Airport Pavement Evaluation Report

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### Peter O. Knight Airport (TPF)





Network	Branch ID	Section	Last				Forecasted PCI						
ID	Dianch ID	ID	PCI	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TPF	TW F	620	100	97	95	92	90	88	86	84	83	81	79
TPF	TW G	750	89	87	85	84	82	81	79	78	76	75	74

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Pavement Database: FDOT

		Pavement Database:	FDOT			
Network:	PETER O.	KNIGHT Branch: AP RU	RUNU	JP APRON	Section:	5105 Surface:AAC
<b>L.C.D.</b> 1/1/20	008 Us	e: APRON Rank: P L	ength: 15	.00 (Ft) <b>Wi</b>	dth: 200.0	0 (Ft) <b>True Area:</b> 3154.000000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2008		MILL and OVERLAY	0.00	0.00	>	
1/1/1987	IMPORT ED	BUILT	0.00	1.50	<b>&gt;</b>	1987: 1.5" AC ON 7" P211 ON 6" STAB. SUBGRADE
Network:				IP APRON	Section:	
L.C.D. 1/1/2		e: APRON Rank: P L	ength: 22	. ,		0 (Ft) <b>True Area:</b> 4386.000001 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2008		MILL and OVERLAY	0.00	0.00	<b>&gt;</b> :	
1/1/1987	IMPORT ED	BUILT	0.00	1.50	<b>&gt;</b>	1987: 1.5" AC ON 7" P211 ON 6" STAB. SUBGRADE
Network:	PETER O.	KNIGHT Branch: AP RU	RUNU	P APRON	Section:	5115 Surface: AAC
L.C.D. 1/1/20	018 Us	e: APRON Rank: P L	ength: 210	.00 (Ft) <b>Wi</b>	dth: 73.0	0 (Ft) <b>True Area:</b> 16251.00000 (SqFt
	Work			Thickness	Major	
Work Date	Code	Work Description	Cost	(in)	M&R	Comments
1/1/2018		MILL and OVERLAY	0.00	0.00	<b>&gt;</b>	2" P-403
1/1/2007	NU-IN	New Construction - Initial	0.00	0.00	<b>&gt;</b> :	
Network:					Section:	
L.C.D. 1/1/2		e: APRON Rank: P L	ength: 355	, ,		0 (Ft) <b>True Area:</b> 23650.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	3" P-403, 6" P-219 (INITIAL CONST
1/1/2011	ML-OV	MILL and OVERLAY	0.00	0.00		
1/1/2002	NC-AC	New Construction - AC	0.00	0.00	<b>&gt;</b>	
			•			
Network:	PETER O.	KNIGHT Branch: AP	APRO	N	Section:	4110 Surface: AAC
<b>L.C.D.</b> 1/1/20	011 Us	e: APRON Rank: P L	ength: 1,500	.00 (Ft) Wie	dth: 100.0	0 (Ft) <b>True Area:</b> 150952.0000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2016	PA-AC	Patching - AC	0.00	0.00		
1/1/2011	ML-OV	MILL and OVERLAY	0.00	0.00		
1/1/1987	IMPORT ED	REPAIR	0.00	0.00		1987 SEAL COAT
1/1/1964	IMPORT ED	BUILT	0.00	1.00	•	1964 1" BIT 6" LIMEROCK

APRON Network: PETER O. KNIGHT Surface: AC Branch: AP Section: 4140 **L.C.D.** 1/1/1986 Use: APRON Rank: P Length: 200.00 (Ft) Width: 75.00 (Ft) **True Area:** 14967.00000 (SqFt Work Major Thickness **Work Date Work Description** Cost Comments Code M&R (in) IMPORT BUILT 1/1/1986 0.00 0.00 EST 1986 BIT ~

FD

#### **Work History Report**

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Pavement Database: FDOT

Network: PETER O. KNIGHT Branch: RW 18-36 **RUNWAY 18-36** Section: 6205 Surface: AAC **L.C.D.** 1/1/2008 Use: RUNWAY Rank: P Length: 2,443.00 (Ft) Width: 75.00 (Ft) True Area: 188847.0000 (SqFt Work Thickness Major **Work Date** Cost **Work Description Comments** Code (in) M&R 1/1/2019 CS-AC Crack Sealing - AC 0.00 0.00 1/1/2019 PA-AC Patching - AC 0.00 0.00 1/1/2008 ML-OL Mill and Overlay 0.00 0.00 ~ 1/1/1986 IMPORT OVERLAY 0.00 1986 1.5" P-401 OL 1.50 ~ ED IMPORT BUILT 1/1/1963 0.00 1.00 **V** 1963 1" P-401 OL ON .5-1" BIT AND ED 6" SAND

Network: PETER O. KNIGHT

Branch: RW 18-36

RUNWAY 18-36

Section: 6210

Surface:AC

L.C.D. 1/1/2018

Use: RUNWAY

Rank: P

Length: 50.00 (Ft)

Width: 108.00 (Ft)

True Area: 3782.000001 (SqFt)

Work Date

Work Description

Cost

Thickness

Major

Comments

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	3" P-403, P-220
1/1/2008	ML-OL	Mill and Overlay	0.00	0.00		
1/1/1986	IMPORT ED	OVERLAY	0.00	1.50		1986 1.5" P-401 OL
1/1/1963	IMPORT ED	BUILT	0.00	1.00	<b>V</b>	1963 1" P-401 OL ON .5-1" BIT AND 6" SAND

 Network:
 PETER O. KNIGHT
 Branch:
 RW 4-22
 RUNWAY 4-22
 Section:
 6103
 Surface:AC

 L.C.D. 1/1/2018
 Use:
 RUNWAY
 Rank:
 P
 Length:
 303.00 (Ft)
 Width:
 100.00 (Ft)
 True Area:
 30300.00000 (SqFt)

	Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
Ī	1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>Y</b>	
	1/1/2007	NU-IN	New Construction - Initial	0.00	0.00		

 Network:
 PETER O. KNIGHT
 Branch:
 RW 4-22
 RUNWAY 4-22
 Section:
 6105
 Surface:
 AC

 L.C.D. 1/1/2018
 Use:
 RUNWAY
 Rank:
 P
 Length:
 3,105.00 (Ft)
 Width:
 100.00 (Ft)
 True Area:
 310500.0000 (SqFt)

Thickness Work Major **Work Date Work Description** Cost **Comments** Code (in) M&R 1/1/2018 CR-AC Complete Reconstruction - AC 0.00 0.00 ~ 1/1/2001 Overlay - AC Fabric OL-AF 0.00 2.00 ~ 2"AC with Asph Runbber Membr inte IMPORT OVERLAY 1/1/1986 0.000.00 ~ EST 1986 BIT OL ED IMPORT BUILT 1/1/1960 0.001.00 1960 1" P-401 OL ON EXISTING ~

 Network:
 PETER O. KNIGHT
 Branch:
 RW 4-22
 RUNWAY 4-22
 Section:
 6110
 Surface:AC

 L.C.D. 1/1/2018
 Use:
 RUNWAY
 Rank:
 P
 Length:
 178.00 (Ft)
 Width:
 100.00 (Ft)
 True Area:
 17800.00000 (SqFt)

PAV'T

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	
1/1/2007	ML-OL	Mill and Overlay	0.00	0.00		
1/1/1992	IMPORT ED	OVERLAY	0.00	1.50		1992 1.5" P-401 OL
1/1/1960	IMPORT ED	BUILT	0.00	1.00		1960 1" P-401 OL ON EXISTING PAV'T

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Pavement Database: FDOT

Network: PETER O. KNIGHT Branch: TL HANG N TAXILANE TO E Section: 800 Surface: AC L.C.D. 1/1/2011 Use: TAXIWAY Rank: P Length: 1,120.00 (Ft) Width: 25.00 (Ft) True Area: 29552.00000 (SqFt Work Thickness Major **Work Date** Cost **Work Description** Comments Code (in) M&R 1/1/2011 NU-IN New Construction - Initial 0.00 2" ASPHALT (TYPE S-1), 6" LIMER ightharpoons

Network: PETER O. KNIGHT Branch: TL T-HANG TAXILANE TO T-Section: 705 Surface:AC Use: TAXILAN Rank: P 25.00 (Ft) True Area: 60798.00001 (SqFt L.C.D. 1/1/2018 **Length:** 2,100.00 (Ft) **Width:** Work Thickness Major Work Date **Work Description** Cost Comments Code (in) M&R 1/1/2018 CR-AC | Complete Reconstruction - AC 0.00 0.00 ~ 1/1/1964 IMPORT BUILT 0.00 0.00 **EST 1964 BIT** ED

Network: PETER O. KNIGHT

Branch: TL T-HANG TAXILANE TO T- Section: 710

Surface:AAC

L.C.D. 1/1/2007

Use: TAXILAN

Rank: P

Length: 400.00 (Ft) Width: 25.00 (Ft) True Area: 11226.00000 (SqFt)

Work Thickness Major Work Date **Work Description** Cost Comments Code (in) M&R 1/1/2007 MILL and OVERLAY ML-OV 0.00 0.00 ~ 1/1/1964 IMPORT BUILT 0.00 **EST 1964 BIT** 0.00 ED

Network: PETER O. KNIGHT Branch: TW A TAXIWAY A Section: 104 Surface: AC **L.C.D.** 1/1/2018 262.00 (Ft) Width: 35.00 (Ft) True Area: 9170.000002 (SqFt Use: TAXIWAY Rank: P Length: Work Thickness Major **Work Date** Cost **Work Description Comments** Code M&R (in) 1/1/2018 CR-AC Complete Reconstruction - AC 0.00 0.00 1/1/2007 NU-IN New Construction - Initial 0.00 0.00 ~

Network: PETER O. KNIGHT Branch: TW A TAXIWAY A Section: 105 Surface:AC

L.C.D. 1/1/2018 Use: TAXIWAY Rank: P Length: 2,874.00 (Ft) Width: 35.00 (Ft) True Area: 100460.0000 (SqFt

Work Thickness Major **Work Date Work Description** Cost Comments Code (in) M&R 1/1/2018 CR-AC Complete Reconstruction - AC 0.00 0.00 ~ IMPORT OVERLAY 1/1/1992 0.001.00 1992 1" P-401 OL ED IMPORT BUILT 1/1/1965 0.001965 1" P-401 6" P-211 28" 1.00 ED GRANULAR

Network: PETER O. KNIGHT Branch: TW A1 TAXIWAY A1 Section: 103 Surface:AC

LCD 1/1/2018 Use: TAXIWAY Rank: P. Length: 83.00 (Et) Width: 65.00 (Et) True Area: 5794.000001 (Soft

н	L.C.D. 1/1/20	010 08	se: IAAIWAI Kalik: P L	engui: 65	.00 (Ft) WI	utii: 05.0	0 (Ft) 1 rue Area: 3/94.000001 (Sqrt
	Work Date	Vork Date Work Code Work Description		Cost	Thickness (in)	Major M&R	Comments
	1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b> :	
	1/1/2007	NU-IN	New Construction - Initial	0.00	0.00		

1	O	/4	12	01	9
1	v	<b>/ T</b>	<i>  4</i>	UΙ	•

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#### **Work History Report**

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Pavement Database: FDOT

	Network:	PETER O.	KNIGHT Branch: TW A	TAXIV	WAY A	Section:	115 Surface:AC
L.C.D. 1/1/2018 Use: TAXIWAY R			e: TAXIWAY Rank: P L	ength: 259	.00 (Ft) <b>Wi</b>	dth: 35.0	0 (Ft) <b>True Area:</b> 9703.000002 (SqFt
Work Date   Work Code   Work Do		Work Description	Cost	Thickness (in)	Major M&R	Comments	
Ī	1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	
	1/1/2008	ML-OV	MILL and OVERLAY	0.00	0.00		
	1/1/1965	IMPORT	BUILT	0.00	1.00		1965 1" BIT 6" LIMEROCK 28"
		ED		ı			GRANULAR

Network: PETER O. KNIGHT Branch: TW A TAXIWAY A Section: 120 Surface:AC

L.C.D. 1/1/2018 Use: TAXIWAY Rank: P Length: 163.00 (Ft) Width: 35.00 (Ft) True Area: 5070.000001 (SqFt

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	
1/1/2008	ML-OL	Mill and Overlay	0.00	0.00		
1/1/1986	IMPORT ED	OVERLAY	0.00	1.50		1986 1.5" P-401 OL
1/1/1965	IMPORT ED	BUILT	0.00	1.00		1965 1" BIT 6" LIMEROCK 28" GRANULAR

Network: PETER O. KNIGHT Branch: TW A2 TAXIWAY A2 Section: 630 Surface:AC

L.C.D. 1/1/2018 Use: TAXIWAY Rank: P Length: 100.00 (Ft) Width: 40.00 (Ft) True Area: 4673.000001 (SqFt

Work Date Work Ode Work Description Cost Thickness Major M&R

Code Comments

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<	
1/1/2007	NU-IN	New Construction - Initial	0.00	0.00		

**Network: PETER O. KNIGHT** Branch: TW A3 TAXIWAY A3 Section: 155 Surface: AC **L.C.D.** 1/1/2018 Use: TAXIWAY Rank: P Length: 35.00 (Ft) Width: 83.00 (Ft) True Area: 3892.000001 (SqFt Thickness Work Major **Work Date Work Description** Cost **Comments** Code (in) M&R 1/1/2018 NC-AC New Construction - AC 0.00 0.00 

Network: PETER O. KNIGHT Branch: TW A4 TAXIWAY A4 Section: 425 Surface:AC

L.C.D. 1/1/2018 Use: TAXIWAY Rank: P Length: 75.00 (Ft) Width: 40.00 (Ft) True Area: 5338.000001 (SqFt Work Thickness Major **Work Date Work Description** Cost Comments Code M&R (in) 1/1/2018 CR-AC Complete Reconstruction - AC 0.00 0.00 IMPORT OVERLAY 1/1/1992 0.001.00 ~ 1992 1" P-401 OL ED 1/1/1964 IMPORT BUILT 1964 1" P-201 6" LIMEROCK 0.00 1.00 ~

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Pavement Database: FDOT

Network:	PETER O.	KNIGHT Branch: TW B	TAXIV	WAY B	Section:	205 Surface:AAC
<b>L.C.D.</b> 1/1/2	011 Us	se: TAXIWAY Rank: P	Length: 280	.00 (Ft) Wie	dth: 40.0	0 (Ft) <b>True Area:</b> 11793.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2011	ML-OV	MILL and OVERLAY	0.00	0.00	>	
1/1/1987	IMPORT ED	REPAIR	0.00	0.00		1987 SEAL CAOT
1/1/1965	IMPORT	BUILT	0.00	1.00	<b>~</b> :	1965 1" BIT 6" LIMEROCK 28"
1, 1, 1, 00	ED	20121		1.00	<u>.</u>	GRANULAR
Network:	PETER O.	KNIGHT Branch: TW C	TAXIV	WAY C	Section:	305 Surface:AAC
<b>L.C.D.</b> 1/1/2	010 Us	se: TAXIWAY Rank: P	Length: 150	.00 (Ft) Wie	dth: 40.0	0 (Ft) <b>True Area:</b> 7165.000002 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2010	ML-OL	Mill and Overlay	0.00	0.00	<b>V</b>	
1/1/1992		OVERLAY	0.00	1.00	<b>&gt;</b>	1992 1" P-401 OL
1/1/1965	ED IMPORT	ринт	0.00	1.00	[]·	1965 1" P-401 6" P-211 28"
1/1/1903	ED	BUILI	0.00	1.00	<b>&gt;</b> :	GRANULAR
Network:	PETER O.	KNIGHT Branch: TW C	TAXIV	WAY C	Section:	310 Surface:AC
<b>L.C.D.</b> 1/1/2	018 Us	se: TAXIWAY Rank: P	Length: 425	.00 (Ft) Wie	dth: 40.0	0 (Ft) <b>True Area:</b> 16840.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>	
1/1/1987	IMPORT ED	REPAIR	0.00	0.00		1987 SEAL COAT
1/1/1965	IMPORT	BUILT	0.00	1.00	<b>&gt;</b> :	1965 1" BIT 6" LIMEROCK 28"
	ED					GRANULAR
Network:	PETER O.	KNIGHT Branch: TW CI	ENTER TAXIV	WAY CENT	Section:	315 Surface:AC
<b>L.C.D.</b> 1/1/2	008 Us	se: TAXIWAY Rank: P	Length: 500	.00 (Ft) Wie	dth: 20.0	0 (Ft) <b>True Area:</b> 11056.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2008	NU-IN	New Construction - Initial	0.00	0.00	<b>V</b>	
Network:	PETER O.	KNIGHT Branch: TW CI	ENTER TAXIV	WAY CENT	Section:	320 Surface:AC
<b>L.C.D.</b> 1/1/2	008 Us	se: TAXIWAY Rank: P	Length: 400	.00 (Ft) Wie	dth: 25.0	0 (Ft) <b>True Area:</b> 11536.00000 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2008	NU-IN	New Construction - Initial	0.00	0.00		
			•			
Network:	PETER O.	KNIGHT Branch: TW CI	ENTER TAXIV	WAY CENT	Section:	325 Surface:AC
<b>L.C.D.</b> 1/1/2	008 Us	se: TAXIWAY Rank: P	Length: 300	.00 (Ft) Wie	dth: 100.0	0 (Ft) <b>True Area:</b> 33247.00001 (SqFt
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00		
1/1/2008	NU-IN	New Construction - Initial	0.00	0.00		

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Pavement Database: FDOT

	T WYCHICH D MIMOUSCI I DOI								
Network:	PETER O.	KNIGHT Branch: TW D	TAXIV	WAY D	Section:	420 Surface: AAC			
L.C.D. 1/1/2			ength: 1,015			0 (Ft) <b>True Area:</b> 43147.00001 (SqFt			
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments			
1/1/2019	CS-AC	Crack Sealing - AC	0.00	0.00					
1/1/2011	ML-OV	MILL and OVERLAY	0.00	0.00					
1/1/1987	IMPORT ED	REPAIR	0.00	0.00		1987 SEAL COAT			
1/1/1964	IMPORT ED	BUILT	0.00	1.00		1964 1" P-401 6" P-211			
Network:	PETER O.	KNIGHT Branch: TW E	TAXIV	WAY E	Section:	505 Surface:AC			
<b>L.C.D.</b> 1/1/2	018 Us	se: TAXIWAY Rank: P L	ength: 50	.00 (Ft) <b>Wi</b> o	dth: 40.0	0 (Ft) True Area: 2353.000000 (SqFt			
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments			
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00	<b>V</b>				
1/1/2005	ML-OV	MILL and OVERLAY	0.00	2.00		2" AC / EXISTING BASE			
1/1/1986	IMPORT ED	OVERLAY	0.00	1.50	<b>V</b>	1986 1.5" BIT OL			
1/1/1965	IMPORT ED	BUILT	0.00	1.00		1965 1" BIT 6" LIMEROCK 28" GRANULAR			
Network:	PETER O.	KNIGHT <b>Branch:</b> TW E	TAXIV	WAY E	Section:	510 Surface: AC			
<b>L.C.D.</b> 1/1/2	018 Us	se: TAXIWAY Rank: P L	ength: 240	.00 (Ft) Wie	dth: 35.0	0 (Ft) <b>True Area:</b> 8415.000002 (SqFt			
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments			
1/1/2018	CR-AC	Complete Reconstruction - AC	0.00	0.00					
1/1/1987	IMPORT ED	REPAIR	0.00	0.00		1987 SEAL COAT			
1/1/1965	IMPORT ED	BUILT	0.00	1.00		1965 1" BIT 6" LIMEROCK 28" GRANULAR			
Network:	PETER O.	KNIGHT <b>Branch:</b> TW E	TAXIV	WAY E	Section:	515 Surface:AC			
<b>L.C.D.</b> 1/1/2	011 Us	se: TAXIWAY Rank: P L	ength: 100	.00 (Ft) Wie	dth: 50.0	0 (Ft) True Area: 4952.000001 (SqFt			
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments			
1/1/2011		New Construction - Initial	0.00	0.00		2" ASPHALT (TYPE S-1), 6" LIMER			
•	•								
Network:				WAY E	Section:	520 <b>Surface:</b> AC 0 (Ft) <b>True Area:</b> 2711.000000 (SqFt			
Work Date	Work	Work Description	ength: 56  Cost	Thickness	Major	Comments			
1/1/2018	Code CR-AC	Complete Reconstruction - AC	0.00	(in) 0.00	M&R ✓	3" P-403, P-220			
1/1/1987	IMPORT	•	0.00	0.00		1987 SEAL COAT			
1/1/1965	ED IMPORT	BUILT	0.00	1.00		1965 1" BIT 6" LIMEROCK 28"			

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Pavement Database: FDOT

Network: PETER O. KNIGHT		KNIGHT Branch: TW E	V E TAXIWAY E		Section:	650 Surface:AAC
<b>L.C.D.</b> 1/1	2008 Us	se: TAXIWAY Rank: P L	ength: 100	.00 (Ft) Wi	dth: 50.0	0 (Ft) <b>True Area:</b> 5471.000001 (SqFt
Work Date   Work   Work		Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2008	ML-OL	Mill and Overlay	0.00	0.00	<b>V</b>	
1/1/1986	ML-OL	Mill and Overlay	0.00	0.00	<b>V</b>	
1/1/1963	1/1/1963 NU-IN New Construct		0.00	0.00		

Network: PETER O. KNIGHT TAXIWAY F Branch: TW F Section: 605 Surface: AAC **L.C.D.** 1/1/2008 Use: TAXIWAY Rank: P Length: 738.00 (Ft) Width: 35.00 (Ft) True Area: 82680.00002 (SqFt Work Thickness Major Work Date **Work Description** Cost **Comments** Code M&R (in) 1/24/2019 Crack Sealing - AC CS-AC 0.00 0.00 1/1/2008 ML-OV MILL and OVERLAY 0.00 0.00 ~ 1/1/1987 IMPORT BUILT 1987 1.5" BIT 7" P-211 6" STAB 0.00 1.50 ~ ED **BASE** 

Network: PETER O. KNIGHT Branch: TW F TAXIWAY F Section: 610 Surface: AAC 122.00 (Ft) L.C.D. 1/1/2008 Use: TAXIWAY Rank: P Length: Width: 48.00 (Ft) True Area: 5824.000001 (SqFt Work Thickness Major **Work Date Work Description** Cost Comments Code M&R (in) 1/1/2008 MILL and OVERLAY ML-OV 0.00 0.00 **\** 1/1/1987 IMPORT BUILT 0.00 1.50 1987 1.5" BIT 7" SOIL CEMENT 6" ~ ED STAB BASE

**Network: PETER O. KNIGHT** Branch: TW F TAXIWAY F Section: 615 Surface: AAC **L.C.D.** 1/1/2019 Use: TAXIWAY Rank: P Length: 130.00 (Ft) Width: 35.00 (Ft) True Area: 6836.000002 (SqFt Work **Thickness** Major **Work Date Work Description** Cost **Comments** Code M&R (in) 1/1/2019 MILL and OVERLAY ML-OV 0.00 0.00 UNKNOWN ~ 1/1/2008 ML-OV MILL and OVERLAY 0.00 0.00 ~ 1/1/1987 IMPORT BUILT 0.00 1.50 1987 1.5" BIT 7" P-211 6" STAB ~ ED

 Network:
 PETER O. KNIGHT
 Branch:
 TW F
 TAXIWAY F
 Section:
 620
 Surface:
 Surface:
 AC

 L.C.D. 1/1/2019
 Use:
 TAXIWAY
 Rank:
 P
 Length:
 80.00 (Ft)
 Width:
 35.00 (Ft)
 True Area:
 3610.000001 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
1/1/2019	ML-OV	MILL and OVERLAY	0.00	0.00	<b>V</b>	UNKNOWN
1/1/2008	ML-OV	MILL and OVERLAY	0.00	0.00		
1/1/1987	IMPORT ED	BUILT	0.00	1.50		1987 1.5" BIT 7" SOIL CEMENT 6" STAB BASE

Branch: TW G Network: PETER O. KNIGHT TAXIWAY G Section: 750 Surface:AC L.C.D. 1/1/2011 Use: TAXIWAY Rank: P Length: 300.00 (Ft) Width: 30.00 (Ft) True Area: 12333.00000 (SqFt Work Thickness Major **Work Date Work Description** Cost **Comments** Code (in) M&R 1/1/2011 NU-IN New Construction - Initial 0.00 0.00 2" ASPHALT (TYPE S-1), 6" LIMER

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Pavement Database: FDOT

#### **Summary:**

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	25	1,078,357.00	1.00	0.42
Complete Reconstruction - AC	17	617,357.00	0.00	0.00
Crack Sealing - AC	9	529,485.00	0.00	0.00
MILL and OVERLAY	23	619,617.00	0.09	0.41
New Construction - AC	2	27,542.00	0.00	0.00
New Construction - Initial	12	174,335.00	0.00	0.00
OVERLAY	9	641,315.00	1.17	0.47
Overlay - AC Fabric	1	310,500.00	2.00	0.00
Patching - AC	2	339,799.00	0.00	0.00
REPAIR	6	233,858.00	0.00	0.00

# **Branch Condition Report**

Page 1 of 2

Pavement Database: FDOT

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
AP	2	1,700.00	87.50	165,919.00	APRON	61.00	18.00	75.75
AP RU	3	247.00	157.67	23,791.00	APRON	80.67	14.06	91.02
AP TIEDO	1	355.00	50.00	23,650.00	APRON	100.00	0.00	100.00
RW 18-36	2	2,493.00	91.50	192,629.00	RUNWAY	89.00	11.00	78.43
RW 4-22	3	3,586.00	100.00	358,600.00	RUNWAY	100.00	0.00	100.00
TL HANG	1	1,120.00	25.00	29,552.00	TAXIWAY	92.00	0.00	92.00
TL T-HANG	2	2,500.00	25.00	72,024.00	TAXILANE	83.50	16.50	94.86
TW A	4	3,558.00	35.00	124,403.00	TAXIWAY	100.00	0.00	100.00
TW A1	1	83.00	65.00	5,794.00	TAXIWAY	100.00	0.00	100.00
TW A2	1	100.00	40.00	4,673.00	TAXIWAY	100.00	0.00	100.00
TW A3	1	35.00	83.00	3,892.00	TAXIWAY	100.00	0.00	100.00
TW A4	1	75.00	40.00	5,338.00	TAXIWAY	100.00	0.00	100.00
TW B	1	280.00	40.00	11,793.00	TAXIWAY	82.00	0.00	82.00
TW C	2	575.00	40.00	24,005.00	TAXIWAY	87.00	13.00	92.24
TW CENTE	3	1,200.00	48.33	55,839.00	TAXIWAY	74.00	0.82	74.01
TW D	1	1,015.00	40.00	43,147.00	TAXIWAY	78.00	0.00	78.00
TW E	5	546.00	42.00	23,902.00	TAXIWAY	92.60	9.07	91.92
TW F	4	1,070.00	38.25	98,950.00	TAXIWAY	87.50	12.68	79.97
TW G	1	300.00	30.00	12,333.00	TAXIWAY	89.00	0.00	89.00

10/4/2019	Branch Condition Report	Page 2 of 2
	Pavement Database: FDOT	

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average STD PCI	Weighted Average PCI
APRON	6	213,360.00	77.33	19.67	80.14
RUNWAY	5	551,229.00	95.60	8.80	92.46
TAXILANE	2	72,024.00	83.50	16.50	94.86
TAXIWAY	26	443,621.00	90.38	11.18	87.95
ALL	39	1,280,234.00	88.69	14.00	88.98

Pavement Database: FDOT	NetworkId: TPF
-------------------------	----------------

	base: FDOT				rvein	vorkiu.	TPF				
Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspec tion		
AP	4110	1/1/2011	AAC	APRON	Р	0	150,952.00	12/12/201 8	7	79	
AP	4140	1/1/1986	AC	APRON	Р	0	14,967.00	12/12/201 8	32	43	
AP RU	5105	1/1/2008	AAC	APRON	Р	0	3,154.00	12/12/201 8	10	67	
AP RU	5110	1/1/2008	AAC	APRON	Р	0	4,386.00	12/12/201 8	10	75	
AP RU	5115	1/1/2018	AAC	APRON	Р	0	16,251.00	1/1/2018	0	100	
AP TIEDOWN	4205	1/1/2018	AC	APRON	Р	0	23,650.00	1/1/2018	0	100	
RW 18-36	6205	1/1/2008	AAC	RUNWAY	Р	0	188,847.00	12/12/201 8	10	78	
RW 18-36	6210	1/1/2018	AC	RUNWAY	Р	0	3,782.00	1/1/2018	0	100	
RW 4-22	6103	1/1/2018	AC	RUNWAY	Р	0	30,300.00	1/1/2018	0	100	
RW 4-22	6105	1/1/2018	AC	RUNWAY	Р	0	310,500.00	1/1/2018	0	100	
RW 4-22	6110	1/1/2018	AC	RUNWAY	P	0	17,800.00	1/1/2018	0	100	
TL HANG NW	800	1/1/2011	AC	TAXIWAY	Р	0	29,552.00	12/12/201 8	7	92	
TL T-HANG	705	1/1/2018	AC	TAXILANE	Р	0	60,798.00	1/1/2018	0	100	
TL T-HANG	710	1/1/2007	AAC	TAXILANE	Р	0	11,226.00	12/12/201 8	11	67	
TW A	104	1/1/2018	AC	TAXIWAY	Р	0	9,170.00	1/1/2018	0	100	
TW A	105	1/1/2018	AC	TAXIWAY	Р	0	100,460.00	1/1/2018	0		
TW A	115	1/1/2018	AC	TAXIWAY	P	0	9,703.00	1/1/2018	0	100	
TW A	120	1/1/2018	AC	TAXIWAY	Р	0	5,070.00	1/1/2018	0		
TW A1	103	1/1/2018	AC	TAXIWAY	P	0	5,794.00	1/1/2018	0		
TW A2	630	1/1/2018	AC	TAXIWAY	Р	0	4,673.00	1/1/2018	0	100	
TW A3	155	1/1/2018	AC	TAXIWAY	Р	0	3,892.00	1/1/2018	0	100	
TW A4	425	1/1/2018	AC	TAXIWAY	Р	0	5,338.00	1/1/2018	0	100	
TW B	205	1/1/2011	AAC	TAXIWAY	Р	0	11,793.00	12/12/201 8	7	82	
TW C	305	1/1/2010	AAC	TAXIWAY	Р	0	7,165.00	12/12/201 8	8	74	
TW C	310	1/1/2018	AC	TAXIWAY	Р	0	16,840.00	1/1/2018	0	100	
TW CENTER	315	1/1/2008	AC	TAXIWAY	Р	0	11,056.00	12/12/201 8	10	73	
TW CENTER	320	1/1/2008	AC	TAXIWAY	Р	0	11,536.00	12/12/201 8	10	75	
TW CENTER	325	1/1/2008	AC	TAXIWAY	Р	0	33,247.00	12/12/201 8	10	74	
TW D	420	1/1/2011	AAC	TAXIWAY	Р	0	43,147.00	12/12/201 8	7	78	
TW E	505	1/1/2018	AC	TAXIWAY	Р	0	2,353.00	1/1/2018	0	100	
TW E	510	1/1/2018	AC	TAXIWAY	Р	0	8,415.00	1/1/2018	0	100	
TW E	515	1/1/2011	AC	TAXIWAY	Р	0	4,952.00	12/12/201 8	7		
TW E	520	1/1/2018	AC	TAXIWAY	Р	0	2,711.00		0	100	
TW E	650	1/1/2008	AAC	TAXIWAY	Р	0	5,471.00	12/12/201 8	10	81	

Pavement Management System PAVER 7.0 TM

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## **Section Condition Report**

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TW F	605	1/1/2008	AAC	TAXIWAY	Р	0	82,680.00	12/12/201 8	10	78
TW F	610	1/1/2008	AAC	TAXIWAY	Р	0	5,824.00	12/12/201 8	10	72
TW F	615	1/1/2019	AAC	TAXIWAY	Р	0	6,836.00	1/1/2019	0	100
TW F	620	1/1/2019	AAC	TAXIWAY	Р	0	3,610.00	1/1/2019	0	100
TW G	750	1/1/2011	AC	TAXIWAY	Р	0	12,333.00	12/12/201 8	7	89

Pavement Management System PAVER 7.0 TM

Pavement Database: FDOT

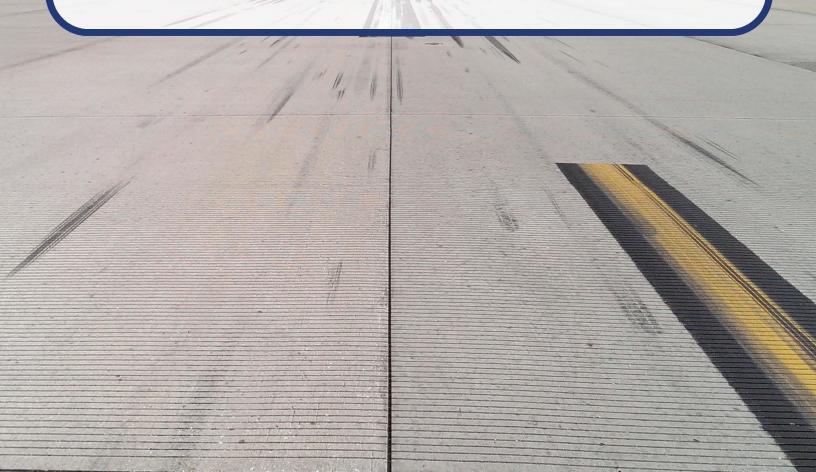
Age Category	Average Age at Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
00-02		647,946.00	21	100.00	0.00	100.00
06-10	9	606,095.00	16	78.06	6.08	78.74
11-15	11	11,226.00	1	67.00	0.00	67.00
31-35	32	14,967.00	1	43.00	0.00	43.00
ALL	5	1,280,234.00	39	88.69	14.00	88.98

Pavement Management System PAVER 7.0 TM



# Appendix B

Airfield Pavement Localized Maintenance and Repair and Major Rehabilitation



2019





### Table B-1 Localized Maintenance and Repair Needs based on Current Condition

Network ID	Branch ID	Section ID	Distress Code	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Work Qty	Work Unit	Unit Cost	٧	Vork Cost
TPF	AP	4110	45	DEPRESSION	Low	670.7	SqFt	0.4%	FDOT - PATCHING - AC FULL DEPTH	779.3	SqFt	\$ 9.00	\$	7,020.00
TPF	AP	4110	49	OIL SPILLAGE	N/A	64.69	SqFt	0.0%	FDOT - PATCHING - AC PARTIAL DEPTH	101.2	SqFt	\$ 4.00	\$	410.00
TPF	AP	4110	52	RAVELING	Low	10101.18	SqFt	6.7%	FDOT - SURFACE SEAL	10100.9	SqFt	\$ 0.55	\$	5,560.00
TPF	AP	4140	52	RAVELING	Low	8780.66	SqFt	58.7%	FDOT - SURFACE SEAL	8780.1	SqFt	\$ 0.55	\$	4,830.00
TPF	AP	4140	52	RAVELING	Medium	5986.78	SqFt	40.0%	FDOT - PATCHING - AC PARTIAL DEPTH	5986.9	SqFt	\$ 4.00	\$	23,950.00
TPF	AP RU	5105	45	DEPRESSION	Low	54.03	SqFt	1.7%	FDOT - PATCHING - AC FULL DEPTH	87.2	SqFt	\$ 9.00	\$	790.00
TPF	AP RU	5105	52	RAVELING	Low	1199.96	SqFt	38.1%	FDOT - SURFACE SEAL	1200.2	SqFt	\$ 0.55	\$	670.00
TPF	AP RU	5110	45	DEPRESSION	Low	30.03	SqFt	0.7%	FDOT - PATCHING - AC FULL DEPTH	56	SqFt	\$ 9.00	\$	510.00
TPF	RW 18-36	6205	52	RAVELING	Low	3602.36	SqFt	1.9%	FDOT - SURFACE SEAL	3602.7	SqFt	\$ 0.55	\$	1,990.00
TPF	TL T-HANG	710	45	DEPRESSION	Low	60.28	SqFt	0.5%	FDOT - PATCHING - AC FULL DEPTH	95.8	SqFt	\$ 9.00	\$	870.00
TPF	TL T-HANG	710	52	RAVELING	Low	113.02	SqFt	1.0%	FDOT - SURFACE SEAL	113	SqFt	\$ 0.55	\$	70.00
TPF	TW B	205	45	DEPRESSION	Low	31.43	SqFt	0.3%	FDOT - PATCHING - AC FULL DEPTH	58.1	SqFt	\$ 9.00	\$	530.00
TPF	TW B	205	52	RAVELING	Low	655.85	SqFt	5.6%	FDOT - SURFACE SEAL	655.5	SqFt	\$ 0.55	\$	370.00
TPF	TW C	305	45	DEPRESSION	Low	27.56	SqFt	0.4%	FDOT - PATCHING - AC FULL DEPTH	52.7	SqFt	\$ 9.00	\$	480.00
TPF	TW C	305	52	RAVELING	Low	1495.11	SqFt	20.9%	FDOT - SURFACE SEAL	1495.1	SqFt	\$ 0.55	\$	830.00
TPF	TW CENTER	315	48	L&TCR	Medium	18.44	Ft	0.2%	FDOT - CRACK SEALING - AC	18.4	Ft	\$ 3.00	\$	60.00
TPF	TW CENTER	315	52	RAVELING	Low	1289.84	SqFt	11.7%	FDOT - SURFACE SEAL	1289.5	SqFt	\$ 0.55	\$	710.00
TPF	TW D	420	52	RAVELING	Low	862.94	SqFt	2.0%	FDOT - SURFACE SEAL	863.3	SqFt	\$ 0.55	\$	480.00
TPF	TW E	515	52	RAVELING	Low	50.05	SqFt	1.0%	FDOT - SURFACE SEAL	49.5	SqFt	\$ 0.55	\$	30.00
TPF	TW E	650	52	RAVELING	Low	55	SqFt	1.0%	FDOT - SURFACE SEAL	54.9	SqFt	\$ 0.55	\$	40.00
TPF	TW F	605	52	RAVELING	Low	819.99	SqFt	1.0%	FDOT - SURFACE SEAL	820.2	SqFt	\$ 0.55	\$	460.00
TPF	TW F	610	52	RAVELING	Low	2038.04	SqFt	35.0%	FDOT - SURFACE SEAL	2037.6	SqFt	\$ 0.55	\$	1,130.00





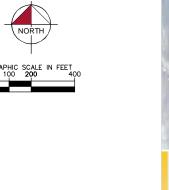
### Table B-2 10-Year Major Rehabilitation Planning Needs at Section Level

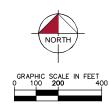
Program Year	Network ID	Branch ID	Section ID	Surface	Area (SF)	PCI Before	Rehabilitation Type	Planning Cost
2020	TPF	AP	4140	AC	14,967	41	AC Restoration	\$ 180,000.00
2020	TPF	AP RU	5105	AAC	3,154	64	AC Restoration	\$ 30,000.00
2022	TPF	TL T-HANG	710	AAC	11,226	64	AC Restoration	\$ 107,000.00
2024	TPF	AP RU	5110	AAC	4,386	64	AC Restoration	\$ 42,000.00
2026	TPF	AP	4110	AAC	150,952	63	AC Restoration	\$ 1,435,000.00
2026	TPF	TW CENTER	315	AC	11,056	64	AC Restoration	\$ 106,000.00
2026	TPF	TW CENTER	325	AC	33,247	64	AC Restoration	\$ 316,000.00
2026	TPF	TW F	610	AAC	5,824	64	AC Restoration	\$ 56,000.00
2027	TPF	TW CENTER	320	AC	11,536	64	AC Restoration	\$ 110,000.00
2028	TPF	TW C	305	AAC	7,165	64	AC Restoration	\$ 69,000.00



# Appendix C

Technical Exhibits







RW 13-31 - TYPICAL RUNWAY BRANCH ID

- TYPICAL TAXIWAY BRANCH ID

TYPICAL APRON BRANCH ID

SECTION NUMBER
PAVEMENT TYPE
TYPICAL SAMPLE UNIT INFORMATION
FLEXIBLE (AC) PAVEMENT LENGTH & WIDTH
RIGID (PCC) PAVEMENT NO. OF SLABS AND SLAB SIZE

- NUMBER OF SAMPLE UNITS IN SECTION - NUMBER OF SAMPLE UNITS TO BE INSPECTED



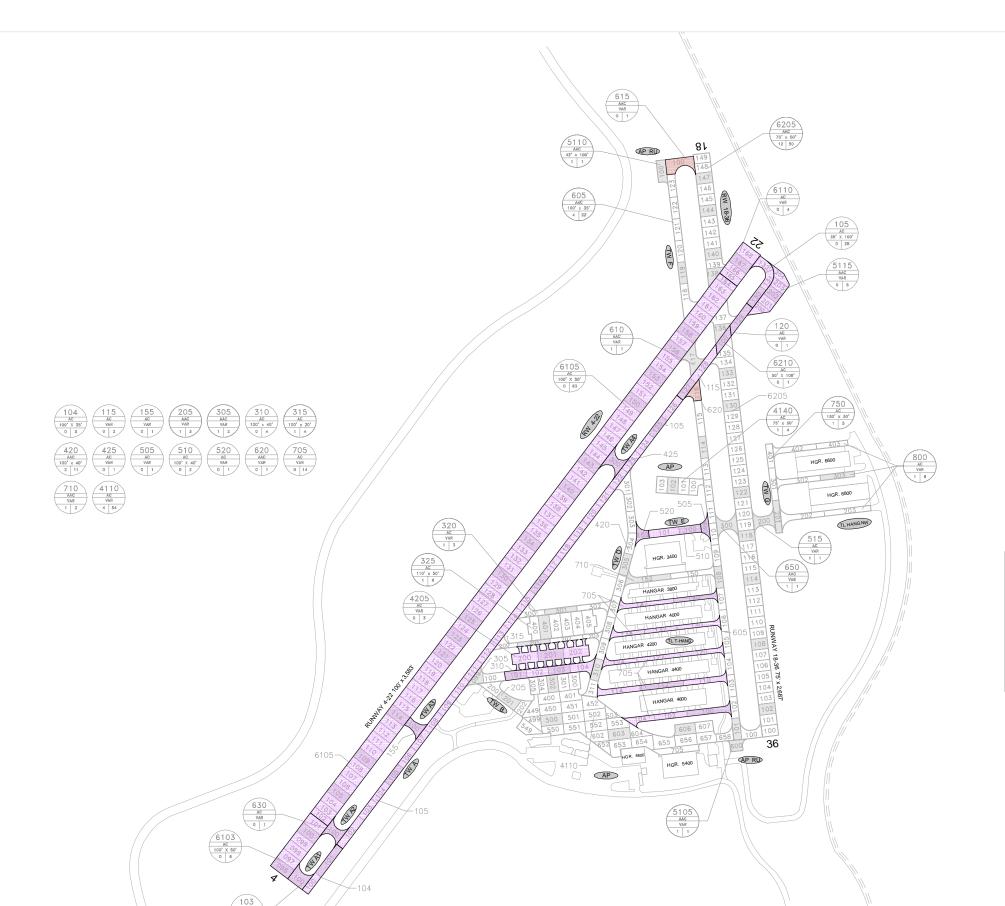
SECTION NOT INSPECTED DUE TO RECENT CONSTRUCTION. SEE SYSTEM INVENTORY MAP FOR CONSTRUCTION DATES.

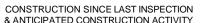
INSPECTED SAMPLE UNITS. GPS COORDINATES ARE AT THE CENTROID OF THE SAMPLE UNIT.

TOTAL SAMPLES INSPECTED = 36 AC: 36 PCC: 0





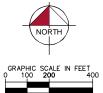




	& ANTICIPATED CONSTRU	CTION ACTIVITY
CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
2018	AP RU	MILL AND OVERLAY / 2" P-403
2018	AP TIEDOWN	COMPLETE RECONSTRUCTION - AC / 3" P-403, 6" P-219
2018	RW 18-36, RW 4-22, TL T-HANG, TW A, TW A1, TW A2, TW A4, TW C, TW E	COMPLETE RECONSTRUCTION - AC / 3" P-403, VARIABLE P-220
2018	TW A3	NEW CONSTRUCTION - AC / 3" P-403, 6" P-220
2019	TW F	MILL AND OVERLAY

PROJECTS	YEAR	2013
PROJECTS	YEAR	2014
PROJECTS	YEAR	2015
 PROJECTS	YEAR	2016
 PROJECTS	YEAR	2017
PROJECTS	YEAR	2018
PROJECTS	YEAR	2019
PROJECTS	YEAR	2020
PROJECTS	YEAR	2021
PROJECTS	YEAR	2022





RW 13-31 - TYPICAL RUNWAY BRANCH ID

- TYPICAL TAXIWAY BRANCH ID - TYPICAL APRON BRANCH ID

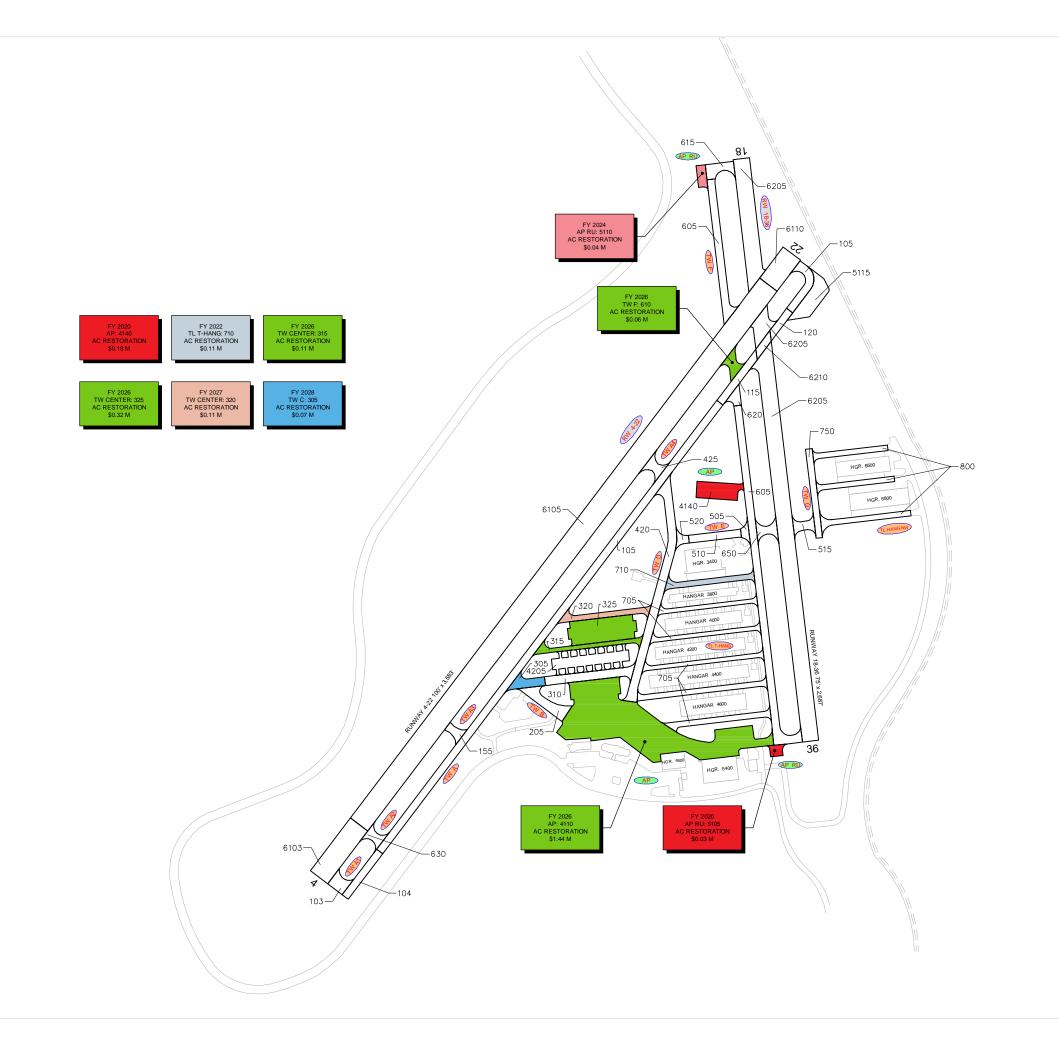
PCI 86-100 GOOD

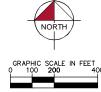
PCI 71-85 SATISFACTORY PCI 56-70 FAIR

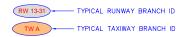
PCI 41-55 POOR PCI 26-40 VERY POOR

PCI 11-25 SERIOUS PCI 0-10 FAILED











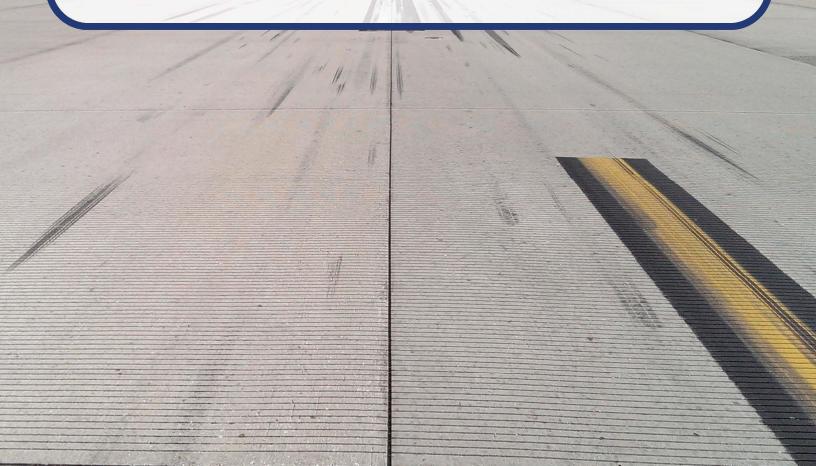


"PROGRAM YEAR"
"BRANCH":"SECTION"
"REHAB ACTIVITY"
"EST. COST"



## Appendix D

Inspection Photograph Documentation









RW 18-36, Section 6205, Sample Unit 102 - Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (52) Raveling, and Low Severity (57) Weathering



RW 18-36, Section 6205, Sample Unit 108 - Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (50) Patching, Low Severity (52) Raveling, and Low Severity (57) Weathering







TL T-HANG, Section 710, Sample Unit 152 - Low Severity (45) Depression, Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (52) Raveling, and Low Severity (57) Weathering



TW F, Section 605, Sample Unit 114 - Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (52) Raveling, and Low Severity (57) Weathering







AP, Section 4110, Sample Unit 603 - Low Severity (45) Depression, Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (50) Patching, Low Severity (52) Raveling, and Low Severity (57) Weathering

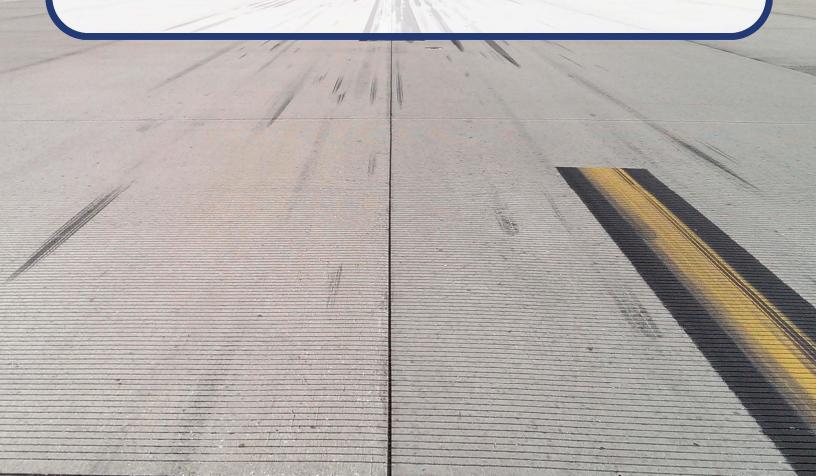


AP, Section 4140, Sample Unit 102 - Low Severity (48) Longitudinal & Transverse Cracking, Low Severity (52) Raveling, and Medium Severity (52) Raveling



# Appendix E

Inspection Distress Details



Code: CS-AC

**PCI:** 90

Is Major M&R: False

**FDOT** Page 1 of 41 **Generated Date** 10/4/2019 Network: **TPF** Name: PETER O. KNIGHT AIRPORT **Branch:** ΑP APRON Use: **APRON** 165,919 SqFt Name: Area: Section: 4110 of 2 From: To: -**Last Const.:** 1/1/2011 C9N59-RL-AP-AAC-APC Zone: Surface: AAC Family: Category: Rank: P 150,952 SqFt 1,500 Ft Width: 100 Ft Area: Length: Slab Width: Slab Length: Ft Joint Length: Ft Slabs: Ft **Shoulder: Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Date: 1/1/1964 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/1987 Work Type: REPAIR Code: IMPORTED Is Major M&R: False Work Date: 1/1/2011 Work Type: MILL and OVERLAY Is Major M&R: True Code: ML-OV Work Date: 1/1/2016 Work Type: Patching - AC Code: PA-AC Is Major M&R: False

**Last Insp. Date:** 12/12/2018 **TotalSamples: 34** Surveyed: 4

L

L

L

R

Type:

4136.00 SqFt

4647.00 SqFt

100.00 SqFt

Area:

Work Type: Crack Sealing - AC

**Conditions:** PCI:

Work Date: 1/1/2019

**Inspection Comments:** 

57

57

52

WEATHERING

WEATHERING

RAVELING

Sample Number: 606

**Sample Comments:** 

Sam	ple Number: 302	Туре:	R	Area:	3933.00 SqFt	PCI:	78
Sam	ple Comments:						
45	DEPRESSION	J	L	45.00 SqFt			
49	OIL SPILLAGE	1	N	8.00 SqFt			
57	WEATHERING	]	L	3883.00 SqFt			
48	L & T CR	]	L	20.00 Ft			
52	RAVELING	]	L	50.00 SqFt			
Sam	ple Number: 500	Type:	R	Area:	5000.00 SqFt	PCI:	80
Sam	ple Comments:						
52	RAVELING	]	L	500.00 SqFt			
57	WEATHERING	1	L	4500.00 SqFt			
45	DEPRESSION	1	L	6.00 SqFt			
48	L & T CR	]	L	82.00 Ft			
Sam	ple Number: 603	Type:	R	Area:	5000.00 SqFt	PCI:	70
Sam	ple Comments:						
52	RAVELING	]	L	600.00 SqFt			
48	L & T CR	1	L	47.00 Ft			
50	PATCHING	]	L	264.00 SqFt			
45	DEPRESSION		L	32.00 SqFt			
				1			

4747.00 SqFt

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** AP APRON Use: APRON Area: 165,919 SqFt Name: Section: 4140 of 2 To: -**Last Const.:** 1/1/1986 From: Surface: AC Family: C9N59-RL-AP-AC Zone: Category: Rank: P 200 Ft Area: 14,967 SqFt Length: Width: 75 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1986 Work Type: BUILT Code: IMPORTED Is Major M&R: True **Last Insp. Date:** 12/12/2018 **TotalSamples:** 4 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** 3750.00 SqFt **PCI:** 43 Sample Number: 102 Type: R Area: **Sample Comments:** 52 RAVELING M 1500.00 SqFt 48 L & T CR L 461.00 Ft PATCHING

L

L

50.00 SqFt

2200.00 SqFt

50

52

RAVELING

Network: TPF PETER O. KNIGHT AIRPORT Name: 23,791 SqFt AP RU RUNUP APRON Use: APRON **Branch:** Name: Area: of 3 5105 Section: From: To: -Last Const.: 1/1/2008 AAC Family: C9N59-RL-AP-AAC-APC Zone: Rank: P Surface: Category: Area: 3,154 SqFt Length: 15 Ft Width: 200 Ft Slab Width: Slab Length: Ft Ft Ft Slabs: Joint Length: Shoulder: **Street Type:** Grade: Lanes: **Section Comments: Work Date:** 1/1/1987 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/2008 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True Work Date: 1/1/2019 Work Type: Crack Sealing - AC Code: CS-AC Is Major M&R: False **Last Insp. Date:** 12/12/2018 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R **PCI:** 67 Sample Number: 600 Type: 3154.00 SqFt Area: **Sample Comments:** L & T CR L 172.00 Ft 48 DEPRESSION L 54.00 SqFt 45

57

52

WEATHERING

RAVELING

L

L

1954.00 SqFt

1200.00 SqFt

Network:	TPF				Name:	PET	ER O. KNIC	GHT AIRP	ORT			
Branch:	AP RU		Name:	RUNUP	APRON		Use:	APRO	N	Area:	23,791 SqF	t
Section:	5110	0	f 3	From: -				To:	-		Last Con	st.: 1/1/2008
Surface:	AAC	Family:	C9N59-RL-A	P-AAC-APC	Zone:			Cat	egory:		Rank: I	•
Area:		4,386 SqFt	Length:		22 Ft		Width:		200 Ft			
Slabs:		Slab Len	ngth:	Ft	Sla	b Width:		Ft		Joint Lengt	h:	Ft
Shoulder:		Street T	ype:		Gr	rade: 0				Lanes:	)	
Section Co	mments:											
Work Date	: 1/1/1987	W	ork Type: BUI	LT			C	Code: IM	PORTED	Is Majo	r M&R: True	•
Work Date	: 1/1/2008	W	ork Type: MIL	L and OVER	LAY		C	Code: MI	L-OV	Is Majo	r M&R: True	2
Work Date	: 1/1/2019	W	ork Type: Crac	ck Sealing - A	C		C	Code: CS	-AC	Is Majo	r M&R: Fals	e
Last Insp. 1	Date: 12/1	2/2018	Totals	Samples: 1			Surveyo	ed: 1				
Conditions	: PCI:	75										
Inspection	Comments:	:										
Sample Nu	<b>mber:</b> 100	) Ty <sub>I</sub>	pe: R	Ar	ea:	4386	5.00 SqFt		<b>PCI:</b> 75			
Sample Co	mments:											
45 DEF	PRESSION		L	30.00	SqFt							
57 WE.	ATHERING	j	L	4386.00	SqFt							
48 L &	T CR		L	222.00 H	t							

TPF PETER O. KNIGHT AIRPORT Network: Name: 23,791 SqFt **Branch:** AP RU RUNUP APRON Use: APRON Name: Area: 5115 of 3 From: To: -**Last Const.:** 1/1/2018 Section: AAC Family: C9N59-RL-AP-AAC-APC Zone: Category: Rank: P Surface: Area: 16,251 SqFt Length: 210 Ft Width: 73 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2007 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2018 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True **Last Insp. Date:** 10/6/2014 **TotalSamples:** 5 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** R 3650.00 SqFt **PCI:** 94 Sample Number: 202 Type: Area:

**Sample Comments:** 

57 WEATHERING L 3650.00 SqFt

Netwo	rk: TPF			Name:	PETER O. KN	IIGHT A	AIRPORT		
Branc	h: RW 18-36	N	ame: RUN	WAY 18-36	Use	: RU	JNWAY	Are	a: 192,629 SqFt
Section	n: 6205	of 2	From:	-			To: -		Last Const.: 1/1/2008
Surfac	e: AAC Fam	ily: C9N59 APC	9-RL-RW-AAC-	Zone:			Category:		Rank: P
Area:	188,847 SqF		Length:	2,443 Ft	Width:		75 Ft		
Slabs:	_	b Length:	zengen. Ft				Ft		Joint Length: Ft
Should		eet Type:	- 10	Grade:	0				Lanes: 0
	n Comments:	eet 1, pet		or wave	v				
Work	<b>Date:</b> 1/1/1963	Work Typ	oe: BUILT			Code:	IMPORTE	D	Is Major M&R: True
Work	<b>Date:</b> 1/1/1986	Work Typ	oe: OVERLAY			Code:	IMPORTE	D	Is Major M&R: True
Work	<b>Date:</b> 1/1/2008	Work Typ	e: Mill and Overla	ay		Code:	ML-OL		Is Major M&R: True
Work	<b>Date:</b> 1/1/2019	Work Typ	oe: Crack Sealing -	· AC		Code:	CS-AC		Is Major M&R: False
Work	<b>Date:</b> 1/1/2019	Work Typ	oe: Patching - AC			Code:	PA-AC		Is Major M&R: False
Last II	nsp. Date: 12/12/2018		TotalSamples:	50	Surve	eyed: 1	12		
Condi	tions: PCI: 78								
Inspec	tion Comments:								
Sampl	e Number: 102	Type:	R	Area:	3750.00 SqFt		PCI:	72	
Sampl	e Comments:								
57	WEATHERING	L	3376.00	SqFt					
50	PATCHING	L	336.00						
48 52	L & T CR RAVELING	L L	122.00 38.00	rt SqFt					
56	SWELLING	L		SqFt					
Sampl	e Number: 108	Type:	R	Area:	3750.00 SqFt		PCI:	69	
Sampl	e Comments:								
52	RAVELING	L	37.00	SqFt					
48	L & T CR	L	208.00						
50	PATCHING	L		SqFt					
56 57	SWELLING	L L	25.00 3623.00	SqFt					
57	WEATHERING e Number: 114	Type:		Area:	3750.00 SqFt		PCI:	75	
_	e Comments:	Type:	K .	Area:	3/30.00 Sqrt		rci:	13	
•		_	45.00						
52 48	RAVELING L & T CR	L L	46.00 230.00	SqFt Ft					
57	WEATHERING	L	3704.00						
Sampl	e Number: 118	Type:		Area:	3750.00 SqFt		PCI:	78	
Sampl	e Comments:								
52	RAVELING	L	52.00	SqFt					
48	L & T CR	L	170.00						
57	WEATHERING	L	3698.00	SqFt					
Sampl	e Number: 122	Type:	R	Area:	3750.00 SqFt		PCI:	63	
Sampl	e Comments:								
57	WEATHERING	L	2542.00						
52	RAVELING	L		SqFt					
48 50	L & T CR PATCHING	L L	192.00 1170.00						
	e Number: 130	Type:		Area:	3750.00 SqFt		PCI:	79	
_	e Comments:	-1 L.	-		3.12.00 Sqr t		1011		
57	WEATHERING	L	3650.00	SqFt					
52	RAVELING	L	100.00	SqFt					
48	L & T CR	L	125.00	Ft					

Samp	ole Number: 133	Type:	R	Area:	3750.00 SqFt	<b>PCI:</b> 70	
Samp	ole Comments:						
52	RAVELING	Ι	_	41.00 SqFt			
57	WEATHERING	I	_	3165.00 SqFt			
50	PATCHING	I	_	544.00 SqFt			
48	L & T CR	I	_	131.00 Ft			
Samp	ole Number: 136	Type:	R	Area:	3627.00 SqFt	<b>PCI:</b> 87	
Samp	ole Comments:						
52	RAVELING	I	_	37.00 SqFt			
48	L & T CR	I	_	20.00 Ft			
57	WEATHERING	I	_	3590.00 SqFt			
Samp	ole Number: 138	Туре:	R	Area:	3380.00 SqFt	PCI: 86	
Samp	ole Comments:						
57	WEATHERING	Ι	_	3346.00 SqFt			
52	RAVELING	I	_	34.00 SqFt			
48	L & T CR	I	_	50.00 Ft			
Samp	ole Number: 140	Туре:	R	Area:	3750.00 SqFt	PCI: 81	
Samp	ole Comments:						
48	L & T CR	I	_	51.00 Ft			
57	WEATHERING	I	_	3400.00 SqFt			
52	RAVELING	I	_	350.00 SqFt			
Samp	ole Number: 144	Type:	R	Area:	3750.00 SqFt	PCI: 87	
Samp	ole Comments:						
48	L & T CR	Ι	_	19.00 Ft			
57	WEATHERING	I		3712.00 SqFt			
52	RAVELING	I	_	38.00 SqFt			
Samp	ole Number: 147	Type:	R	Area:	3750.00 SqFt	<b>PCI:</b> 87	
Samp	ole Comments:						
57	WEATHERING	Ι	_	3712.00 SqFt			
52	RAVELING	I		38.00 SqFt			
48	L & T CR	I	_	20.00 Ft			

Netwo	ork: TPF				Nam	ie:	PETER O. KI	NIGHT A	AIRPORT					
Branc			Name:	RUNW	VAY 18-		Us		JNWAY	Area	ı:	192,629	) SqFt	
Sectio	on: 6210	of 2	2	From:	=				To: -			Las	t Const.:	1/1/2018
Surfac	ce: AC Fami	ily: C	9N59-RL-F	RW-AC	Zone	e:			Category:			Ran	ık: P	
Area:	3,782 SqFt	t	Length	:	50 F	t	Width:		108 Ft					
Slabs:	Slab	Length	ı:	Ft		Slab Wid	lth:		Ft		Joint Lengt	h:	I	₹t
Shoul	der: Stre	et Type	:			Grade:	0				Lanes:	0		
Sectio	on Comments:													
Work	<b>Date:</b> 1/1/1963	Work	Type: BU	ILT				Code:	IMPORTEI	)	Is Majo	or M&R:	True	
Work	<b>Date:</b> 1/1/1986	Work	Type: OV	ERLAY				Code:	IMPORTEI	)	Is Majo	or M&R:	True	
Work	<b>Date:</b> 1/1/2008	Work	Type: Mi	ll and Overlay	<i>y</i>			Code:	ML-OL		Is Majo	or M&R:	True	
Work	<b>Date:</b> 1/1/2018	Work	Type: Con	mplete Recon	struction	n - AC		Code:	CR-AC		Is Majo	or M&R:	True	
Last I	nsp. Date: 10/6/2014		Total	Samples:				eyed:	12					
Condi	itions: PCI: 85			NO	TE: <mark>**</mark>	* Pre-Con	struction PC	I ***						
Inspec	ction Comments:													
Samp	le Number: 102	Type:	R	A	rea:		3750.00 SqFt		PCI:	77				
Samp	le Comments:													
48	LONGITUDINAL/TRANSY CRACKING	VERSE	L	23.00	Ft									
50	PATCHING		L	336.00										
57	WEATHERING	700	L	3414.00			2750 00 ~ =		B.C.*	0.4				
_	le Number: 108	Type:	R	A	rea:		3750.00 SqFt		PCI:	84				
Samp	le Comments:													
50 57	PATCHING WEATHERING		L L	90.00 3660.00										
48	LONGITUDINAL/TRANS	VERSE		39.00	-									
	CRACKING													
-	le Number: 114	Type:	R	A	rea:		3750.00 SqFt		PCI:	86				
Samp	le Comments:													
57	WEATHERING		L	3750.00	-									
48	LONGITUDINAL/TRANSV CRACKING	VERSE		97.00	Ft									
-	le Number: 118	Type:	R	A	rea:		3750.00 SqFt		PCI:	88				
Samp	le Comments:													
48	LONGITUDINAL/TRANSY CRACKING	VERSE	L	63.00	Ft									
57	WEATHERING		L	3750.00	SqFt									
Samp	le Number: 122	Type:	R	A	rea:		3750.00 SqFt		PCI:	65				
Samp	le Comments:													
50	PATCHING		L	750.00										
45 57	DEPRESSION		L	44.00										
57 48	WEATHERING LONGITUDINAL/TRANS	VERSE	L L	3000.00 37.00	-									
	CRACKING													
_	le Number: 130	Type:	R	A	rea:		3750.00 SqFt		PCI:	85				
Samp	le Comments:													
57	WEATHERING		L	3650.00	_									
52 48	RAVELING LONGITUDINAL/TRANS' CRACKING	VERSE	L L	100.00 23.00	-									
Samn	le Number: 133	Type:	R	A	rea:		3750.00 SqFt		PCI:	85				
_	le Comments:	- J PC.		23										
_		VEDCE	ī	<b>60.00</b>	E+									
48	LONGITUDINAL/TRANS	v EKSE	L	60.00	Гι									

	CKACKING						
50	PATCHING		L	42.00 SqFt			
57	WEATHERING		L	3708.00 SqFt			
Samp	ole Number: 137	Type:	R	Area:	3750.00 SqFt	PCI: 94	
Samp	ole Comments:						
57	WEATHERING		L	3750.00 SqFt			
Samp	ole Number: 141	Type:	R	Area:	2625.00 SqFt	PCI: 89	
Samp	ole Comments:						
57	WEATHERING		L	2625.00 SqFt			
48	LONGITUDINAL/TRAN			43.00 Ft			
	CRACKING						
Samp	ole Number: 143	Type:	R	Area:	3750.00 SqFt	PCI: 86	
Samp	ole Comments:						
52	RAVELING		L	324.00 SqFt			
57	WEATHERING		L	3426.00 SqFt			
Samp	ole Number: 147	Type:	R	Area:	3750.00 SqFt	PCI: 94	
Samp	ole Comments:						
57	WEATHERING		L	3750.00 SqFt			
Samp	ole Number: 150	Туре:	R	Area:	3750.00 SqFt	<b>PCI:</b> 94	
Samp	ole Comments:						
57	WEATHERING		L	3750.00 SqFt			

Network	: TPF			N:	ame: PE	ΓER O. KNIG	HT AIRPORT		
Branch:	RW 4-22		Name	RUNWAY	4-22	Use:	RUNWAY	Area:	358,600 SqFt
Section:	6103	of	3	From: -			То: -		Last Const.: 1/1/2018
Surface:	AC	Family:	C9N59-RL	-RW-AC Z	one:		Category:		Rank: P
Area:	30,3	300 SqFt	Leng	th: 303	Ft	Width:	100 Ft		
Slabs:		Slab Leng	gth:	Ft	Slab Width:		Ft	Joint Le	ngth: Ft
Shoulder	r:	Street Ty	pe:		Grade: 0			Lanes:	0
Section (	Comments:								
Work Da	ate: 1/1/2007	Wo	ork Type: N	lew Construction - In	nitial	C	ode: NU-IN	Is M	Tajor M&R: True
Work Da	ate: 1/1/2018	Wo	ork Type: C	Complete Reconstruc	tion - AC	C	ode: CR-AC	Is M	Tajor M&R: True
Last Insp	p. Date: 10/6/20	14	Tot	alSamples: 7		Surveye	<b>d:</b> 2		
Conditio	ons: PCI: 93			NOTE:	*** Pre-Constru	uction PCI **	*		
Inspectio	on Comments:								
Sample I	Number: 96	Тур	e: R	Area:	500	0.00 SqFt	PCI: 9	)4	
Sample (	Comments:								
57 W	VEATHERING		L	5000.00 SqF	t				
Sample I	Number: 99	Тур	e: R	Area:	500	0.00 SqFt	PCI: 9	92	
Sample (	Comments:								
48 L	VEATHERING ONGITUDINAL/ PRACKING	TRANSVERS	L SE L	5000.00 SqF 1.00 Ft	i				

Netwo	vork: TPF			Nam	ne: PETER O. KNIC	GHT AIRPORT	
Branc			Name:			RUNWAY	Area: 358,600 SqFt
Sectio		of 3		From: -		To: -	Last Const.: 1/1/2018
Surfa			5 39N59-RL-1		^•	Category:	Rank: P
		•				100 Ft	Naux. 1
Area:	ŕ	-	Length				E4
Slabs		Slab Length:			Slab Width:	Ft	Joint Length: Ft
Shoul		Street Type:	•		Grade: 0		Lanes: 0
Section	on Comments:						
Work	k Date: 1/1/1960	Work	k Type: BU	UILT	C	Code: IMPORTED	Is Major M&R: True
Work	k Date: 1/1/1986	Work	k Type: OV	VERLAY	C	Code: IMPORTED	Is Major M&R: True
Work	k Date: 1/1/2001	Work	Type: O	Overlay - AC Fabric	C	Code: OL-AF	Is Major M&R: True
Work	k Date: 1/1/2018	Work	Type: Co	Complete Reconstruction	n - AC C	Code: CR-AC	Is Major M&R: True
Last I	<b>Insp. Date:</b> 10/6/2014		Tota	talSamples: 63	Surveye	e <b>d:</b> 14	
Cond	ditions: PCI: 58			NOTE: <mark>**</mark>	* Pre-Construction PCI *	**	
Inspe	ection Comments:						
	ple Number: 105	Type:	R	Area:	5000.00 SqFt	PCI: 54	
-	ple Comments:	Туры	1.	1 <b>1 1</b> 7 m.	JVVV•VV ∼¶	1 (1,	
50	PATCHING		L	690.00 SqFt			
48	LONGITUDINAL/TRA CRACKING	NSVERSE		488.00 Ft			
56	SWELLING		L	20.00 SqFt			
52	RAVELING		L	323.00 SqFt			
52 50	RAVELING		L	3627.00 SqFt			
50 48	PATCHING LONGITUDINAL/TRA CRACKING	NSVERSE	L M	140.00 SqFt 4.00 Ft			
50	PATCHING		L	220.00 SqFt			
Samr	ple Number: 109	Type:	R	Area:	5000.00 SqFt	PCI: 63	
_	ple Comments:	• •					
56	SWELLING		L	25.00 SqFt			
52	RAVELING		L	250.00 SqFt			
52	RAVELING		M	50.00 SqFt			
50	PATCHING	ar	L	800.00 SqFt			
48	LONGITUDINAL/TRA	NSVERSE	L	404.00 Ft			
Samp	ple Number: 114	Type:	R	Area:	5000.00 SqFt	<b>PCI:</b> 56	
Samp	ple Comments:						
52	RAVELING		L	4725.00 SqFt			
56	SWELLING		L	50.00 SqFt			
45	DEPRESSION		L	49.00 SqFt			
52	RAVELING		L	50.00 SqFt			
50	PATCHING		L	225.00 SqFt			
45	DEPRESSION		L	48.00 SqFt			
48	LONGITUDINAL/TRA			260.00 Ft			
48	LONGITUDINAL/TRA	NSVERSE	L 	245.00 Ft			
_	ple Number: 121	Type:	R	Area:	5000.00 SqFt	<b>PCI:</b> 60	
•	ple Comments:						
50	PATCHING		L	6.00 SqFt			
56	SWELLING	== ap	L	25.00 SqFt			
48	LONGITUDINAL/TRA	NSVERSE		367.00 Ft			
45	DEPRESSION		L	16.00 SqFt			
52 52	RAVELING		L	4913.00 SqFt			
52	RAVELING PATCHING		L M	80.00 SqFt			
50	DATE		M	.50 SqFt			

48	LONGITUDINAL/TRANSVERSE CRACKING	L	100.00	Ft			
Samp	ole Number: 123 Type:		R A	rea:	5000.00 SqFt	PCI:	61
Samp	ole Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	443.00	Ft			
52	RAVELING	L	130.00	SaFt			
48	LONGITUDINAL/TRANSVERSE CRACKING		100.00	-			
45	DEPRESSION	L	90.00	SqFt			
52	RAVELING	L	4870.00	SqFt			
56	SWELLING	L	50.00	SqFt			
Samp	ole Number: 125 Type:		R A	rea:	5000.00 SqFt	PCI:	53
Samp	ole Comments:						
52	RAVELING	M	45.00				
45	DEPRESSION	L	80.00				
52	RAVELING	L	250.00				
56	SWELLING	L	150.00				
45 48	DEPRESSION LONGITUDINAL/TRANSVERSE	L	636.00	SqFt Et			
	CRACKING		030.00	11			
-	ole Number: 130 Type:		R A	rea:	5000.00 SqFt	PCI:	52
Samp	ole Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L	659.00				
45	DEPRESSION	L	42.00				
52	RAVELING	L	4482.00				
56 50	SWELLING PATCHING	L	200.00				
52	RAVELING	L L	168.00 350.00				
45	DEPRESSION	L	35.00	-			
45	DEPRESSION	L	63.00				
Samn	ole Number: 134 Type:				5000.00 SqFt	PCI:	65
_	ble Comments:				5 CO CO C C C C C C C C C C C C C C C C	101.	
52	RAVELING	L	4936.00	SaFt			
52	RAVELING	L	64.00				
56	SWELLING	L	50.00	SqFt			
48	LONGITUDINAL/TRANSVERSE CRACKING	L	493.00	Ft			
Samp	ole Number: 140 Type:		R A	rea:	5000.00 SqFt	PCI:	63
Samp	ple Comments:						
52	RAVELING	L	50.00	SqFt			
48	LONGITUDINAL/TRANSVERSE CRACKING	L	532.00	•			
56	SWELLING	L	125.00				
52	RAVELING	L	4950.00	SqFt			
_	ole Number: 143 Type:		R A	rea:	5000.00 SqFt	PCI:	56
_	ple Comments:			G. F.			
45 52	DEPRESSION PAYELING	L	36.00				
52 52	RAVELING RAVELING	L L	250.00 4750.00				
32 48	LONGITUDINAL/TRANSVERSE		4750.00 727.00	-			
	CRACKING						
56 45	SWELLING DEPRESSION	L L	100.00 49.00	-			
	ble Number: 150 Type:				5000.00 SqFt	PCI:	51
_	ble Comments:		- 1			- 011	
52	RAVELING	L	500.00	SqFt			
52 45		L L	500.00 80.00				
45 56	RAVELING		80.00 39.00	SqFt SqFt			
45	RAVELING DEPRESSION	L	80.00 39.00	SqFt SqFt SqFt			

48	LONGITUDINAL/TRANSVERSE CRACKING	L		657.00 Ft			
Samp	ole Number: 153 Type:		R	Area:	5000.00 SqFt	PCI:	50
Samp	ole Comments:						
48	LONGITUDINAL/TRANSVERSE CRACKING	L		665.00 Ft			
50	PATCHING	L		130.00 SqFt			
45	DEPRESSION	L		49.00 SqFt			
52	RAVELING	L		750.00 SqFt			
57	WEATHERING	L		4120.00 SqFt			
56	SWELLING	L		50.00 SqFt			
Samp	ole Number: 156 Type:		R	Area:	5000.00 SqFt	PCI:	63
Samp	ole Comments:						
52	RAVELING	L		750.00 SqFt			
43	BLOCK CRACKING	L		385.00 SqFt			
48	LONGITUDINAL/TRANSVERSE CRACKING	L		362.00 Ft			
52	RAVELING	L		4250.00 SqFt			
Samp	ole Number: 158 Type:		R	Area:	5000.00 SqFt	PCI:	67
Samp	ole Comments:						
52	RAVELING	L		450.00 SqFt			
52	RAVELING	L		4550.00 SqFt			
48	LONGITUDINAL/TRANSVERSE CRACKING	L		512.00 Ft			

Network: TPF PETER O. KNIGHT AIRPORT Name: RW 4-22 RUNWAY 4-22 RUNWAY 358,600 SqFt Branch: Name: Use: Area: 6110 of 3 Section: From: To: Last Const.: 1/1/2018 ACFamily: C9N59-RL-RW-AC Rank: P Surface: Zone: Category: 17,800 SqFt Length: 178 Ft Width: 100 Ft Area: Slab Width: Ft Ft Slabs: Slab Length: Ft Joint Length: **Street Type:** Grade: Lanes: Shoulder: **Section Comments:** Work Date: 1/1/1960 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/1992 Work Type: OVERLAY Code: IMPORTED Is Major M&R: True Work Date: 1/1/2007 Work Type: Mill and Overlay Code: ML-OL Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 10/6/2014 TotalSamples: 4 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** Sample Number: 167 Type: R 5000.00 SqFt **PCI**: 91 Area:

**Sample Comments:** 

57 WEATHERING L 5000.00 SqFt 48 LONGITUDINAL/TRANSVERSE L 10.00 Ft

CRACKING

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TL HANG NW Name: TAXILANE TO EAST Use: TAXIWAY 29,552 SqFt Area: HANGARS Section: 800 of 1 From: To: -**Last Const.:** 1/1/2011 ACFamily: C9N59-RL-TW-AC Rank: P Surface: Zone: Category: 29,552 SqFt 1,120 Ft Width: 25 Ft Area: Length: Ft Slabs: Slab Length: Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: 0 **Section Comments:** Work Date: 1/1/2011 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **TotalSamples:** 6 **Last Insp. Date:** 12/12/2018 Surveyed: 1 **Conditions: PCI:** 92 **Inspection Comments: PCI:** 92 Sample Number: 303 Type: R Area: 3963.00 SqFt **Sample Comments:** 

57

48

WEATHERING

L & T CR

L

L

3963.00 SqFt

2.00 Ft

Netwo	ork: TPF			Nam	e: PETER O. KN	GHT AIRPORT	
Brand	ch: TL T-HANG		Name:	TAXILANE T	O T-HANGARS Use:	TAXILANE A	Area: 72,024 SqFt
Section	on: 705	of 2		From: -		То: -	Last Const.: 1/1/2018
Surfa	ce: AC Fam	ily: C9	N59-RL-T	W-AC Zone	:	Category:	Rank: P
Area:	60,798 SqF	<sup>7</sup> t	Length:	2,100 Ft	Width:	25 Ft	
Slabs	: Slal	b Length:		Ft	Slab Width:	Ft	Joint Length: Ft
Shoul	der: Str	eet Type:			Grade: 0		Lanes: 0
Sectio	on Comments:						
Work	<b>Date:</b> 1/1/1964	Work	Гуре: BUI	LT		Code: IMPORTED	Is Major M&R: True
Work	<b>Date:</b> 1/1/2018	Work	Type: Com	plete Reconstruction	ı - AC	Code: CR-AC	Is Major M&R: True
Last l	Insp. Date: 10/6/2014		Totals	Samples: 16	Surve	yed: 3	
Cond	itions: PCI: 53			NOTE: ***	Pre-Construction PCI	***	
nspe	ction Comments:						
	le Number: 100	Type:	R	Area:	5453.00 SqFt	PCI: 64	
_	le Comments:	- Jpc.		1110	2 .22.00 541	1010	
2	RAVELING		L	2903.00 SqFt			
8	LONGITUDINAL/TRANS CRACKING	VERSE	L	107.00 Ft			
15	DEPRESSION		L	24.00 SqFt			
7	WEATHERING		L	2550.00 SqFt			
15 15	DEPRESSION DEPRESSION		L L	260.00 SqFt 36.00 SqFt			
	le Number: 112		R	Area:	5000.00 SqFt	PCI: 57	
_		Type:	K	Area:	3000.00 SqFt	FCI: 3/	
samp	le Comments:						
15	DEPRESSION		L	30.00 SqFt			
2	RAVELING		L	3125.00 SqFt			
50 15	PATCHING DEPRESSION		L L	210.00 SqFt 50.00 SqFt			
15 15	DEPRESSION		L L	112.00 SqFt			
3	RUTTING		L	75.00 SqFt			
18	LONGITUDINAL/TRANS CRACKING		L	325.00 Ft			
45	DEPRESSION		L	16.00 SqFt			
Samp	le Number: 140	Type:	R	Area:	4268.00 SqFt	PCI: 35	
Samp	le Comments:						
18	LONGITUDINAL/TRANS CRACKING	VERSE	L	126.00 Ft			
50	PATCHING		L	400.00 SqFt			
15	DEPRESSION		L	10.00 SqFt			
52	RAVELING		L	3868.00 SqFt			
45	DEPRESSION		M	779.00 SqFt			
56	SWELLING		L	5.00 SqFt			

TPF Network: PETER O. KNIGHT AIRPORT Name: Branch: TL T-HANG TAXILANE TO T-HANGARS TAXILANE 72,024 SqFt Name: Use: Area: 710 of 2 **Last Const.:** 1/1/2007 Section: From: To: -Surface: AAC Family: C9N59-RL-TW-AAC-Zone: Category: Rank: P APC Width: 11,226 SqFt Length: 400 Ft 25 Ft Area: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** 0 Lanes: Grade: **Section Comments:** Work Date: 1/1/1964 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/2007 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True **Last Insp. Date:** 12/12/2018 **TotalSamples:** 2 Surveyed: 1 **Conditions:** PCI: **Inspection Comments: PCI:** 67 R 5957.00 SqFt Sample Number: 152 Type: Area: **Sample Comments:** 48 L & T CR L 360.00 Ft RAVELING L 60.00 SqFt 52 57 WEATHERING L 5897.00 SqFt

45

56

DEPRESSION

SWELLING

L

L

32.00 SqFt

180.00 SqFt

PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW A TAXIWAY A Use: TAXIWAY 124,403 SqFt Name: Area: 104 of 4 Section: From: To: **Last Const.:** 1/1/2018 ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P Surface: Area: 9,170 SqFt Length: 262 Ft Width: 35 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2007 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 10/6/2014 **TotalSamples:** 3 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments: PCI:** 80 Sample Number: 99 Type: R Area: 3500.00 SqFt **Sample Comments:** RAVELING L 350.00 SqFt 52 LONGITUDINAL/TRANSVERSE L 55.00 Ft 48

CRACKING

WEATHERING

L

3150.00 SqFt

57

Netw	ork: TPF			Na	nme: PE	TER O. KNI	GHT AIRPORT			
Bran	ch: TW A		Name:	TAXIWAY	A	Use:	TAXIWAY	Area:	124,403 SqFt	
Section	on: 105	of 4	1	From: -			То: -		Last Const.:	1/1/2018
Surfa	ce: AC Fai	mily: C	9N59-RL-	TW-AC Zo	one:		Category:		Rank: P	
Area	100,460 Sq	ĮFt	Lengtl	h: 2,874	Ft	Width:	35 Ft			
Slabs	: Sl	ab Length	:	Ft	Slab Width	:	Ft	Joint	Length: Ft	
Shou	der: St	reet Type:	:		Grade:	)		Lane	<b>s:</b> 0	
Section	on Comments:									
Work	<b>Date:</b> 1/1/1965	Work	Type: BU	JILT		(	Code: IMPORTED	Is	Major M&R: True	
Work	Date: 1/1/1992	Work	Type: O	VERLAY		(	Code: IMPORTED	I	s Major M&R: True	
Work	<b>Date:</b> 1/1/2018	Work	Type: Co	omplete Reconstruct	ion - AC	(	Code: CR-AC	I	s Major M&R: True	
Last	Insp. Date: 10/6/2014		Tota	alSamples: 29		Survey	red: 4			
Cond	itions: PCI: 60			NOTE:	*** Pre-Consti	uction PCI *	<del>***</del>			
Inspe	ction Comments:									
Samp	le Number: 105	Туре:	R	Area:	350	00.00 SqFt	PCI: 6	1		
Samp	le Comments:									
48	LONGITUDINAL/TRAN CRACKING	SVERSE	L	637.00 Ft						
52	RAVELING		L	3500.00 SqFt						
Samp	le Number: 116	Type:	R	Area:	350	00.00 SqFt	PCI: 6	6		
Samp	le Comments:									
52 48	RAVELING LONGITUDINAL/TRAN CRACKING	SVERSE	L L	3500.00 SqFt 392.00 Ft						
Samp	le Number: 125	Type:	R	Area:	350	00.00 SqFt	PCI: 4	6		
Samp	le Comments:									
43 52	BLOCK CRACKING RAVELING		L L	2400.00 SqFt 3500.00 SqFt						
48	LONGITUDINAL/TRAN CRACKING	SVERSE		341.00 Ft						
45	DEPRESSION		L	63.00 SqFt	:					
Samp	le Number: 133	Type:	R	Area:	350	00.00 SqFt	PCI: 6	7		
Samp	le Comments:									
48	LONGITUDINAL/TRAN	SVERSE	L	370.00 Ft						

CRACKING

RAVELING

52

L 3500.00 SqFt

Network: TPF PETER O. KNIGHT AIRPORT Name: TW A TAXIWAY A Use: TAXIWAY 124,403 SqFt **Branch:** Name: Area: 115 of 4 Section: From: To: Last Const.: 1/1/2018 ACFamily: C9N59-RL-TW-AC Zone: Rank: P Surface: Category: Area: 9,703 SqFt Length: 259 Ft Width: 35 Ft Slab Length: Ft Slab Width: Ft Slabs: Ft Joint Length: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/1965 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/2008 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC **Last Insp. Date:** 10/6/2014 **TotalSamples:** 3 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments: PCI:** 88 Sample Number: 129 Type: R 3931.00 SqFt Area:

**Sample Comments:** 

57

LONGITUDINAL/TRANSVERSE L 78.00 Ft **CRACKING** 

WEATHERING L 3931.00 SqFt

Network:	TPF			Name:	PETER O. KNIG	HT AIRPORT		
Branch:	TW A		Name:	TAXIWAY A	Use:	TAXIWAY	Area: 124	4,403 SqFt
Section:	120	C	of 4 F	rom: -		То: -		<b>Last Const.:</b> 1/1/2018
Surface:	AC	Family:	C9N59-RL-TW	-AC Zone:		Category:		Rank: P
Area:		5,070 SqFt	Length:	163 Ft	Width:	35 Ft		
Slabs:		Slab Le	ngth:	Ft Slab	Width:	Ft	Joint Length:	Ft
Shoulder:		Street T	ype:	Gra	<b>de:</b> 0		Lanes: 0	
Section Con	mments:							
Work Date:	: 1/1/1965	W	ork Type: BUIL	Т	C	ode: IMPORTED	Is Major Mo	&R: True
Work Date:	: 1/1/1986	W	ork Type: OVE	RLAY	C	ode: IMPORTED	Is Major Mo	&R: True
Work Date:	: 1/1/2008	W	ork Type: Mill a	and Overlay	C	ode: ML-OL	Is Major Mo	&R: True
Work Date:	: 1/1/2018	W	ork Type: Comp	elete Reconstruction - A	C C	ode: CR-AC	Is Major Mo	&R: True
Last Insp. I	Date: 10/6	5/2014	TotalSa	amples: 2	Surveye	<b>d:</b> 1		
Conditions:	PCI:	80		NOTE: *** Pre	e-Construction PCI **	**		
Inspection (	Comments	:						
Sample Nui	mber: 13	1 <b>Ty</b>	pe: R	Area:	2695.00 SqFt	PCI: 80		
Sample Cor	mments:							
	NGITUDINA ACKING	AL/TRANSVER	SE L	80.00 Ft				

 CRACKING
WEATHERING
DEPRESSION
L
0.000
FT
0.000

PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW A1 TAXIWAY A1 Use: TAXIWAY 5,794 SqFt Name: Area: 103 of 1 **Last Const.:** 1/1/2018 Section: From: To: ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P Surface: Area: 5,794 SqFt Length: 83 Ft Width: 65 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2007 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 10/6/2014 TotalSamples: 1 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** R **PCI:** 84 Sample Number: 97 Type: Area: 5615.69 SqFt **Sample Comments:** 

DEPRESSION L 44.00 SqFt 45 WEATHERING L 5615.00 SqFt 57 LONGITUDINAL/TRANSVERSE L 48 49.00 Ft

CRACKING

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW A2 TAXIWAY A2 Use: TAXIWAY 4,673 SqFt Name: Area: 630 of 1 **Last Const.:** 1/1/2018 Section: From: To: Surface: ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P Area: 4,673 SqFt Length: 100 Ft Width: 40 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2007 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 10/6/2014 TotalSamples: 1 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** R 4673.45 SqFt **PCI:** 94 Sample Number: 100 Type: Area: **Sample Comments:** 

57

WEATHERING

L

4673.00 SqFt

Network: TPF		Name:	PETER O. KNIGHT	AIRPORT		
Branch: TW A4	Name:	TAXIWAY A4	Use: 7	ΓAXIWAY	Area:	5,338 SqFt
Section: 425	of 1 Fr	om: -		То: -		Last Const.: 1/1/2018
Surface: AC Family:	C9N59-RL-TW-	AC Zone:		Category:		Rank: P
Area: 5,338 SqFt	Length:	75 Ft	Width:	40 Ft		
Slabs: Slab Le	ength:	Ft Slab	Width:	Ft	Joint Length:	Ft
Shoulder: Street 7	Гуре:	Grad	<b>e:</b> 0		Lanes: 0	
Section Comments:						
Work Date: 1/1/1964	Work Type: BUILT		Code	e: IMPORTED	Is Major M	&R: True
Work Date: 1/1/1992	Work Type: OVER	LAY	Code	e: IMPORTED	Is Major M	&R: True
Work Date: 1/1/2018	Work Type: Compl	ete Reconstruction - AC	Code	e: CR-AC	Is Major Mo	&R: True
<b>Last Insp. Date:</b> 10/6/2014	TotalSai	mples: 1	Surveyed:	1		
Conditions: PCI: 45		NOTE: *** Pre-	Construction PCI ***			
Inspection Comments:						
Sample Number: 300 Ty	ype: R	Area:	5338.00 SqFt	PCI: 45		
Sample Comments:						
45 DEPRESSION	L	63.00 SqFt				
50 PATCHING	M	4.00 SqFt				
43 BLOCK CRACKING	L	220.00 SqFt				
48 LONGITUDINAL/TRANSVEI CRACKING	RSE L	513.00 Ft				
	M	4.00 SqFt				
52 RAVELING	IVI	4.00 Sq1 t				
52 RAVELING 56 SWELLING	M L	150.00 SqFt				

PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW B TAXIWAY B Use: TAXIWAY 11,793 SqFt Name: Area: 205 **Last Const.:** 1/1/2011 Section: of 1 From: To: -Family: C9N59-RL-TW-AAC-Category: Rank: P Surface: AACZone: APC Width: Length: 280 Ft 40 Ft Area: 11,793 SqFt Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** 0 Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1965 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/1987 Work Type: REPAIR Code: IMPORTED Is Major M&R: False Work Date: 1/1/2011 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True TotalSamples: 3 **Last Insp. Date:** 12/12/2018 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** Sample Number: 201 R 4495.00 SqFt PCI: 82 Type: Area: **Sample Comments:** 57 WEATHERING L 4245.00 SqFt 48 L & T CR L 34.00 Ft 52 RAVELING L 250.00 SqFt

DEPRESSION

L

12.00 SqFt

45

PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW C TAXIWAY C Use: TAXIWAY 24,005 SqFt Name: Area: 305 of 2 From: Section: To: -Last Const.: 1/1/2010 AAC Family: C9N59-RL-TW-AAC-Zone: Category: Rank: P Surface: APC Width: 7,165 SqFt Length: 150 Ft 40 Ft Area: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** 0 Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1965 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/1992 Work Type: OVERLAY Code: IMPORTED Is Major M&R: True Work Date: 1/1/2010 Work Type: Mill and Overlay Code: ML-OL Is Major M&R: True TotalSamples: 2 **Last Insp. Date:** 12/12/2018 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** Sample Number: 099 R PCI: 74 Type: 3115.00 SqFt Area: **Sample Comments:** 52 RAVELING L 650.00 SqFt 48 L & T CR L 22.00 Ft

12.00 SqFt

2465.00 SqFt

L

L

45

57

DEPRESSION

WEATHERING

Network:	TPF				N	ame:	PET	ER O. KN	IGHT A	AIRPORT					
Branch:	TW C		Namo	e: T	AXIWAY	C		Use	: TA	AXIWAY	Area:		24,005	SqFt	
Section:	310	of	. 2	From:	-					To: -			Last	t Const.:	1/1/2018
Surface:	AC	Family:	C9N59-R	L-TW-AC	Z	one:				Category:			Ran	k: P	
Area:	16,	840 SqFt	Len	gth:	42:	5 Ft		Width:		40 F	t				
Slabs:		Slab Leng	gth:		Ft	Slab Wi	dth:			Ft		Joint Length:		F	t
Shoulder:		Street Ty	pe:			Grade:	0				]	Lanes: 0			
Section Co	omments:														
Work Dat	te: 1/1/1965	Wo	ork Type:	BUILT					Code:	IMPORTE	ED	Is Major	M&R:	True	
Work Dat	te: 1/1/1987	Wo	ork Type:	REPAIR					Code:	IMPORTE	ED	Is Major	M&R:	False	
Work Dat	te: 1/1/2018	Wo	ork Type:	Complete R	Reconstruc	tion - AC			Code:	CR-AC		Is Major	M&R:	True	
Last Insp.	Date: 10/6/20	14	To	otalSample	s: 4			Surve	yed: 2	2					
Condition	s: PCI: 55	5			NOTE:	*** Pre-Co	<mark>nstru</mark>	ction PCI	***						
Inspection	Comments:														
Sample N	umber: 101	Тур	e: R		Area:		4000	0.00 SqFt		PCI:	54				
Sample C	omments:														
50 PA	TCHING		L	300	0.00 SqF	t									
52 RA	VELING		L	3700	0.00 SqF	t									
45 DE	EPRESSION		L	9	9.00 SqF	t									
43 BL	OCK CRACKIN	1G	L	3700	0.00 SqF	t									
Sample N	umber: 103	Тур	e: R		Area:		4000	0.00 SqFt		PCI:	55				
Sample C	omments:														
52 RA	VELING		L	3700	0.00 SqF	t									
50 PA	TCHING		L	300	0.00 SqF	t									
43 BL	OCK CRACKIN	lG	L	3700	0.00 SqF	t									

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW CENTER TAXIWAY CENTER Use: TAXIWAY Area: 55,839 SqFt Name: Section: 315 of 3 To: -**Last Const.:** 1/1/2008 From: Surface: AC Family: C9N59-RL-TW-AC Zone: Category: Rank: P Area: 11,056 SqFt Length: 500 Ft Width: 20 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/2008 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 12/12/2018 TotalSamples: 4 Surveyed: 1 **Conditions: PCI:** 73 **Inspection Comments:** R 3000.00 SqFt **PCI:** 73 Sample Number: 201 Type: Area: **Sample Comments:** 48 L & T CR L 40.00 Ft 57 WEATHERING L 2640.00 SqFt RAVELING 52 L 350.00 SqFt

5.00 Ft

10.00 SqFt

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L & T CR

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PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW CENTER TAXIWAY CENTER Use: TAXIWAY 55,839 SqFt Name: Area: 320 of 3 Section: From: To: Last Const.: 1/1/2008 ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P Surface: Area: 11,536 SqFt Length: 400 Ft Width: 25 Ft Slab Length: Ft Slab Width: Ft Joint Length: Ft Slabs: Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2008 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2019 Work Type: Crack Sealing - AC Code: CS-AC Is Major M&R: False Work Date: 1/1/2019 Work Type: Crack Sealing - AC Code: CS-AC Is Major M&R: False **Last Insp. Date:** 12/12/2018 **TotalSamples:** 3 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 3750.00 SqFt **PCI:** 75 Sample Number: 301 Type: Area: **Sample Comments:** 

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WEATHERING

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3750.00 SqFt

298.00 Ft

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW CENTER TAXIWAY CENTER Use: TAXIWAY 55,839 SqFt Name: Area: 325 of 3 Section: From: To: **Last Const.:** 1/1/2008 Surface: ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P Area: 33,247 SqFt Length: 300 Ft Width: 100 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: Lanes: **Section Comments:** Work Date: 1/1/2008 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True Work Date: 1/1/2019 Work Type: Crack Sealing - AC Code: CS-AC Is Major M&R: False **Last Insp. Date:** 12/12/2018 **TotalSamples:** 6 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 5500.00 SqFt PCI: 74 Sample Number: 401 Type: Area: **Sample Comments:** 

L & T CR

WEATHERING

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463.00 Ft

5500.00 SqFt

		•	PEREN O VIVI			
Network: TPF		Name:	PETER O. KNIG	HT AIRPORT		
Branch: TW D	Name:	TAXIWAY D	Use:	TAXIWAY	<b>Area:</b> 43,	147 SqFt
Section: 420	of 1	From: -		То: -	]	Last Const.: 1/1/2011
Surface: AAC	Family: C9N59-RL-T APC	W-AAC- Zone:		Category:	]	Rank: P
<b>Area:</b> 43,147	SqFt Length	: 1,015 Ft	Width:	40 Ft		
Slabs:	Slab Length:	Ft S	lab Width:	Ft	Joint Length:	Ft
Shoulder:	Street Type:	G	rade: 0		Lanes: 0	
Section Comments:						
<b>Work Date:</b> 1/1/1964	Work Type: BU	ILT	(	Code: IMPORTED	Is Major M&	R: True
<b>Work Date:</b> 1/1/1987	Work Type: RE	PAIR	(	Code: IMPORTED	Is Major M&	R: False
Work Date: 1/1/2011	Work Type: MI	LL and OVERLAY	(	Code: ML-OV	Is Major M&	R: True
Work Date: 1/1/2019	Work Type: Cra	ck Sealing - AC	(	Code: CS-AC	Is Major M&	R: False
Last Insp. Date: 12/12/2018	Total	Samples: 11	Survey	ed: 2		
Conditions: PCI: 78						
Inspection Comments:						
Sample Number: 305	Type: R	Area:	4000.00 SqFt	<b>PCI:</b> 76		
Sample Comments:						
57 WEATHERING	L	3920.00 SqFt				
48 L & T CR	L	198.00 Ft				
52 RAVELING	L	80.00 SqFt				
Sample Number: 310	Type: R	Area:	4000.00 SqFt	<b>PCI:</b> 80		
Sample Comments:						
57 WEATHERING	L	3920.00 SqFt				
52 RAVELING	L	80.00 SqFt				
48 L & T CR	L	131.00 Ft				

Network: TPF PETER O. KNIGHT AIRPORT Name: TW E TAXIWAY E TAXIWAY 23,902 SqFt **Branch:** Name: Use: Area: 505 of 5 Section: From: To: Last Const.: 1/1/2018 ACFamily: C9N59-RL-TW-AC Rank: P Surface: Zone: Category: 2,353 SqFt Length: 50 Ft Width: 40 Ft Area: Slab Width: Ft Ft Slabs: Slab Length: Ft Joint Length: **Street Type:** Grade: Lanes: Shoulder: **Section Comments:** Work Date: 1/1/1965 Work Type: BUILT Code: IMPORTED Is Major M&R: True Work Date: 1/1/1986 Work Type: OVERLAY Code: IMPORTED Is Major M&R: True Work Date: 1/1/2005 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True Work Date: 1/1/2018 Work Type: Complete Reconstruction - AC Code: CR-AC Is Major M&R: True **Last Insp. Date:** 10/6/2014 TotalSamples: 1 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** Sample Number: 99 Type: R 2353.21 SqFt **PCI:** 87 Area:

**Sample Comments:** 

57 WEATHERING L 2353.00 SqFt 48 LONGITUDINAL/TRANSVERSE L 48.00 Ft

CRACKING

Networ	k: TPF				Na	me: PE	ETER O. KNI	GHT AIRPORT			
Branch	: TW E		Name	e: TA	AXIWAY	Ξ	Use:	TAXIWAY	Area:	23,902 SqFt	
Section	: 510	of	5	From:	-			То: -		Last Const.:	1/1/2018
Surface	: AC	Family: (	C9N59-R	L-TW-AC	Zo	ne:		Category:		Rank: P	
Area:		8,415 SqFt	Leng	gth:	240	Ft	Width:	35 Ft			
Slabs:		Slab Lengt	h:		Ft	Slab Width	:	Ft	Joint Le	ngth: Ft	
Should	Shoulder: Street Type:					Grade:	0		Lanes:	0	
Section	Comments:										
Work I	Date: 1/1/1965	Wor	k Type:	BUILT			(	Code: IMPORTED	Is M	ajor M&R: True	
Work I	Date: 1/1/1987	Wor	k Type:	REPAIR			(	Code: IMPORTED	Is M	ajor M&R: False	
Work I	Date: 1/1/2018	Wor	k Type:	Complete R	econstructi	on - AC	(	Code: CR-AC	Is M	ajor M&R: True	
Last In	sp. Date: 10/0	6/2014	To	talSamples	<b>3</b> : 3		Survey	<b>ed:</b> 1			
Conditi	ons: PCI:	59			NOTE: *	** Pre-Const	ruction PCI *	**			
Inspect	ion Comments	:									
Sample	Number: 10	00 Type:	R		Area:	35	15.00 SqFt	PCI: 5	9		
Sample	Comments:										
45	DEPRESSION		L	48	3.00 SqFt						
45	DEPRESSION		L	40	.00 SqFt						
54	SHOVING		L		.00 SqFt						
48		AL/TRANSVERSE	L		0.00 Ft						
52	DAVELING		T	2515	OO SaEt						

52 RAVELING L 3515.00 SqFt

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW E TAXIWAY E Use: TAXIWAY Area: 23,902 SqFt Name: Section: 515 of 5 **Last Const.:** 1/1/2011 From: To: Surface: AC Family: C9N59-RL-TW-AC Zone: Category: Rank: P 50 Ft Area: 4,952 SqFt Length: 100 Ft Width: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/2011 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 12/12/2018 **TotalSamples:** 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4952.00 SqFt **PCI:** 82 Sample Number: 200 Type: Area: **Sample Comments:** 52 RAVELING L 50.00 SqFt 48 L & T CR L 153.00 Ft

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WEATHERING

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4902.00 SqFt

Netwo	rk:	TPF					Name:	PET	ER O. KN	IGHT A	AIRPORT				
Branc	h:	TW E			Name:	TAXIV	VAY E		Use	: TA	XIWAY	Area:	23,902	SqFt	
Section	n: 5	520		of 5	Fro	m: -					То: -		Last	Const.:	1/1/2018
Surfac	e: A	AC	Family:	C9N	59-RL-TW-A	.C	Zone:				Category:		Ran	k: P	
Area:			2,711 SqFt		Length:		56 Ft		Width:		35 Ft				
Slabs:			Slab L	ength:		Ft	SI	lab Width:			Ft	Joint L	ength:	Ft	
Should	ler:		Street	Type:			G	rade: 0				Lanes:	0		
Section	n Con	nments:													
Work	Date:	: 1/1/1965	,	Work T	ype: BUILT					Code:	IMPORTED	Is I	Major M&R:	True	
Work	Date:	1/1/1987	•	Work T	ype: REPAIR					Code:	IMPORTED	Is !	Major M&R:	False	
Work	Date:	1/1/2018	,	Work T	ype: Complet	e Recon	struction -	AC		Code:	CR-AC	Is I	Major M&R:	True	
Last I	nsp. D	Date: 10/6	5/2014		TotalSam	ples: 3	3		Surve	yed:	1				
Condi	tions:	PCI:	59			NO	TE: <mark>*** F</mark>	<mark>re-Constru</mark>	ction PCI	***					
Inspec	tion (	Comments:	:												
Sampl	e Nur	nber: 100	) T	ype:	R	A	rea:	3515	5.00 SqFt		PCI: 59	ı			
Sampl	e Con	nments:													
48		GITUDINA CKING	AL/TRANSVE	RSE L		279.00	Ft								
52	RAV	'ELING		I	. 3	515.00									
45		RESSION		I	,	40.00	-								
54		VING		I		22.00	-								
45	DEP	RESSION		I	,	48.00	SaFt								

PETER O. KNIGHT AIRPORT Network: TPF Name: Branch: TW E TAXIWAY E Use: TAXIWAY 23,902 SqFt Name: Area: 650 From: Section: of 5 To: -Last Const.: 1/1/2008 AAC Family: C9N59-RL-TW-AAC-Zone: Rank: P Surface: Category: APC Width: 5,471 SqFt Length: 100 Ft 50 Ft Area: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** 0 Lanes: Shoulder: Grade: **Section Comments:** Code: NU-IN Work Date: 1/1/1963 Work Type: New Construction - Initial Is Major M&R: True Work Date: 1/1/1986 Work Type: Mill and Overlay Is Major M&R: True Code: ML-OL Work Date: 1/1/2008 Work Type: Mill and Overlay Code: ML-OL Is Major M&R: True **Last Insp. Date:** 12/12/2018 TotalSamples: 1 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** Sample Number: 300 R **PCI:** 81 Type: 5471.00 SqFt Area: **Sample Comments:** 52 RAVELING L 55.00 SqFt

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WEATHERING

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5416.00 SqFt

190.00 Ft

Network: TPF		Nan	ne: PETER O. KNI	GHT AIRPORT	
Branch: TW F	Nai	me: TAXIWAY F	Use:	TAXIWAY A	<b>98,950</b> SqFt
Section: 605	of 4	From: -		То: -	Last Const.: 1/1/2008
Surface: AAC	Family: C9N59- APC	-RL-TW-AAC- Zon	e:	Category:	Rank: P
Area: 82,68	80 SqFt Le	ength: 738 F	Width:	35 Ft	
Slabs:	Slab Length:	Ft	Slab Width:	Ft	Joint Length: Ft
Shoulder:	Street Type:		Grade: 0		Lanes: 0
Section Comments:					
Work Date: 1/1/1987	Work Type	: BUILT	•	Code: IMPORTED	Is Major M&R: True
Work Date: 1/1/2008	Work Type	: MILL and OVERLAY	•	Code: ML-OV	Is Major M&R: True
<b>Work Date:</b> 1/24/2019	Work Type	: Crack Sealing - AC	•	Code: CS-AC	Is Major M&R: False
<b>Last Insp. Date:</b> 12/12/201	18	TotalSamples: 22	Survey	ved: 4	
Conditions: PCI: 78					
Inspection Comments:					
Sample Number: 101	Type:	R Area:	3546.00 SqFt	<b>PCI:</b> 73	
Sample Comments:	71		1		
56 SWELLING	L	20.00 SqFt			
57 WEATHERING	L	3475.00 SqFt			
3/ WEATHERING		200 00 E			
	L	200.00 Ft			
	L L	71.00 SqFt			
48 L & T CR 52 RAVELING	L		3500.00 SqFt	<b>PCI:</b> 79	
48 L & T CR 52 RAVELING Sample Number: 108	L	71.00 SqFt	3500.00 SqFt	<b>PCI:</b> 79	
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments:	L	71.00 SqFt  R	3500.00 SqFt	<b>PCI:</b> 79	
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING	Type:	71.00 SqFt	3500.00 SqFt	<b>PCI:</b> 79	
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR	Type:	71.00 SqFt  R	3500.00 SqFt 3500.00 SqFt	PCI: 79	
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR  Sample Number: 114	Type:	71.00 SqFt  R			
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR  Sample Number: 114  Sample Comments:	Type:	71.00 SqFt  R			
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR  Sample Number: 114  Sample Comments:	Type:	71.00 SqFt  R			
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR  Sample Number: 114  Sample Comments: 48 L & T CR	Type:	71.00 SqFt  R			
48 L & T CR 52 RAVELING  Sample Number: 108  Sample Comments: 57 WEATHERING 48 L & T CR  Sample Number: 114  Sample Comments: 48 L & T CR 57 WEATHERING	Type:  L L Type:  L L L L L L	71.00 SqFt  R			

L 3500.00 SqFt L 20.00 Ft

WEATHERING

L & T CR

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TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW F TAXIWAY F Use: TAXIWAY 98,950 SqFt Name: Area: Section: 610 of 4 **Last Const.:** 1/1/2008 From: To: -Surface: AAC Family: C9N59-RL-TW-AAC-Zone: Category: Rank: P APC Width: 5,824 SqFt Length: 122 Ft 48 Ft Area: Ft Slabs: Slab Length: Slab Width: Ft Joint Length: Ft Shoulder: **Street Type:** Grade: 0 Lanes: **Section Comments:** Work Type: BUILT Work Date: 1/1/1987 Code: IMPORTED Is Major M&R: True Work Date: 1/1/2008 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True **Last Insp. Date:** 12/12/2018 TotalSamples: 1 Surveyed: 1 **Conditions: PCI:** 72 **Inspection Comments: PCI:** 72 Sample Number: 117 R Type: Area: 5824.00 SqFt **Sample Comments:** 48 L & T CR L 122.00 Ft WEATHERING L 3786.00 SqFt 57

52

RAVELING

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2038.00 SqFt

N.41	TDE					NT -		DETER	) I/NII/	NIT A	IDDODT					
Network						Nai		PETER			AIRPORT					
Branch:	TW F			Name:	TAXI	WAY F	· · · · · · · · · · · · · · · · · · ·		Use:	TA	XIWAY	Ar	rea:	98,950	) SqFt	
Section:	615		of 4		From:	-					To: -			Las	t Const.:	1/1/2019
Surface:	AAC	Family:	C9N APG		TW-AAC-	Zor	ie:				Category:			Rai	ık: P	
Area:		6,836 SqFt		Lengtl	h:	130	Ft	Wi	dth:		35 Ft					
Slabs:		Slab L	ength:		Ft		Slab Wid	lth:			Ft		Joint Leng	th:	F	t
Shoulder	:	Street	Type:				Grade:	0					Lanes:	0		
Section (	Comments:															
Work Da	nte: 1/1/1987	•	Work T	ype: BU	JILT				C	ode:	IMPORTE	D	Is Maj	or M&R:	True	
Work Da	nte: 1/1/2008	1	Work T	ype: M	ILL and OVE	RLAY			C	ode:	ML-OV		Is Maj	or M&R:	True	
Work Da	ate: 1/1/2019	•	Work T	ype: M	ILL and OVE	RLAY			C	ode:	ML-OV		Is Maj	or M&R:	True	
Last Insp	<b>Date:</b> 10/6	/2014		Tota	lSamples:	24			Surveye	ed: 4	1					
Conditio	ns: PCI:	89			NO	OTE: <mark>*</mark>	** Pre-Con	struction	n PCI *	**						
Inspectio	on Comments:															
Sample N	Number: 101	T	ype:	R		Area:		3546.00	SqFt		PCI:	84				
Sample (	Comments:								•							
48 L	/EATHERING ONGITUDINA RACKING	AL/TRANSVE		L L	3546.00 120.00	_										
Sample N	Number: 108	3 T	ype:	R		Area:		3500.00	SqFt		PCI:	87				
Sample (	Comments:															
	ONGITUDINA RACKING	AL/TRANSVE	RSE I	L	75.00	Ft										
57 W	EATHERING	ł	]	L	3500.00	SqFt										
Sample N	Number: 114	T	ype:	R	I	Area:		3500.00	SqFt		PCI:	90				
Sample (	Comments:															
	ONGITUDINA RACKING	AL/TRANSVE	RSE I	L	17.00	Ft										
	EATHERING	ł	]	L	3500.00	SqFt										
Sample N	Number: 122	2 T	ype:	R	A	Area:		3500.00	SqFt		PCI:	94				
Sample (	Comments:															

3500.00 SqFt

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WEATHERING

Network: TPF PETER O. KNIGHT AIRPORT Name: Branch: TW F TAXIWAY F Use: TAXIWAY 98,950 SqFt Name: Area: 620 of 4 Section: From: To: -Last Const.: 1/1/2019 AAC Family: C9N59-RL-TW-AAC-Rank: P Surface: Zone: Category: APC Width: 3,610 SqFt Length: 80 Ft 35 Ft Area: Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** 0 Shoulder: Grade: Lanes: **Section Comments:** Work Date: 1/1/1987 Work Type: BUILT Code: IMPORTED Is Major M&R: True Is Major M&R: True Work Date: 1/1/2008 Work Type: MILL and OVERLAY Code: ML-OV Work Date: 1/1/2019 Work Type: MILL and OVERLAY Code: ML-OV Is Major M&R: True **Last Insp. Date:** 10/6/2014 **TotalSamples:** 2 Surveyed: 1 NOTE: \*\*\* Pre-Construction PCI \*\*\* **Conditions:** PCI: **Inspection Comments:** Sample Number: 116 R **PCI:** 69 Type: Area: 3803.00 SqFt **Sample Comments:** 

52 RAVELING L 3803.00 SqFt 48 LONGITUDINAL/TRANSVERSE L 92.00 Ft

CRACKING

TPF PETER O. KNIGHT AIRPORT Network: Name: **Branch:** TW G TAXIWAY G Use: TAXIWAY Area: 12,333 SqFt Name: Section: 750 of 1 **Last Const.:** 1/1/2011 From: To: Surface: ACFamily: C9N59-RL-TW-AC Zone: Category: Rank: P 300 Ft Area: 12,333 SqFt Length: Width: 30 Ft Slabs: Slab Length: Ft Slab Width: Ft Joint Length: Ft **Street Type:** Lanes: Shoulder: Grade: **Section Comments:** Work Date: 1/1/2011 Work Type: New Construction - Initial Code: NU-IN Is Major M&R: True **Last Insp. Date:** 12/12/2018 **TotalSamples:** 3 Surveyed: 1 **Conditions:** PCI: **Inspection Comments:** R 4500.00 SqFt **PCI:** 89 Sample Number: 201 Type: Area: **Sample Comments:** 

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48

WEATHERING

L & T CR

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4500.00 SqFt

46.00 Ft