

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

## Statewide Airfield Pavement Management Program

Peter O Knight Airport– TPF (Regional Reliever) Tampa, Florida (District 7)



January 2012

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#### **EXECUTIVE SUMMARY**

In 2010, the Florida Department of Transportation (FDOT) Aviation Office selected a Consultant team consisting of Kimley-Horn and Associates and their Subconsultants, AMEC and All About Pavements, Inc., to provide services in support of FDOT in the continuing evaluation and updating of the existing Statewide Airfield Pavement Management Program (SAPMP) to be completed over fiscal years 2011 and 2012.

The tasks required to achieve this objective at Peter O Knight Airport included:

- Obtain recent construction history from the Airport to update the Pavement Inventory CADD drawings from the previous SAPMP update,
- Perform a visual Pavement Condition Index (PCI) survey of the airfield pavements at the Airport,
- Update the MicroPAVER database to analyze the PCI field data and determine the current condition of the airfield pavements,
- Predict the future deterioration of the pavements,
- Develop a 10-year M&R plan to address the pavement needs at Peter O Knight Airport, and
- Provide the estimated costs associated with the suggested immediate and future M&R activities

During December 2011, the PCI survey was performed at Peter O Knight Airport. The results of the survey indicate that, based on a numerical scale of 0 to 100, the overall area-weighted average PCI of the airfield pavements in 2011 is 85, representing a Satisfactory overall network condition.

Table I below summarizes the overall condition summary by network branch.

Branch Name	Area Weighted PCI	PCI Range	Average Condition Rating	FDOT Minimum Service Level	MicroPAVER Minimum PCI	Action Required
Apron	97	72 - 100	Good	60	65	
Run-Up Apron	97	92 - 100	Good	60	65	
Runway 18-36	95	95	Good	75	65	
Runway 4-22	69	65 - 100	Fair	75	65	Х
Taxiway Alpha	67	57 - 100	Fair	65	65	
Taxiway Bravo	90	64 - 100	Good	65	65	
Taxiway Charlie	70	59 - 100	Fair	65	65	
Taxiway Center	96	95 - 100	Good	65	65	
Taxiway Delta	94	46 - 100	Good	65	65	
Taxiway Echo	81	74 - 93	Satisfactory	65	65	
Taxiway Foxtrot	96	90 - 97	Good	65	65	
Taxiway to T-Hangars	68	68	Fair	65	65	

## **Table I: Condition Summary by Branch**

Tables II and III below illustrate the area-weighted PCI computed individually for each pavement use and rank, respectively.

Use	Average Area- Weighted PCI	Condition Rating
Runway	78	Satisfactory
Taxiway	81	Satisfactory
Apron	97	Good
All (Weighted)	85	Satisfactory

## **Table II: Condition Summary by Pavement Use**

Rank*	Average Area- Weighted PCI	Condition Rating
Primary	80	Satisfactory
Secondary	95	Good
Tertiary	N/A	N/A
All (Weighted)	87	Good

## Table III: Condition Summary by Pavement Rank

\*The pavement rank for the airport pavement network is listed on Table 2-3.

The immediate M&R needs, or needs that have been programmed to be completed in the first year of the 10-year M&R plan based on an unlimited budget at Peter O Knight Airport, include: Runway 4-22, Taxiway A, Taxiway B, Taxiway C and Taxiway D. These pavement sections exhibited distresses which justify mill and overlay rehabilitation. The immediate needs are summarized in Table IV below.

Branch Name	Section ID	Surface Type	Section Area (ft <sup>2</sup> )	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
Runway 4-22	6105	AAC	310,500	\$797,363.94	64	Mill and Overlay	100
Taxiway A	105	AAC	103,252	\$542,280.73	56	Mill and Overlay	100
Taxiway B	150	AAC	3,015	\$7,743.75	64	Mill and Overlay	100
Taxiway C	310	AC	17,091	\$76,329.55	58	Mill and Overlay	100
Taxiway D	425	AAC	3,373	\$25,671.13	45	Mill and Overlay	100
Taxiway D	620	AAC	1,965	\$14,178.09	51	Mill and Overlay	100
				\$1,463,567.19	56		100

#### **Table IV: Immediate Major M&R Needs**

\* Costs are adjusted for inflation.

A forecast of Major M&R needs for a 10-year period, starting from 2012, was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval. The results of this analysis are provided in Table V below.

Year	Preventative	Major M&R	Total Year Cost
2012	\$30,221.30	\$1,463,567.19	\$1,493,788.49
2013	\$29,293.28	\$0.00	\$29,293.28
2014	\$40,592.44	\$0.00	\$40,592.44
2015	\$38,010.02	\$202,108.32	\$240,118.34
2016	\$68,101.26	\$0.00	\$68,101.26
2017	\$97,644.60	\$0.00	\$97,644.60
2018	\$125,537.30	\$45,893.00	\$171,430.30
2019	\$157,363.00	\$0.00	\$157,363.00
2020	\$186,440.10	\$41,586.44	\$228,026.54
2021	\$215,174.78	\$0.00	\$215,174.78
Total	\$988,378.08	\$1,753,154.95	\$2,741,533.03

## Table V: 10-Year M&R Costs under Unlimited Funding Scenario

Note: Costs are adjusted for inflation.

The implementation of the 10-Year Major M&R Plan is expected to provide an improvement in the overall condition of the airfield pavement, where the area-weighted PCI would only decrease from 80 in 2012 to 76 in 2021. Appendix F lists the Major M&R for the 10-Year program. Appendix G graphically depicts the program activity.

It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all Peter O Knight Airport pavements in 2021 may remain near 76. The airport manager should realize that what is most important is that the pavement repair work (preventative and major M&R) that has been identified for Peter O Knight Airport is conducted at some point in the 10-year plan.

#### 1. INTRODUCTION

The State of Florida has more than 100 public airports that are vital to the Florida economy as well as the economy of the United States. There are millions of square yards of pavement for the runways, taxiways, aprons and other areas of these airports that support aircraft operations. The timely and proper maintenance and rehabilitation (M&R) of these pavements allows the airports to operate efficiently, economically and without excessive down time.

In order to support the planning, scheduling, and design of the M&R activities based on pavement evaluation and pavement management performance trends, the Florida Department of Transportation (FDOT) Aviation Office implemented the Statewide Airfield Pavement Management Program (SAPMP) in 1992.

In 2010, the FDOT Aviation Office selected a Consultant team consisting of Kimley-Horn and Associates and their Subconsultants, MACTEC Engineering and Consulting and All About Pavements, Inc., to provide services in support of FDOT in the continuing evaluation and updating of the existing SAPMP to be completed over fiscal years 2011 and 2012.

This report discusses the work performed, a summary of the findings, results, and recommendations for M&R planning associated with the update to the SAPMP. It also describes the procedures used to ensure that the appropriate engineering and scientific standards of care, quality, budget, and schedule requirements are implemented during the performance of the SAPMP.

#### 1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

- Describe, briefly, the SAPMP and the roles and responsibilities of the program's participants;
- Provide background information on pavement management principles, objectives, and benefits to this airport;
- Outline the procedures used to collect, evaluate and report pavement inspection results at this airport;
- Present the findings from the pavement inspection;
- Analyze and discuss the needs for Maintenance and Rehabilitation (M&R) activities and associated costs for this airport.

#### 1.2 FDOT Statewide Airfield Pavement Management Program

In 1992, the FDOT implemented the SAPMP to improve the knowledge of pavement conditions at public airports in the State system, identify maintenance needs at individual airports, automate information management, and establish standards to address future needs. The 1992 SAPMP provided valuable information for establishing and performing pavement M&R.

In 1992/1993, and 1998/1999, the FDOT Aviation Office participated in the development of a proprietary software pavement management system and developed and populated a pavement management database that provided valuable information for establishing M&R policies, estimating M&R costs, and developing recommendations for performing routine pavement

maintenance. This system, AIRPAV, was implemented, and initial condition surveys were performed in 1992 and 1993. The SAPMP was updated with additional surveys in 1998 and 1999.

In 2004, the FDOT Aviation Office undertook a project to update the pavement management system software utilized for the SAPMP. This project involved a review of the AIRPAV software and other available pavement management system software. As a result of this review, MicroPAVER was selected as the software for the update project. Data from the 1998/1999 condition surveys were converted to the MicroPAVER system, and the inventory of the pavement systems and drawings of the pavements were updated to reflect maintenance, rehabilitation, and construction activities since 1998/1999. The pavements were inspected between 2006 and 2008, and an updated M&R program was developed based on the new condition of the airfield pavements. As part of the update, procedures for the inspection and collection of pavement data were developed, and a website (www.floridaairportpavement.com) was created for the input of data under secure procedures.

Currently, airports using the AIP Grant Program are required by the Federal Aviation Administration (FAA) to develop a pavement maintenance program (FAA/AC 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements") using trained personnel to perform a detailed inspection of airfield pavements. The inspections are required to be performed at least once a year or every 3 years if pavement inspection is characterized in the form of a Pavement Condition Index (PCI) survey (such as ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys", (2004 edition)). The 2004 edition was utilized in lieu of the 2010 edition to maintain database integrity and benefit of pavement performance curves from the previous inspections.

In 2010, the FDOT Aviation Office selected a team consisting of the Consultant and their Subconsultants to provided services in support of FDOT in the continuing evaluation and updating of the existing SAPMP to be completed over fiscal years 2011 and 2012.

#### 1.3 Organization

#### **1.3.1** Aviation Office Program Manager Role

The Aviation Office Airport Engineering Manager serves as the Aviation Office Program Manager (AO-PM) monitoring the work of the Consultant. The AO-PM has review and approval authority for each program task and also manages the day-to-day details of the SAPMP and the updates.

#### 1.3.2 Consultant Role

The Consultant (Kimley-Horn and Associates, Inc.) and their Subconsultants (AMEC Engineering and Consulting and All About Pavements, Inc.) provide technical and administrative assistance to the AO-PM during the execution of this program, which involves the continuing evaluation of airport pavements and updating of the SAPMP based upon procedures outlined in FAA Advisory Circular 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements" and ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys" (2004).

#### 1.3.3 Airport Role

The airports are the ultimate client for each of the field inspections and reports. Individual airports will be provided final deliverables prepared by the Consultant that have been reviewed and approved by the AO-PM. The airport should provide a current Airport Layout Plan (ALP) to the Consultant and, if they participated in the previous SAPMP update, indicate any construction activity that has been performed since the previous inspections.

#### **1.4** Pavement Types and Pavement Management

#### 1.4.1 Pavement basics

A pavement is a prepared surface designed to provide a continuous smooth ride at a certain speed and to support an estimated amount of traffic for a certain number of years. Pavements are constructed of a combination of subgrade soils, subbases, bases and surfacing. There are mainly two types of pavements;

- Flexible pavement, composed of an asphalt concrete (AC) surface, and
- Rigid pavement composed of a Portland Cement Concrete (PCC) surface.

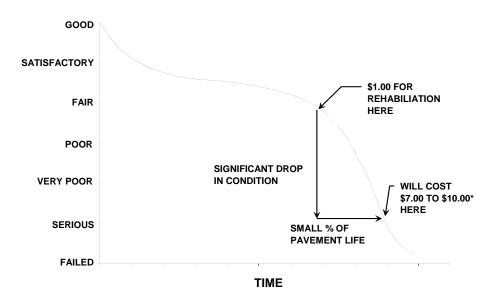
Both pavement types use a combination of layered materials and thicknesses in order to support the traffic loads and protect the underlying natural subgrade soil. Flexible pavements (AC) dissipate the load from layer to layer until the load magnitude is small enough to be supported by the subgrade soil. In rigid pavements (PCC), the Portland Cement Concrete supports most of the load, and the base or subbase layer is mainly constructed to provide a smooth and continuous platform for the construction of the concrete surface.

A small percentage of the airport pavements in Florida are composed of asphalt concrete surface over Portland Cement Concrete (APC). This pavement type is known as "composite" pavement.

Due to the different nature of the pavement types and their materials, flexible and rigid pavements have different distresses and failure mechanisms. Understanding the mechanics and failure modes of both pavement types will assist engineers in making adequate and long lasting repairs or rehabilitation to the pavement structures.

#### 1.4.2 Pavement Management System Concept

The SAPMP utilized a Pavement Management System (PMS) to develop the M&R recommendations discussed in this report. A PMS is a tool to assist engineers, planners and managing agencies in making decisions when planning pavement M&R. The management of pavements involves scheduling pavement maintenance and rehabilitation before pavements deteriorate to a condition where reconstruction (the most expensive alternative) is the only solution. Figure 1-1 below, taken from FAA/AC 5380-7A "Airport Pavement Management Program", illustrates how a pavement generally deteriorates and the relative cost of rehabilitation at various times throughout its life. Note that during the first 75 percent of a pavement's life, it performs relatively well. After that, however, it begins to deteriorate rapidly. The number of years a pavement stays in "good" condition depends on how well it is maintained. As the illustration demonstrates, the cost of maintaining the pavement above a critical condition before rapid deterioration has occurred.



## Figure 1-1: Pavement Life Cycle

Source: FAA/AC 150/5380-7A "Airport Pavement Management Program" \*Modified to reflect current construction costs.

Pavements deteriorate at an accelerated rate with increasing traffic and limited M&R resources. Planned maintenance and rehabilitation, essentially preventing pavements from reaching deteriorated conditions, helps managers/owners/agencies maximize the use of their budgets and prolong the life of the pavements. A PMS provides a tool to schedule and plan maintenance and rehabilitation based on engineering information and existing and predicted conditions of pavements.

There are several components or elements that are essential to a PMS. The first steps in the implementation of a PMS are to know and clearly identify what needs to be managed, the limits of the managing agency's responsibilities and the condition of the existing pavements. Once the cause and the extent of pavement problems are known, the appropriate maintenance and/or rehabilitation can be planned. By using local unit costs and expected yearly budgets, a multi-year M&R plan can be determined.

#### **1.4.3** Pavement Inspection Methodology for the SAPMP

Pavement condition assessment is one of the primary decision variables in any airport PMS. Pavement condition assessments generally include visual surveys in accordance with ASTM D 5340, "Standard Test Method for Airport Pavement Condition Index Surveys" and structural evaluation. Pavement condition surveys assess the functional condition of the pavement surface. Typically, most problems within a pavement structure will eventually reflect to the pavement surface. The structural condition and relative support of the pavement layers can be assessed utilizing non-destructive deflection testing (NDT) as well as other in-depth engineering evaluation or sampling and testing methods.

For the Statewide Aviation Pavement Management Program update, only visual surveys were performed. Further structural and geotechnical testing should be conducted to determine the appropriate rehabilitation methods during the design process.

In preparation of the PCI surveys, the airfield pavements are divided into sample units as established in FAA AC 150/5380-6B and ASTM D 5340. Further discussion of how the airport pavements are divided and subdivided into units by construction and use can be found in Section 2 "Network Definition and Pavement Inventory" of this report.

Sample unit sizes are approximately  $5000 \pm 2000$  square feet for AC-surfaced pavements and  $20 \pm 8$  slabs for PCC-surfaced pavements. Prior to conducting the field inspections, the sampling plan was developed based on previous sampling and modified based on the available knowledge of Branches, Sections, use patterns, construction types and history. The sampling rate used for the FDOT Statewide Airfield Pavement Management Program is provided in Table 1-1 below.

	AC Pavemen	ts		PCC Paveme	ents	
NT	n	l	NT	n		
Ν	Runway	Others	Ν	Runway	Others	
1-4	1	1	1-3	1	1	
5-10	2	1	4-6	2	1	
11-15	3	2	7-10	3	2	
16-30	5	3	11-15	4	2	
31-40	7	4	16-20	5	3	
41-50	8	5	21-30	7	3	
<u>&gt;</u> 51	20% but <u>&lt;</u> 20	10% but <u>&lt;</u> 10	31-40	8	4	
			41-50	10	5	
			<u>&gt;</u> 51	20% but <u>&lt;</u> 20	10% but <u>&lt;</u> 10	

## Table 1-1: Sampling Rate for FDOT Condition Surveys

Where

N = total number of sample units in Section n = number of sample units to inspect

The sample units to inspect are determined by a systematic random sampling technique. This means that the locations are determined such that they are distributed evenly throughout the Section. In the case when nonrepresentive distresses are observed in the field, additional sample units were added.

The distress quantities and severity levels from the sample units are used to compute the PCI value for each Section. PCI values range from 0 to 100. As Figure 1-2 below indicates, MicroPAVER provides a rating scale that relates PCI to pavement condition. A PCI between 0 and 10 is considered 'Failed' pavement, and a PCI between 86 and 100 is considered 'Good' pavement, with five other conditions for PCI values between 11 and 85.

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

## Figure 1-2: PCI Rating Scale

#### **1.5 Definitions**

<u>Aviation Office</u> - The Aviation Office is charged with responsibility for promoting the safe development of aviation to serve the people of the State of Florida. The Aviation Office Program Manager (AO-PM) has review and approval authority for each program task of the SAPMP.

<u>Base Course</u> - Base Course is a layer of manufactured material, usually crushed rock (aggregate) or stabilized material (asphalt or concrete or Florida Limerock), immediately beneath the surface course of a pavement, which provides support to the surface course.

<u>Branch</u> - A Branch designates pavements that have common usage and functionality, such as an entire runway, taxiway, or apron.

<u>Branch ID</u> - A short form identification for the pavement Branch. In this report, Branch includes the common designation for the item e.g. RW 18-36.

<u>Category</u> - The Category classifies the airport according to the type and volume of aircraft traffic, as follows:

- GA for general aviation or community airports;
- RL for regional relievers or small hubs;
- PR for primary (certified under Part 139 requirements).

<u>Critical PCI</u> - The PCI value considered to be the threshold for M&R decisions. PCI above the Critical generate economical activities expected to preserve and prolong acceptable condition. M&R for PCI values less than Critical make sense only for reasons of safety or to maintain a pavement in operable condition. A pavement section is expected to deteriorate very quickly once it reaches the Critical PCI and the unit cost of repair increases significantly.

<u>Distress Type</u> - A distress type is a defined visible defect in pavement evidenced by cracking, vertical displacement or deterioration of material. In PCI technology, 16 distinct distress types for asphalt surfaced and 15 for Portland Cement Concrete surfaced pavements have been described and rated according to the impact their presence has on pavement condition.

<u>Florida DOT (FDOT)</u> - Florida Department of Transportation was represented in this project by the Office of Aviation.

<u>Global M&R</u> - Global M&R is defined as activities applied to entire pavement Sections with the primary objective of slowing the rate of deterioration. These activities are primary for asphalt surfaced pavements, e.g. surface treatments.

Localized M&R (Maintenance and Repair) - Localized M&R is a temporizing activity performed on existing pavement to extend its serviceability and/or to improve rideability. Localized M&R can be applied either as a safety (stop-gap) measure or preventive measure. Common localized maintenance methods include crack sealing, joint sealing, and patching.

<u>Major M&R (e.g. Rehabilitation)</u> - Activities performed over the entire area of a pavement Section that are intended to restore and/or maintain serviceability. This includes asphalt overlays, milling and replacing asphalt pavement, reconstruction with asphalt, reconstruction with Portland Cement Concrete (PCC) pavements, and PCC overlays.

<u>MicroPAVER</u> - A commercially available software subsidized by FAA and agencies in the US Department of Defense developed to support engineered management of pavement assets using a condition based approach. This software has the functionality such that, if properly implemented, maintained, and operated, it meets the pavement management program requirements described by the FAA in Advisory Circular 150/5380-7A.

<u>Minimum Condition Level</u> - A threshold PCI value established by FDOT to represent the targeted minimum pavement condition that is desirable in the Florida Airport System. These values were established with consideration of pavement function and airport type. For instance, runways have higher minimum condition levels than aprons, and Primary airports have higher minimum condition levels than airports.

<u>Network Definition</u> - A Network Definition is a Computer-Aided Drafting & Design (CADD) drawing which shows the airport pavement outline with Branch and Section boundaries. This drawing also includes the PCI sample units and is used to identify those sample units to be surveyed, i.e. the sampling plan. The Network Definition for the airport is in Appendix A along with a table of inventory data.

<u>Pavement Condition Index (PCI)</u> - The Pavement Condition Index is a number which represents the condition of a pavement segment at a specific point in time. It is based on visual identification and measurement of specific distress types commonly found in pavement which has been in service for a period of time. The definitions and procedures for determining the PCI are found in ASTM D 5340, published by ASTM International.

<u>Pavement Evaluation</u> - A systematic approach undertaken by trained and experienced personnel intended for determination of the condition, serviceability, and best corrective action for pavement. Techniques to standardize pavement evaluation include the Pavement Condition Index procedures.

<u>Pavement Management System (PMS)</u> - A Pavement Management System is a broad function that uses pavement evaluation and pavement performance trends as a basis for planning, programming, financing, and maintaining a pavement system.

<u>Pavement Surface Type</u> - The surface of pavement is identified as one of four types:

- AC for asphalt surface pavements;
- PCC for Portland Cement Concrete pavements;
- AAC for asphalt surface pavements that have had an asphalt overlay at some point in their construction history;
- APC for composite pavements, which consist of asphalt over Portland Cement Concrete pavement.
- PAC for composite pavements, which consist of Portland Cement Concrete over asphalt pavement.

<u>Rank</u> - Pavement rank in MicroPAVER determines the priority to be assigned to a pavement Section when developing an M&R plan. Pavement Sections are ranked as follows according to their use:

- P for Primary pavements, such as primary runways, primary taxiways, and primary aprons;
- S or Secondary pavements, such as secondary runways, secondary taxiways, and secondary aprons;
- T for Tertiary pavements such as "T" hangars and slightly used aprons.

<u>Reconstruction</u> - Reconstruction includes removal of existing pavement, preparation of subgrade, and construction of new pavement with new or recycled materials. Reconstruction is indicated when distress types evident at the surface indicate failure in the pavement structure or subgrade of a type, and to an extent, not correctable by less extensive construction.

<u>Rehabilitation</u> - Rehabilitation represents construction using existing pavement for a foundation. Rehabilitation most commonly consists of an overlay of existing pavement with a new asphalt or concrete surface. Recently, technology has expanded the options to include recycling of existing pavement and incorporating engineering fabrics or thin layers of elasticized materials to retard reflection of distress types through the new surface.

<u>Sample Unit</u> - Uniformly sized portions of a Section as defined in ASTM D 5340. Sample units are a means to reduce the total amount of pavement actually surveyed using statistics to select and survey enough area to provide a representative measure of Section PCI. Sample Unit sizes are  $5,000 \pm 2,000$  square feet for AC-surfaced pavements and  $20 \pm 8$  slabs for PCC-surfaced pavements.

<u>Section</u> - Sections subdivide Branches into portions of similar pavement. Sections are prescribed by pavement structure, age, condition, and use. Sections are identified on the airport Network Definition. They are the smallest unit used for determining M&R requirements based on condition.

<u>Section ID</u> - A short form identification for the pavement Section that maintains the original AirPAV identification where 100 series through 3000 series Sections are taxiways, 4000 and 5000 series Sections are aprons (the 5000 series represent run-up aprons and turnarounds), and 6000 series Sections are runways.

<u>Statewide Airfield Pavement Management Program (SAPMP)</u> – The Statewide Airfield Pavement Management Program is a program implemented in 1992 by the Florida Department of Transportation to plan, schedule, and design the maintenance and rehabilitation activities

necessary for the airfield pavement on Florida's public airports to allow the airports to operate efficiently, economically, and without excessive down time.

<u>System Inventory</u> - A System Inventory is a Computer-Aided Drafting & Design (CADD) drawing which shows the airport pavement outline and identifies airfield construction activities since the last inspection. The System Inventory for the airport is included in Appendix A.

<u>Use</u> - In MicroPAVER, Use is the term for the function of the pavement area. This is either Runway, Taxiway, or Apron for purposes of the FDOT Statewide Aviation Pavement Management System.

#### 2. NETWORK DEFINITION AND PAVEMENT INVENTORY

Peter O Knight Airport (TPF), consists of two runways. Runway 4-22 is constructed of asphalt concrete pavement and is 100-ft wide by 3,405-ft long. Runway 18-36 is constructed of asphalt concrete pavement and is 75-ft wide by 2,688-ft long. Parallel Taxiway A and its connectors serve Runway 4-22. Parallel Taxiway F and its connectors serve Runway 18-36. Peter O Knight Airport is also served by a network of taxiways consisting of Taxiway D, Taxiway B and Taxiway E. The airport has T-Hangar and apron facilities on the central and eastern areas of the property. This airport is designated as a Regional Reliever airport and is located in District 7 of the Florida Department of Transportation.

It is important to note that the aforementioned runway data in addition to the remaining airfield pavement facilities geometric dimensions may vary slightly from the geometry used in the condition and M & R analysis based on field measurements.

Peter O. Knight Airport opened in 1937 and was constructed by the Works Progress Administration. During World War II the airport was used as an auxiliary fighter landing field for nearby Army airfields such as Clearwater, Drew, and MacDill. The airport continues to serve small private planes and helicopters, with a few airships. The airport also has a seaplane basin. An extension of the north/east and south/west ends has been completed in 2008.

#### 2.1 Network Definition

The pavements within the network are defined in MicroPAVER in terms of manageable units that help to organize the data into similar groups. An organizational hierarchy is used to establish these units.

#### 2.1.1 Branch Section Identification

The airport pavement network is subdivided into separate Branches (runways, taxiways, or aprons) that have distinctly different uses. Branches are then further divided into Sections with similar pavement construction and performance that may share other common attributes.

Sections are manageable units used to organize the data collection and are treated individually during the rehabilitation planning stage. A pavement rank, consisting of primary, secondary, and tertiary levels, is assigned to each Section based on their level and type of use. The pavement rankings that were designated for each Section in the previous SAPMP update were again used for this update.

As discussed in Section 1.4.3 "Pavement Inspection Methodology for the SAPMP", the sections are sub-divided into sample units, which are the smallest subdivision in a pavement network, only for the purpose of conducting the pavement condition survey.

#### 2.1.2 System Inventory and Network Definition Update

The System Inventory and Network Definition drawings are used to identify changes in the network since the most recent update from the 2006/2008 inspections and also to plan the field inspection activities for the 2011 survey. Prior to the field inspection process, the System Inventory drawing was updated from the previous inspection with notes indicating recent

construction projects on the various Sections of pavement throughout the airfield. This System Inventory drawing is used to update the Network Definition drawing.

The Network Definition drawing shows the airport pavement outline with Branch and Section boundaries. This drawing also includes the PCI sample units and is used to identify those sample units to be surveyed, i.e. the sampling plan. The previous airport configuration and history was compared with the current airport configuration, and the existing network branch, section and sample unit designations were revised to match the current configuration. This drawing serves not only as a primary guide for the airfield inspectors but also as an important historical record.

Due to recent and anticipate construction history; pavement area sections may have been consolidated or created which will affect the total number of sample units to be inspected based on the ASTM 5340 criteria.

The updated System Inventory and Network Definition drawings for Peter O Knight Airport are provided in Appendix A. Table 2-1 below lists the recent construction projects at the airport.

## Table 2-1: Construction Since Last Inspection & Anticipated ConstructionActivity

Construction Year	Location	Work Type / Pavement Section
2007	Taxiway A Run-Up	New Asphalt Pavement Construction
2008	Runway 18-36 / Taxiway F	Asphalt Pavement Overlay
2008	Taxiway F Run-Ups	New Asphalt Pavement Construction
2008	Taxiway Center / Taxiway E	New Asphalt Pavement Construction
2010	Taxiway C	Asphalt Pavement Overlay
2011	Taxiway B&D and Apron	Asphalt Pavement Reconstruction
2012	Runway 4-22 and Taxiway A	Asphalt Pavement Overlay

#### 2.2 Pavement Inventory

The detailed pavement inventory was updated to reflect the network definition update and field inspection results. The total number of sample units designated to be inspected at the airport is 71 sample units.

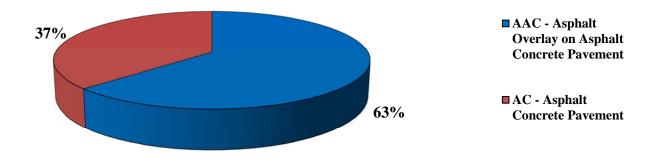
The total airfield pavement area in 2011 at Peter O Knight Airport is 1,213,305 square feet. The breakdown of pavement area for each pavement use is provided in Table 2-2.

Use	Area (ft <sup>2</sup> )	% of Total Area
Runway	551,816	45%
Taxiway	471,780	39%
Apron	189,709	16%
All (Weighted)	1,213,305	100%

## Table 2-2: Pavement Area by Pavement Use

Figure 2-1 presents the breakdown of the pavement area at Peter O Knight Airport by surface type.





Details of pavement Branch and Section information including Branch name (which indicates pavement use), Branch ID, Section ID, section area, rank, surface type, last construction date, number of samples inspected, and number of samples in each Section are given in Table 2-3 below. A more detailed Pavement Inventory Table may be found in Appendix A of this report.

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Total Samples Inspected	Total Samples
Apron	AP	APRON	4140	14,967	Р	AC	1	1
Apron	AP	APRON	4110	150,952	Р	AC	1	14
Apron	AP RU	APRON	5115	16,251	Р	AC	1	1
Apron	AP RU	APRON	5105	3,154	Р	AAC	1	1
Apron	AP RU	APRON	5110	4,386	Р	AAC	1	1
Runway 18-36	RW 18-36	RUNWAY	6205	191,017	S	AAC	12	47
Runway 4-22	RW 4-22	RUNWAY	6105	310,500	Р	AAC	14	67
Runway 4-22	RW 4-22	RUNWAY	6103	32,500	Р	AC	2	2
Runway 4-22	RW 4-22	RUNWAY	6110	17,800	Р	AAC	1	18
Taxiway Alpha	TW A	TAXIWAY	105	103,252	Р	AAC	4	31
Taxiway Alpha	TW A	TAXIWAY	103	5,616	Р	AC	1	1
Taxiway Alpha	TW A	TAXIWAY	104	9,170	Р	AC	1	1
Taxiway Alpha	TW A	TAXIWAY	630	4,673	Р	AC	1	1
Taxiway Alpha	TW A	TAXIWAY	115	11,155	Р	AAC	1	2
Taxiway Alpha	TW A	TAXIWAY	120	5,876	Р	AAC	1	1
Taxiway Bravo	TW B	TAXIWAY	150	3,015	Р	AAC	1	1
Taxiway Bravo	TW B	TAXIWAY	625	1,658	Р	AAC	1	1
Taxiway Bravo	TW B	TAXIWAY	205	11,793	Р	AC	1	3
Taxiway Charlie	TW C	TAXIWAY	310	17,091	Р	AC	2	5
Taxiway Charlie	TW C	TAXIWAY	305	6,914	Р	AAC	1	1
Taxiway Center	TW CENTER	TAXIWAY	315	11,056	Р	AC	1	1
Taxiway Center	TW CENTER	TAXIWAY	320	11,536	Р	AC	1	1
Taxiway Center	TW CENTER	TAXIWAY	325	33,247	Р	AC	1	1
Taxiway Delta	TW D	TAXIWAY	425	3,373	Р	AAC	1	2
Taxiway Delta	TW D	TAXIWAY	620	1,965	Р	AAC	1	1
Taxiway Delta	TW D	TAXIWAY	420	41,270	Р	AC	1	2
Taxiway Echo	TW E	TAXIWAY	510	11,126	Р	AC	1	3
Taxiway Echo	TW E	TAXIWAY	505	2,353	Р	AAC	1	1
Taxiway Echo	TW E	TAXIWAY	650	5,471	Р	AAC	1	1

## **Table 2-3: Branch and Section Inventory**

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Total Samples Inspected	Total Samples
Taxiway Foxtrot	TW F	TAXIWAY	615	4,039	А	AAC	1	1
Taxiway Foxtrot	TW F	TAXIWAY	605	86,523	Р	AAC	4	22
Taxiway Foxtrot	TW F	TAXIWAY	610	7,582	Р	AAC	1	2
Taxiway T-Hangars	TW T-HANG	TAXIWAY	705	72,024	Р	AC	3	15

## Table 2-3: Branch and Section Inventory (Continued)

Note: If new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

\* Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

#### 3. PAVEMENT CONDITION

Pavement conditions were inspected in accordance with the methods outlined in FAA AC 150/5380-6B and ASTM D 5340-04 "Standard Practice for Airport Pavement Condition Index Surveys." These procedures define distress type, severity and quantity for sampling areas within each section to determine the Pavement Condition Index (PCI).

#### 3.1 Inspection Methodology

A PCI survey is performed by measuring the amount and severity of pavement distresses, which are caused by traffic load, climate, and other factors, observed within a sample unit. This data is imported into MicroPAVER, which calculates PCI values for the pavement sections. Table 3-1 below lists the pavement distress types and related causes for asphalt concrete (AC).

## **Table 3-1: Pavement Distresses for Asphalt Concrete Surfaces**

Code	Distress	Mechanism				
41	Alligator Cracking	Load				
42	Bleeding	Construction Quality/ Mix Design				
43	Block Cracking	Climate / Age				
44	Corrugation	Load / Construction Quality				
45	Depression	Subgrade Quality				
46	Jet Blast	Aircraft				
47	Joint Reflection - Cracking	Climate / Prior Pavement				
48	Longitudinal/Transverse Cracking	Climate / Age				
49	Oil Spillage	Aircraft / Vehicle				
50	Patching	Utility / Pavement Repair				
51	Polished Aggregate	Load				
52	Weathering/Raveling	Climate / Load				
53	Rutting	Load				
54	Shoving	Pavement Growth				
55	Slippage Cracking	Load / Pavement Bond				
56	Swelling	Climate / Subgrade Quality				
Source: U.S	Source: U.S. Army CERL, FDOT Airfield Inspection Reference Manual					

Prior to conducting the inspections, Global Positioning System (GPS) coordinates were recorded using CADD at the centroid of each sample unit. The centroid is usually the geometric center of the area, but in cases where sample units are irregular in shape, this is the center of mass. These data are presented in a table on the updated Network Definition Map in Appendix A of this report.

Pavement condition inspections at Peter O Knight Airport were performed in December 2011. Data was recorded in the field in accordance with FAA Advisory Circular 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements" and ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys" (2004).

After the completion of data collection, the data was imported into MicroPAVER, and PCI values were calculated for the pavement sections.

#### **3.2** Pavement Condition Index Results

According to the 2011 survey, the overall area-weighted PCI at Peter O Knight Airport is 85, representing a Satisfactory overall network condition.

Overall the airport exhibited pavement distresses associated with climate and age. Asphalt Concrete pavement distresses include; weathering, raveling, block cracking, and longitudinal and transverse cracking and swelling.

Runway 4-22 exhibited low and medium severity longitudinal/transverse cracking, low and medium severity patching, low and medium severity weathering/raveling, low severity depression and low severity swelling. These distresses are associated with climate, age and subgrade quality. Runway 4-22 is in Fair overall condition.

Runway 18-36 was rehabilitated with an asphalt overlay in 2008. It exhibited occasional low severity longitudinal/transverse cracks and minimal low severity swelling. Runway 18-36 is in Good condition.

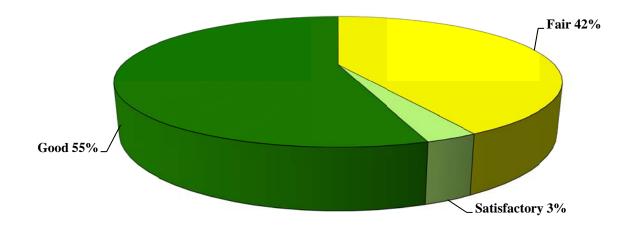
Taxiway A, Taxiway C and the Taxiway to T-Hangars exhibited low severity longitudinal/transverse cracking, low and medium severity weathering/raveling, low severity block cracking and oil spillage. These are climate and age related distresses, which are common in pavements of similar age. These taxiways are in Fair to Poor condition.

Portions of the apron, Taxiway B and Taxiway D were recently rehabilitated in 2011. The rehabilitation consisted of asphalt mill and overlay and new asphalt pavement construction. These pavements were not included in the pavement management inspections due to the new construction. The recently constructed pavement was assumed to have a PCI of 100.

Appendix B contains a table and a Condition Map which depicts the PCI results by Section, and Appendix C contains a table of PCI results by Branch. Appendix I includes detailed distress data generated by MicroPAVER for each inspected sample unit.

Figure 3-1 provides the PCI distribution by rating category for Peter O Knight Airport.





Condition Rating	Total Area (ft <sup>2</sup> )	Percent
Good	668,458	55%
Satisfactory	31,969	3%
Fair	507,540	42%
Poor	5,337	0%
Very Poor	0	0%
Serious	0	0%
Failed	0	0%

Approximately 58% of the network is in Good and Satisfactory condition while 42% of the network is in Fair and Poor condition. Table 3-3 illustrates the area-weighted PCI computed individually for each pavement use.

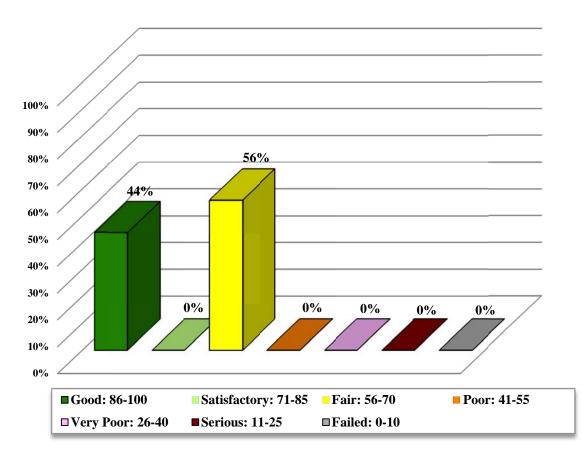
Use	Average Area- Weighted PCI	Condition Rating
Runway	78	Satisfactory
Taxiway	81	Satisfactory
Apron	97	Good
All (Weighted)	85	Satisfactory

### Table 3-3: Condition by Pavement Use

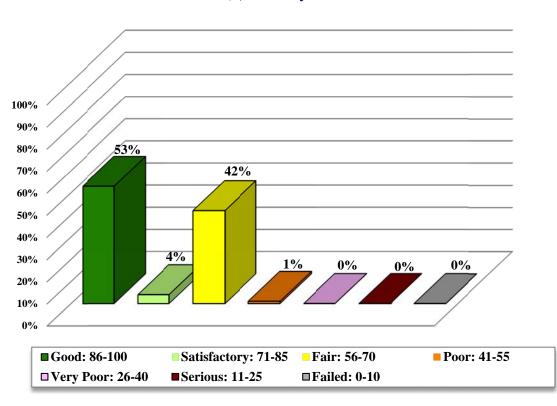
Figure 3-2 presents the breakdown of PCI by range for each pavement use.

### Figure 3-2: Percentage of Pavement Area within Each PCI Range by Pavement Use

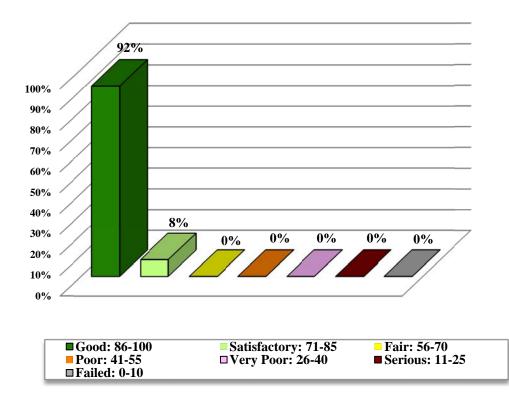
#### (a) Runway



(b) Taxiway

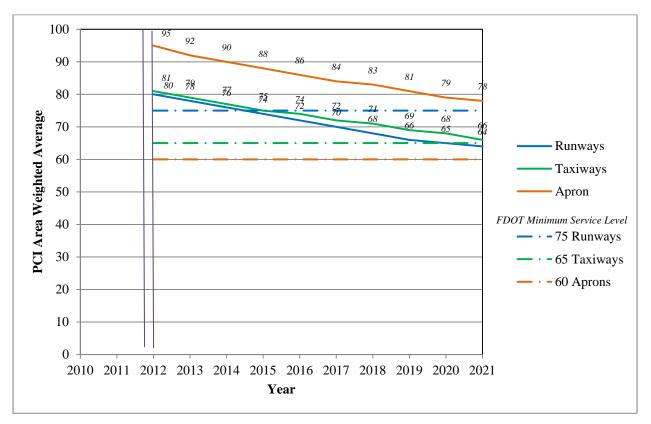


#### (c) Apron



#### 4. PAVEMENT CONDITION PREDICTION

Performance prediction models or deterioration curves for PCI were used to develop a condition forecast. The performance models were developed for combinations of variables such as pavement use (runway, taxiway or apron), surface type (AC or PCC) and airport category (GA, RL, or PR). Figure 4-1 illustrates the predicted performance of pavements at Peter O Knight Airport based on current condition, age since last construction and the deterioration model appropriate for the type of pavement. The figure presents the forecast for each pavement use and displays the FDOT minimum service level for Regional Reliever (RL) airports.



#### Figure 4-1: Predicted PCI by Pavement Use

Appendix D presents the tabular summary of the predicted Section PCI for each year from 2012 to 2021.

#### 5. MAINTENANCE POLICIES AND COSTS

#### 5.1 Policies

Maintenance and rehabilitation (M&R) policies are sets of rules used to develop repair recommendations for distresses encountered during the visual inspections.

Maintenance refers to repair-type activities that are applied to specific distress types on the pavement. These activities are preventative and/or corrective in nature and are recommended to help achieve the performance goal.

Table 5-1 provides the list of the maintenance activities used in MicroPAVER to treat specific distress types. MicroPAVER applies repairs to these distresses and adjusts the PCI based on specific rules. These repairs are used only in the first year of an analysis.

Rehabilitation is warranted when the pavement condition decreases below a critical point such that the deterioration is extensive or the rate of deterioration is so great that routine maintenance is no longer cost-efficient. This critical point is called "Critical PCI." The critical PCI levels for different pavement and branch types established in the previous SAPMP update were used in this update for the development of the M&R plan for the airport. Sections above critical PCI levels receive routine maintenances while pavements predicted to deteriorate below their respective critical PCI level during the analysis period will be identified for Major M&R. Table 5-2 gives the critical PCI levels for Regional Reliever Airports.

The maintenance rehabilitation policy and activity costs have been updated based on the study of readily available construction cost data at the time of this study. The costs depicted in this report are intended for planning purposes.

Surface	Distress	Severity*	Work Type	Code	Work Unit
	Alligator Crack	М, Н	Patching - AC Deep	PA-AD	SqFt
	Bleeding	N/A	No Localized M&R	NONE	N/A
	Block Crack	M, H	Crack Sealing – AC	CS-AC	SqFt
	Corrugation	L, M, H	Patching - AC Deep	PA-AD	SqFt
	Depression	М, Н	Patching - AC Deep	PA-AD	SqFt
	Jet Blast	N/A	Patching - AC Deep	PA-AD	SqFt
	Joint Ref. Crack	M, H	Crack Sealing – AC	CS-AC	Ft
	L & T Crack	М, Н	Crack Sealing – AC	CS-AC	Ft
AC	Oil Spillage	N/A	Patching - AC Shallow	PA-AS	SqFt
AC	Patching	M, H	Patching - AC Deep	PA-AD	SqFt
	Polished Agg.	N/A	No Localized M&R	NONE	N/A
	Denalize /	L	Surface Sealing - Rejuvenating	SS-RE	SqFt
	Raveling / Weathering	М	Surface Seal - Coal Tar	SS-CT	SqFt
	weathering	Н	Microsurfacing	MI-AC	SqFt
	Rutting	M, H	Patching - AC Deep	PA-AD	SqFt
	Shoving	M, H	Grinding (Localized)	GR-LL	SqFt
	Slippage Crack	N/A	Patching - AC Shallow	PA-AS	SqFt
	Swelling	М, Н	Patching - AC Deep	PA-AD	SqFt
	Blow-Up	L, M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Corner Break	М, Н	Patching - PCC Full Depth	PA-PF	SqFt
	Linear Crack	М, Н	Crack Sealing – PCC	CS-PC	Ft
	Dynability Croals	Н	Slab Replacement – PCC	SL-PC	SqFt
	Durability Crack	М	Patching - PCC Full Depth	PA-PF	SqFt
	Jt. Seal Damage	М, Н	Joint Seal (Localized)	JS-LC	Ft
	Small Patch	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
PCC	Large Patch	М, Н	Patching - PCC Full Depth	PA-PF	SqFt
PCC	Popouts	N/A	No Localized M&R	NONE	N/A
	Pumping	N/A	No Localized M&R	NONE	N/A
	Scaling	Н	Slab Replacement – PCC	SL-PC	SqFt
	Faulting	М, Н	Grinding (Localized)	GR-PP	Ft
	Shattered Slab	M, H	Slab Replacement – PCC	SL-PC	SqFt
	Shrinkage Crack	N/A	No Localized M&R	NONE	N/A
	Joint Spall	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
	Corner Spall	M, H	Patching - PCC Partial Depth	PA-PP	SqFt

## **Table 5-1: Routine Maintenance Activities for Airfield Pavements**

L = Low, M = Medium, H = High

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

## Table 5-2: Critical PCI for Regional Reliever Airports

It should be noted that critical PCI is not the same as Minimum PCI or Minimum Condition. The Minimum PCI is a value set by the user so pavement sections are rehabilitated before they fall below the set minimum. Table 5-3 gives the targeted, or desired, Minimum PCI values for runways, taxiways, and aprons of Regional Reliever Airports.

# Table 5-3: FDOT Minimum Service Level PCI for Regional RelieverAirports

Minimum PCI				
Runway Taxiway Apron				
75	65	60		

Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values in Table 5-2 the PCI trigger range when the likely activity would be a mill and resurface was 40 to 79 and reconstruction at a PCI of 39 or lower. One important concept of pavement management systems is that it is cost effective to maintain pavements that are already in good condition rather than wait for them to get worse and require more expensive rehabilitation.

Crack sealing and full-depth patching are the M&R activities recommended to repair pavements with PCI values between 80 and 90. MicroPAVER considers these as preventative M&R with their primary objective being to slow the rate of pavement deterioration. While the trigger PCI for mill and overlay has been set to 55, MicroPAVER also assigns mill and overlay to sections with a PCI greater than 55 if they exhibit some structural distress. Table 5-4 summarizes the M&R activities for Regional Reliever Airports based on PCI value.

	Activity	PCI Range
Maintenance	Crack Sealing and Full-Depth Patching	80 and 90
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	40 to 79
	Reconstruction	39 and less

## Table 5-4: M&R Activities for Regional Reliever Airports

#### 5.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were updated from the previous SAPMP study based on current construction cost trends in order to determine meaningful costs for the program. Table 5-5 presents the unit costs summary.

#### 5.3 M&R Activities

FDOT recognizes that although Mill and Overlay work is recommended for asphalt pavements within a PCI range from 40 to 79, it is conceivable that airports may not have adequate funding to perform this type of rehabilitation. Microsurfacing treatment is a maintenance/rehabilitation measure that can be used in lieu of asphalt pavement mill and overlay; however it should be understood that this measure is intended for short term pavement life extension. While the cost of microsurfacing is significantly lower than that of pavement mill and overlay, it is not intended to be a full rehabilitative measure for long term benefit.

Code	Name	Cost	Unit
GR-LL	Grinding (Localized for AC)	\$2.10	SqFt
PA-AL	Patching – AC Leveling	\$2.30	SqFt
PA-AS	Patching – AC Shallow	\$2.90	SqFt
PA-PF	Patching – PCC Full Depth	\$38.11	SqFt
PA-PP	Patching – PCC Partial Depth	\$19.06	SqFt
SL-PC	Slab Replacement – PCC	\$39.11	SqFt
CS-PC	Crack Sealing – PCC	\$4.24	Ft
UN-PC	Undersealing – PCC	\$3.40	Ft
CS-AC	Crack Sealing – AC	\$2.25	Ft
GR-PP	Grinding (Localized for PCC)	\$22.51	Ft
JS-LC	Joint Seal (Localized)	\$2.00	Ft
SH-LE	Shoulder Leveling	\$2.81	Ft
JS-SI	Joint Seal – Silicon	\$2.81	Ft
PA-AD	Patching – AC Deep	\$4.90	SqFt
OL-AT	Overlay – AC Thin	\$2.80	SqFt
SS-CT	Surface Seal – Coal Tar	\$0.40	SqFt
SS-FS	Surface Seal – Fog Seal	\$0.40	SqFt
SS-RE	Surface Seal – Rejuvenating	\$0.40	SqFt
ST-SB	Surface Treatment – Single Bitum.	\$0.30	SqFt
ST-SS	Surface Treatment – Slurry Seal	\$0.55	SqFt
ST-ST	Surface Treatment – Sand Tar	\$0.28	SqFt
MI-AC	Microsurfacing - AC	\$0.65	SqFt

## **Table 5-5: Maintenance Unit Costs for FDOT**

The improvement in condition due to maintenance actions applied to specific distresses is only performed when an inspection was performed recently and only in the first year of the M&R analysis. In subsequent years, MicroPAVER calculates M&R costs based on expected unit costs for pavements in a range of PCIs. That is, for low PCI, it is expected that the repair would be significant (e.g. reconstruction) and therefore very costly.

Using available unit cost data, the Major M&R Cost by Condition table was set up as shown in Table 5-6. The cost assigned to each range of PCI is based on a Transportation Cost Report provided by Office of Planning Policy of FDOT where the unit costs of reconstruction and resurfacing of airfield pavements were included. These costs were then assigned to the appropriate PCI range to arrive at a cost per square foot necessary to restore pavements at that PCI level to new condition, i.e. a PCI of 100.

## Table 5-6: M&R Activities and Unit Costs by Condition for Regional Reliever Airports

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crack Sealing and Full-Depth Patching	90	\$0.10
Wannenance	Clack Seaming and Full-Depth I atching	80	\$0.40
		70	\$0.90
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	60	\$3.68
		50	\$7.61
		40	\$18.57
	Description	30	\$18.57
	Reconstruction	20	\$18.57

A 3% inflation rate per year was applied to the unit costs during the M&R analysis.

#### 6. PAVEMENT REHABILITATION NEEDS ANALYSIS

Maintenance and Rehabilitation (M&R) analyses were performed after the condition data were calculated and MicroPAVER was customized with the maintenance policies and cost settings described in the previous section.

The objective of the M&R analysis is to observe the effect of different fiscal scenarios on the network condition, over a period of ten years, starting from 2012. The analysis was conducted using an unlimited budget. An unlimited budget allows all M&R needs to be identified along with the associated cost regardless of priority.

Table 6-1 presents the M&R list of immediate needs for Major M&R, i.e. Year 1 of the forecast. The importance of this listing is that it points out the major activities triggered by the current condition of the pavements.

Branch Name	Section ID	Surface Type	Section Area (ft <sup>2</sup> )	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
Runway 4-22	6105	AAC	310,500	\$797,363.94	64	Mill and Overlay	100
Taxiway A	105	AAC	103,252	\$542,280.73	56	Mill and Overlay	100
Taxiway B	150	AAC	3,015	\$7,743.75	64	Mill and Overlay	100
Taxiway C	310	AC	17,091	\$76,329.55	58	Mill and Overlay	100
Taxiway D	425	AAC	3,373	\$25,671.13	45	Mill and Overlay	100
Taxiway D	620	AAC	1,965	\$14,178.09	51	Mill and Overlay	100
				\$1,463,567.19	56		100

## Table 6-1: Summary of Immediate Major M&R Needs Option No. 1

\* Costs are adjusted for inflation.

FDOT recognizes that the costs attributed to the aforementioned 'Major Activity' of performing a pavement 'Mill and Overlay' may conflict with budgetary constraints. Table 6-2 presents an alternative minor rehabilitative activity to the mid-range performing pavements. The alternative activity is performing a 'Microsurfacing/Slurry Seal' to the pavement to retard the degradation of the facility until funding is available for a 'Mill and Overlay' activity.

Branch Name	Section ID	Surface Type	Section Area (ft <sup>2</sup> )	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
Runway 4-22	6105	AAC	310,500	\$201,825.00	64	Microsurfacing	100
Taxiway A	105	AAC	103,252	\$67,113.92	56	Microsurfacing	100
Taxiway B	150	AAC	3,015	\$1,960.06	64	Microsurfacing	100
Taxiway C	310	AC	17,091	\$11,109.31	58	Microsurfacing	100
Taxiway D	425	AAC	3,373	\$2,192.67	45	Microsurfacing	100
Taxiway D	620	AAC	1,965	\$1,276.95	51	Microsurfacing	100
				\$285,477.92	56		100

## Table 6-2: Summary of Immediate Major M&R Needs Option No. 2

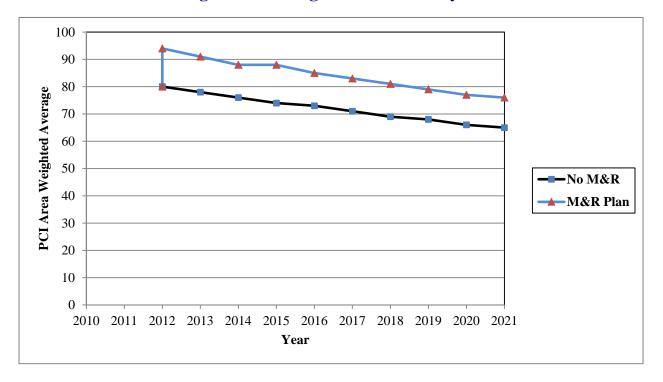
\* Costs are adjusted for inflation.

In addition to the immediate Major M&R needs, maintenance activities for pavement areas above critical PCI have been recommended by MicroPAVER for Year 1 and are shown in Table 6-3 below. The costs provided in Table 5-5 were used to calculate the costs associated with this work, which is intended to treat specific distress types. A more detailed table is provided in Appendix E.

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
Apron	AP	4140	WEATH/RAVEL	L	Surface Seal - Rejuvenating	5,986.70	SqFt	\$0.40	\$2,394.68
Taxiway Bravo	TW B	625	WEATH/RAVEL	L	Surface Seal - Rejuvenating	1,326.40	SqFt	\$0.40	\$530.55
Taxiway Echo	TW E	510	WEATH/RAVEL	L	Surface Seal - Rejuvenating	6,314.30	SqFt	\$0.40	\$2,525.74
Taxiway Foxtrot	TW F	615	WEATH/RAVEL	L	Surface Seal - Rejuvenating	81.00	SqFt	\$0.40	\$32.40
Taxiway T-Hangar	TW T-HANG	705	WEATH/RAVEL	М	Surface Seal - Coal Tar	5,652.10	SqFt	\$0.40	\$2,260.88
Taxiway T-Hangar	TW T-HANG	705	OIL SPILLAGE	Ν	Patching - AC Shallow	4,334.50	SqFt	\$2.90	\$12,570.07
Taxiway T-Hangar	TW T-HANG	705	WEATH/RAVEL	L	Surface Seal - Rejuvenating	24,747.20	SqFt	\$0.40	\$9,898.98
								Total =	\$30,213.30

## Table 6-3: Summary of Year 1 Maintenance Activities

The 10 year forecast results are shown in Figure 6-1, illustrating the effect on pavement condition (PCI) of doing no maintenance versus having unlimited funds and performing all M&R actions based on the policies.



### **Figure 6-1: Budget Scenario Analysis**

The following network level observations can be made from the figure above:

- The PCI will deteriorate from an average of 80 in 2012 to an average of 65 in ten years if no M&R activities are performed. Specific pavement sections may be closer to critical condition as identified by the immediate needs in Table IV. Estimated PCI ratings are presented in Appendix D.
- The PCI will remain at or above an average of 76 through the 10-year analysis period under the unlimited budget scenario. A 2021 PCI average of 76 with this scenario is 11 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about \$1,735,154.95.

#### 7. MAINTENANCE AND REHABILITATION PLAN

The M&R analysis results include activities that likely exceed a typical annual budget level. These activities would need to be evaluated for feasibility and desirability based on the airport's future plans. In an effort to identify appropriate budget levels, the 10 year M&R analysis was evaluated to determine levels needed to address several specific areas: preventive maintenance, major activities for pavements in poor condition (Major M&R for PCIs less than Critical), and activities that would be desirable to preserve good pavement conditions where they exist (Major M&R for PCI greater than or equal to Critical).

Table 7-1 provides the summary results under the critical PCI unlimited funding scenario.

Year	Preventative	Major M&R	Total Year Cost
2012	\$30,221.30	\$1,463,567.19	\$1,493,788.49
2013	\$29,293.28	\$0.00	\$29,293.28
2014	\$40,592.44	\$0.00	\$40,592.44
2015	\$38,010.02	\$202,108.32	\$240,118.34
2016	\$68,101.26	\$0.00	\$68,101.26
2017	\$97,644.60	\$0.00	\$97,644.60
2018	\$125,537.30	\$45,893.00	\$171,430.30
2019	\$157,363.00	\$0.00	\$157,363.00
2020	\$186,440.10	\$41,586.44	\$228,026.54
2021	\$215,174.78	\$0.00	\$215,174.78
Total	\$988,378.08	\$1,753,154.95	\$2,741,533.03

### Table 7-1: M&R Costs under Unlimited Funding Scenario

Note: Costs are adjusted for inflation.

Approximately 83% of the total Major M&R cost is required in the first year (2012). According to the 2011 inspections, the following pavement sections were in immediate need of Major M&R Activity:

- **Runway 4-22** Asphalt pavement mill and overlay activity.
- **Taxiway A** Asphalt pavement mill and overlay activity.
- **Taxiway B** Asphalt pavement mill and overlay activity.
- **Taxiway C** Asphalt pavement mill and overlay activity.
- **Taxiway D** Asphalt pavement mill and overlay activity.

The unlimited budget scenario provides the basis for estimating the total repair cost.

Appendix F provides details of M&R plan by year under the unlimited funding scenario, and the map of the 10-year M&R plan is provided in Appendix G. It is important to understand that the SAPMP is a network level tool and the M&R costs provided in this report are only for planning purposes.

#### 8. VISUAL AIDS

#### 8.1 System Inventory and Network Definition Drawings

The System Inventory and Network Definition CADD drawings, which show the airport pavement outline with Branch and Section boundaries and identify changes in the network pavement since the last inspection and the sampling plan, respectively, are included in Appendix A of this report.

#### 8.2 Condition Map

A Condition Map that has been prepared based on data linked to the airport's shape file is included in Appendix B. The Condition Map graphically show the inventory and condition of the airport via color coding shown on the shape file. The coding provides a visual representation that illustrates the PCIs for each pavement section.

#### 8.3 10-Year M&R Map

A 10-Year M&R Map that shows the summary of the M&R plan is attached in Appendix G.

#### 8.4 Photographs

Selected digital photographs taken during the pavement inspection are provided in Appendix H to provide visual support to special pavement conditions or distress observed during the inspection of the airport.

#### 9. RECOMMENDATIONS

Pavement condition inspections were performed at Peter O Knight Airport, and a 10-year M&R plan was developed based on the unlimited funding scenario.

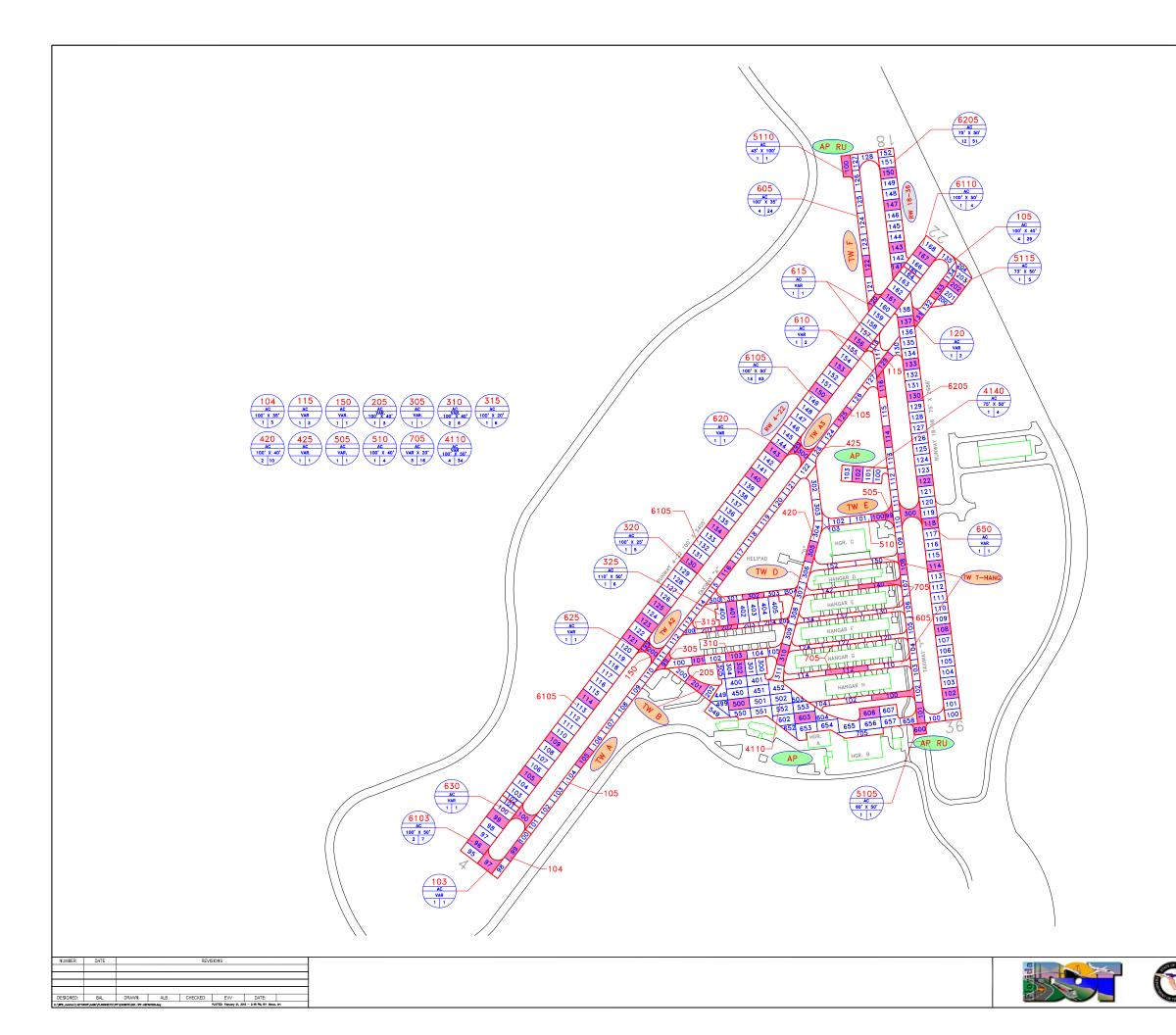
The following recommendations were made based on the 2011 condition inspection and M&R analysis results:

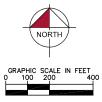
- **Runway 4-22** Asphalt pavement mill and overlay activity.
- **Taxiway A** Asphalt pavement mill and overlay activity.
- **Taxiway B** Asphalt pavement mill and overlay activity.
- **Taxiway C** Asphalt pavement mill and overlay activity.
- **Taxiway D** Asphalt pavement mill and overlay activity.

Further evaluation of these features is necessary in order to develop repair plans and timing for future budgets since these needs cannot be addressed with typical annual expenditures.

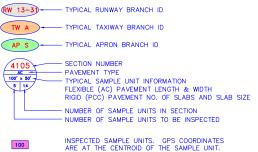
# **APPENDIX A**

# NETWORK DEFINITION MAP SYSTEM INVENTORY MAP PAVEMENT INVENTORY TABLE WORK HISTORY REPORT





### LEGEND



TOTAL SAMPLES INSPECTED = 71

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

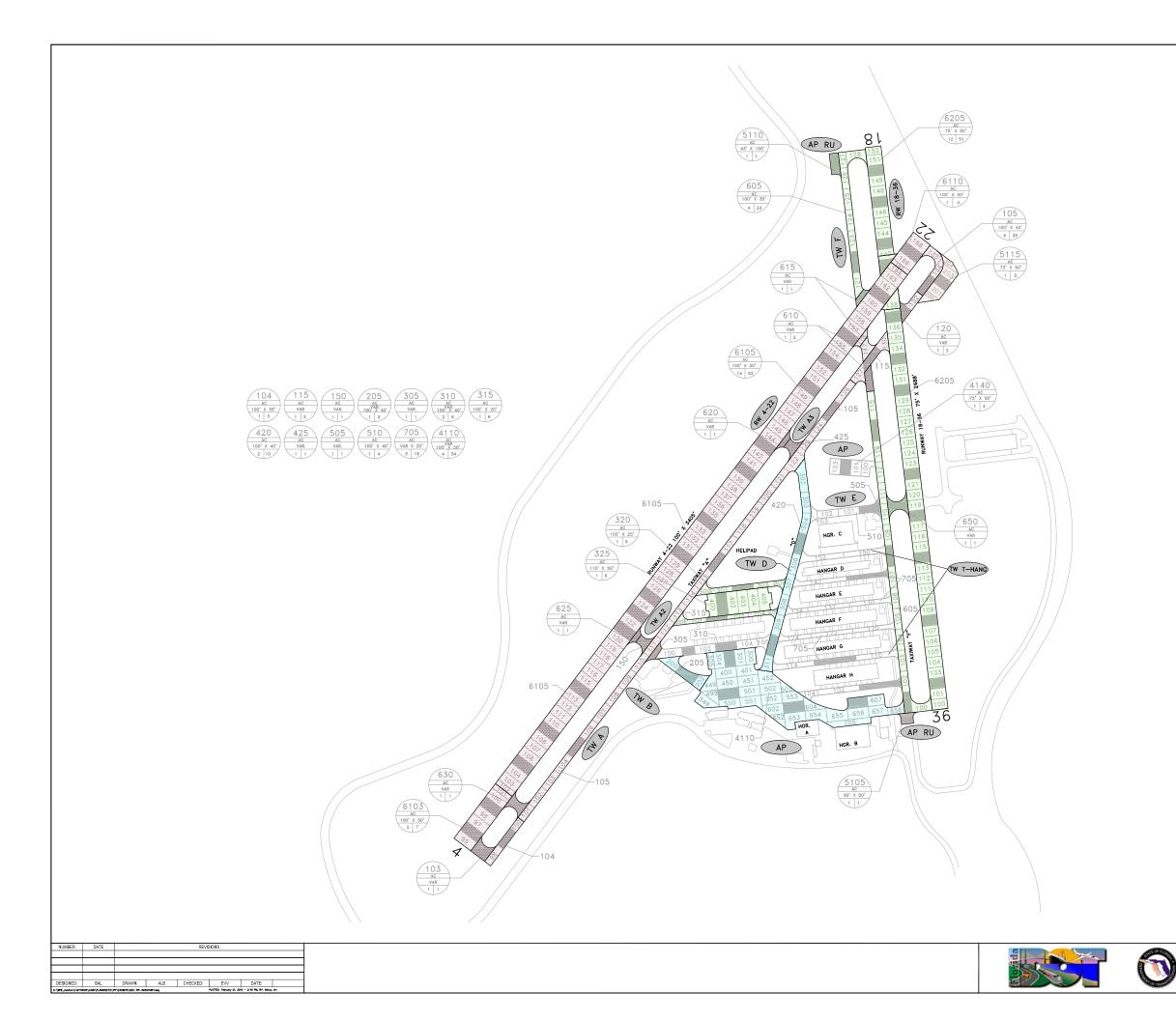


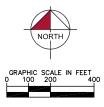
NETWORK DEFINITION MAP	IDENTIFIER
	TPF
PETER O. KNIGHT AIRPORT	
HILLSBOROUGH COUNTY, FLORIDA	FDOT DISTRICT
	17
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE	

Branch	Section	Sample	Latitude	Longitude
RW 18-36	6210	141	27.918459	-82.447936
RW 18-36	6205	102	27.912964	-82.447154
RW 18-36	6205	108	27.913783	-82.447267
RW 18-36	6205	114	27.914603	-82.447380
RW 18-36	6205	118	27.915149	-82.447455
RW 18-36	6205	122	27.915695	-82.447531
RW 18-36	6205	130	27.916787	-82.447681
RW 18-36	6205	133	27.917196	-82.447738
RW 18-36	6205	137	27.917759	-82.447816
RW 18-36	6205	143	27.918698	-82.447945
RW 18-36	6205	147	27.919244	-82.448021
RW 18-36	6205	150	27.919653	-82.448077
RW 4-22	6105	102	27.911550	-82.453510
RW 4-22	6105	105	27.911880	-82.453231
RW 4-22	6105	109	27.912320	-82.452858
RW 4-22	6105	114	27.912869	-82.452393
RW 4-22	6105	121	27.913638	-82.451741
RW 4-22	6105	123	27.913858	-82.451555
RW 4-22	6105	125	27.914078	-82.451369
RW 4-22	6105	130	27.914628	-82.450904
RW 4-22	6105	134	27.915067	-82.450531
RW 4-22	6105	140	27.915726	-82.449973
RW 4-22	6105	143	27.916056	-82.449694
RW 4-22	6105	150	27.916825	-82.449042
RW 4-22	6105	153	27.917155	-82.448763
RW 4-22	6105	156	27.917485	-82.448483
RW 4-22	6105	161	27.918034	-82.448018
RW 4-22	6105	166	27.918584	-82.447552
AP RU	5110	100	27.919736	-82.448677
AP RU	5105	600	27.912506	-82.447591
AP N	4140	102	27.915777	-82.448507
AP S	4135	204	27.912745	-82.450367
AP S	4125	508	27.912843	-82.449583
AP S	4120	104	27.912689	-82.450506
AP S	4115	102	27.912413	-82.448676
AP S	4110	203	27.912537	-82.448902
AP S	4110	308	27.912652	-82.449632
AP	4105	301	27.912725	-82.448299
TW AP	710	110	27.913275	-82.450085

### Sample Unit Centroid Coordinates

Branch	Section	Sampla	Latitude	Longitudo
		Sample		Longitude
TW T-HANG	705	100	27.912938	-82.447970
TW T-HANG	705	112	27.913255	-82.448652
TW T-HANG	705	140	27.914361	-82.448163
AP CONN TW	655	199	27.912615	-82.447744
TW F CONN	650	300	27.915280	-82.447739
TW A	630	99	27.911238	-82.453536
TW A2	625	199	27.913557	-82.451575
TW A3	620	299	27.916119	-82.449405
TW F	615	120	27.918002	-82.448283
TW F	610	116	27.916907	-82.448166
TW F	605	101	27.912710	-82.447587
TW F	605	108	27.914622	-82.447851
TW F	605	114	27.916260	-82.448077
TW F	605	122	27.918455	-82.448380
TW E	510	101	27.915202	-82.448459
TW E	510	100	27.915230	-82.448205
TW E	505	99	27.915248	-82.448038
TW A3	425	300	27.916038	-82.449289
TW D	420	310	27.913450	-82.449575
TW D	415	312	27.913009	-82.449692
TW D	410	502	27.915314	-82.449090
TW D	405	308	27.913982	-82.449415
TW AP	325	401	27.913986	-82.450315
TW AP	320	302	27.914206	-82.450012
TW AP	315	202	27.913798	-82.450393
TW C	310	101	27.913367	-82.450867
TW C	310	103	27.913433	-82.450252
TW C	305	99	27.913345	-82.451295
TW B	205	202	27.913059	-82.450837
TW A2	150	200	27.913478	-82.451458
TW A	120	131	27.917826	-82.447640
TW A	115	129	27.917309	-82.448070
TW A	105	105	27.912117	-82.452449
TW A	105	116	27.914535	-82.450401
TW A	105	125	27.916513	-82.448725
TW A	105	132	27.918015	-82.447449





#### CONSTRUCTION SINCE LAST INSPECTION & ANTICIPATED CONSTRUCTION ACTIVITY

CONSTRUCTION YEAR	LOCATION	WORK TYPE / PAVEMENT SECTION
2007	TAXIWAY A RUN-UP PAD	NEW ASPHALT PAVEMENT CONSTRUCTION
2008	RUNWAY 18-36 TAXIWAY F	ASPHALT PAVEMENT OVERLAY
2008	TAXIWAY F RUN-UPS	NEW ASPHALT PAVEMENT CONSTRUCTION
2008	TAXIWAY CENTER TAXIWAY E	NEW ASPHALT PAVEMENT CONSTRUCTION
2010	TAXIWAY C	ASPHALT PAVEMENT OVERLAY
2011	TAXIWAY B&D AND APRON	ASPHALT PAVEMENT RECONSTRUCTION
2012	RUNWAY 4-22 AND TAXIWAY A	ASPHALT PAVEMENT OVERLAY



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



### Table A-1: Pavement Inventory

Branch Name	Branch ID	Branch Use	Section ID	Length (ft)	Width (ft)	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Last Const. Date	Last Insp. Date	Total Samples
Apron	AP	APRON	4140	200	75	14,967	Р	AC	1/1/1986	12/1/2011	1
Apron	AP	APRON	4110	1500	100	150,952	Р	AC	1/1/2011	1/1/2011	14
Apron	AP RU	APRON	5115	210	73	16,251	Р	AC	1/1/2007	12/1/2011	1
Apron	AP RU	APRON	5105	15	200	3,154	Р	AAC	1/1/2008	12/1/2011	1
Apron	AP RU	APRON	5110	22	200	4,386	Р	AAC	1/1/2008	12/1/2011	1
Runway 18-36	RW 18-36	RUNWAY	6205	2500	75	191,017	S	AAC	1/1/2008	12/1/2011	47
Runway 4-22	RW 4-22	RUNWAY	6105	3105	100	310,500	Р	AAC	1/1/2001	12/1/2011	67
Runway 4-22	RW 4-22	RUNWAY	6103	325	100	32,500	Р	AC	1/1/2007	12/1/2011	2
Runway 4-22	RW 4-22	RUNWAY	6110	178	100	17,800	Р	AAC	1/1/2007	12/1/2011	18
Taxiway Alpha	TW A	TAXIWAY	105	2500	40	103,252	Р	AAC	1/1/1992	12/1/2011	31
Taxiway Alpha	TW A	TAXIWAY	103	100	50	5,616	Р	AC	1/1/2007	12/1/2011	1
Taxiway Alpha	TW A	TAXIWAY	104	262	35	9,170	Р	AC	1/1/2007	12/1/2011	1
Taxiway Alpha	TW A	TAXIWAY	630	100	40	4,673	Р	AC	1/1/2007	12/1/2011	1
Taxiway Alpha	TW A	TAXIWAY	115	270	40	11,155	Р	AAC	1/1/2008	12/1/2011	2
Taxiway Alpha	TW A	TAXIWAY	120	140	40	5,876	Р	AAC	1/1/2008	12/1/2011	1
Taxiway Bravo	TW B	TAXIWAY	150	60	50	3,015	Р	AAC	1/1/1992	12/1/2011	1
Taxiway Bravo	TW B	TAXIWAY	625	65	25	1,658	Р	AAC	1/1/2001	12/1/2011	1
Taxiway Bravo	TW B	TAXIWAY	205	280	40	11,793	Р	AC	1/1/2011	1/1/2011	3
Taxiway Charlie	TW C	TAXIWAY	310	425	40	17,091	Р	AC	1/1/1965	12/1/2011	5
Taxiway Charlie	TW C	TAXIWAY	305	150	40	6,914	Р	AAC	1/1/2010	1/1/2010	1
Taxiway Center	TW CENTER	TAXIWAY	315	500	20	11,056	Р	AC	1/1/2008	12/1/2011	1
Taxiway Center	TW CENTER	TAXIWAY	320	400	25	11,536	Р	AC	1/1/2008	12/1/2011	1

Branch Name	Branch ID	Branch Use	Section ID	Length (ft)	Width (ft)	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Last Const. Date	Last Insp. Date	Total Samples
Taxiway Center	TW CENTER	TAXIWAY	325	300	100	33,247	Р	AC	1/1/2008	12/1/2011	1
Taxiway Delta	TW D	TAXIWAY	425	75	40	3,373	Р	AAC	1/1/1992	12/1/2011	2
Taxiway Delta	TW D	TAXIWAY	620	65	25	1,965	Р	AAC	1/1/2001	12/1/2011	1
Taxiway Delta	TW D	TAXIWAY	420	1000	40	41,270	Р	AC	1/1/2011	1/1/2011	2
Taxiway Echo	TW E	TAXIWAY	510	275	40	11,126	Р	AC	1/1/1965	12/1/2011	3
Taxiway Echo	TW E	TAXIWAY	505	50	40	2,353	Р	AAC	1/1/2005	12/1/2011	1
Taxiway Echo	TW E	TAXIWAY	650	100	50	5,471	Р	AAC	1/1/2008	12/1/2011	1
Taxiway Foxtrot	TW F	TAXIWAY	615	100	40	4,039	А	AAC	1/1/2008	12/1/2011	1
Taxiway Foxtrot	TW F	TAXIWAY	605	2400	35	86,523	Р	AAC	1/1/2008	12/1/2011	22
Taxiway Foxtrot	TW F	TAXIWAY	610	200	35	7,582	Р	AAC	1/1/2008	12/1/2011	2
Taxiway T-Hangars	TW T-HANG	TAXIWAY	705	3500	20	72,024	Р	AC	1/1/1964	12/1/2011	15

### Table A-1: Pavement Inventory (Continued)

\* Note: If new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

\*Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

Date:01/	26/2012		story Re	port	1 of 6
Network: T		anch: AP (APRON)			Section: 4110 Surface: AC
	/2011 <b>Use:</b> AP	, ,	1.500.00 Ft	Width:	100.00 Ft <b>True Area:</b> 150.952.39 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2011 01/01/1987 01/01/1964	ML-OL IMPORTED IMPORTED	Mill and Overlay REPAIR BUILT	\$0	0.00	True False 1987 SEAL COAT True 1964 1" BIT 6" LIMEROCK
Network: TR L.C.D.: 01/01	PF Bra /1986 Use: AP	anch: AP (APRON) RON Rank: P Length:	200.00 Ft	Width:	<b>Section:</b> 4140 <b>Surface:</b> AC 75.00 Ft <b>True Area:</b> 14.966.77 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/1986	IMPORTED	BUILT		(,	True EST 1986 BIT
Network: TR L.C.D.: 01/01	PF Bra /2008 Use: AP	anch: AP RU (APRON) RON Rank: PLength:	15.00 Ft	Width:	<b>Section:</b> 5105 <b>Surface:</b> AAC 200.00 Ft <b>True Area:</b> 3.153.64 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2008 01/01/1987	ML-OL IMPORTED	Mill and Overlay BUILT	\$0	0.00 1.50	True True 1987: 1.5" AC ON 7" P211 ON 6" STAB. SUBGRADE
Network: TR L.C.D.: 01/01		anch: AP RU (APRON) RON Rank:P Length:	22.00 Ft	Width:	<b>Section:</b> 5110 <b>Surface:</b> AAC 200.00 Ft <b>True Area:</b> 4.385.84 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2008 01/01/1987	ML-OL IMPORTED	Mill and Overlay BUILT	\$0	0.00 1.50	True True 1987: 1.5" AC ON 7" P211 ON 6" STAB. SUBGRADE
Network: TR L.C.D.: 01/01	PF Bra /2007 Use: AP	anch: AP RU (APRON) RON Rank:P Length:	210.00 Ft	Width:	<b>Section:</b> 5115 <b>Surface:</b> AC 73.00 Ft <b>True Area:</b> 16.251.05 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2007	INITIAL	Initial Construction	\$0	0.00	True
Network: TR L.C.D.: 01/01	PF Bra /2008 Use: RL	anch: RW 18-36 (RUNWA' INWAY Rank:S Length:	Y 18-36) 2.500.00 Ft	Width:	<b>Section:</b> 6205 <b>Surface:</b> AAC 75.00 Ft <b>True Area:</b> 191.016.57 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2008 01/01/1986 01/01/1963	ML-OL IMPORTED IMPORTED	Mill and Overlay OVERLAY BUILT	\$0	0.00 1.50 1.00	True True 1986 1.5" P-401 OL True 1963 1" P-401 OL ON .5-1" BIT AND 6" SAND
Network: TR L.C.D.: 01/01	PF Bra /2007 Use: RL	anch: RW 4-22 (RUNWA' INWAY Rank:P Length:	Y 4-22) 325.00 Ft	Width:	<b>Section:</b> 6103 <b>Surface:</b> AC 100.00 Ft <b>True Area:</b> 32.500.00 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2007	INITIAL	Initial Construction	\$0	0.00	True
Network: TR L.C.D.: 01/01	PF Bra /2001 Use: RL	anch: RW 4-22 (RUNWA INWAY Rank: P Length:	Y 4-22) 3.105.00 Ft	Width:	<b>Section:</b> 6105 <b>Surface:</b> AAC 100.00 Ft <b>True Area:</b> 310.500.00 SaF
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R Comments
01/01/2001	OL-AF	Overlay - AC Fabric	\$0	2.00	True 2"AC with Asph Runbber Membr nterlayer/Existing

Date:01/	26/2012		story Re	port	2 of 6
01/01/1986 01/01/1960	IMPORTED IMPORTED	OVERLAY BUILT		1.00	True EST 1986 BIT OL True 1960 1" P-401 OL ON EXISTING PAV'T
Network: TR	PF Bra	anch: RW 4-22 (RUNWA)	Y 4-22)	Width:	<b>Section:</b> 6110 <b>Surface:</b> AAC
L.C.D.: 01/01	1/2007 Use: RU	JNWAY Rank:P Length:	178.00 Ft		100.00 Ft <b>True Area:</b> 17.800.00 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2007	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1992	IMPORTED	OVERLAY		1.50	True 1992 1.5" P-401 OL
01/01/1960	IMPORTED	BUILT		1.00	True 1960 1" P-401 OL ON EXISTING PAV'T
Network: TR L.C.D.: 01/01		anch: TW A (TAXIWA XIWAY Rank: P Length:	YA) 100.00 Ft	Width:	<b>Section:</b> 103 <b>Surface:</b> AC 50.00 Ft <b>True Area:</b> 5.615.69 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2007	INITIAL	Initial Construction	\$0	0.00	True
Network: TR	PF Bra	anch: TW A (TAXIWA	Y A)	Width:	<b>Section:</b> 104 <b>Surface:</b> AC
L.C.D.: 01/01	1/2007 Use: TA	XIWAY Rank:P Length:	262.00 Ft		35.00 Ft <b>True Area:</b> 9.170.00 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2007	INITIAL	Initial Construction	\$0	0.00	True
Network: TF	PF Bra	anch: TW A (TAXIWA	YA)	Width:	<b>Section:</b> 105 <b>Surface:</b> AAC
L.C.D.: 01/01	1/1992 Use: TA	XIWAY Rank:P Length:	2,500.00 Ft		40.00 Ft <b>True Area:</b> 103,252.19 SqF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/1992	IMPORTED	OVERLAY		1.00	True 1992 1" P-401 OL
01/01/1965	IMPORTED	BUILT		1.00	True 1965 1" P-401 6" P-211 28" GRANULAR
Network: TR L.C.D.: 01/01		anch: TW A (TAXIWA XIWAY Rank:P Length:	YA) 270.00 Ft	Width:	<b>Section:</b> 115 <b>Surface:</b> AAC 40.00 Ft <b>True Area:</b> 11.155.15 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008 01/01/1965	ML-OL IMPORTED	Mill and Overlay BUILT	\$0	0.00 1.00	True True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
<b>Network:</b> TR	PF Bra	anch: TW A (TAXIWA	YA)	Width:	<b>Section:</b> 120 <b>Surface:</b> AAC
<b>L.C.D.:</b> 01/01	1/2008 Use: TA	XIWAY Rank:P Length:	140.00 Ft		40.00 Ft <b>True Area:</b> 5.876.45 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1986	IMPORTED	OVERLAY		1.50	True 1986 1.5" P-401 OL
01/01/1965	IMPORTED	BUILT		1.00	True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
Network: TR	PF Bra	anch: TW A (TAXIWA	YA)	Width:	<b>Section:</b> 630 <b>Surface:</b> AC
L.C.D.: 01/01	1/2007 Use: TA	XIWAY Rank:P Length:	100.00 Ft		40.00 Ft <b>True Area:</b> 4.673.45 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2007	INITIAL	Initial Construction	\$0	0.00	True
Network: TR	PF Bra	anch: TW B (TAXIWA	YB)	Width:	Section: 150 Surface: AAC
L.C.D.: 01/01	1/1992 Use: TA	XIWAY Rank:P Length:	60.00 Ft		50.00 Ft True Area: 3.015.48 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/1992	ML-OL	Mill and Overlay	\$0	0.00	True

Date:01/	26/2012		story Re	port	3 of 6
01/01/1965	INITIAL	Initial Construction	\$0	0.00	True
Network: TR	PF Bra	anch: TW B (TAXIWA	YB)	Width:	<b>Section:</b> 205 <b>Surface:</b> AC
L.C.D.: 01/01	1/2011 Use: TA	XIWAY Rank: P Length:	280.00 Ft		40.00 Ft <b>True Area:</b> 11.793.45 SqF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2011 01/01/1987 01/01/1965	ML-OL IMPORTED IMPORTED	Mill and Overlay REPAIR BUILT	\$0	0.00 1.00	True False 1987 SEAL CAOT True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
Network: TF L.C.D.: 01/01		anch: TW B (TAXIWA XIWAY Rank: P Length:	YB) 65.00 Ft	Width:	Section: 625 Surface: AAC 25.00 Ft True Area: 1.657.98 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2001	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1992	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1965	INITIAL	Initial Construction	\$0	0.00	True
Network: TH	PF Bra	anch: TW C (TAXIWA	Y C)	Width:	Section: 305 Surface: AAC
L.C.D.: 01/01	1/2010 Use: TA	XIWAY Rank:P Length:	150.00 Ft		40.00 Ft True Area: 6.914.22 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2010	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1992	IMPORTED	OVERLAY		1.00	True 1992 1" P-401 OL
01/01/1965	IMPORTED	BUILT		1.00	True 1965 1" P-401 6" P-211 28" GRANULAR
Network: TR	PF Bra	anch: TW C (TAXIWA	Y C)	Width:	<b>Section:</b> 310 <b>Surface:</b> AC
L.C.D.: 01/01	1/1965 Use: TA	XIWAY Rank:P Length:	425.00 Ft		40.00 Ft <b>True Area:</b> 17.091.25 SqF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/1987 01/01/1965	IMPORTED IMPORTED	REPAIR BUILT		1.00	False 1987 SEAL COAT True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
Network: TR L.C.D.: 01/01	PF Bra 1/2008 Use: TA	•	Y CENTER) 500.00 Ft	Width:	<b>Section:</b> 315 <b>Surface:</b> AC 20.00 Ft <b>True Area:</b> 11.056.09 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	INITIAL	Initial Construction	\$0	0.00	True
Network: TF L.C.D.: 01/01	PF Bra 1/2008 Use: TA		Y CENTER) 400.00 Ft	Width:	Section: 320 Surface: AC 25.00 Ft True Area: 11.536.12 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	INITIAL	Initial Construction	\$0	0.00	True
Network: TF L.C.D.: 01/01	PF Bra 1/2008 Use: TA		Y CENTER) 300.00 Ft	Width:	<b>Section:</b> 325 <b>Surface:</b> AC 100.00 Ft <b>True Area:</b> 33.247.46 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	INITIAL	Initial Construction	\$0	0.00	True
Network: TR	PF Bra	anch: TW D (TAXIWA	YD <b>)</b>	Width:	<b>Section:</b> 420 <b>Surface:</b> AC
L.C.D.: 01/01	1/2011 Use: TA	XIWAY Rank: P Length:	1.000.00 Ft		40.00 Ft <b>True Area:</b> 41.269.85 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2011	ML-OL	Mill and Overlay	\$0	0.00	True

Date:01/	26/2012		story Re	port	4 of 6
01/01/1987 01/01/1964	IMPORTED IMPORTED	REPAIR BUILT		1.00	False 1987 SEAL COAT True 1964 1" P-401 6" P-211
Network: TR	PF Bra	anch: TW D (TAXIWA	YD)	Width:	Section: 425 Surface: AAC
L.C.D.: 01/01	1/1992 Use: TA	XIWAY Rank: P Length:	75.00 Ft		40.00 Ft True Area: 3.373.34 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/1992	IMPORTED	OVERLAY		1.00	True 1992 1" P-401 OL
01/01/1964	IMPORTED	BUILT		1.00	True 1964 1" P-201 6" LIMEROCK
Network: TR	PF Bra	anch: TW D (TAXIWA	Y D)	Width:	<b>Section:</b> 620 <b>Surface:</b> AAC
L.C.D.: 01/01	1/2001 Use: TA	XIWAY Rank: P Length:	65.00 Ft		25.00 Ft <b>True Area:</b> 1.964.54 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2001	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1992	ML-OL	Mill and Overlay	\$0		True
01/01/1965	INITIAL	Initial Construction	\$0		True
Network: TR L.C.D.: 01/01		anch: TW E (TAXIWA XIWAY Rank: P Length:	YE) 50.00 Ft	Width:	<b>Section:</b> 505 <b>Surface:</b> AAC 40.00 Ft <b>True Area:</b> 2.353.21 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2005 01/01/1986 01/01/1965	MI&OV IMPORTED IMPORTED	Mill & Overlay OVERLAY BUILT	\$0	2.00 1.50 1.00	True 2" AC / EXISTING BASE True 1986 1.5" BIT OL True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
Network: TR	PF Bra	anch: TW E (TAXIWA	YE)	Width:	<b>Section:</b> 510 <b>Surface:</b> AC
L.C.D.: 01/01	1/1965 Use: TA	XIWAY Rank: P Length:	275.00 Ft		40.00 Ft <b>True Area:</b> 11.125.79 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/1987 01/01/1965	IMPORTED IMPORTED	REPAIR BUILT		1.00	False 1987 SEAL COAT True 1965 1" BIT 6" LIMEROCK 28" GRANULAR
Network: TR	PF Bra	anch: TW E (TAXIWA	YE)	Width:	<b>Section:</b> 650 <b>Surface:</b> AAC
L.C.D.: 01/01	1/2008 Use: TA	XIWAY Rank: P Length:	100.00 Ft		50.00 Ft <b>True Area:</b> 5.470.82 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1986	ML-OL	Mill and Overlay	\$0		True
01/01/1963	INITIAL	Initial Construction	\$0		True
Network: TR	PF Bra	anch: TW F (TAXIWA	Y F)	Width:	<b>Section:</b> 605 <b>Surface:</b> AAC
L.C.D.: 01/01	1/2008 Use: TA	XIWAY Rank: P Length:	2.400.00 Ft		35.00 Ft <b>True Area:</b> 86.522.78 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008	ML-OL	Mill and Overlay	\$0	0.00	True
01/01/1987	IMPORTED	BUILT		1.50	True 1987 1.5" BIT 7" P-211 6" STAB BASE
Network: TR	PF Bra	anch: TW F (TAXIWA	YF)	Width:	<b>Section:</b> 610 <b>Surface:</b> AAC
L.C.D.: 01/01	1/2008 Use: TA	XIWAY Rank: P Length:	200.00 Ft		35.00 Ft <b>True Area:</b> 7.582.16 SaF
Work	Work	Work	Cost	Thickness	Major
Date	Code	Description		(in)	M&R Comments
01/01/2008 01/01/1987	ML-OL IMPORTED	Mill and Overlay BUILT	\$0	0.00 1.50	True True 1987 1.5" BIT 7" SOIL CEMENT 6" STAB BASE

Date:01/	26/2012	Work History Report       5 of 6         Pavement Database:       5						
<b>Network:</b> TI <b>L.C.D.:</b> 01/01	PF Br 1/2008 Use: TA	anch: TW F (TAXIWA XIWAY Rank: A Length:		Width:		<b>ction:</b> 615 <b>Surface:</b> AAC .00 Ft <b>True Area:</b> 4.038.95 SqF		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments		
01/01/2008 01/01/1987	ML-OL INITIAL	Mill and Overlay Initial Construction	\$0 \$0		True True			
Network: TPF Branch: TW T-HANG (TAXIWA L.C.D.: 01/01/1964 Use: TAXIWAY Rank:P Length:			y to t-hangars 3.500.00 Ft	S) Width:		<b>ction:</b> 705 <b>Surface:</b> AC .00 Ft <b>True Area:</b> 72.024.05 SaF		
Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments		
01/01/1964	IMPORTED	BUILT			True	EST 1964 BIT		

## Work History Report

Pavement Database:

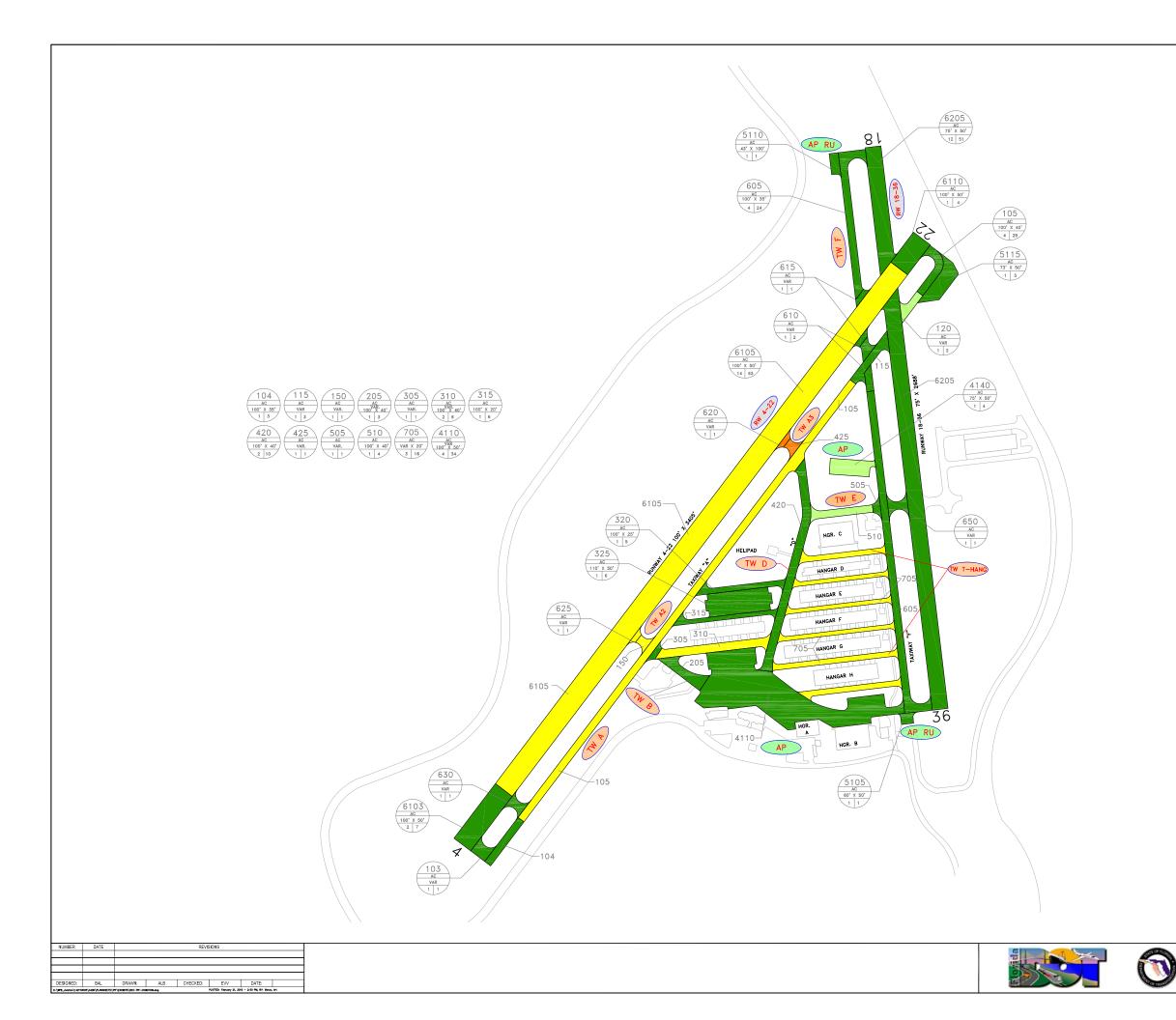
### Summary:

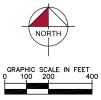
Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	20	1,073,109.10	1.11	.21
Initial Construction	13	140,197.63	.00	.00
Mill & Overlay	1	2,353.21	2.00	
Mill and Overlay	20	563,663.61	.00	.00
OVERLAY	8	641,085.98	1.29	.27
Overlay - AC Fabric	1	310,500.00	2.00	
REPAIR	5	232,232.73		

STD = Standard Deviation

# **APPENDIX B**

## 2012 CONDITION MAP PAVEMENT CONDITION INDEX TABLE





# LEGEND



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



Branch Name	Branch ID	Branch Use	Section ID	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Total Samples Inspected	Total Samples	PCI	PCI Category
Apron	AP	APRON	4140	14,967	Р	AC	1	1	72	Satisfactory
Apron	AP	APRON	4110	150,952	Р	AC	1	14	100	Good
Apron	AP RU	APRON	5115	16,251	Р	AC	1	1	100	Good
Apron	AP RU	APRON	5105	3,154	Р	AAC	1	1	95	Good
Apron	AP RU	APRON	5110	4,386	Р	AAC	1	1	92	Good
Runway 18-36	RW 18-36	RUNWAY	6205	191,017	S	AAC	12	47	95	Good
Runway 4-22	RW 4-22	RUNWAY	6105	310,500	Р	AAC	14	67	65	Fair
Runway 4-22	RW 4-22	RUNWAY	6103	32,500	Р	AC	2	2	100	Good
Runway 4-22	RW 4-22	RUNWAY	6110	17,800	Р	AAC	1	18	100	Good
Taxiway Alpha	TW A	TAXIWAY	105	103,252	Р	AAC	4	31	57	Fair
Taxiway Alpha	TW A	TAXIWAY	103	5,616	Р	AC	1	1	100	Good
Taxiway Alpha	TW A	TAXIWAY	104	9,170	Р	AC	1	1	100	Good
Taxiway Alpha	TW A	TAXIWAY	630	4,673	Р	AC	1	1	100	Good
Taxiway Alpha	TW A	TAXIWAY	115	11,155	Р	AAC	1	2	95	Good
Taxiway Alpha	TW A	TAXIWAY	120	5,876	Р	AAC	1	1	83	Satisfactory
Taxiway Bravo	TW B	TAXIWAY	150	3,015	Р	AAC	1	1	64	Fair
Taxiway Bravo	TW B	TAXIWAY	625	1,658	Р	AAC	1	1	70	Fair
Taxiway Bravo	TW B	TAXIWAY	205	11,793	Р	AC	1	3	100	Good
Taxiway Charlie	TW C	TAXIWAY	310	17,091	Р	AC	2	5	59	Fair
Taxiway Charlie	TW C	TAXIWAY	305	6,914	Р	AAC	1	1	100	Good
Taxiway Center	TW CENTER	TAXIWAY	315	11,056	Р	AC	1	1	95	Good
Taxiway Center	TW CENTER	TAXIWAY	320	11,536	Р	AC	1	1	100	Good

### **Table B-1: Pavement Condition Index**

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft <sup>2</sup> )	Section Rank	Surface Type	Total Samples Inspected	Total Samples	PCI	PCI Category
Taxiway Center	TW CENTER	TAXIWAY	325	33,247	Р	AC	1	1	96	Good
Taxiway Delta	TW D	TAXIWAY	425	3,373	Р	AAC	1	2	46	Poor
Taxiway Delta	TW D	TAXIWAY	620	1,965	Р	AAC	1	1	52	Poor
Taxiway Delta	TW D	TAXIWAY	420	41,270	Р	AC	1	2	100	Good
Taxiway Echo	TW E	TAXIWAY	510	11,126	Р	AC	1	3	74	Satisfactory
Taxiway Echo	TW E	TAXIWAY	505	2,353	Р	AAC	1	1	91	Good
Taxiway Echo	TW E	TAXIWAY	650	5,471	Р	AAC	1	1	93	Good
Taxiway Foxtrot	TW F	TAXIWAY	615	4,039	А	AAC	1	1	90	Good
Taxiway Foxtrot	TW F	TAXIWAY	605	86,523	Р	AAC	4	22	97	Good
Taxiway Foxtrot	TW F	TAXIWAY	610	7,582	Р	AAC	1	2	95	Good
Taxiway T-Hangars	TW T-HANG	TAXIWAY	705	72,024	Р	AC	3	15	68	Fair

### Table B-1: Pavement Condition Index (Continued)

Note: If new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

\* Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

# **APPENDIX C**

## **BRANCH CONDITION REPORT SECTION CONDITION REPORT**

Date: 1 /26/2012		<b>Bra</b> Paven	1 of 2					
Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
AP (APRON)	2	1,700.00	87.50	165,919.16	APRON	86.00	14.00	97.47
AP RU (APRON)	3	247.00	157.67	23,790.53	APRON	95.67	3.30	97.86
RW 18-36 (RUNWAY 18-36)	1	2,500.00	75.00	191,016.57	RUNWAY	95.00	0.00	95.00
RW 4-22 (RUNWAY 4-22)	3	3,608.00	100.00	360,800.00	RUNWAY	88.33	16.50	69.88
TW A (TAXIWAY A)	6	3,372.00	40.83	139,742.93	TAXIWAY	89.17	15.59	67.11
TW B (TAXIWAY B)	3	405.00	38.33	16,466.91	TAXIWAY	78.00	15.75	90.39
TW C (TAXIWAY C)	2	575.00	40.00	24,005.47	TAXIWAY	79.50	20.50	70.81
TW CENTER (TAXIWAY CENTER)	3	1,200.00	48.33	55,839.67	TAXIWAY	97.00	2.16	96.63
TW D (TAXIWAY D)	3	1,140.00	35.00	46,607.73	TAXIWAY	66.00	24.17	94.07
TW E (TAXIWAY E)	3	425.00	43.33	18,949.82	TAXIWAY	86.00	8.52	81.60
TW F (TAXIWAY F)	3	2,700.00	36.67	98,143.89	TAXIWAY	94.00	2.94	96.56
TW T-HANG (TAXIWAY TO T-HANGARS)	1	3,500.00	20.00	72,024.05	TAXIWAY	68.00	0.00	68.00

Date: 1 /26/2012

## **Branch Condition Report**

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	5	189,709.69	91.80	10.36	97.52
RUNWAY	4	551,816.57	90.00	14.58	78.58
TAXIWAY	24	471,780.47	84.38	17.57	81.11
All	33	1,213,306.73	86.18	16.59	82.52

STD = Standard Deviation

Date: 1 /26/2012			ent Datal	on Conc		<b>n R</b> (	•		1 of	3
Branch ID	Section ID	Last Const. Date	Surface	Use	1	Lanes	, True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
AP (APRON)	4110	01/01/2011	AC	APRON	Р	0	150,952.39	01/01/2011	0	100.00
AP (APRON)	4140	01/01/1986	AC	APRON	Р	0	14,966.77	12/01/2011	25	72.00
AP RU (APRON)	5105	01/01/2008	AAC	APRON	Р	0	3,153.64	12/01/2011	3	95.00
AP RU (APRON)	5110	01/01/2008	AAC	APRON	Р	0	4,385.84	12/01/2011	3	92.00
AP RU (APRON)	5115	01/01/2007	AC	APRON	Р	0	16,251.05	12/01/2011	4	100.00
RW 18-36 (RUNWAY 18-36)	6205	01/01/2008	AAC	RUNWAY	s	0	191,016.57	12/01/2011	3	95.00
RW 4-22 (RUNWAY 4-22)	6103	01/01/2007	AC	RUNWAY	Р	0	32,500.00	12/01/2011	4	100.00
RW 4-22 (RUNWAY 4-22)	6105	01/01/2001	AAC	RUNWAY	Р	0	310,500.00	12/01/2011	10	65.00
RW 4-22 (RUNWAY 4-22)	6110	01/01/2007	AAC	RUNWAY	Р	0	17,800.00	12/01/2011	4	100.00
TW A (TAXIWAY A)	103	01/01/2007	AC	TAXIWAY	Р	0	5,615.69	12/01/2011	4	100.00
TW A (TAXIWAY A)	104	01/01/2007	AC	TAXIWAY	Р	0	9,170.00	12/01/2011	4	100.00
TW A (TAXIWAY A)	105	01/01/1992	AAC	TAXIWAY	Р	0	103,252.19	12/01/2011	19	57.00
TW A (TAXIWAY A)	115	01/01/2008	AAC	TAXIWAY	Р	0	11,155.15	12/01/2011	3	95.00
TW A (TAXIWAY A)	120	01/01/2008	AAC	TAXIWAY	Р	0	5,876.45	12/01/2011	3	83.00
TW A (TAXIWAY A)	630	01/01/2007	AC	TAXIWAY	Р	0	4,673.45	12/01/2011	4	100.00
TW B (TAXIWAY B)	150	01/01/1992	AAC	TAXIWAY	Р	0	3,015.48	12/01/2011	19	64.00
TW B (TAXIWAY B)	205	01/01/2011	AC	TAXIWAY	Р	0	11,793.45	01/01/2011	0	100.00
TW B (TAXIWAY B)	625	01/01/2001	AAC	TAXIWAY	Р	0	1,657.98	12/01/2011	10	70.00
TW C (TAXIWAY C)	305	01/01/2010	AAC	TAXIWAY	Р	0	6,914.22	01/01/2010	0	100.00
TW C (TAXIWAY C)	310	01/01/1965	AC	TAXIWAY	Р	0	17,091.25	12/01/2011	46	59.00
TW CENTER (TAXIWAY CENTER)	315	01/01/2008	AC	TAXIWAY	Р	0	11,056.09	12/01/2011	3	95.00
TW CENTER (TAXIWAY CENTER)	320	01/01/2008	AC	TAXIWAY	Р	0	11,536.12	12/01/2011	3	100.00
TW CENTER (TAXIWAY CENTER)	325	01/01/2008	AC	TAXIWAY	Р	0	33,247.46	12/01/2011	3	96.00
TW D (TAXIWAY D)	420	01/01/2011	AC	TAXIWAY	Р	0	41,269.85	01/01/2011	0	100.00
TW D (TAXIWAY D)	425	01/01/1992	AAC	TAXIWAY	Р	0	3,373.34	12/01/2011	19	46.00
TW D (TAXIWAY D)	620	01/01/2001	AAC	TAXIWAY	Р	0	1,964.54	12/01/2011	10	52.00
TW E (TAXIWAY E)	505	01/01/2005	AAC	TAXIWAY	Р	0	2,353.21	12/01/2011	6	91.00

Date: 1 /26/2012		Section Condition Report       2         Pavement Database:       NetworkID: TPF											
Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI			
TW E (TAXIWAY E)	510	01/01/1965	AC	TAXIWAY	Ρ	0	11,125.79	12/01/2011	46	74.00			
TW E (TAXIWAY E)	650	01/01/2008	AAC	TAXIWAY	Р	0	5,470.82	12/01/2011	3	93.00			
TW F (TAXIWAY F)	605	01/01/2008	AAC	TAXIWAY	Ρ	0	86,522.78	12/01/2011	3	97.00			
TW F (TAXIWAY F)	610	01/01/2008	AAC	TAXIWAY	Р	0	7,582.16	12/01/2011	3	95.00			
TW F (TAXIWAY F)	615	01/01/2008	AAC	TAXIWAY	А	0	4,038.95	12/01/2011	3	90.00			
TW T-HANG (TAXIWAY TO <del>T HANGARS)</del>	705	01/01/1964	AC	TAXIWAY	Ρ	0	72,024.05	12/01/2011	47	68.00			

Date: 1 /26/2012

## Section Condition Report

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Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	0.00	210,929.91	4	100.00	0.00	100.00
03-05	3.33	461,052.22	18	95.89	4.40	96.26
06-10	9.00	316,475.73	4	69.50	14.04	65.14
16-20	19.00	109,641.01	3	55.67	7.41	56.85
21-25	25.00	14,966.77	1	72.00	0.00	72.00
over 40	46.33	100,241.09	3	67.00	6.16	67.13
All	9.61	1,213,306.73	33	86.18	16.59	82.52

# **APPENDIX D**

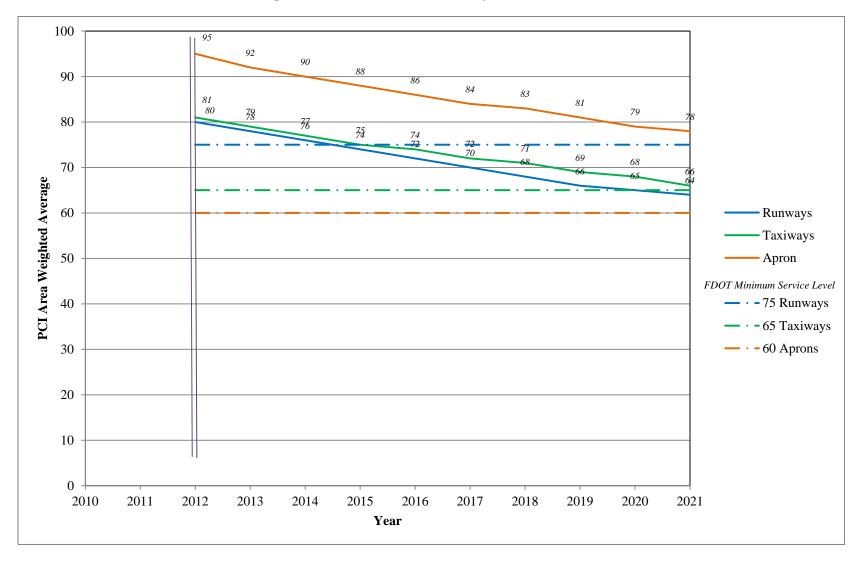
## PAVEMENT CONDITION PREDICTION TABLE PREDICTED PCI BY PAVEMENT USE GRAPH

		Section	Current					PCI Fo	recast				
Branch Name	Branch ID	ID	PCI	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Apron	AP	4110	100	96	94	92	90	88	86	84	82	80	79
Apron	AP	4140	72	71	70	69	68	66	65	64	63	62	61
Run-Up Apron	AP RU	5105	95	94	92	90	88	86	84	83	81	80	79
Run-Up Apron	AP RU	5110	92	91	89	87	85	84	82	81	80	78	77
Run-Up Apron	AP RU	5115	100	99	96	94	92	89	87	85	84	82	80
Runway 18-36	RW 18-36	6205	95	93	89	86	83	80	78	76	73	71	70
Runway 4-22	RW 4-22	6103	100	99	97	96	94	92	90	88	86	84	81
Runway 4-22	RW 4-22	6105	65	64	63	62	61	60	59	58	57	56	56
Runway 4-22	RW 4-22	6110	100	98	94	90	87	84	81	79	76	74	72
Taxiway Alpha	TW A	103	100	99	96	94	92	90	88	87	85	83	82
Taxiway Alpha	TW A	104	100	99	96	94	92	90	88	87	85	83	82
Taxiway Alpha	TW A	105	57	56	55	53	51	49	48	46	44	42	41
Taxiway Alpha	TW A	115	95	93	90	87	85	82	80	79	77	75	74
Taxiway Alpha	TW A	120	83	82	80	78	76	75	73	72	71	70	69
Taxiway Alpha	TW A	630	100	99	96	94	92	90	88	87	85	83	82
Taxiway Bravo	TW B	150	64	64	63	62	61	61	60	59	57	56	54
Taxiway Bravo	TW B	205	100	97	95	92	91	89	87	85	83	82	80
Taxiway Bravo	TW B	625	70	69	69	68	67	67	66	66	65	64	64
Taxiway Charlie	TW C	305	100	92	89	86	84	81	79	78	76	75	73
Taxiway Charlie	TW C	310	59	58	57	56	55	54	53	52	51	50	49
Taxiway Center	TW CENTER	315	95	94	92	90	88	86	84	83	81	79	78
Taxiway Center	TW CENTER	320	100	99	96	94	92	90	88	87	85	83	82

### **Table D-1: Pavement Condition Prediction**

Branch Name	Branch ID	Section	Current					PCI Fo	recast				
branch Name	Branch ID	ID	PCI	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Taxiway Center	TW CENTER	325	96	95	93	91	89	87	85	83	82	80	79
Taxiway Delta	TW D	420	100	97	95	92	91	89	87	85	83	82	80
Taxiway Delta	TW D	425	46	45	43	41	40	38	36	34	33	31	29
Taxiway Delta	TW D	620	52	51	49	47	46	44	42	40	38	37	35
Taxiway Echo	TW E	505	91	89	87	84	82	80	78	76	75	74	72
Taxiway Echo	TW E	510	74	73	72	71	69	68	67	66	65	64	63
Taxiway Echo	TW E	650	93	92	90	88	87	85	83	81	79	78	76
Taxiway Foxtrot	TW F	605	97	95	92	89	86	84	82	80	78	76	75
Taxiway Foxtrot	TW F	610	95	93	90	87	85	82	80	79	77	75	74
Taxiway Foxtrot	TW F	615	90	88	86	83	81	79	77	76	74	73	72
Taxiway T-Hangars	TW T-HANG	705	68	67	66	65	64	63	62	61	60	59	58

### Table D-1: Pavement Condition Prediction (Continued)



### Figure D-1: Predicted PCI by Pavement Use

# **APPENDIX E**

## YEAR 1 MAINTENANCE ACTIVITIES TABLE

Table E-1:	Year	1	Maintenance	Activities
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Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Work Quantity Unit		Unit Cost	Work Cost
Apron	AP	4140	WEATH/RAVEL	L	Surface Seal - Rejuvenating	5,986.70	SqFt	\$0.40	\$2,394.68
Taxiway Bravo	TW B	625	WEATH/RAVEL	L	Surface Seal - Rejuvenating	1,326.40	SqFt	\$0.40	\$530.55
Taxiway Echo	TW E	510	WEATH/RAVEL	L	Surface Seal - Rejuvenating	6,314.30	SqFt	\$0.40	\$2,525.74
Taxiway Foxtrot	TW F	615	WEATH/RAVEL	L	Surface Seal - Rejuvenating	81.00	SqFt	\$0.40	\$32.40
Taxiway T-Hangar	TW T-HANG	705	WEATH/RAVEL	М	Surface Seal - Coat Tar	5,652.10	SqFt	\$0.40	\$2,260.88
Taxiway T-Hangar	TW T-HANG	705	OIL SPILLAGE	Ν	Patching - AC Shallow	4,334.50	SqFt	\$2.90	\$12,570.07
Taxiway T-Hangar	TW T-HANG	705	WEATH/RAVEL	L	Surface Seal - Rejuvenating	24,747.20	SqFt	\$0.40	\$9,898.98
								Total =	\$30,213.30

# **APPENDIX F**

### MAJOR M&R PLAN BY YEAR UNDER UNLIMITED FUNDING SCENARIO TABLE

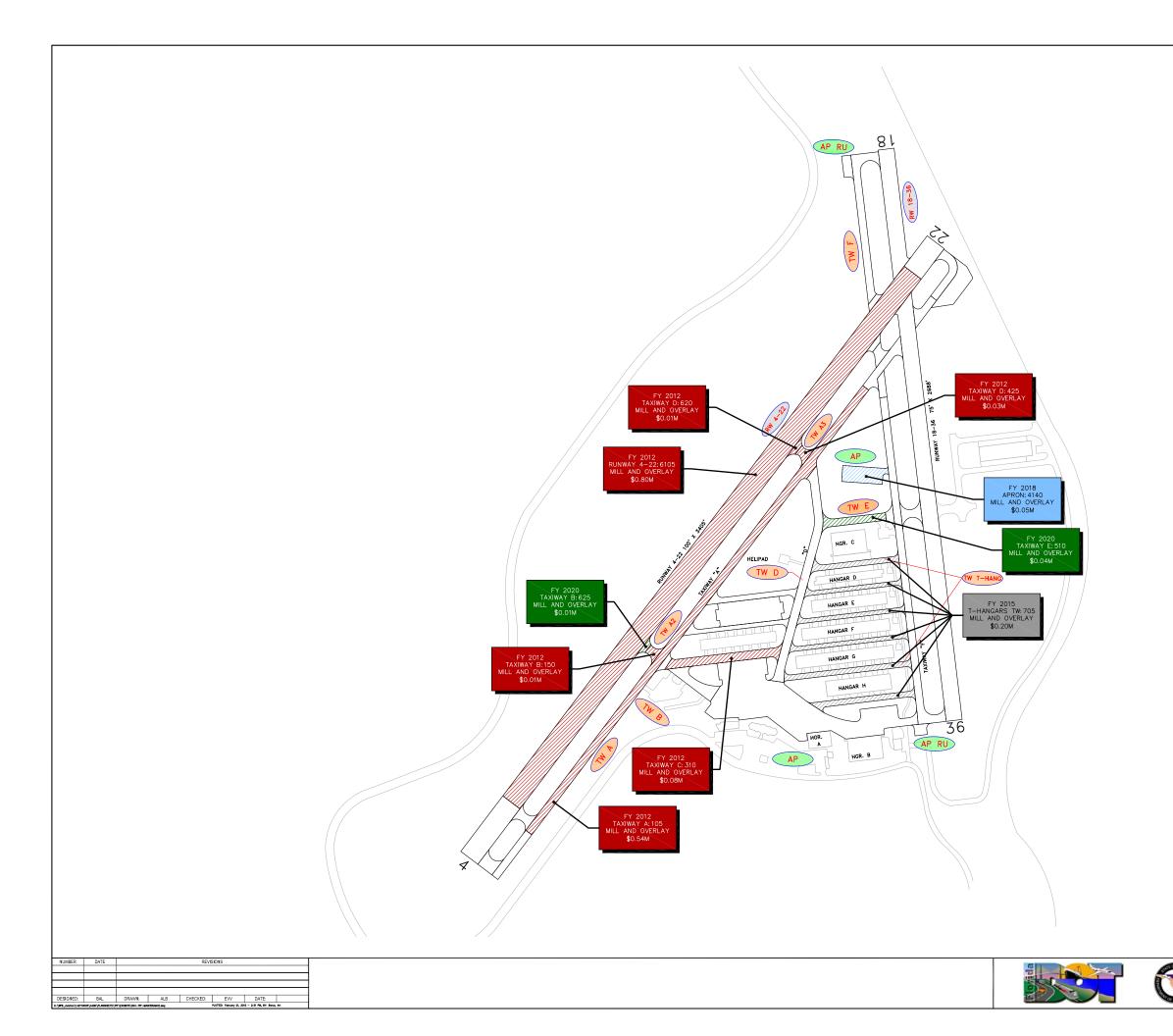
Year	Branch Name	Section ID	Surface Type	Section Area (ft <sup>2</sup> )	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2012	Runway 4-22	6105	AAC	310,500	\$797,363.94	64	Mill and Overlay	100
2012	Taxiway A	105	AAC	103,252	\$542,280.73	56	Mill and Overlay	100
2012	Taxiway B	150	AAC	3,015	\$7,743.75	64	Mill and Overlay	100
2012	Taxiway C	310	AC	17,091	\$76,329.55	58	Mill and Overlay	100
2012	Taxiway D	425	AAC	3,373	\$25,671.13	45	Mill and Overlay	100
2012	Taxiway D	620	AAC	1,965	\$14,178.09	51	Mill and Overlay	100
2015	T-Hangars Taxiway	705	AC	72,024	\$202,108.32	64	Mill and Overlay	100
2018	Apron	4140	AC	14,967	\$45,893.00	64	Mill and Overlay	100
2020	Taxiway B	625	AAC	1,658	\$5,393.52	64	Mill and Overlay	100
2020	Taxiway E	510	AC	11,126	\$36,192.92	64	Mill and Overlay	100
Total \$1,753,154.95 59								100

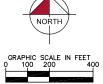
### Table F-1: Major M&R Plan by Year under Unlimited Funding Scenario

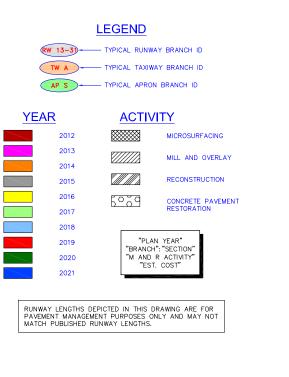
\* Costs are adjusted for inflation.

# **APPENDIX G**

10-YEAR M&R MAP









10-YEAR M&R MAP	
PETER O. KNIGHT AIRPORT HILLSBOROUGH COUNTY. FLORIDA	FDOT DISTRICT
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE	7

# **APPENDIX H**

PHOTOGRAPHS



Runway 18-36, Section 6205, Sample Unit 114 - Low severity (48) Longitudinal and Transverse Cracking



Taxiway E, Section 510, Sample Unit 100 – Low severity (48) Longitudinal and Transverse Cracking, Low severity (52) Weathering and Raveling



Runway 4-22, Section 6105, Sample Unit 153 – Low severity (48) Longitudinal and Transverse Cracking, Low severity (50) Patching, Low and medium severity (52) Weathering and Raveling



Runway 4-22, Section 6105, Sample Unit 114 – Low and medium severity (48) Longitudinal and Transverse Cracking, Medium severity (50) Patching, Low severity (52) Weathering and Raveling



Taxiway A, Section 105, Sample Unit 116 – Low severity (48) Longitudinal and Transverse Cracking, Low and medium severity (52) Weathering and Raveling



Taxiway D, Section 425, Sample Unit 300 – Low severity (48) Longitudinal and Transverse Cracking, Low and medium severity (52) Weathering and Raveling, Low severity (43) Block Cracking



Taxiway B, Section 310, Sample Unit 101 – Low severity (43) Block Cracking, Low severity (52) Weathering and Raveling

# **APPENDIX I**

PCI RE-INSPECTION REPORT

Branch: AP	Name: APRON		Use: APRON	Area:	165,919.16SqFt
Section: 4110 Surface: AC Area: 150,952.39Sq Shoulder: Stre Section Comments:	e ,	Zone: Width: Lanes: 0	To: - Category: 100.00Ft	Rank: P	Last Const.: 1/1/201
Last Insp. Date3/14/1 Conditions: PCI:74.0	· · ·	ed: 1			

Sample Number: 203	Туре: к	Area:	5,000.00SqFt		PCI = 74
Sample Comments:					
41 ALLIGATOR CR		$\mathbb{L}$	20.00	SqFt	Comments:
45 DEPRESSION		М	40.00	SqFt	Comments:
48 L & T CR		L	282.00	Ft	Comments:

Network: TPF Name: PETER O. KNIGHT AIRP	ORT			
Branch: AP Name: APRON		Use: APRON	Area: 10	65,919.16SqFt
Section: 4140 of 2 From: - Surface: AC Family: FDOT-RL-AP-AC Area: 14,966.77SqFt Length: 200.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments: Last Insp. Dat(12/1/2011 Total Samples: 1 Sur Conditions: PCI:72.00   Inspection Comments:	Zone: Width: Lanes: 0	To: - Category: 75.00Ft	Rank: P	Last Const.: 1/1/1986
Sample Number: 102 Type: R Sample Comments:	Area: 3,750.	00SqFt 32.01 Ft	PCI = 72 Comments:	

Network: TPF	Name: PETER O. KNIGHT AIRI	PORT			
Branch: AP RU	Name: APRON		Use: APRON	Area:	23,790.53SqFt
Section: 5105 Surface: AAC Area: 3,153.64SqF Shoulder: Stree Section Comments:	of 3 From: - Family: FDOT-RL-AP-AAC t Length: 15.00Ft et Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 200.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/20 Conditions: PCI:95.00 Inspection Comments:	1	rveyed: 1			
Sample Number: 60 Sample Comments:	0 Type: R L/TRANSVERSE CRACKING	Area: 3,000.0	00SqFt 24.01 Ft	PCI = 95 Comments	5 <b>:</b>

FDOT Report Generated Date: 1/26/2012 Site Name:

Network: TPF	Name: PETER O. KNIGHT AIRI	OKI			
Branch: AP RU	Name: APRON		Use: APRON	Area:	23,790.53SqFt
Section: 5110 Surface: AAC Area: 4,385.84SqFt Shoulder: Stree Section Comments:	of 3 From: - Family: FDOT-RL-AP-AAC Length: 22.00Ft t Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 200.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Dat(12/1/201 Conditions: PCI:92.00 Inspection Comments:	1	rveyed: 1			
Sample Number: 100 Sample Comments:	Type: R	Area: 4,429.0	00SqFt	PCI = 92	

48 LONGITUDINAL/TRANSVERSE CRACKING L 96.02 Ft Comments:

Network: TPF	Name: PETER O. KNIGHT AIRF	PORT			
Branch: AP RU	Name: APRON		Use: APRON	Area:	23,790.53SqFt
Section: 5115 Surface: AC Area: 16,251.05SqFt Shoulder: Street ' Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC Length: 210.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 73.00Ft	Rank: P	Last Const.: 1/1/2007
Last Insp. Date12/1/2011 Conditions: PCI:100.00   Inspection Comments:	Total Samples: 1 Sur	rveyed: 1			
Sample Number: 202 Sample Comments: <no distresses=""></no>	Type: R	Area: 3,650.	00SqFt	PCI = 100	

Network: TPF Name: PETER O. KNIGHT A	AIRPORT			
Branch: RW 18-36 Name: RUNWAY 18-36		Use: RUNWAY	Area:	191,016.57SqFt
Section: 6205 of 1 From: - Surface: AAC Family: FDOT-RL-RW-AA Area: 191,016.57SqFt Length: 2,500.00 Shoulder: Street Type: Grade: 0.00 Section Comments:		To: - Category: 75.00Ft	Rank: s	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Total Samples: 47 Conditions: PCI:95.00   Inspection Comments:	Surveyed: 12			
Sample Number: 102 Type: R Sample Comments:	Area: 3,75	50.00SqFt	PCI = 96	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	24.01 Ft	Comments	:
Sample Number: 108 Type: R Sample Comments:	Area: 3,75	50.00SqFt	PCI = 90	
50 PATCHING 48 LONGITUDINAL/TRANSVERSE CRACKING	L L	70.00 SqFt 27.01 Ft	Comments Comments	
Sample Number: 114 Type: R	Area: 3,75	50.00SqFt	PCI = 95	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	43.01 Ft	Comments	:
Sample Number: 118 Type: R	Area: 3,75	50.00SqFt	PCI = 94	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	56.01 Ft	Comments	:
Sample Number: 122 Type: R	Area: 3,75	50.00SqFt	PCI = 94	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	47.01 Ft	Comments	:
Sample Number: 130 Type: R Sample Comments:	Area: 3,75	50.00SqFt	PCI = 98	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	2.00 Ft	Comments	:
Sample Number: 133 Type: R Sample Comments:	Area: 3,75	50.00SqFt	PCI = 94	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	47.01 Ft	Comments	:
Sample Number: 137 Type: R	Area: 3,75	50.00SqFt	PCI = 98	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	1.00 Ft	Comments	:
Sample Number: 141 Type: R Sample Comments:	Area: 2,62	24.83SqFt	PCI = 91	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	69.02 Ft	Comments	:
Sample Number: 143 Type: R Sample Comments:	Area: 3,75	50.00SqFt	PCI = 97	
sample Comments: 56 SWELLING 48 LONGITUDINAL/TRANSVERSE CRACKING	L L	2.00 SqFt 2.00 Ft	Comments Comments	
Sample Number: 147 Type: R Sample Comments: <no distresses=""></no>	Area: 3,75	50.00SqFt	PCI = 100	

Sample Number: 150 Type: R	Area:	3,750.00SqFt	PCI = 98
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	3.00 Ft	Comments:

Network: TPF	Name: PETER O. KNIGHT AIRF	PORT			
Branch: RW 4-22	Name: RUNWAY 4-22		Use: RUNWAY	Area:	360,800.00SqFt
Section: 6103 Surface: AC Area: 32,500.00SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-RW-AC Length: 325.00Ft ype: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 100.00Ft	Rank: P	Last Const.: 1/1/2007
Last Insp. Dat(12/1/2011 Conditions: PCI:100.00   Inspection Comments:	Total Samples: 2 Sur	eveyed: 2			
Sample Number: 96 Sample Comments: <no distresses=""></no>	Туре: к	Area: 5,000.0	0SqFt	PCI = 100	
Sample Number: 99 Sample Comments: <no distresses=""></no>	Туре: к	Area: 5,000.0	0SqFt	PCI = 100	

Branch: RW 4-22 Name: RUNWAY 4-22		Use: RUN	WAY Area:	360,800.00SqFt
Dianen. Kw 4-22 Maine. Konwari 4-22		USC. KUN	WAI Alca.	500,800.005qFt
Section:6105of3From: -Surface:AACFamily:FDOT-RL-RW-AACArea:310,500.00SqFtLength:3,105.00FtShoulder:Street Type:Grade:0.00Section Comments:Section Comments:Section Comments:		To: - categor Vidth: 100.00Ft	ry: Rank: P	Last Const.: 1/1/200
Last Insp. Date12/1/2011 Total Samples: 67 Sur Conditions: PCI:65.00   Inspection Comments:	veyed: 14			
Sample Number: 105 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 62	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	150.04 F	t Comment	s:
48 LONGITUDINAL/TRANSVERSE CRACKING	М	50.01 F		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	61.02 F		
50 PATCHING	M			
52 WEATHERING/RAVELING	М	649.99 S	qFt Comment	5:
Sample Number: 109 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 64	
48 LONGITUDINAL/TRANSVERSE CRACKING	М			s:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	100.03 F		
48 LONGITUDINAL/TRANSVERSE CRACKING	L	68.02 F		
52 WEATHERING/RAVELING	L	500.00 S		
52 WEATHERING/RAVELING	М	500.00 S	qFt Comment	S:
Sample Number: 114 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 56	
48 LONGITUDINAL/TRANSVERSE CRACKING	М	250.06 F	t Comment	s:
48 LONGITUDINAL/TRANSVERSE CRACKING	L	170.04 F		
50 PATCHING	М			
52 WEATHERING/RAVELING	L	600.00 S	-	
45 DEPRESSION	L	20.00 S	qFt Comment	S:
Sample Number: 121 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 66	
48 LONGITUDINAL/TRANSVERSE CRACKING	М			s:
48 LONGITUDINAL/TRANSVERSE CRACKING	L			
48 LONGITUDINAL/TRANSVERSE CRACKING	L			
52 WEATHERING/RAVELING 50 PATCHING	L M	600.00 S 6.25 S		
Sample Number: 123 Type: R	Area:	5,000.00SqFt	PCI = 60	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	М	101.03 F	+ Common+	c •
48 LONGITUDINAL/IRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	M L			
48 LONGITUDINAL/TRANSVERSE CRACKING	L M			
48 LONGITUDINAL/TRANSVERSE CRACKING	L	124.03 F		
52 WEATHERING/RAVELING	L	1,299.99 S		
45 DEPRESSION	L	112.00 S		s:
52 WEATHERING/RAVELING	М	112.00 S	qFt Comment	s:
Sample Number: 125 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 73	

48 LONGITUDINAL/TRANSVERSE CRACKING		L 157.04	r+	Comments:	
52 WEATHERING/RAVELING				Comments:	
		4 50.00			
48 LONGITUDINAL/TRANSVERSE CRACKING		L 61.02	-	Comments:	
52 WEATHERING/RAVELING		L 1,649.99	SqFt	Comments:	
Sample Number: 130 Type: R	Area:	5,000.00SqFt		PCI = 68	
Sample Comments:		1 1 5 0 0 4	<b>T</b> +	0	
48 LONGITUDINAL/TRANSVERSE CRACKING		4 150.04		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 150.04		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 98.03		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 77.02		Comments:	
56 SWELLING		L 32.00		Comments:	
52 WEATHERING/RAVELING	-	1,249.99	SqFt	Comments:	
Sample Number: 134 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 62	
48 LONGITUDINAL/TRANSVERSE CRACKING	ī	4 200.05	F+	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 174.04		Comments:	
52 WEATHERING/RAVELING		L 1,399.99		Comments:	
52 WEATHERING/RAVELING 52 WEATHERING/RAVELING		4 45.00		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	-	L 8.00	fι	Comments:	
Sample Number: 140 Type: R Sample Comments:	Area:	5,000.00SqFt		PCI = 72	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 100.03	Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		4 100.03		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L 144.04		Comments:	
56 SWELLING		L 36.00		Comments:	
52 WEATHERING/RAVELING		L 1,049.99		Comments:	
Sample Number: 143 Type: R	Area:	5,000.00SqFt		PCI = 66	
Sample Comments:	Area:	5,000.00SqFt		PCI = 66	
		5,000.00SqFt 4 100.03	Ft	PCI = 66 Comments:	
Sample Comments:	I	-			
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	I	M 100.03	Ft	Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	I	1 100.03 1 341.09	Ft SqFt	Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING	I	100.03 341.09 1,999.98 54.00	Ft SqFt	Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R	I	100.03 341.09 1,999.98 54.00	Ft SqFt SqFt	Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments:	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt	Ft SqFt SqFt SqFt	Comments: Comments: Comments: Comments: PCI = 65	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 100.03	Ft SqFt SqFt SqFt Ft	Comments: Comments: Comments: Comments: PCI = 65 Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07	Ft SqFt SqFt SqFt Ft Ft	Comments: Comments: Comments: Comments: PCI = 65 Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99	Ft SqFt SqFt SqFt Ft Ft SqFt	Comments: Comments: Comments: Comments: PCI = 65 Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07	Ft SqFt SqFt SqFt Ft Ft SqFt	Comments: Comments: Comments: Comments: PCI = 65 Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99	Ft SqFt SqFt SqFt Ft Ft SqFt	Comments: Comments: Comments: Comments: PCI = 65 Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments:	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99 600.00 5,000.00SqFt	Ft SqFt SqFt SqFt Ft SqFt SqFt	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99 600.00 5,000.00SqFt 2 200.05	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99 600.00 5,000.00SqFt 200.05 203.05	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt Ft Ft	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: PCI = 60 PCI = 60 Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 4 734.99 600.00 5,000.00SqFt 5,000.00SqFt 4 200.05 203.05 4 22.01	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt Ft Ft	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: PCI = 60 PCI = 60 Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 100.03 291.07 4 734.99 600.00 5,000.00SqFt 203.05 4 22.01 187.00	Ft SqFt SqFt SqFt Ft SqFt SqFt Ft Ft Ft Ft SqFt	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: PCI = 60 Comments: Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 4 734.99 600.00 5,000.00SqFt 5,000.00SqFt 4 200.05 203.05 4 22.01	Ft SqFt SqFt SqFt Ft SqFt SqFt Ft Ft Ft SqFt Sq	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: PCI = 60 PCI = 60 Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 WEATHERING/RAVELING 54 WEATHERING/RAVELING 55 WEATHERING/RAVELING 55 WEATHERING/RAVELING 56 Type: R	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 203.05 4 22.01 187.00 1,349.99	Ft SqFt SqFt SqFt Ft SqFt SqFt Ft Ft Ft SqFt Sq	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: PCI = 60 Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R 54 Sample Number: 156 Type: R 55 Sample Comments:	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 203.05 4 22.01 187.00 1,349.99 4 77.00 5,000.00SqFt	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt SqFt	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 WEATHERING/RAVELING 54 MEATHERING/RAVELING 55 WEATHERING/RAVELING 56 Sample Number: 156 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 54 MEATHERING/RAVELING 55 WEATHERING/RAVELING 56 Sample Number: 156 Type: R Sample Comments: 57 MEATHERING/RAVELING	Area:	100.03         341.09         1,999.98         54.00         54.00         5,000.00SqFt         100.03         291.07         734.99         600.00         5,000.00SqFt         200.05         203.05         22.01         187.00         1,349.99         77.00         5,000.00SqFt         181.05	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt SqFt	Comments: Commen	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 50 PATCHING 56 SWELLING Sample Number: 150 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING Sample Number: 153 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING 50 PATCHING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING 53 Type: R Sample Number: 156 Type: R Sample Comments:	Area:	4 100.03 341.09 1,999.98 54.00 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 5,000.00SqFt 203.05 4 22.01 187.00 1,349.99 4 77.00 5,000.00SqFt	Ft SqFt SqFt SqFt Ft SqFt SqFt SqFt SqFt	Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	

Sample Number: 161 Type: R	Area:	5,000.00SqFt		PCI = 64
Sample Comments:				
48 LONGITUDINAL/TRANSVERSE CRACK	LING L	41.01	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACK	KING M	63.02	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACK	KING M	12.00	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACK	KING L	49.01	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACK	KING M	100.03	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACK	KING L	88.02	Ft	Comments:
52 WEATHERING/RAVELING	М	180.00	SqFt	Comments:
52 WEATHERING/RAVELING	L	999.99	SqFt	Comments:

Network: TPF	Name: PETER O. KNIGHT AIRP	PORT			
Branch: RW 4-22	Name: RUNWAY 4-22		Use: RUNWAY	Area:	360,800.00SqFt
Section: 6110 Surface: AAC Area: 17,800.00SqFt Shoulder: Street Section Comments:	of 3 From: - Family: FDOT-RL-RW-AAC Length: 178.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 100.00Ft	Rank: P	Last Const.: 1/1/2007
Last Insp. Date12/1/2011 Conditions: PCI:100.00   Inspection Comments:	Total Samples: 18 Sur	rveyed: 1			
Sample Number: 167 Sample Comments: <no distresses=""></no>	Туре: к	Area: 5,000.	00SqFt	PCI = 100	

Network:	IFF	Name: PETER O. KNIGHT AIR	FORI			
Branch:	TW A	Name: TAXIWAY A		Use: TAXIWAY	Area:	139,742.93SqFt
Surface:	103 AC 5,615.69SqFt Street 7 nents:	of 6 From: - Family: FDOT-RL-TW-AC Length: 100.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 50.00Ft	Rank: P	Last Const.: 1/1/2007
1	Date12/1/2011 5: PCI:100.00   mments:	Total Samples: 1 Su	rveyed: 1			
Sample Nu Sample Comm		Туре: к	Area: 5,615.0	69SqFt	PCI = 100	

Network:	TPF	Name: PETER O. KNIGHT AIR	PORT			
Branch:	TW A	Name: TAXIWAY A		Use: TAXIWAY	Area:	139,742.93SqFt
Surface:	104 AC 9,170.00SqFt Street T ents:	of 6 From: - Family: FDOT-RL-TW-AC Length: 262.00Ft ype: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 35.00Ft	Rank: P	Last Const.: 1/1/2007
-	Date12/1/2011 PCI:100.00   nments:	Total Samples: 1 Su	irveyed: 1			
Sample Nui Sample Comm <no dist<="" td=""><td>ents:</td><td>Туре: к</td><td>Area: 3,500.</td><td>00SqFt</td><td>PCI = 100</td><td></td></no>	ents:	Туре: к	Area: 3,500.	00SqFt	PCI = 100	

Network: TPF Name: PETER O. KNIGHT AIRI	PORT			
Branch: TWA Name: TAXIWAY A		Use: TAXIWAY	Area: 139,7	742.93SqFt
Section: 105 of 6 From: - Surface: AAC Family: FDOT-RL-TW-AAC Area: 103,252.19SqFt Length: 2,500.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments:		To: - ne: Category: Tidth: 40.00Ft	Rank: P	Last Const.: 1/1/1992
Last Insp. Dat(12/1/2011 Total Samples: 31 Sur Conditions: PCI:57.00   Inspection Comments:	rveyed: 4			
Sample Number: 105 Type: R Sample Comments:	Area:	3,500.00SqFt	PCI = 68	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING	L L	444.11 Ft 799.99 SqFt	Comments: Comments:	
Sample Number: 116 Type: R Sample Comments:	Area:	3,500.00SqFt	PCI = 55	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	123.03 Ft	Comments:	
52 WEATHERING/RAVELING	М	500.00 SqFt	Comments:	
52 WEATHERING/RAVELING	M	500.00 SqFt	Comments:	
52 WEATHERING/RAVELING	L	999.99 SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	257.07 Ft	Comments:	
Sample Number: 125 Type: R Sample Comments:	Area:	3,500.00SqFt	PCI = 47	
43 BLOCK CRACKING	L	769.99 SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	100.03 Ft	Comments:	
13 BLOCK CRACKING	L	999.99 SqFt	Comments:	
13 BLOCK CRACKING	L	799.99 SqFt	Comments:	
52 WEATHERING/RAVELING 52 WEATHERING/RAVELING	L M	1,999.98 SqFt 500.00 SqFt	Comments: Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	M L	229.06 Ft	Comments:	
Sample Number: 133 Type: R	Area:	3,500.00SqFt	PCI = 59	
Sample Comments:	Ŧ			
48 LONGITUDINAL/TRANSVERSE CRACKING 48 LONGITUDINAL/TRANSVERSE CRACKING	L L	97.02 Ft 100.03 Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 43 BLOCK CRACKING	L L	999.99 SqFt	Comments: Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	34.01 Ft	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	100.03 Ft	Comments:	
40 LUNGIIUUUINAL/INANOVENDE CAACAING				

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TWA	Name: TAXIWAY A		Use: TAXIWAY	Area:	139,742.93SqFt
Section: 115 Surface: AAC Area: 11,155.15SqFt Shoulder: Street 7 Section Comments:	of 6 From: - Family: FDOT-RL-TW-AAC Length: 270.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:95.00   Inspection Comments:	Total Samples: 2 Sur	veyed: 1			
Sample Number: 129 Sample Comments: 48 LONGITUDINAL/	Type: r TRANSVERSE CRACKING	Area: 3,930.5	4SqFt 44.01 Ft	PCI = 95 Comment:	s:

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TW A	Name: TAXIWAY A		Use: TAXIWAY	Area:	139,742.93SqFt
Section: 120 Surface: AAC Area: 5,876.45SqFt Shoulder: Street	of 6 From: - Family: FDOT-RL-TW-AAC Length: 140.00Ft Type: Grade: 0.00	Zone: Width Lanes: 0	To: - Category: : 40.00Ft	Rank: P	Last Const.: 1/1/2008
Section Comments:					
Section Comments: Last Insp. Dat(12/1/2011 Conditions: PCI:83.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1			

Network: T	PF	Name: PETER O. KNIGHT A	IRPORT				
Branch: T	WA	Name: TAXIWAY A			Use: TAXIWAY	Area:	139,742.93SqFt
Section: 63 Surface: A Area: 4,0 Shoulder: Section Commer	C 673.45SqFt Street Ty	of 6 From: - Family: FDOT-RL-TW-AC Length: 100.00 rpe: Grade: 0.00		ne: /idth:	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/2007
Last Insp. Da Conditions: Inspection Comr	PCI:100.00	Total Samples: 1	Surveyed: 1				
Sample Num Sample Commen <no diste<="" td=""><td>nts:</td><td>Туре: к</td><td>Area:</td><td>4,673.45</td><td>SqFt</td><td>PCI = 100</td><td></td></no>	nts:	Туре: к	Area:	4,673.45	SqFt	PCI = 100	

Network: TPF Name: PETER O. KNIGHT AIR	RPORT			
Branch: TW B Name: TAXIWAY B		Use: TAXIWAY	Area:	16,466.91SqFt
Section:150of3From: -Surface:AACFamily:FDOT-RL-TW-AACArea:3,015.48SqFtLength:60.00FtShoulder:Street Type:Grade:0.00Section Comments:Section Comments:Section Comments:		To: - Category: 50.00Ft	Rank: P	Last Const.: 1/1/1992
Last Insp. Date12/1/2011 Total Samples: 1 Seconditions: PCI:64.00   Inspection Comments:	urveyed: 1			

Network: TPF	Name: PETER O. KNIGHT AIRF	PORT			
Branch: TW B	Name: TAXIWAY B		Use: TAXIWAY	Area:	16,466.91SqFt
Section: 205 Surface: AC Area: 11,793.45SqFt Shoulder: Street Section Comments:	of 3 From: - Family: FDOT-RL-TW-AC Length: 280.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/2011
NOTE: *** Pre-Cons Last Insp. Dat63/14/1999 Conditions: PCI:41.00   Inspection Comments: IMPO	9 Total Samples: 3 Sur	rveyed: 1			
Sample Number: 202 Sample Comments:	Туре: к	Area: 4,000.0	00SqFt	PCI = 41	

Sumple Rumber. 202	rype. R	i ii cu.	1,000.000411		I CI II	
Sample Comments:						
41 ALLIGATOR CR		М	40.00	SqFt	Comments:	
43 BLOCK CR		L	2,000.00	SqFt	Comments:	
48 L & T CR		L	218.00	Ft	Comments:	
52 WEATH/RAVEL		L	4,000.00	SqFt	Comments:	
53 RUTTING		L	18.00	SqFt	Comments:	

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TWB	Name: TAXIWAY B		Use: TAXIWAY	Area:	16,466.91SqFt
Section: 625 Surface: AAC Area: 1,657.98SqFt Shoulder: Street	of 3 From: - Family: FDOT-RL-TW-AAC Length: 65.00Ft Type: Grade: 0.00	Zone: Width Lanes: 0	To: - Category: 1: 25.00Ft	Rank: P	Last Const.: 1/1/2001
Section Comments:					
Section Comments: Last Insp. Date12/1/201 Conditions: PCI:70.00   Inspection Comments:	1 Total Samples: 1 Sur	veyed: 1			
Last Insp. Date12/1/201	1 Total Samples: 1 Sur Type: R		657.98SqFt	PCI = 70	

FDOT Report Generated Date: 1/26/2012 Site Name:

Branch:	TW C	Name: T	AXIWAY C			Use: TAXIWAY	Area:	24,005.47SqFt
Section: Surface: Area: Shoulder: Section Com		Len	From: - FDOT-RL-TW-AAC gth: 150.00Ft Grade: 0.00	Zor Wi Lanes: 0	ne: idth:	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/2010

Conditions: PCI:88.00 | Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 100	Type: R	Area:	1,800.00SqFt	PCI = 88
Sample Comments: 48 L & T CR		L	67.00 Ft	Comments:

Network: TPF	Name: PETER O. KNIGHT AIR	PORT			
Branch: TWC	Name: TAXIWAY C		Use: TAXIWAY	Area:	24,005.47SqFt
Section: 310 G Surface: AC Area: 17,091.25SqFt Shoulder: Street Ty Section Comments:	of 2 From: - Family: FDOT-RL-TW-AC Length: 425.00Ft pe: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/1965
Last Insp. Date12/1/2011 Conditions: PCI:59.00   inspection Comments:	Total Samples: 5 Su	rveyed: 2			
Sample Number: 101 Sample Comments:	Туре: к	Area: 2,400	0.00SqFt	PCI = 59	
43 BLOCK CRACKING 52 WEATHERING/RAVI	ELING		,399.98 SqFt ,399.98 SqFt	Comments: Comments:	
		•		DCI = 50	
Sample Number: 103 Sample Comments:	Туре: к	Area: 4,000	0.00SqFt	PCI = 59	

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TW CENTER	Name: TAXIWAY CENTER		Use: TAXIWAY	Area:	55,839.678qFt
Section: 315 Surface: AC Area: 11,056.09SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-TW-AC Length: 500.00Ft Sype: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 20.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:95.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1			
Sample Number: 202 Sample Comments: 48 LONGITUDINAL/	Type: r TRANSVERSE CRACKING	Area: 2,000.0	00SqFt 23.01 Ft	PCI = 95 Comments	s <b>:</b>

Network: TPF	Name: PETER O. KNIGHT AIRP	PORT			
Branch: TW CENTER	Name: TAXIWAY CENTER		Use: TAXIWAY	Area:	55,839.67SqFt
Section: 320 Surface: AC Area: 11,536.12SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-TW-AC Length: 400.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 25.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:100.00   Inspection Comments:	Total Samples: 1 Sur	rveyed: 1			
Sample Number: 302 Sample Comments: <no distresses=""></no>	Туре: к	Area: 2,500.0	00SqFt	PCI = 100	

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TW CENTER	Name: TAXIWAY CENTER		Use: TAXIWAY	Area:	55,839.678qFt
Section: 325 Surface: AC Area: 33,247.46SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-TW-AC Length: 300.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 100.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:96.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1			
Sample Number: 401 Sample Comments: 48 LONGITUDINAL/	Type: r Transverse cracking	Area: 5,500.0	00 <b>S</b> qFt 25.01 Ft	PCI = 96 Comments	

Network: TPF	Name: PETER O. KNIGHT AIRPORT			
Branch: TW D	Name: TAXIWAY D	Use: TAXIWAY	Area:	46,607.73SqFt
Section: 420 Surface: AC Area: 41,269.85SqFt Shoulder: Stree Section Comments:		To: - one: Category: /idth: 40.00Ft	Rank: P	Last Const.: 1/1/201
NOTE: *** Pre-Con Last Insp. Dat(3/14/199 Conditions: PCI:66.00 Inspection Comments: IMP	9 Total Samples: 2 Surveyed: 1			

Sample Number: 310	Туре: к	Area:	4,000.00SqFt	PCI = 66
Sample Comments:				
48 L & T CR		L	453.00 Ft	Comments:
52 WEATH/RAVEL		L	4,000.00 SqFt	Comments:

Network: TPF Name: PETER O. KNIGHT AIR	PORT			
Branch: TWD Name: TAXIWAYD		Use: TAXIWAY	Area:	46,607.73SqFt
Conditions: PCI:46.00	Zone: Width: Lanes: 0 Irveyed: 1	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/1992
Inspection Comments:				

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TW D	Name: TAXIWAY D		Use: TAXIWAY	Area:	46,607.73SqFt
Section: 620 Surface: AAC Area: 1,964.54SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-TW-AAC Length: 65.00Ft Type: Grade: 0.00	Zone: Width: Lanes: 0	To: - Category: 25.00Ft	Rank: P	Last Const.: 1/1/2001
Last Insp. Dat(12/1/2011 Conditions: PCI:52.00	Total Samples: 1 Sur	veyed: 1			

Network: TPF	Nam	e: PETER O. KNIGHT	AIRPORT				
Branch: TW	e Nam	e: TAXIWAY E			Use: TAXIWAY	Area:	18,949.82SqFt
Section: 505 Surface: AAC Area: 2,353 Shoulder: Section Comments:	.21SqFt Street Type:	3 From: - mily: FDOT-RL-TW-A Length: 50.0 Grade: 0.00		Zone: Width: : 0	To: - Category: 40.00Ft	Rank: P	Last Const.: 1/1/2005
Last Insp. Date Conditions: PC Inspection Commer	I:91.00	al Samples: 1	Surveyed:	1			
Sample Number		Type: R EVERSE CRACKIN	Area:	2,353.2 L	21SqFt 62.02 Ft	PCI = 91 Comments	

Network: TPF	Name: PETER O. KNIGHT AIRI	PORT				
Branch: TWE	Name: TAXIWAY E		Use: T	AXIWAY	Area:	18,949.82SqFt
Section: 510 Surface: AC Area: 11,125.79SqFt Shoulder: Street 7 Section Comments:	of 3 From: - Family: FDOT-RL-TW-AC Length: 275.00Ft Type: Grade: 0.00		To: one: Cate Vidth: 40.0	gory:	Rank: P	Last Const.: 1/1/1965
Last Insp. Date12/1/2011 Conditions: PCI:74.00   Inspection Comments:	Total Samples: 3 Su	rveyed: 1				
Sample Number: 100 Sample Comments:	Type: R	Area:	2,290.58SqFt		PCI = 74	
	TRANSVERSE CRACKING	L L	142.04 1,299.99	-	Comments Comments	

Network: TPF	Name: PETER O. KNIGHT AIRI	PORT				
Branch: TWE	Name: TAXIWAY E		Use	: TAXIWAY	Area:	18,949.82SqFt
Section: 650 Surface: AAC Area: 5,470.82SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: DEFAULT Length: 100.00Ft Type: Grade: 0.00		one: C Vidth: 5	o: - ategory: 0.00Ft	Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:93.00   Inspection Comments:	Total Samples: 1 Su	rveyed: 1				
Sample Number: 300 Sample Comments:	Туре: к	Area:	5,470.82SqFt		PCI = 93	
	TRANSVERSE CRACKING VELING	L L		02 Ft 00 SqFt	Comments Comments	

Network: TPF	Name: PETER O. KNIGHT AIRP	ORT			
Branch: TWF	Name: TAXIWAY F		Use: TAXIWAY	Area:	98,143.89SqFt
Section: 605 Surface: AAC Area: 86,522.78SqFt Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-TW-AAC Length: 2,400.00Ft Type: Grade: 0.00	Zone Wid Lanes: 0		Rank: P	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:97.00   Inspection Comments:	Total Samples: 22 Sur	veyed: 4			
Sample Number: 101	Type: R	Area:	3,500.00SqFt	PCI = 93	
Sample Comments: 48 LONGITUDINAL/	TRANSVERSE CRACKING	L	68.02 Ft	Comments:	:
Sample Number: 108	Type: R	Area:	3,500.00SqFt	PCI = 96	
Sample Comments: 48 LONGITUDINAL/	TRANSVERSE CRACKING	L	15.00 Ft	Comments:	:
Sample Number: 114	Туре: к	Area:	3,500.00SqFt	PCI = 98	
Sample Comments: 48 LONGITUDINAL/	TRANSVERSE CRACKING	L	4.00 Ft	Comments:	:
Sample Number: 122 Sample Comments: <no distresses=""></no>	Type: R	Area:	3,500.00SqFt	PCI = 100	

Network:	TPF	Name: PETER O. KNIGHT AIR	RPORT			
Branch:	TW F	Name: TAXIWAY F		Use: TAXIWAY	Area:	98,143.89SqFt
Section: Surface: Area: Shoulder: Section Com		of 3 From: - Family: FDOT-RL-TW-AAC Length: 200.00Ft Type: Grade: 0.00		To: - Category: 35.00Ft	Rank: P	Last Const.: 1/1/2008
-	Date12/1/2011 as: PCI:95.00   omments:	Total Samples: 2 Su	irveyed: 1			
Sample Com		Type: R TRANSVERSE CRACKING	Area: 3,802	.76SqFt 44.01 Ft	PCI = 95	

Network: TPF	Name: PETER O. KNIGHT AIRF	PORT			
Branch: TWF	Name: TAXIWAY F		Use: TAXIWAY	Area:	98,143.89SqFt
Section: 615 Surface: AAC Area: 4,038.95SqFt Shoulder: Street Section Comments:	of 3 From: - Family: FDOT-RL-TW-AAC Length: 100.00Ft Type: Grade: 0.00	Zone Wid Lanes: 0	0.0	Rank: A	Last Const.: 1/1/2008
Last Insp. Date12/1/2011 Conditions: PCI:90.00   Inspection Comments:	Total Samples: 1 Sur	rveyed: 1			
Sample Number: 120 Sample Comments:	Type: R	Area:	1,994.49SqFt	PCI = 90	
	/TRANSVERSE CRACKING AVELING	L L	26.01 Ft 40.00 SqFt	Comments Comments	

Network: TPF Name: PETER O. KNIGHT AIRPO	ORT			
Branch: TW T-HANG Name: TAXIWAY TO T-HANGA	RS	Use: TAXIWAY	Area:	72,024.05SqFt
Section: 705 of 1 From: - Surface: AC Family: FDOT-RL-TW-AC Area: 72,024.05SqFt Length: 3,500.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments:	Zo: W Lanes: 0	To: - ne: Category: Tidth: 20.00Ft	Rank: P	Last Const.: 1/1/1964
Last Insp. Date12/1/2011 Total Samples: 15 Sur Conditions: PCI:68.00   Inspection Comments:	veyed: 3			
Sample Number: 100 Type: R	Area:	5,268.26SqFt	PCI = 70	
Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	L	110.03 Ft	Comments:	
52 WEATHERING/RAVELING	L	600.00 SqFt		
52 WEATHERING/RAVELING	L	1,259.99 SqFt		
52 WEATHERING/RAVELING	М	170.00 SqFt		
52 WEATHERING/RAVELING	М	315.00 SqFt	Comments:	
Sample Number: 112 Type: R Sample Comments:	Area:	5,000.00SqFt	PCI = 67	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	208.05 Ft	Comments:	
52 WEATHERING/RAVELING	L	2,099.98 SqFt		
52 WEATHERING/RAVELING	L	400.00 SqFt		
52 WEATHERING/RAVELING	M	100.00 SqFt		
52 WEATHERING/RAVELING	М	525.00 SqFt	Comments:	
Sample Number: 140 Type: R Sample Comments:	Area:	4,268.04SqFt	PCI = 67	
52 WEATHERING/RAVELING	L	100.00 SqFt	Comments:	
52 WEATHERING/RAVELING	L	400.00 SqFt	Comments:	
49 OIL SPILLAGE	N	799.99 SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING	L	64.02 Ft	Comments:	