

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

## Statewide Airfield Pavement Management Program

Palm Beach County Park Airport– LNA (Regional Reliever)
Lantana, Florida
(District 4)



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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 Palm Beach County Park 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 Palm Beach County Park Airport, and
- ➤ Provide the estimated costs associated with the suggested immediate and future M&R activities

During April 2012, the PCI survey was performed at Palm Beach County Park 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 2012 is 78, representing a Satisfactory overall network condition.

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

**Table I: Condition Summary by Branch** 

Branch Name	Area Weighted PCI	PCI Range	Condition Rating	FDOT Minimum Service Level	MicroPAVER Minimum PCI	Action Required
General Aviation Apron	60	56 - 62	Fair	65	65	X
Apron Run-Up at RW 9	100	100	Good	65	65	
Apron Run-Up at RW 15	79	79	Satisfactory	65	65	
Runway 15-33	100	100	Good	75	65	
Runway 3-21	77	38 - 79	Satisfactory	75	65	X
Runway 9-27	87	87	Good	75	65	
Taxiway Alpha	84	84	Satisfactory	65	65	
Taxiway A-1	51	51	Poor	65	65	X
Taxiway Bravo	81	68 - 83	Satisfactory	65	65	
Taxiway B-1	77	77	Satisfactory	65	65	
Taxiway Charlie	98	89 - 100	Good	65	65	

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

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

Use	Average Area- Weighted PCI	Condition Rating		
Runway	89	Good		
Taxiway	89	Good		
Apron	61	Fair		
All (Weighted)	78	Satisfactory		

**Table III: Condition Summary by Pavement Rank** 

Rank*	Average Area- Weighted PCI	Condition Rating
Primary	76	Satisfactory
Tertiary	87	Good
All (Weighted)	78	Satisfactory

<sup>\*</sup>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 Palm Beach County Park Airport, include: The GA Apron and Runway 3-21. These pavement sections exhibit distresses which justify mill and overlay rehabilitation or full pavement reconstruction. The immediate needs are summarized in Table IV below.

Table IV: Immediate Major M&R Needs

Rranch Nama		Section Area (ft²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R	
GA Apron	4105	AC	587,001.91	\$1,833,794.03	62	Mill and Overlay	100
GA Apron	4115	AAC	293,242.67	\$1,540,111.16	56	Mill and Overlay	100
Runway 3-21	6310	AC	6,150.00	\$60,282.32	38	Reconstruction	100
Taxiway A-1	120	AC	15,014.03	\$108,356.31	51	Mill and Overlay	100
			Total	\$3,542,543.82			100

<sup>\*</sup> 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.

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

Year	Preventative	Major M&R	Total Year Cost
2012	\$55,614.53	\$3,542,543.81	\$3,598,158.35
2013	\$77,366.78	\$0.00	\$77,366.78
2014	\$95,967.53	\$0.00	\$95,967.53
2015	\$125,307.93	\$23,932.33	\$149,240.25
2016	\$162,681.54	\$0.00	\$162,681.54
2017	\$209,353.21	\$0.00	\$209,353.21
2018	\$265,882.04	\$0.00	\$265,882.04
2019	\$258,800.02	\$722,116.32	\$980,916.34
2020	\$305,844.84	\$0.00	\$305,844.84
2021	\$361,644.79	\$0.00	\$361,644.79
Total	\$1,918,463.21	\$4,288,592.46	\$6,207,055.67

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 stay constant

from 78 in 2012 to 78 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 Palm Beach County Park Airport pavements in 2021 may remain near 78. 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 Palm Beach County Park 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 occurs is much less compared to maintaining pavements after substantial deterioration has occurred.

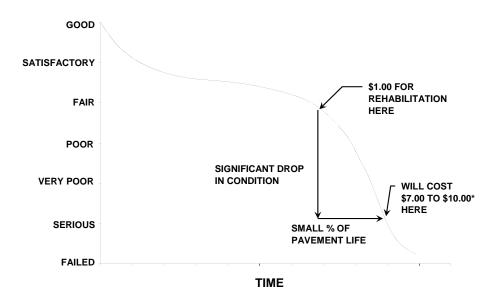


Figure 1-1: Pavement Life Cycle

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.

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

	AC Pavemen	ts	PCC Pavements			
NT	n		NT	n		
N	Runway	Others	N	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>≥</u> 51	20% but <u>&lt;</u> 20	10% but ≤10	31-40	8	4	
			41-50	10	5	
			<u>≥</u> 51	20% but <u>&lt;</u> 20	10% but <u>&lt;</u> 10	

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.

Figure 1-2: PCI Rating Scale

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

#### 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.

<u>Localized M&R (Maintenance and Repair)</u> - 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 General Aviation 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

Palm Beach County Park Airport (LNA) is located south of West Palm Beach, in Palm Beach County, Florida. It is owned by Palm Beach County and operated by the Department of Airports. The Airport is served by three runways. Runway 9-27 is 75-ft wide by 3,489-ft long. Runway 3-21 is 75-ft wide by 3,256-ft long. Runway 15-33 is 100-ft wide by 3,421-ft long. Runway 9-27 is served by parallel Taxiways Charlie and Alpha. Runway 15-33 is served by parallel Taxiway Bravo. There is a general aviation ramp on the south side of the Airport adjacent to Taxiway Charlie. This airport is designated as a Regional Reliever airport and is located in District 4 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.

Palm Beach County Park Airport, commonly referred to as Lantana Airport, was established in 1941 as a reliever airport to Palm Beach International Airport. It harbored the Civil Air Patrol, an auxiliary to the Air Corps, to monitor submarine activities along Florida's coast during World War II. The airport transitioned to civilian use in the 1950's as a training and general aviation facility.

#### 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 2012 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 Palm Beach County Park 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 Construction Activity** 

Construction Year	Location	Work Type / Pavement Section
2012	Runway 15-33	Asphalt Pavement Rehabilitation
2012	Taxiway Charlie	Asphalt Pavement Reconstruction
2012	Apron Run-Up RW 9	New Asphalt Pavement Construction
2014	Runway 03-21	Asphalt Pavement Rehabilitation

### 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 84 sample units.

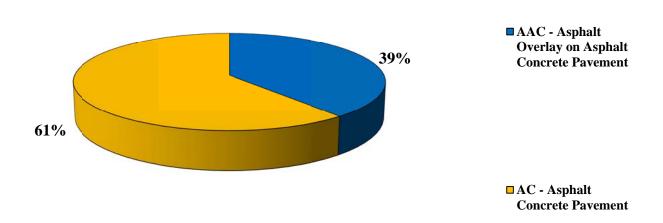
The total airfield pavement area in 2012 at Palm Beach County Park Airport is 2,238,622 square feet. The breakdown of pavement area for each pavement use is provided in Table 2-2.

Table 2-2: Pavement Area by Pavement Use

Use	Area (ft²)	% of Total Area		
Runway	825,858	37%		
Taxiway	499,311	22%		
Apron	913,453	41%		
All (Weighted)	2,238,622	100%		

Figure 2-1 presents the breakdown of the pavement area at Palm Beach County Park Airport by surface type.

Figure 2-1: Pavement Area 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.

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

Branch Name	Branch ID	Section ID	True Area (ft²)	Section Rank	Surface Type	Last Const. Date	Total Samples Inspected	Sample Units in Section
General Aviation Apron	AP GA	4105	587,002	P	AC	1/1/1985	12	125
General Aviation Apron	AP GA	4115	293,243	P	AAC	1/1/1985	11	57
Apron Run-Up at RW 9	AP RU RW 9	4205	26,830	P	AC	1/1/2012	1	6
Apron Run-Up at RW 15	AP RU RW15	4305	6,377	P	AC	1/1/1993	1	1
Runway 15-33	RW 15-33	6205	27,600	P	AAC	1/1/2012	2	6
Runway 15-33	RW 15-33	6215	314,956	P	AAC	1/1/2012	13	63
Runway 3-21	RW 3-21	6310	6,150	P	AC	1/1/1965	1	2
Runway 3-21	RW 3-21	6305	228,640	P	AC	1/1/1993	13	61
Runway 9-27	RW 9-27	6105	248,513	T	AC	6/1/2007	14	66
Taxiway Alpha	TW A	310	110,651	P	AC	6/1/2007	3	30
Taxiway A-1	TW A1	120	15,014	P	AC	1/1/1964	1	4
Taxiway Bravo	TW B	205	115,827	P	AC	1/1/1993	4	32
Taxiway Bravo	TW B	215	8,529	P	AC	1/1/1993	1	2
Taxiway B-1	TW B1	220	9,653	P	AC	1/1/1993	1	2
Taxiway Charlie	TW C	103	16,849	P	AAC	1/1/2007	1	3
Taxiway Charlie	TW C	115	12,354	P	AAC	6/1/2007	1	3
Taxiway Charlie	TW C	105	210,435	P	AAC	1/1/2012	4	35

Note: If a 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	. Army CERL, FDOT Airfield Inspecti	on 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 Palm Beach County Park Airport were performed in April 2012. 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 2012 survey, the overall area-weighted PCI at Palm Beach County Park Airport is 78, representing a Satisfactory overall network condition.

The Airport exhibited overall pavement distresses associated with subgrade quality, climate, and age. Typical pavement distresses include: weathering and raveling, block cracking, longitudinal and transverse cracking, oil spillage, depression, patching, and swelling.

Runway 3-21 was mostly in Satisfactory condition with a PCI of 72. The pavement in the intersection with Runway 9-27 was more severely distressed with a PCI of 38, representing a Very Poor condition. Distresses include low severity patching; low severity weathering and raveling; and low and medium, and high severity longitudinal and transverse cracking. These are climate and age related distresses.

Runway 9-27 was in Good condition with a PCI of 87. Distresses include low severity depression; low severity weathering and raveling; and low severity longitudinal and transverse cracking. These are climate, subgrade quality, and age related distresses.

Taxiways were in Fair to Good condition, with the exception of Taxiway A-1, which had a PCI of 51, representing a Poor condition. Distresses on Taxiway A-1 include low severity block cracking, low severity longitudinal and transverse cracking, low and medium severity patching, and low severity weathering and raveling. These distresses were found on other taxiways, but in lower quantities. Other distresses found on the taxiways include low severity block cracking and low severity swelling. These are climate and age related distresses. Areas of medium and high severity weathering and raveling were localized and not indicative of overall pavement condition.

The GA Apron was in Fair condition with PCI's ranging from 56 to 62. Distresses include low, medium, and high severity longitudinal and transverse cracking; low, medium, and high severity weathering and raveling; low and medium severity patching; low severity shoving; oil spillage; low severity swelling; low severity depression; and low and medium severity block cracking. These are age, climate, PCC pavement growth, aircraft operation, and subgrade quality related distresses.

Runway 15-33 and Taxiway Charlie are scheduled to be rehabilitated in the summer of 2012. They were not inspected and their PCI's were reset to 100 for this report.

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 Palm Beach County Park Airport.

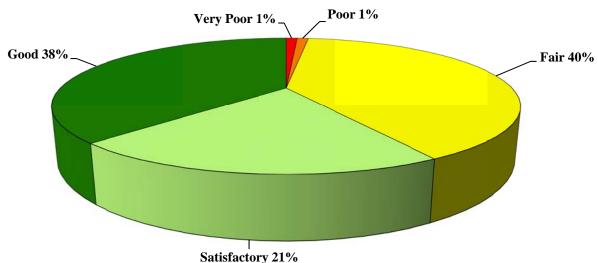


Figure 3-1: Network PCI Distribution by Rating Category

Figure 3-1a: Condition Rating Summary

Condition Rating	Condition Rating Total Area (ft²)	
Good	857,537	38%
Satisfactory	471,147	21%
Fair	888,773	40%
Poor	15,014	1%
Very Poor	6,150	1%
Serious	0	0%
Failed	0	0%

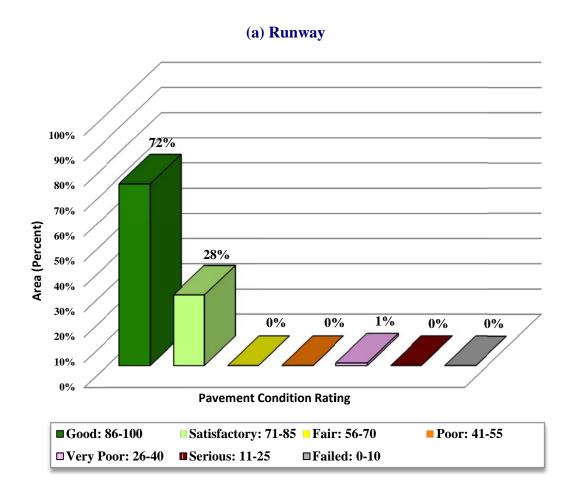
Approximately 59% of the network is in Good and Satisfactory condition while 2% of the network is in Poor and Very Poor condition. Table 3-3 illustrates the area-weighted PCI computed individually for each pavement use.

**Table 3-2: Condition by Pavement Use** 

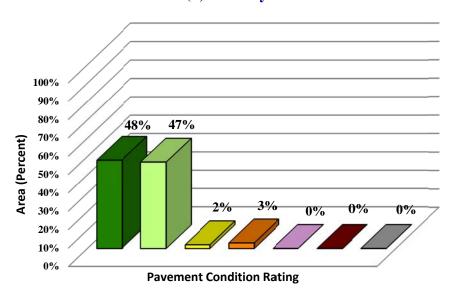
Use	Average Area- Weighted PCI	Condition Rating
Runway	89	Good
Taxiway	89	Good
Apron	61	Fair
All (Weighted)	78	Satisfactory

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

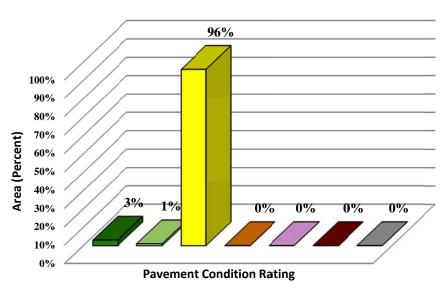


## (b) Taxiway





## (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 Palm Beach County Park 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.

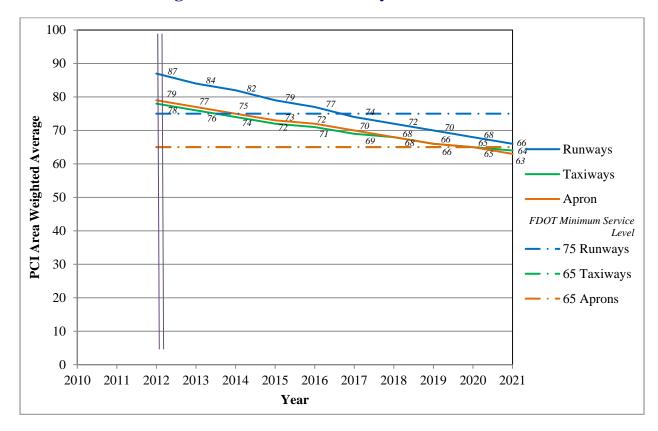


Figure 4-1: Predicted PCI by Pavement Use

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.

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

Surface	Distress	Severity*	Work Type	Code	Work Unit
	Alligator Crack	M, H	Patching - AC Deep	PA-AD	SqFt
AC	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	M, H	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	M, H	Crack Sealing – AC	CS-AC	Ft
	Oil Spillage	N/A	Patching - AC Shallow	PA-AS	SqFt
	Patching	M, H	Patching - AC Deep	PA-AD	SqFt
	Polished Agg.	N/A	No Localized M&R	NONE	N/A
	Davidina /	L	Surface Sealing - Rejuvenating	SS-RE	SqFt
	Raveling / Weathering	M	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	M, H	Patching - AC Deep	PA-AD	SqFt
	Blow-Up	L, M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Corner Break	M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Linear Crack	M, H	Crack Sealing – PCC	CS-PC	Ft
	Durability Crack	Н	Slab Replacement – PCC	SL-PC	SqFt
	Durability Clack	M	Patching - PCC Full Depth	PA-PF	SqFt
	Jt. Seal Damage	M, H	Joint Seal (Localized)	JS-LC	Ft
	Small Patch	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
PCC	Large Patch	M, H	Patching - PCC Full Depth	PA-PF	SqFt
rcc	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	M, H	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

<sup>\*</sup>L = Low, M = Medium, H = High

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

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

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 Reliever Airports

Minimum PCI						
Runway Taxiway Apron						
75	65	65				

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.

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

	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

#### 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.

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

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

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
Maintenance	Crack Searing and Pun-Depth Fatching	80	\$0.40
Rehabilitation		70	\$0.90
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	60	\$3.68
		50	\$7.61
		40	\$18.57
	December of the second	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.

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

Branch Name	Section ID	Surface Type	Section Area (ft²)	Major M&R Costs*	PCI Before M&R Activity		PCI After M&R
GA Apron	4105	AC	AC 587,002 \$1,833,794.03 62 Mill and Overlay		100		
GA Apron	4115	AAC	293,243	\$1,540,111.16	56	Mill and Overlay	100
Runway 3-21	6310	AC	6,150 \$60,282.32 38 Reconstruction		100		
Taxiway A-1	tiway A-1 120 AC 15,01		15,014	\$108,356.31	51	Mill and Overlay	100
			Total	\$3,542,543.82			100

<sup>\*</sup> 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.

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

Branch Name	Section ID	Surface Type	Section Area (ft²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
GA Apron	4105	AC	587,002	587,002 \$381,551.24 62 Microsurfacing		100	
GA Apron	4115	AAC	293,243	\$190,607.74	56	Microsurfacing	100
Runway 3-21	6310	AC	6,150	\$60,282.32	\$60,282.32 38 Reconstruction		100
Taxiway A-1	120	0 AC 15,014 \$9,759.12 51 Microsurfacing		100			
			Total	\$642,200.42			100

<sup>\*</sup> 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.

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

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
Apron Run-Up at RW 15	AP RU RW15	4305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	957	SqFt	\$0.40	\$382.80
Runway 3-21	RW 3-21	6305	L & T CR	M	Crack Sealing - AC	103	Ft	\$2.25	\$231.68
Runway 3-21	RW 3-21	6305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	50,558.80	SqFt	\$0.40	\$20,223.71
Runway 9-27	RW 9-27	6105	WEATH/RAVEL	L	Surface Seal - Rejuvenating	33,963.10	SqFt	\$0.40	\$13,585.36
Taxiway Alpha	TW A	310	WEATH/RAVEL	Н	H Microsurfacing - AC		SqFt	\$0.65	\$90.59
Taxiway Alpha	TW A	310	WEATH/RAVEL	L	L Surface Seal - Rejuvenating		SqFt	\$0.40	\$6,761.73
Taxiway Bravo	TW B	205	WEATH/RAVEL	L	L Surface Seal - Rejuvenating		SqFt	\$0.40	\$12,624.62
Taxiway Bravo	TW B	215	WEATH/RAVEL	M	M Surface Seal - Coat Tar		SqFt	\$0.40	\$5.56
Taxiway Bravo	TW B	215	WEATH/RAVEL	L	L Surface Seal - Rejuvenating		SqFt	\$0.40	\$511.75
Taxiway B-1	TW B1	220	L & T CR	M	Crack Sealing - AC	123.7	Ft	\$2.25	\$278.26
Taxiway B-1	TW B1	220	WEATH/RAVEL	L	Surface Seal - Rejuvenating	1,447.30	SqFt	\$0.40	\$578.91
Taxiway Charlie	TW C	103	WEATH/RAVEL	L	L Surface Seal - Rejuvenating		SqFt	\$0.40	\$112.33
Taxiway Charlie	TW C	115	WEATH/RAVEL	L	Surface Seal - Rejuvenating 568.1		SqFt	\$0.40	\$227.24
								Total =	\$55,614.54

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.

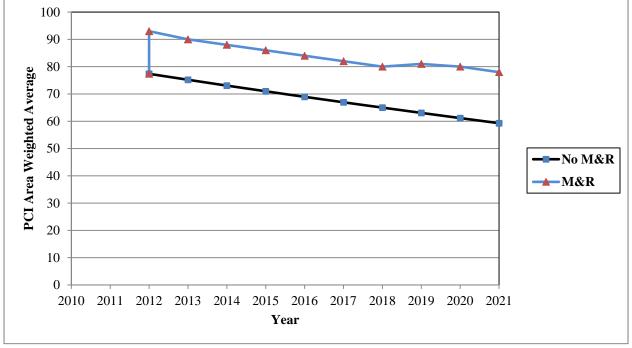


Figure 6-1: Budget Scenario Analysis

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

- The PCI will deteriorate from an average of 78 in 2012 to an average of 59 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 78 through the 10-year analysis period under the unlimited budget scenario. A 2021 PCI average of 78 with this scenario is 19 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about \$4.3 million.

#### 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.

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

Year	Preventative	Major M&R	Total Year Cost
2012	\$55,614.53	\$3,542,543.81	\$3,598,158.35
2013	\$77,366.78	\$0.00	\$77,366.78
2014	\$95,967.53	\$0.00	\$95,967.53
2015	\$125,307.93	\$23,932.33	\$149,240.25
2016	\$162,681.54	\$0.00	\$162,681.54
2017	\$209,353.21	\$0.00	\$209,353.21
2018	\$265,882.04	\$0.00	\$265,882.04
2019	\$258,800.02	\$722,116.32	\$980,916.34
2020	\$305,844.84	\$0.00	\$305,844.84
2021	\$361,644.79	\$0.00	\$361,644.79
Total	\$1,918,463.21	\$4,288,592.46	\$6,207,055.67

Note: Costs are adjusted for inflation.

Approximately 69% of the total Major M&R cost is required in the first year (2012). According to the 2012 inspections, the following pavement sections were in immediate need of Major M&R Activity:

- **General Aviation Apron** Asphalt pavement mill and overlay
- Runway 3-21 Full pavement section reconstruction
- **Taxiway A-1** Asphalt Pavement Mill and Overlay

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 Palm Beach County Park Airport, and a 10-year M&R plan was developed based on the unlimited funding scenario.

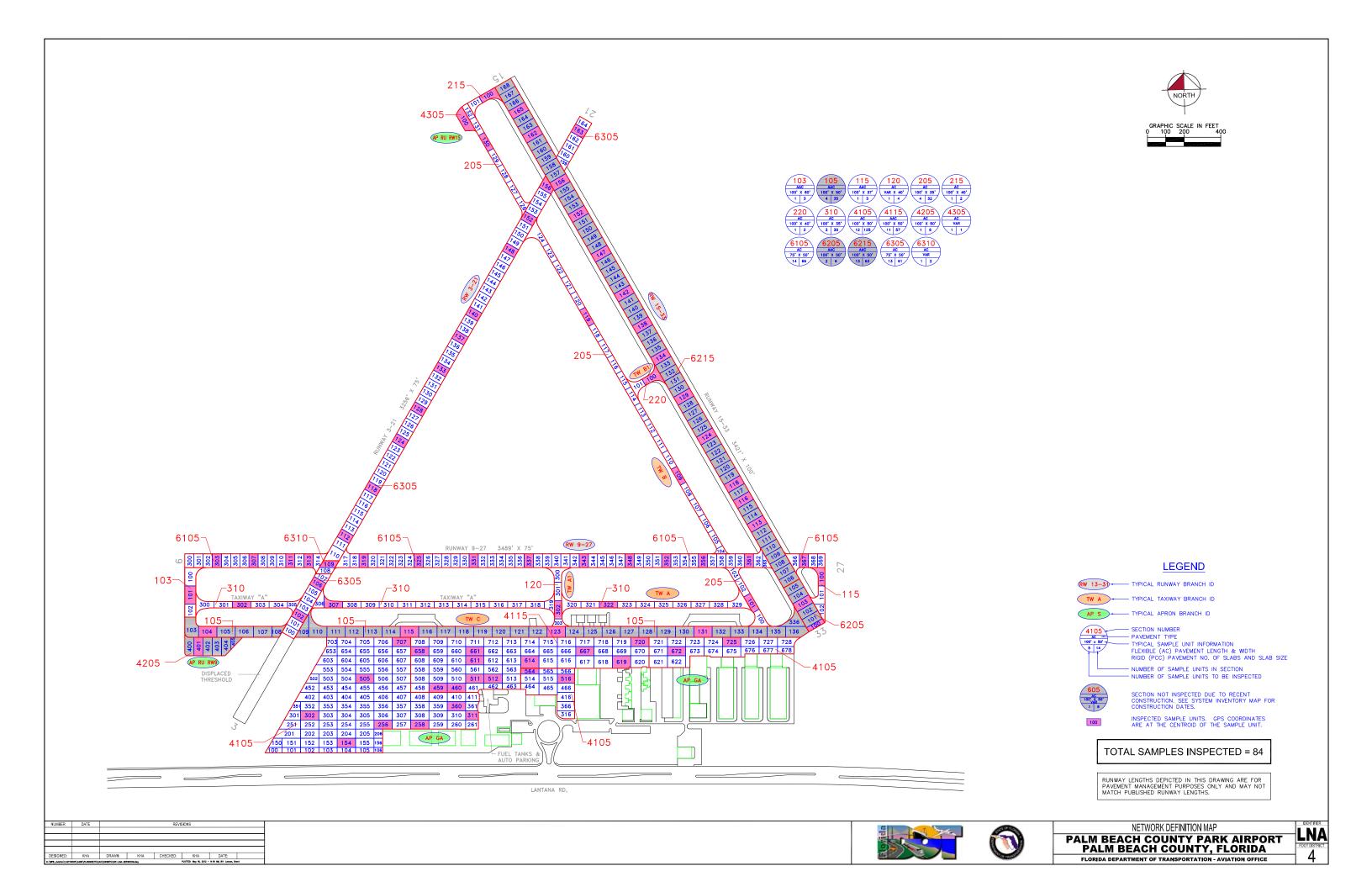
The following recommendations were made based on the 2012 condition inspection and M&R analysis results:

- **General Aviation Apron** Asphalt pavement mill and overlay
- **Runway 3-21** Full pavement section reconstruction
- **Taxiway A-1** Asphalt Pavement Mill and Overlay

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



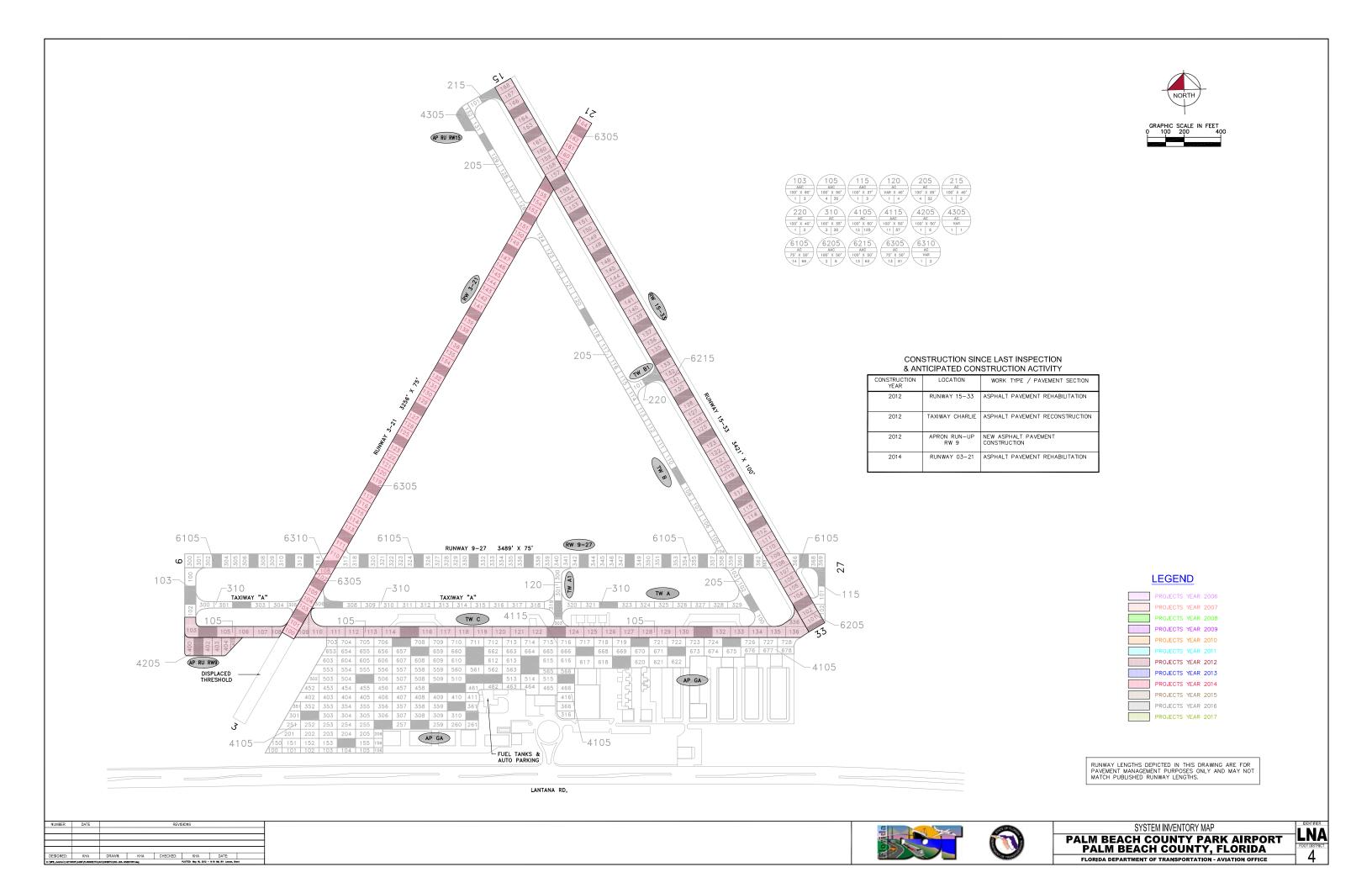
### **Sample Unit Centroid Coordinates**

Branch	Section	Sample	Latitude	Longitude
RW 3-21	6305	102	26.59043322	-80.08909695
RW 3-21	6305	106	26.59089997	-80.08877298
RW 3-21	6305	112	26.59160009	-80.08828702
RW 3-21	6305	118	26.59230021	-80.08780105
RW 3-21	6305	124	26.59300032	-80.08731507
RW 3-21	6305	128	26.59346707	-80.08699108
RW 3-21	6305	133	26.59405049	-80.08658609
RW 3-21	6305	137	26.59451723	-80.08626210
RW 3-21	6305	140	26.59486729	-80.08601910
RW 3-21	6305	148	26.59580077	-80.08537110
RW 3-21	6305	152	26.59626750	-80.08504710
RW 3-21	6305	156	26.59675170	-80.08473311
RW 3-21	6305	163	26.59755103	-80.08415607
RW 3-21	6310	109	26.59105861	-80.08856483
RW 15-33	6215	113	26.59157587	-80.08141541
RW 15-33	6215	116	26.59194010	-80.08163110
RW 15-33	6215	118	26.59218292	-80.08177489
RW 15-33	6215	124	26.59291137	-80.08220627
RW 15-33	6215	129	26.59351841	-80.08256575
RW 15-33	6215	134	26.59412546	-80.08292524
RW 15-33	6215	138	26.59461109	-80.08321283
RW 15-33	6215	142	26.59509672	-80.08350043
RW 15-33	6215	147	26.59570376	-80.08385993
RW 15-33	6215	152	26.59631080	-80.08421943
RW 15-33	6215	156	26.59679643	-80.08450704
RW 15-33	6215	162	26.59752488	-80.08493845
RW 15-33	6215	165	26.59788910	-80.08515416
RW 15-33	6205	100	26.59002669	-80.08049804
RW 15-33	6205	103	26.59036178	-80.08069647
RW 9-27	6105	303	26.59129914	-80.09044223
RW 9-27	6105	307	26.59128042	-80.08983063
RW 9-27	6105	311	26.59126169	-80.08921903
RW 9-27	6105	314	26.59124765	-80.08876034
RW 9-27	6105	319	26.59122423	-80.08799584
RW 9-27	6105	325	26.59119613	-80.08707844
RW 9-27	6105	331	26.59116802	-80.08616104
RW 9-27	6105	337	26.59113991	-80.08524364

Branch	Section	Sample	Latitude	Longitude
RW 9-27	6105	343	26.59111179	-80.08432625
RW 9-27	6105	348	26.59108836	-80.08356175
RW 9-27	6105	352	26.59106960	-80.08295015
RW 9-27	6105	356	26.59105085	-80.08233856
RW 9-27	6105	361	26.59102740	-80.08157406
RW 9-27	6105	367	26.59099850	-80.08065722
AP RU RW15	4305	100	26.59776068	-80.08604210
AP RU RW 9	4205	401	26.59006783	-80.09005107
AP GA	4115	459	26.58928096	-80.08682651
AP GA	4115	460	26.58927159	-80.08652071
AP GA	4115	511	26.58939969	-80.08620971
AP GA	4115	512	26.58939031	-80.08590391
AP GA	4115	611	26.58967461	-80.08619928
AP GA	4115	614	26.58962176	-80.08528284
AP GA	4115	619	26.58957382	-80.08375171
AP GA	4115	658	26.58984018	-80.08711146
AP GA	4115	661	26.58981207	-80.08619407
AP GA	4115	667	26.58975584	-80.08435930
AP GA	4115	720	26.58986518	-80.08343670
AP GA	4105	154	26.58850301	-80.08838673
AP GA	4105	256	26.58875921	-80.08776472
AP GA	4105	258	26.58874048	-80.08715314
AP GA	4105	302	26.58893413	-80.08898269
AP GA	4105	311	26.58885056	-80.08627760
AP GA	4105	360	26.58899666	-80.08653113
AP GA	4105	505	26.58945589	-80.08804447
AP GA	4105	516	26.58935311	-80.08468991
AP GA	4105	564	26.58948429	-80.08528805
AP GA	4105	672	26.58970897	-80.08283033
AP GA	4105	707	26.58998701	-80.08741205
AP GA	4105	725	26.58981830	-80.08190773
TW A	310	302	26.59062668	-80.09005440
TW A	310	307	26.59060016	-80.08854579
TW A	310	322	26.59043931	-80.08393844
TW B	220	100	26.59383436	-80.08303666
TW B	215	100	26.59811363	-80.08559361
TW B	205	101	26.59039245	-80.08155427

#### **Sample Unit Centroid Coordinates**

Branch	Section	Sample	Latitude	Longitude
TW B	205	109	26.59233654	-80.08269780
TW B	205	119	26.59476471	-80.08413577
TW B	205	130	26.59743567	-80.08571760
TW A-1	120	302	26.59038898	-80.08478077
TW C	115	100	26.59078222	-80.08041056
TW C	105	104	26.59052211	-80.09091545
TW C	105	115	26.59013410	-80.08727177
TW C	105	123	26.59005914	-80.08482540
TW C	105	131	26.58998413	-80.08237903
TW C	103	101	26.59068160	-80.09081673



**Table A-1: Pavement Inventory** 

Branch Name	Branch ID	Branch Use	Section ID	Length (ft)	Width (ft)	True Area (ft2)	Section Rank	Surface Type	Last Const. Date	Last Insp. Date	Sample Units in Section
General Aviation Apron	AP GA	APRON	4105	2,700	200	587,002	P	AC	1/1/1985	4/25/2012	125
General Aviation Apron	AP GA	APRON	4115	900	300	293,243	P	AAC	1/1/1985	4/25/2012	57
Apron Run-Up at RW 9	AP RU RW 9	APRON	4205	100	200	26,830	P	AC	1/1/2012	1/1/2012	6
Apron Run-Up at RW 15	AP RU RW15	APRON	4305	125	50	6,377	P	AC	1/1/1993	4/25/2012	1
Runway 15-33	RW 15-33	RUNWAY	6205	276	100	27,600	P	AAC	1/1/2012	1/1/2012	6
Runway 15-33	RW 15-33	RUNWAY	6215	3,149	100	314,956	P	AAC	1/1/2012	1/1/2012	63
Runway 3-21	RW 3-21	RUNWAY	6310	82	75	6,150	P	AC	1/1/1965	4/25/2012	2
Runway 3-21	RW 3-21	RUNWAY	6305	3,000	75	228,640	P	AC	1/1/1993	4/25/2012	61
Runway 9-27	RW 9-27	RUNWAY	6105	3,200	75	248,513	T	AC	6/1/2007	4/25/2012	66
Taxiway Alpha	TW A	TAXIWAY	310	2,745	40	110,651	P	AC	6/1/2007	4/25/2012	30
Taxiway A-1	TW A1	TAXIWAY	120	350	35	15,014	P	AC	1/1/1964	4/25/2012	4
Taxiway Bravo	TW B	TAXIWAY	205	3,100	35	115,827	P	AC	1/1/1993	4/25/2012	32
Taxiway Bravo	TW B	TAXIWAY	215	200	40	8,529	P	AC	1/1/1993	4/25/2012	2
Taxiway B-1	TW B1	TAXIWAY	220	200	40	9,653	P	AC	1/1/1993	4/25/2012	2
Taxiway Charlie	TW C	TAXIWAY	103	250	60	16,849	P	AAC	1/1/2007	4/25/2012	3
Taxiway Charlie	TW C	TAXIWAY	115	250	40	12,354	P	AAC	6/1/2007	4/25/2012	3
Taxiway Charlie	TW C	TAXIWAY	105	3,400	60	210,435	P	AAC	1/1/2012	1/1/2012	35

Note: If a 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.

## **Work History Report**

1 of 4

Pavement Database:

		Pavem	ent Database:	'	
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/1985 <b>Use:</b> AF	anch: APGA (GAAPRO PRON Rank PLength:	ON) 2,700.00 Ft	Width:	<b>Section:</b> 4105 <b>Surface:</b> AC 200.00 Ft <b>True Area:</b> 587,001.91 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/1985	IMPORTED	BUILT		2.00	True 1985: 2" P-401 ON 6" P-211
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/1985 <b>Use:</b> AF	anch: AP GA (GA APRO PRON Rank P Length:	ON) 900.00 Ft	Width:	<b>Section:</b> 4115 <b>Surface:</b> AAC 300.00 Ft <b>True Area:</b> 293.242.67 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/1985 01/01/1965	IMPORTED IMPORTED	OVERLAY BUILT		1.50 1.50	True 1985: 1.5" P-401 OVERLAY True 1965: 1.5" P-401 ON 8" P-211
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/2012 <b>Use:</b> AF	-	APRON AT RW 200.00 Ft	9) Width:	Section:         4205         Surface:         AC           100.00         Ft         True Area:         26.830.49         SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/2012	INITIAL	Initial Construction	\$0	0.00	True
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/1993 <b>Use:</b> AF	•	APRON AT RW 125.00 Ft	15) Width:	<b>Section:</b> 4305 <b>Surface:</b> AC 50.00 Ft <b>True Area:</b> 6.377.23 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/1993	IMPORTED	BUILT		2.00	True 1993: 2 INCH P-401 ON 6 INCH P-211
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/2012 <b>Use:</b> RU	anch: RW 15-33 (RUNWA' JNWAY Rank P Length:	Y 15-33 <b>)</b> 276.00 Ft	Width:	<b>Section:</b> 6205 <b>Surface:</b> AAC 100.00 Ft <b>True Area:</b> 27,600.00 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/2012 01/01/1992 01/01/1975 01/01/1964	ML-OL IMPORTED IMPORTED IMPORTED	Mill and Overlay REPAIR OVERLAY BUILT	\$0	0.00 1.50	True False 1992: P-628 PAVEMENT REJUVENATOR WAS APPLIED OVER ENTIRE RUNWAY True 1975: FDOT TYPE I ASPHALT True 1964: 1.5" ASPHALT OVERLAY ON EXISTING FLEX. PAVEMENT
<b>Network:</b> LN <b>L.C.D.:</b> 01/01	NA <b>Br</b> a 1/2012 <b>Use:</b> RU	anch: RW 15-33 (RUNWA' JNWAY Rank P Length:	Y 15-33 <b>)</b> 3,149.00 Ft	Width:	<b>Section:</b> 6215 <b>Surface:</b> AAC 100.00 Ft <b>True Area:</b> 314,955.99 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/2012 01/01/1975	ML-OL IMPORTED	Mill and Overlay BUILT	\$0	0.00	True 1975: FDOT TYPE I ASPHALT OVERLAY ON EXISTING FLEX. PAVEMENT - NO HIST
<b>Network:</b> LN <b>L.C.D.:</b> 01/01	NA <b>Br</b> 1/1993 <b>Use:</b> RL	anch: RW 3-21 (RUNWA' JNWAY Rank P Length:	Y 3-21) 3,000.00 Ft	Width:	<b>Section:</b> 6305 <b>Surface:</b> AC 75.00 Ft <b>True Area:</b> 228.639.68 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/1993	IMPORTED	BUILT		2.00	True 1993: 2" P401 ON 6" P211
Network: LN L.C.D.: 01/01	NA <b>Br</b> 1/1965 <b>Use:</b> RL	anch: RW 3-21 (RUNWA' JNWAY Rank P Length:	Y 3-21 <b>)</b> 82.00 Ft	Width:	<b>Section:</b> 6310 <b>Surface:</b> AC 75.00 Ft <b>True Area:</b> 6.150.00 SqF
Work Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R Comments
01/01/1965	INITIAL	Initial Construction	\$0	0.00	True 1965: 1.5: ASPHALT SURFACE - LEVEL COURSE AS NECESSARY

#### **Work History Report**

Pavement Database:

 Network:
 LNA
 Branch:
 RW 9-27
 (RUNWAY 9-27)
 Section:
 6105
 Surface:
 AC

 L.C.D.:
 06/01/2007
 Use:
 RUNWAY
 Rank T Length:
 3,200.00 Ft
 Width:
 75.00 Ft
 True Area:248,512.70 SqF

2 of 4

Work Work Work Thickness Major Comments Cost Date Code Description ( in) M&R 06/01/2007 CR-AC Complete Reconstruction - AC \$0 0.00 True **IMPORTED OVERLAY** EXISTING ASPHALT ON EXISTING 01/01/1965 True SAND-ASPHALT BASE 01/01/1965 **IMPORTED BUILT** 1965: 1.5: ASPHALT SURFACE - LEVEL COURSE AS NECESSARY

 Network:
 LNA
 Branch:
 TW A
 (TAXIWAY A)
 Section:
 310
 Surface:
 AC

 L.C.D.:
 06/01/2007
 Use:
 TAXIWAY
 Rank P Length:
 2,745.00 Ft
 Width:
 40.00 Ft
 True Area:
 110.650.65 SqF

Work Work Thickness Major Comments Cost Date Code Description M&R ( in) NC-AC New Construction - AC 06/01/2007 0.00 \$0 True

 Network:
 LNA
 Branch:
 TW A1
 (TAXIWAY A1)
 Section:
 120
 Surface:
 AC

 L.C.D.:
 01/01/1964
 Use:
 TAXIWAY
 Rank P Length:
 350.00 Ft
 Width:
 35.00 Ft
 True Area:
 15.014.03 SqF

Work Work Work Thickness Major Comments Cost Date Code Description M&R ( in) 01/01/1964 INITIAL **Initial Construction** \$0 1964: 1.5" ASPHALT OVERLAY ON 1.50 True SAND-BITUM. LEVEL COURSE

 Network:
 LNA
 Branch:
 TW B
 (TAXIWAY B)
 Section:
 205
 Surface:
 AC

 L.C.D.:
 01/01/1993
 Use:
 TAXIWAY
 Rank P Length:
 3,100.00 Ft
 Width:
 35.00 Ft
 True Area:115,827.11 SqF

Work Work Work Thickness Major Comments Cost Date Code Description M&R ( in) 01/01/1993 **IMPORTED BUILT** 2.00 True 1993: 2 INCH P-401 ON 6 INCH P-211

 Network:
 LNA
 Branch:
 TW B
 (TAXIWAY B)
 Section:
 215
 Surface:
 AC

 L.C.D.:
 01/01/1993
 Use:
 TAXIWAY
 Rank P Length:
 200.00 Ft
 Width:
 40.00 Ft
 True Area:
 8,528.61 SqF

Work Work Work Thickness Major Comments Cost Date Code Description M&R ( in) 01/01/1993 IMPORTED **BUILT** 2.00 True 1993: 2 INCH P-401 ON 6 INCH P-211

 Network:
 LNA
 Branch:
 TW B1
 (TAXIWAY B1)
 Section:
 220
 Surface:
 AC

 L.C.D.:
 01/01/1993
 Use:
 TAXIWAY
 Rank P Length:
 200.00
 Ft
 Width:
 40.00
 Ft
 True Area:
 9,652.91
 SqF

Work Work Work Thickness Major Comments Cost Date Code Description M&R ( in) 01/01/1993 INITIAL **Initial Construction** \$0 2.00 True 1993: 2 INCH P-401 ON 6 INCH P-211

 Network:
 LNA
 Branch:
 TW C
 (TAXIWAY C)
 Section:
 103
 Surface:
 AAC

 L.C.D.:
 01/01/2007
 Use:
 TAXIWAY
 Rank P Length:
 250.00
 Ft
 Width:
 60.00
 Ft
 True Area:
 16.849.17
 SqF

Work Thickness Major Work Work Comments Cost M&R Date Code Description ( in) 01/01/2007 ML-OL Mill and Overlay \$0 0.00 True 01/01/1964 INITIAL **Initial Construction** \$0 True 1964: 1.5" ASPHALT OVERLAY ON 1.50 EXISTING FLEX. PAVEMENT

 Network:
 LNA
 Branch:
 TW C
 (TAXIWAY C)
 Section:
 105
 Surface:
 AAC

 L.C.D.:
 01/01/2012
 Use:
 TAXIWAY
 Rank P Length:
 3,400.00 Ft
 Width:
 60.00 Ft
 True Area:210,434.62 SqF

	Vork Date	Work Code	Work Description	Cost	Thickness ( in)	Major M&R	Comments
01/	/01/2012	NC-AC	New Construction - AC	\$0	0.00	True	
01/	/01/1964	IMPORTED	BUILT		1.50		1964: 1.5" ASPHALT OVERLAY ON EXISTING FLEX. PAVEMENT

## **Work History Report**

3 of 4

Pavement Database:

Network: LNA Branch: TW C L.C.D.: 06/01/2007 Use: TAXIWAY

TWC (TAXIWAYC)

AY Rank P Length:

250.00 Ft

**Section:** 115 **Width:** 40.00 Ft **T**<sub>1</sub>

,

Surface: AAC

True Area: 12,353.73 SqF

Work Date	Work Code	Work Description	Cost	Cost Thickness M		Comments
06/01/2007	CR-AC	Complete Reconstruction - AC	\$0	0.00	True	
01/01/1964	IMPORTED	BUILT		1.50		1964: 1.5" ASPHALT OVERLAY ON EXISTING FLEX. PAVEMENT

## **Work History Report**

4 of 4

Pavement Database:

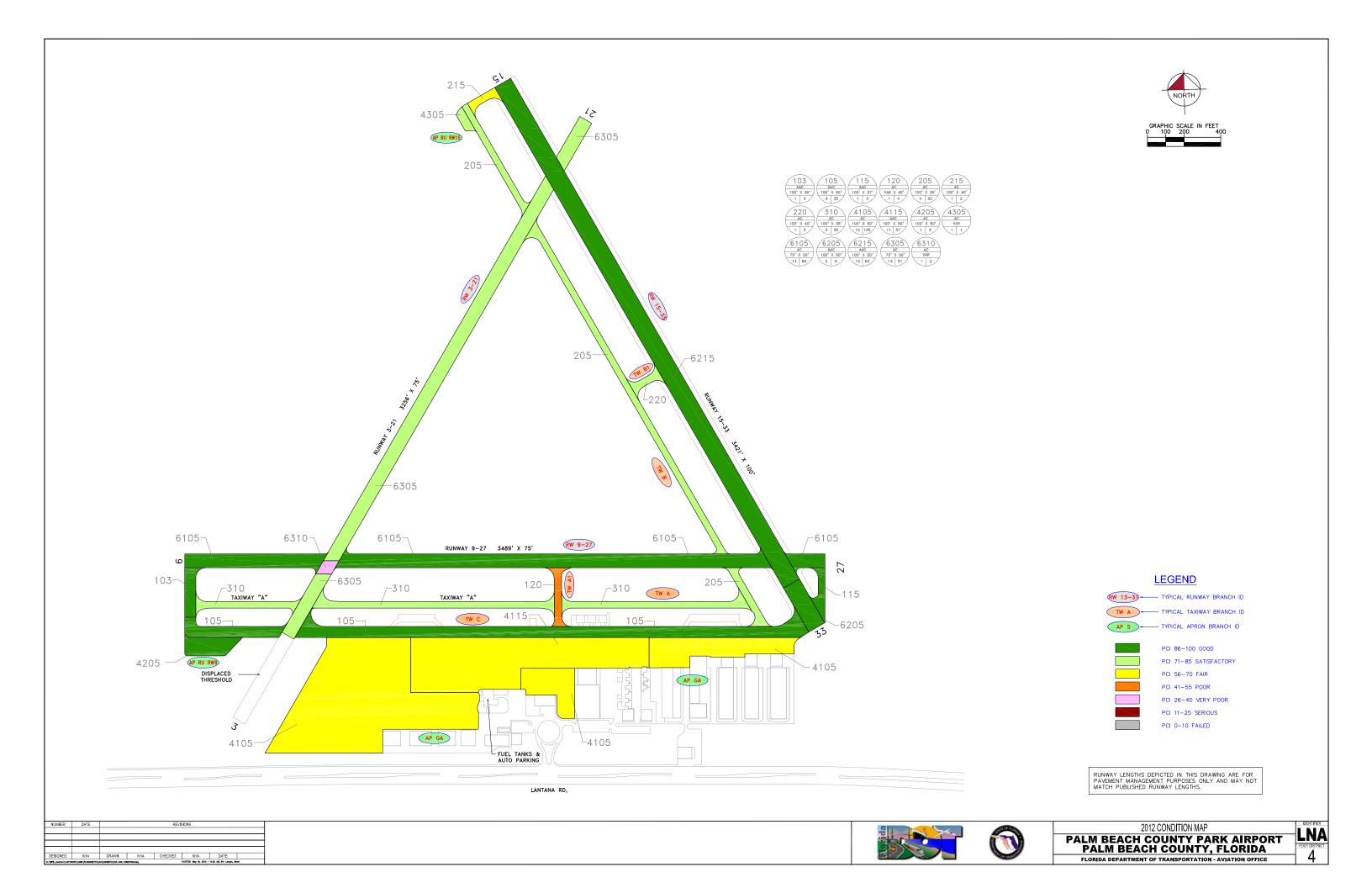
Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
BUILT	11	2,053,474.25	1.78	.26
Complete Reconstruction - AC	2	260,866.43	.00	.00
Initial Construction	5	74,496.60	1.00	.94
Mill and Overlay	3	359,405.16	.00	.00
New Construction - AC	2	321,085.27	.00	.00
OVERLAY	3	569,355.37	1.50	
REPAIR	1	27,600.00		

STD = Standard Deviation

## **APPENDIX B**

# 2012 CONDITION MAP PAVEMENT CONDITION INDEX TABLE



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

Branch Name	Branch ID	Branch Use	Section ID	True Area (ft²)	Section Rank	Surface Type	Total Samples Inspected	Total Samples	PCI	PCI Category
General Aviation Apron	AP GA	APRON	4105	587,002	P	AC	12	125	62	Fair
General Aviation Apron	AP GA	APRON	4115	293,243	P	AAC	11	57	56	Fair
Apron Run-Up at RW 9	AP RU RW 9	APRON	4205	26,830	P	AC	1	6	100	Good
Apron Run-Up at RW 15	AP RU RW15	APRON	4305	6,377	P	AC	1	1	79	Satisfactory
Runway 15-33	RW 15-33	RUNWAY	6205	27,600	P	AAC	2	6	100	Good
Runway 15-33	RW 15-33	RUNWAY	6215	314,956	P	AAC	13	63	100	Good
Runway 3-21	RW 3-21	RUNWAY	6310	6,150	P	AC	1	2	38	Very Poor
Runway 3-21	RW 3-21	RUNWAY	6305	228,640	P	AC	13	61	79	Satisfactory
Runway 9-27	RW 9-27	RUNWAY	6105	248,513	Т	AC	14	66	87	Good
Taxiway Alpha	TW A	TAXIWAY	310	110,651	P	AC	3	30	84	Satisfactory
Taxiway A-1	TW A1	TAXIWAY	120	15,014	P	AC	1	4	51	Poor
Taxiway Bravo	TW B	TAXIWAY	205	115,827	P	AC	4	32	83	Satisfactory
Taxiway Bravo	TW B	TAXIWAY	215	8,529	P	AC	1	2	68	Fair
Taxiway B-1	TW B1	TAXIWAY	220	9,653	P	AC	1	2	77	Satisfactory
Taxiway Charlie	TW C	TAXIWAY	103	16,849	P	AAC	1	3	91	Good
Taxiway Charlie	TW C	TAXIWAY	115	12,354	P	AAC	1	3	89	Good
Taxiway Charlie	TW C	TAXIWAY	105	210,435	P	AAC	4	35	100	Good

Note: If a 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: 5 /10/2012

#### **Branch Condition Report**

Pavement Database: NetworkID: LNA

Sum Section Avg Section PCI Number of Weighted **True Area** Average **Branch ID** Use **Sections** Length Width Standard Average (SqFt) PCI PCI (Ft) (Ft) Deviation APGA (GA APRON) 2 3,600.00 250.00 880,244.58 **APRON** 59.00 3.00 60.00 APRU RW 9 (RUN-UP APRON AT 200.00 100.00 26,830.49 **APRON** 100.00 1 100.00 0.00 RW 9) APRU RW15 (RUN-UP APRON AT 1 125.00 50.00 6,377.23 **APRON** 79.00 0.00 79.00 RW 15) RW 15-33 (RUNWAY 15-33) 2 3,425.00 342,555.99 RUNWAY 100.00 100.00 100.00 0.00 RW 3-21 (RUNWAY 3-21) 2 3,082.00 75.00 234,789.68 **RUNWAY** 58.50 20.50 77.93 RW 9-27 (RUNWAY 9-27) 1 3,200.00 75.00 248,512.70 **RUNWAY** 87.00 87.00 0.00 TW A (TAXIWAY A) 1 2,745.00 40.00 110,650.65 **TAXIWAY** 84.00 0.00 84.00 TW A1 (TAXIWAY A1) 350.00 15,014.03 **TAXIWAY** 1 35.00 51.00 0.00 51.00 TW B (TAXIWAY B) 3,300.00 124,355.72 **TAXIWAY** 2 37.50 75.50 7.50 81.97 TW B1 (TAXIWAY B1) 200.00 9,652.91 **TAXIWAY** 1 40.00 77.00 0.00 77.00 TW C (TAXIWAY C) **TAXIWAY** 3 3,900.00 53.33 239,637.52 93.33 4.78 98.80

1 of 2

## **Branch Condition Report**

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	4	913,452.30	74.25	17.09	61.31
RUNWAY	5	825,858.37	80.80	22.85	89.81
TAXIWAY	8	499,310.83	80.38	14.23	89.47
All	17	2,238,621.50	79.06	18.02	78.11

STD = Standard Deviation

Date: 5 /10/2012

#### **Section Condition Report**

Pavement Database:

NetworkID: LNA

Last Age Section ID Use PCI **Branch ID** Last **Surface** Rank Lanes **True Area** Inspection Αt Const. (SqFt) Date Inspection Date Ρ APGA (GA APRON) **APRON** 587,001.91 04/25/2012 4105 01/01/1985 AC 0 27 62.00 Ρ AP GA (GA APRON) 4115 01/01/1985 AAC **APRON** 0 293,242.67 04/25/2012 27 56.00 AP RU RW 9 (RUN-UP APRON Р 26,830.49 01/01/2012 4205 01/01/2012 AC **APRON** 0 0 100.00 AT RW 9) AP RU RW15 (RUN-UP APRON Ρ 4305 01/01/1993 AC **APRON** 0 6,377.23 04/25/2012 19 79.00 AT RW 15) 01/01/2012 Р RW 15-33 (RUNWAY 15-33) 6205 AAC **RUNWAY** 0 27,600.00 01/01/2012 0 100.00 RW 15-33 (RUNWAY 15-33) 01/01/2012 AAC **RUNWAY** Р 314,955.99 01/01/2012 6215 0 0 100.00 RW 3-21 (RUNWAY 3-21) 01/01/1993 **RUNWAY** Ρ 6305 AC 0 228,639.68 04/25/2012 19 79.00 AC RW 3-21 (RUNWAY 3-21) 6310 01/01/1965 **RUNWAY** Ρ 0 6,150.00 04/25/2012 47 38.00 RW 9-27 (RUNWAY 9-27) 6105 06/01/2007 AC **RUNWAY** Т 248,512.70 04/25/2012 5 87.00 Ρ TW A (TAXIWAY A) 310 06/01/2007 AC **TAXIWAY** 0 110,650.65 04/25/2012 5 84.00 TW A1 (TAXIWAY A1) 01/01/1964 AC **TAXIWAY** Ρ 15,014.03 04/25/2012 51.00 120 0 48 TW B (TAXIWAY B) 205 01/01/1993 AC **TAXIWAY** Ρ 115,827.11 04/25/2012 83.00 19 8,528.61 04/25/2012 TW B (TAXIWAY B) 215 01/01/1993 AC **TAXIWAY** Ρ 0 19 68.00 **TAXIWAY** Ρ 9,652.91 04/25/2012 TW B1 (TAXIWAY B1) 220 01/01/1993 AC 0 19 77.00 TW C (TAXIWAY C) 01/01/2007 AAC **TAXIWAY** Р 16,849.17 04/25/2012 103 0 5 91.00 TW C (TAXIWAY C) Ρ 0 210,434.62 01/01/2012 105 01/01/2012 AAC **TAXIWAY** 0 100.00 Ρ TW C (TAXIWAY C) 115 06/01/2007 AAC **TAXIWAY** 0 12,353.73 04/25/2012 5 89.00

1 of 2

Date: 5 /10/2012

## **Section Condition Report**

**t** 2 of 2

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	579,821.10	4	100.00	0.00	100.00
03-05	5.00	388,366.25	4	87.75	2.59	86.38
16-20	19.00	369,025.54	5	77.20	5.00	79.95
26-30	27.00	880,244.58	2	59.00	3.00	60.00
over 40	47.50	21,164.03	2	44.50	6.50	47.22
All	15.53	2,238,621.50	17	79.06	18.02	78.11

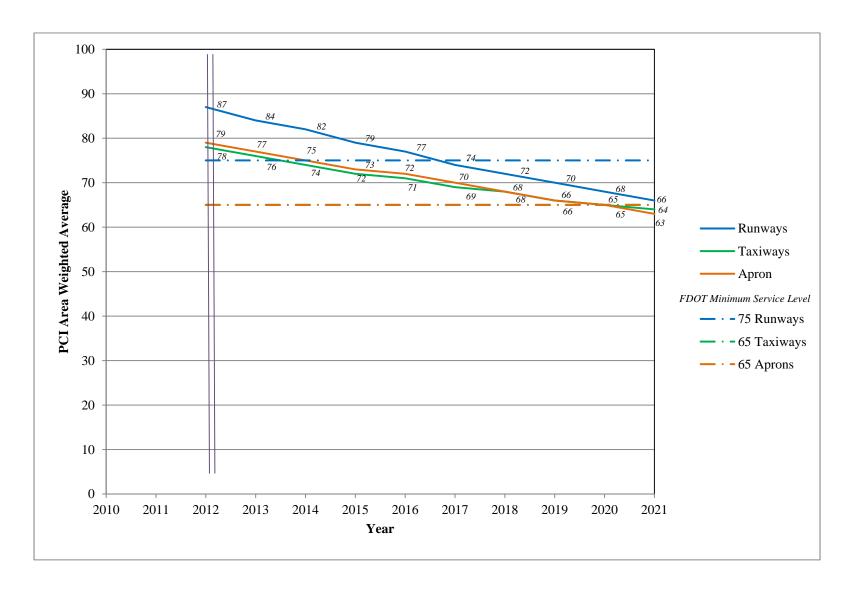
## **APPENDIX D**

# PAVEMENT CONDITION PREDICTION TABLE PREDICTED PCI BY PAVEMENT USE GRAPH

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

D. L.N.	Branch ID	Section ID	Current PCI	PCI Forecast									
Branch Name				2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
General Aviation Apron	AP GA	4105	62	62	61	60	59	58	56	55	54	53	52
General Aviation Apron	AP GA	4115	56	56	53	51	48	46	43	40	36	32	29
Apron Run-Up at RW 9	AP RU RW 9	4205	100	99	96	94	92	90	88	86	84	82	80
Apron Run-Up at RW 15	AP RU RW15	4305	79	79	77	76	74	73	72	70	69	68	67
Runway 15-33	RW 15-33	6205	100	98	94	91	87	84	81	79	76	74	72
Runway 15-33	RW 15-33	6215	100	98	94	91	87	84	81	79	76	74	72
Runway 3-21	RW 3-21	6310	38	38	37	36	35	35	34	33	31	30	29
Runway 3-21	RW 3-21	6305	79	79	76	74	72	70	68	66	64	62	61
Runway 9-27	RW 9-27	6105	87	87	84	82	80	78	76	74	72	70	68
Taxiway Alpha	TW A	310	84	84	82	80	79	77	76	75	73	72	71
Taxiway A-1	TW A1	120	51	51	50	49	48	47	45	44	43	42	41
Taxiway Bravo	TW B	205	83	83	81	80	78	77	75	74	72	71	70
Taxiway Bravo	TW B	215	68	68	67	65	64	63	62	61	60	59	58
Taxiway B-1	TW B1	220	77	77	75	74	73	71	70	69	68	66	65
Taxiway Charlie	TW C	103	91	90	88	85	83	81	79	77	75	74	73
Taxiway Charlie	TW C	115	89	88	86	83	81	79	78	76	74	73	72
Taxiway Charlie	TW C	105	100	98	95	92	89	86	84	81	79	78	76

Figure D-1: Predicted PCI by Pavement Use



## **APPENDIX E**

#### YEAR 1 MAINTENANCE ACTIVITIES TABLE

**Table E-1: Year 1 Maintenance Activities** 

Branch Name	Branch ID	Section ID	Distress Description	Distress Severity	Work Description	Work Quantity	Work Unit	Unit Cost	Work Cost
Apron Run-Up at RW 15	AP RU RW15	4305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	957	SqFt	\$0.40	\$382.80
Runway 3-21	RW 3-21	6305	L & T CR	M	Crack Sealing - AC	103	Ft	\$2.25	\$231.68
Runway 3-21	RW 3-21	6305	WEATH/RAVEL	L	Surface Seal - Rejuvenating	50,558.80	SqFt	\$0.40	\$20,223.71
Runway 9-27	RW 9-27	6105	WEATH/RAVEL	L	Surface Seal - Rejuvenating	33,963.10	SqFt	\$0.40	\$13,585.36
Taxiway Alpha	TW A	310	WEATH/RAVEL	Н	Microsurfacing - AC	139.4	SqFt	\$0.65	\$90.59
Taxiway Alpha	TW A	310	WEATH/RAVEL	L	Surface Seal - Rejuvenating	16,904.20	SqFt	\$0.40	\$6,761.73
Taxiway Bravo	TW B	205	WEATH/RAVEL	L	Surface Seal - Rejuvenating	31,561.30	SqFt	\$0.40	\$12,624.62
Taxiway Bravo	TW B	215	WEATH/RAVEL	M	Surface Seal - Coat Tar	13.9	SqFt	\$0.40	\$5.56
Taxiway Bravo	TW B	215	WEATH/RAVEL	L	Surface Seal - Rejuvenating	1,279.40	SqFt	\$0.40	\$511.75
Taxiway B-1	TW B1	220	L & T CR	M	Crack Sealing - AC	123.7	Ft	\$2.25	\$278.26
Taxiway B-1	TW B1	220	WEATH/RAVEL	L	Surface Seal - Rejuvenating	1,447.30	SqFt	\$0.40	\$578.91
Taxiway Charlie	TW C	103	WEATH/RAVEL	L	Surface Seal - Rejuvenating	280.8	SqFt	\$0.40	\$112.33
Taxiway Charlie	TW C	115	WEATH/RAVEL	L	Surface Seal - Rejuvenating	568.1	SqFt	\$0.40	\$227.24
								Total =	\$55,614.54

## **APPENDIX F**

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

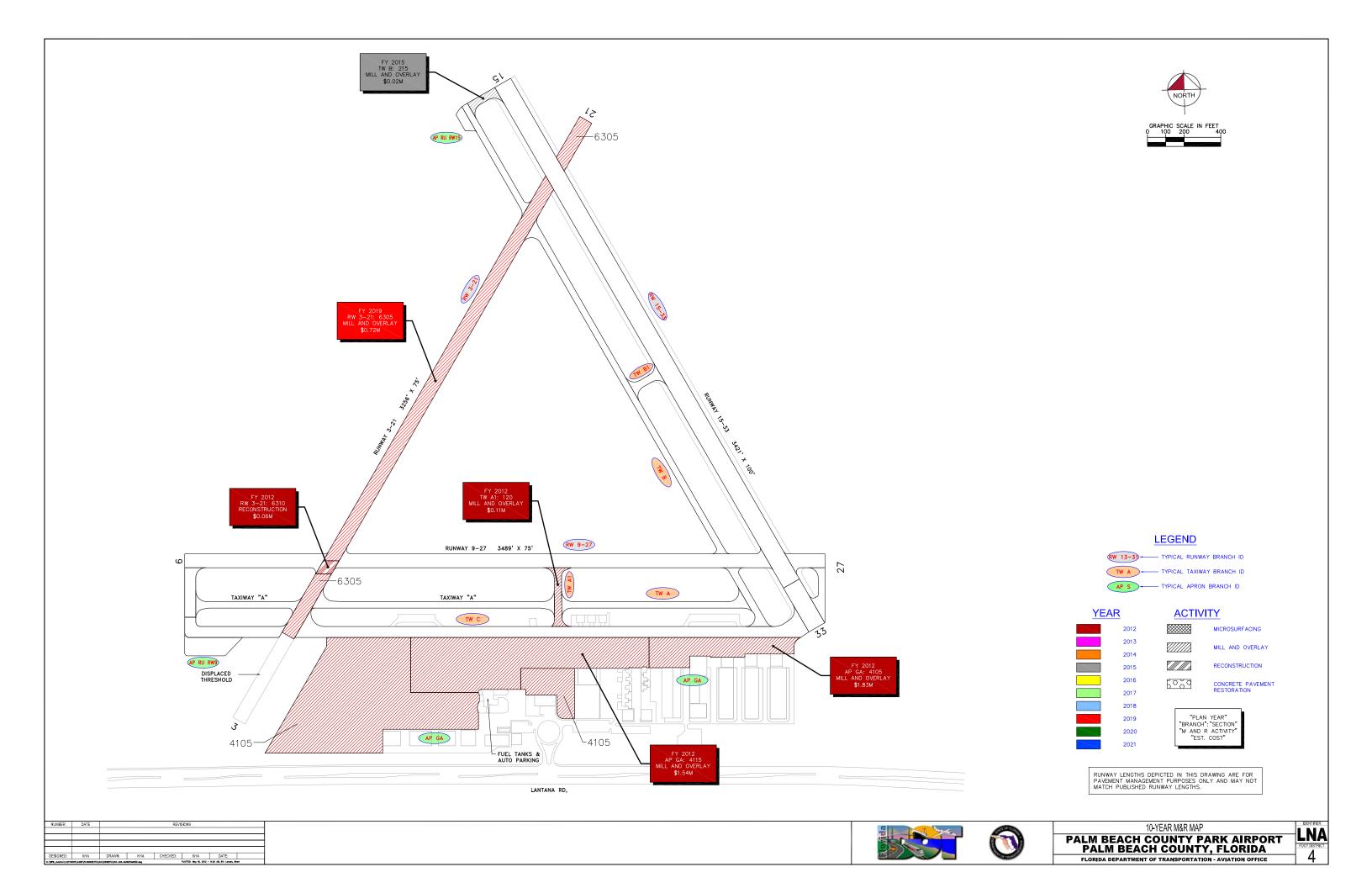
Table F-1: Major M&R Plan by Year under Unlimited Funding Scenario

Year	Branch Name	Section ID	Surface Type	Section Area (ft²)	Major M&R Costs*	PCI Before M&R	M&R Activity	PCI After M&R
2012	General Aviation Apron	4105	AC	587,002	\$1,833,794.03	62	Mill and Overlay	100
2012	General Aviation Apron	4115	AAC	293,243	\$1,540,111.16	56	Mill and Overlay	100
2012	Runway 3-21	6310	AC	6,150	\$60,282.32	38	Reconstruction	100
2012	Taxiway A-1	120	AC	15,014	\$108,356.31	51	Mill and Overlay	100
2015	Taxiway Bravo	215	AC	8,529	\$23,932.33	64	Mill and Overlay	100
2019	Runway 3-21	6305	AC	228,640	\$722,116.32	64	Mill and Overlay	100
				Total	\$4,288,592.47	56		100

<sup>\*</sup> Costs are adjusted for inflation.

## **APPENDIX G**

10-YEAR M&R MAP



## **APPENDIX H**

#### **PHOTOGRAPHS**



Runway 3-21, Section 6305, Sample Unit 156 – Low severity (52) Weathering and Raveling, low severity (45) Depression



Runway 3-21, Section 6305, Sample Unit 156 – Low severity (52) Weathering and Raveling, low and medium severity (48) Longitudinal and Transverse Cracking



Runway 3-21, Section 6310, Sample Unit 109 – Low, medium, and high severity (48) Longitudinal and Transverse Cracking; low severity (52) Weathering and Raveling



Runway 9-27, Section 6105, Sample Unit 319 – Low severity (52) Weathering and Raveling, low severity (45) Depression



Runway 9-27, Section 6105, Sample Unit 6105, Sample Unit 313 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



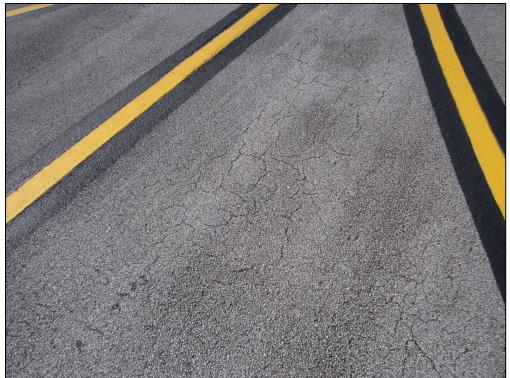
Taxiway Bravo, Section 215, Sample Unit 100 - Low severity (48) Longitudinal and Transverse Cracking, low severity (56) Swelling



Taxiway B-1, Section 220, Sample Unit 100 – Low and medium severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Taxiway Alpha, Section 310, Sample Unit 322 – High severity (52) Weathering and Raveling



Taxiway A-1, Section 120, Sample Unit 302 - Low severity (52) Weathering and Raveling, low severity (43) Block Cracking



GA Apron, Section 4105, Sample Unit 302 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (56) Swelling



GA Apron, Section 4105, Sample Unit 258 – Low severity (52) Weathering and Raveling, low severity (54) Shoving, (49) Oil Spillage



GA Apron, Section 4115, Sample Unit 661 – Low severity (48) Longitudinal and Transverse Cracking, low and medium (52) Weathering and Raveling, low severity (45) Depression



GA Apron, Section 4115, Sample Unit 614 – Low and medium severity (48) Longitudinal and Transverse Cracking, low and high severity (52) Weathering and Raveling, low severity (56) Swelling



GA Apron, Section 4115, Sample Unit 720 – Low severity (48) Longitudinal and Transverse Cracking, low severity (43) Block Cracking, low severity (52) Weathering and Raveling

# **APPENDIX I**

### PCI RE-INSPECTION REPORT

FDOT\_COMB

Report Generated Date: 5/10/2012 Site Name:

Site Name:					
Network: LNA Name: PALM BEACH COUNTY	PARK AII	RPOR	Т		
Branch: AP GA Name: GA APRON			Use: APRON	Area: 880	),244.58SqFt
Section: 4105 of 2 From: - Surface: AC Family: FDOT-RL-AP-AC Area: 587,001.91SqFt Length: 2,700.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments:	Lanes:		To: - Category: dth: 200.00Ft	Rank: P	Last Const.: 1/1/1985
Last Insp. Date4/25/2012 Total Samples: 125 Sur Conditions: PCI:62.00   Inspection Comments:	veyed: 1	12			
Sample Number: 154 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 69	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING		L L	509.13 Ft 3,999.97 SqFt	Comments:	
Sample Number: 256 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 66	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	3.00 Ft	Comments:	
50 PATCHING		L	150.00 SqFt	Comments:	
52 WEATHERING/RAVELING		L	4,849.96 SqFt	Comments:	
Sample Number: 258 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 48	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	28.01 Ft	Comments:	
52 WEATHERING/RAVELING		L	2,393.98 SqFt	Comments:	
52 WEATHERING/RAVELING		M	500.00 SqFt	Comments:	
54 SHOVING		L	32.00 SqFt	Comments:	
50 PATCHING 49 OIL SPILLAGE		L N	2,105.98 SqFt 406.00 SqFt	Comments: Comments:	
		IA	400.00 bqrc	Commerce:	
Sample Number: 302 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 63	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	223.06 Ft	Comments:	
52 WEATHERING/RAVELING		L	4,499.96 SqFt	Comments:	
56 SWELLING		L	344.00 SqFt	Comments:	
49 OIL SPILLAGE		N	4.00 SqFt	Comments:	
Sample Number: 311 Type: R Sample Comments:	Area:		3,488.80SqFt	PCI = 71	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	51.01 Ft	Comments:	
52 WEATHERING/RAVELING		L	2,791.02 SqFt	Comments:	
Sample Number: 360 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 69	
45 DEPRESSION		L	35.00 SqFt	Comments:	
45 DEPRESSION		L	12.00 SqFt	Comments:	
52 WEATHERING/RAVELING		L	4,999.96 SqFt	Comments:	
Sample Number: 505 Type: R Sample Comments:	Area:		5,000.00SqFt	PCI = 53	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	354.09 Ft	Comments:	
52 WEATHERING/RAVELING		L	3,999.97 SqFt	Comments:	
52 WEATHERING/RAVELING		M	999.99 SqFt	Comments:	
45 DEPRESSION		L	105.00 SqFt	Comments:	

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Report Generated Date: 5/10/2012

Sample Number: 516 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 55	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	83.02	Ft	Comments:	
52 WEATHERING/RAVELING		L	4,499.96	SqFt	Comments:	
52 WEATHERING/RAVELING		M	494.00	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		Η	6.00	Ft	Comments:	
50 PATCHING		M	160.00	SqFt	Comments:	
Sample Number: 564 Type: R Sample Comments:	Area:		3,200.00SqFt		PCI = 52	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	54.01	Ft	Comments:	
52 WEATHERING/RAVELING		L	3,104.97	SqFt	Comments:	
52 WEATHERING/RAVELING		Η	95.00	SqFt	Comments:	
49 OIL SPILLAGE		N	78.00	SqFt	Comments:	
Sample Number: 672 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 69	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	77.02	Ft	Comments:	
*		L L	77.02 4,999.96		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING  Sample Number: 707 Type: R	Area:					
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING	Area:		4,999.96	SqFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING  Sample Number: 707 Type: R Sample Comments:	Area:	L	4,999.96 5,000.00SqFt	SqFt Ft	Comments: PCI = 64	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING  Sample Number: 707 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING	Area:	L L	4,999.96 5,000.00SqFt 156.04	SqFt Ft SqFt	Comments:  PCI = 64  Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING  Sample Number: 707 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING  Sample Number: 725 Type: R	Area:	L L M	4,999.96 5,000.00SqFt 156.04 96.00	SqFt Ft SqFt	Comments:  PCI = 64  Comments: Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING  Sample Number: 707 Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 52 WEATHERING/RAVELING 52 WEATHERING/RAVELING		L L M	4,999.96 5,000.00SqFt 156.04 96.00 4,903.96	SqFt Ft SqFt SqFt	Comments:  PCI = 64  Comments: Comments: Comments:	

FDOT\_COMB

Report Generated Date: 5/10/2012

Site Name:						
Network: LNA Name: PALM BEACH COUNTY	PARK AII	RPORT				
Branch: AP GA Name: GA APRON			Use: AF	PRON	Area: 88	0,244.58SqFt
Section: 4115 of 2 From: - Surface: AAC Family: FDOT-RL-AP-AAC Area: 293,242.67SqFt Length: 900.00Ft Shoulder: Street Type: Grade: 0.00 Section Comments:	Lanes:	Zone: Width	To: - Categ n: 300.00	gory:	Rank: P	Last Const.: 1/1/1985
Last Insp. Date4/25/2012 Total Samples: 57 Sur Conditions: PCI:56.00   Inspection Comments:	rveyed: 1	.1				
Sample Number: 459 Type: R Sample Comments:	Area:	5,	000.00SqFt		PCI = 55	
49 OIL SPILLAGE		N	104.00	SaFt	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	114.03		Comments:	
52 WEATHERING/RAVELING		Н		SqFt	Comments:	
52 WEATHERING/RAVELING		M	492.00	_	Comments:	
52 WEATHERING/RAVELING		L	4,499.96		Comments:	
		<u>-</u>		24-0		
Sample Number: 460 Type: R Sample Comments:	Area:	5,	000.00SqFt		PCI = 64	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	310.08	Ft	Comments:	
52 WEATHERING/RAVELING		L	4,999.96		Comments:	
56 SWELLING		L	146.00	_	Comments:	
Sample Number: 511 Type: R Sample Comments:	Area:	5,	.000.00SqFt		PCI = 59	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	143.04	Ft	Comments:	
52 WEATHERING/RAVELING		M	19.00	SqFt	Comments:	
56 SWELLING		L	306.00	SqFt	Comments:	
52 WEATHERING/RAVELING		M	66.00	SqFt	Comments:	
52 WEATHERING/RAVELING		L	4,914.96	SqFt	Comments:	
Sample Number: 512 Type: R Sample Comments:	Area:	5,	000.00SqFt		PCI = 64	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	100.03	##	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	216.06		Comments:	
52 WEATHERING/RAVELING		L	4,999.96		Comments:	
49 OIL SPILLAGE		N	140.00	_	Comments:	
Sample Number: 611 Type: R	Area:	5,	000.00SqFt	<u> </u>	PCI = 56	
Sample Comments:		ъл	12 01	₽₽	Common + - •	
48 LONGITUDINAL/TRANSVERSE CRACKING		M T	43.01		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	362.09		Comments:	
52 WEATHERING/RAVELING		L	4,999.96		Comments:	
56 SWELLING		L	749.99	SqFt	Comments:	
Sample Number: 614 Type: R Sample Comments:	Area:	6,	800.00SqFt		PCI = 47	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	397.10	F†	Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		L	37.10		Comments:	
48 LONGITUDINAL/TRANSVERSE CRACKING		M	21.01		Comments:	
52 WEATHERING/RAVELING		M H	24.00			
52 WEATHERING/RAVELING 52 WEATHERING/RAVELING		п L	6,775.94	_	Comments:	
43 BLOCK CRACKING		М	600.00		Comments:	
DUITVORYS VIOLE		IvI	000.00	byrt	Comments.	

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Report Generated Date: 5/10/2012

49 OIL SPILLAGE 56 SWELLING		N L	3.00 441.00		Comments:
Sample Number: 619 Type: R Sample Comments:	Area:		6,800.00SqFt		PCI = 51
43 BLOCK CRACKING		М	533.00	SaFt	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		L	436.11		Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		M	112.03		Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		Н	21.01		Comments:
52 WEATHERING/RAVELING		L	6,799.94	SqFt	Comments:
56 SWELLING		L	27.00	_	Comments:
Sample Number: 658 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 69
48 LONGITUDINAL/TRANSVERSE CRACKING		L	116.03	Ft	Comments:
52 WEATHERING/RAVELING		L	4,999.96	SqFt	Comments:
Sample Number: 661 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 30
48 LONGITUDINAL/TRANSVERSE CRACKING		M	131.03	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		L	463.12	Ft	Comments:
52 WEATHERING/RAVELING		L	4,499.96	SqFt	Comments:
52 WEATHERING/RAVELING		M	500.00	SqFt	Comments:
56 SWELLING		L	2,499.98	SqFt	Comments:
45 DEPRESSION		L	266.00		Comments:
49 OIL SPILLAGE		N	48.00	SqFt	Comments:
Sample Number: 667 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 63
48 LONGITUDINAL/TRANSVERSE CRACKING		L	223.06	Ft	Comments:
43 BLOCK CRACKING		L	939.99	SqFt	Comments:
52 WEATHERING/RAVELING		L	4,999.96	SqFt	Comments:
Sample Number: 720 Type: R Sample Comments:	Area:		5,000.00SqFt		PCI = 61
48 LONGITUDINAL/TRANSVERSE CRACKING		L	31.01	Ft	Comments:
43 BLOCK CRACKING		L	2,399.98		Comments:
52 WEATHERING/RAVELING		L	4,999.96	SqFt	Comments:

Last Const.: 1/1/2012

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: AP RU RW 9 Name: RUN-UP APRON AT RW 9 Use: APRON Area: 26,830.49SqFt

Section: 4205 of 1 From: - To: -

Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P

Area: 26,830.49SqFt Length: 200.00Ft Width: 100.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date1/1/2012 Total Samples: 0 Surveyed: 0

Conditions: PCI:100.00 |

Inspection Comments: Construction/Major M&R inspection record.

Sample Number: Type: Area: 0.00

<NO SAMPLE RECORDS>

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: AP RU RW15 Name: RUN-UP APRON AT RW 15 Use: APRON Area: 6,377.23SqFt

Section: 4305 of 1 From: - To: - Last Const.: 1/1/1993

50.00Ft

Surface: AC Family: FDOT-RL-AP-AC Zone: Category: Rank: P

Area: 6,377.23SqFt Length: 125.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 1 Surveyed: 1

Conditions: PCI:79.00 | Inspection Comments:

Sample Number: 100 Type: R Area: 6,377.23SqFt PCI = 79

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING 29.01 Ft L Comments: 50 PATCHING L 84.00 SqFt Comments: 50 PATCHING 48.00 SqFt Comments: L 52 WEATHERING/RAVELING 956.99 SqFt L Comments:

FDOT\_COMB

Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: RW 15-33 Name: RUNWAY 15-33 Use: RUNWAY Area: 342,555.99SqFt

Section: 6205 of 2 From: - To: - Last Const.: 1/1/2012

100.00Ft

50.00 Ft

Comments:

Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P

Area: 27,600.00SqFt Length: 276.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

**NOTE:** \*\*\* Pre-Construction PCI \*\*\*

Last Insp. Date10/10/2007 Total Samples: 8 Surveyed: 2

Conditions: PCI:55.00 | Inspection Comments:

48 L & T CR

Sample Number: 101 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 52		
48 L & T CR		L	207.00 E	Ft Comm	ments:	
52 WEATH/RAVEL		L	4,400.00 \$	SqFt Comm	ments:	
48 L & T CR		M	232.00 E	Ft Comm	ments:	
52 WEATH/RAVEL		M	600.00 8	SqFt Comm	ments:	
Sample Number: 104	Type: R	Area:	5,000.00SqFt	PCI = 58		
Sample Number: 104 Sample Comments: 48 L & T CR	Type: R	Area:	5,000.00SqFt 171.00 E		ments:	
Sample Comments:	Туре: R		, 1	Ft Comm		
Sample Comments: 48 L & T CR	Туре: R	L	171.00 E	Ft Comm	ments:	

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: RW 15-33 Name: RUNWAY 15-33 Use: RUNWAY Area: 342,555.99SqFt

Section: 6215 of 2 From: - To: - Last Const.: 1/1/2012

Surface: AAC Family: FDOT-RL-RW-AAC Zone: Category: Rank: P

Area: 314,955.99SqFt Length: 3,149.00Ft Width: 100.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

**NOTE:** \*\*\* Pre-Construction PCI \*\*\*

Last Insp. Date10/10/2007 Total Samples: 79 Surveyed: 12

Conditions: PCI:60.00 |

Inspection Comments:					
Sample Number: 113 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 64	
48 L & T CR		M	106.00 Ft	Comments:	
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:	
48 L & T CR		L	272.00 Ft	Comments:	
Sample Number: 119 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 64	
48 L & T CR		M	125.00 Ft	Comments:	
48 L & T CR		$\mathbf L$	206.00 Ft	Comments:	
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:	
Sample Number: 125 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 62	
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:	
48 L & T CR		M	202.00 Ft	Comments:	
48 L & T CR		L	221.00 Ft	Comments:	
Sample Number: 130 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 59	
48 L & T CR		L	346.00 Ft	Comments:	
52 WEATH/RAVEL		Н	2.00 SqFt	Comments:	
48 L & T CR		M	81.00 Ft	Comments:	
52 WEATH/RAVEL		L	4,998.00 SqFt		
Sample Number: 135 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 64	
48 L & T CR		L	270.00 Ft	Comments:	
48 L & T CR		M	89.00 Ft	Comments:	
52 WEATH/RAVEL		L	5,000.00 SqFt		
Sample Number: 139 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 64	
48 L & T CR		L	143.00 Ft	Comments:	
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:	
48 L & T CR		M	50.00 Ft	Comments:	
Sample Number: 143 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 59	
52 WEATH/RAVEL		M	18.00 SqFt	Comments:	
40		M	164.00 Ft	Comments:	
48 L & T CR		1.1	101.00 10	Commerce	
48 L & T CR 48 L & T CR		L	220.00 Ft	Comments:	

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Report Generated Date: 5/10/2012

Sample Number: 148 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 57
48 L & T CR		M	175.00 Ft	Comments:
52 WEATH/RAVEL		${f L}$	4,800.00 SqFt	Comments:
48 L & T CR		${f L}$	317.00 Ft	Comments:
52 WEATH/RAVEL		М	200.00 SqFt	Comments:
Sample Number: 153 Sample Comments:	Type: R	Area:	5,000.00SqFt	PCI = 62
48 L & T CR		${f L}$	120.00 Ft	Comments:
48 L & T CR		M	247.00 Ft	Comments:
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:
Sample Number: 157 Sample Comments:	Туре: R	Area:	5,000.00SqFt	PCI = 54
48 L & T CR		L	176.00 Ft	Comments:
50 PATCHING		L	155.00 SqFt	Comments:
52 WEATH/RAVEL		${f L}$	4,745.00 SqFt	Comments:
48 L & T CR		M	150.00 Ft	Comments:
52 WEATH/RAVEL		М	100.00 SqFt	Comments:
Sample Number: 163 Sample Comments:	Туре: R	Area:	5,000.00SqFt	PCI = 64
52 WEATH/RAVEL		L	5,000.00 SqFt	Comments:
48 L & T CR		M	45.00 Ft	Comments:
48 L & T CR		L	290.00 Ft	Comments:
Sample Number: 166 Sample Comments:	Туре: R	Area:	5,000.00SqFt	PCI = 51
52 WEATH/RAVEL		М	1,010.00 SqFt	Comments:
48 L & T CR		M	217.00 Ft	Comments:
		==		
52 WEATH/RAVEL		L	3,090.00 SqFt	Comments:

FDOT COMB

Report Generated Date: 5/10/2012

48 LONGITUDINAL/TRANSVERSE CRACKING

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT Branch: RW 3-21 Name: RUNWAY 3-21 Use: RUNWAY Area: 234,789.68SqFt 2 To: -Last Const.: 1/1/1993 Section: 6305 of From: -Surface: Family: FDOT-RL-RW-AC Zone: Category: Rank: P AC Area: 228,639.68SqFt Length: 3,000.00Ft Width: 75.00Ft Lanes: 0 Shoulder: Street Type: Grade: 0.00 Section Comments: Last Insp. Date4/25/2012 Total Samples: 61 Surveyed: 13 Conditions: PCI:79.00 | Inspection Comments: PCI = 76Sample Number: 102 Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 155.04 Ft Comments: L 52 WEATHERING/RAVELING 1,499.99 SqFt Comments: L Sample Number: 106 Type: R Area: 3,750.00SqFt PCI = 74Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 54.01 Ft Comments: 50 PATCHING 389.50 SaFt Comments: L 52 WEATHERING/RAVELING 1,124.99 SqFt Comments: T. Sample Number: 112 Area: 3,750.00SqFt PCI = 78Type: R Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 64.02 Ft Comments: 52 WEATHERING/RAVELING 1,249.99 SqFt Comments: Sample Number: 118 PCI = 80Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 42.01 Ft Comments: 52 WEATHERING/RAVELING L 849.99 SqFt Comments: Sample Number: 124 Type: R Area: 3,750.00SqFt PCI = 80Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 39.01 Ft Comments: 52 WEATHERING/RAVELING L 899.99 SqFt Comments: PCI = 81Sample Number: 128 Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 35.01 Ft Comments: 52 WEATHERING/RAVELING 749.99 SqFt L Comments: Sample Number: 133 PCI = 80Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 62.02 Ft Comments: 52 WEATHERING/RAVELING 899.99 SqFt L Comments: PCI = 80Sample Number: 137 Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 53.01 Ft Comments: 52 WEATHERING/RAVELING 899.99 SqFt L Comments: PCI = 82Sample Number: 140 Type: R Area: 3,750.00SqFt Sample Comments:

L

157.04 Ft

Comments:

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Report Generated Date: 5/10/2012

52 WEATHERING/RAVELING		L	400.00	SqFt	Comments:
Sample Number: 148 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 82
48 LONGITUDINAL/TRANSVERSE CRACKING		L	57.01	Ft	Comments:
52 WEATHERING/RAVELING		L	649.99	SqFt	Comments:
Sample Number: 152 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 84
48 LONGITUDINAL/TRANSVERSE CRACKING		L	79.02	Ft	Comments:
52 WEATHERING/RAVELING		L	500.00	SqFt	Comments:
Sample Number: 156 Type: R Sample Comments:	Area:		3,862.49SqFt		PCI = 69
48 LONGITUDINAL/TRANSVERSE CRACKING		M	22.01	Ft	Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING		L	223.06	Ft	Comments:
52 WEATHERING/RAVELING		L	580.00	SqFt	Comments:
45 DEPRESSION		L	18.00	SqFt	Comments:
45 DEPRESSION		L	48.00	SqFt	Comments:
Sample Number: 163 Type: R A	Area:		3,750.00SqFt		PCI = 84
48 LONGITUDINAL/TRANSVERSE CRACKING		L	26.01	Ft	Comments:
52 WEATHERING/RAVELING		L	500.00	SqFt	Comments:

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: RW 3-21 Name: RUNWAY 3-21 Use: RUNWAY Area: 234,789.68SqFt

Section: 6310 of 2 From: - To: - Last Const.: 1/1/1965

75.00Ft

Surface: AC Family: FDOT-RL-RW-AC Zone: Category: Rank: P

Area: 6,150.00SqFt Length: 82.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 2 Surveyed: 1

Conditions: PCI:38.00 | Inspection Comments:

Sample Number: 109 Type: R Area: 3,248.08SqFt PCI = 38

Sample Comments:

142.04 Ft 48 LONGITUDINAL/TRANSVERSE CRACKING L Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING Μ 380.10 Ft Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 76.02 Ft Comments: Η 52 WEATHERING/RAVELING 3,248.05 SqFt L Comments:

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Sample Number: 348

Sample Comments:

Type: R

Area:

3,750.00SqFt

PCI = 92

Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT Branch: RW 9-27 Name: RUNWAY 9-27 Use: RUNWAY Area: 248,512.70SqFt Section: 1 To: -Last Const.: 6/1/2007 6105 of From: -Surface: Family: FDOT-RL-RW-AC Zone: Category: Rank: T AC Area: 248,512.70SqFt Length: 3,200.00Ft Width: 75.00Ft Lanes: 0 Shoulder: Street Type: Grade: 0.00 Section Comments: Last Insp. Date4/25/2012 Total Samples: 66 Surveyed: 14 Conditions: PCI:87.00 | Inspection Comments: Sample Number: 303 3,750.00SqFt PCI = 89Type: R Area: Sample Comments: 52 WEATHERING/RAVELING 500.00 SqFt Comments: L Sample Number: 307 Type: R Area: 3,750.00SqFt PCI = 87Sample Comments: 52 WEATHERING/RAVELING 699.99 SqFt L Comments: Sample Number: 311 PCI = 88Type: R Area: 3,750.00SqFt Sample Comments: 52 WEATHERING/RAVELING 600.00 SqFt L Comments: Sample Number: 313 PCI = 79Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 21.01 Ft Comments: L 52 WEATHERING/RAVELING T. 1,124.99 SqFt Comments: PCI = 74Sample Number: 319 3,750.00SqFt Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 86.02 Ft L Comments: 52 WEATHERING/RAVELING 600.00 SqFt Comments: L 45 DEPRESSION 130.00 SqFt T. Comments: PCI = 85Sample Number: 325 Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING  $_{\rm L}$ 5.00 Ft Comments: 52 WEATHERING/RAVELING 600.00 SqFt Comments: T. Sample Number: 331 PCI = 86Type: R Area: 3,750.00SqFt Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING 2.00 Ft Comments: L 52 WEATHERING/RAVELING L 500.00 SqFt Comments: PCI = 86Sample Number: 337 3,750.00SqFt Type: R Area: Sample Comments: 48 LONGITUDINAL/TRANSVERSE CRACKING L 7.00 Ft Comments: 52 WEATHERING/RAVELING 500.00 SqFt Comments: Sample Number: 343 Area: PCI = 90Type: R 3,750.00SqFt Sample Comments: 52 WEATHERING/RAVELING L 400.00 SqFt Comments:

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Report Generated Date: 5/10/2012

52 WEATHERING/RAVELING		L	250.00	SqFt	Comments:
Sample Number: 352 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 84
48 LONGITUDINAL/TRANSVERSE CRACKING		L	8.00	Ft	Comments:
52 WEATHERING/RAVELING		L	600.00	SqFt	Comments:
Sample Number: 356 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 91
52 WEATHERING/RAVELING		L	350.00	SqFt	Comments:
Sample Number: 361 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 88
48 LONGITUDINAL/TRANSVERSE CRACKING		L	11.00	Ft	Comments:
52 WEATHERING/RAVELING		L	300.00	SqFt	Comments:
Sample Number: 367 Type: R Sample Comments:	Area:		3,750.00SqFt		PCI = 94
52 WEATHERING/RAVELING		L	150.00	SqFt	Comments:

40.00Ft

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 110,650.65SqFt

Section: 310 of 1 From: - To: - Last Const.: 6/1/2007

Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P

Area: 110,650.65SqFt Length: 2,745.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Shoulder: Street Type: Grade Section Comments:

Last Insp. Date4/25/2012 Total Samples: 30 Surveyed: 3

Conditions: PCI:84.00 | Inspection Comments:

Sample Number: 302 Type: R Area: 3,500.00SqFt PCI = 88

Sample Comments:

52 WEATHERING/RAVELING L 525.00 Sqft Comments:

Sample Number: 307 Type: R Area: 4,114.60SqFt PCI = 82

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 29.01 Ft Comments:

52 WEATHERING/RAVELING L 822.99 Sqft Comments:

Sample Number: 322 Type: R Area: 3,500.00SqFt PCI = 81

Sample Comments:

52 WEATHERING/RAVELING H 9.00 SqFt Comments:

52 WEATHERING/RAVELING H 5.00 SqFt Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 17.00 Ft Comments: 52 WEATHERING/RAVELING L 350.00 Sqft Comments:

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW A1 Name: TAXIWAY A1 Use: TAXIWAY Area: 15,014.03SqFt

Section: 120 of 1 From: - To: - Last Const.: 1/1/1964

35.00Ft

Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P

Area: 15,014.03SqFt Length: 350.00Ft Width:

Shoulder: Street Type: Grade: 0.00 Lanes: 0 Section Comments:

Last Insp. Date4/25/2012 Total Samples: 4 Surveyed: 1

Conditions: PCI:51.00 | Inspection Comments:

Sample Number: 302	Type: R	Area:	4,006.58SqFt		PCI = 51
Sample Comments:					
43 BLOCK CRACKING		$\mathbf{L}_{\mathbf{L}}$	175.00	SqFt	Comments:
48 LONGITUDINAL/TRA	ANSVERSE CRACKING	L	219.06	Ft	Comments:
50 PATCHING		L	558.00	SqFt	Comments:
50 PATCHING		M	294.00	SqFt	Comments:
52 WEATHERING/RAVE	LING	L	3,153,97	SaFt.	Comments:

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TWB Name: TAXIWAYB Use: TAXIWAY Area: 124,355.72SqFt

Section: 205 of 2 From: - To: - Last Const.: 1/1/1993

Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P

Area: 115,827.11SqFt Length: 3,100.00Ft Width: 35.00Ft

Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 32 Surveyed: 4

Conditions: PCI:83.00 | Inspection Comments:

Sample Number: 101 Type: R Area: 3,977.68SqFt PCI = 71

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 107.03 Ft Comments: 52 WEATHERING/RAVELING L 175.00 SqFt Comments:

52 WEATHERING/RAVELING L 2,784.98 SqFt Comments:

Sample Number: 109 Type: R Area: 3,500.00SqFt PCI = 83

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 23.01 Ft Comments:

52 WEATHERING/RAVELING L 600.00 SqFt Comments:

Sample Number: 119 Type: R Area: 3,500.00SqFt PCI = 87

Sample Comments:
48 LONGITUDINAL/TRANSVERSE CRACKING L 9.00 Ft Comments:

52 WEATHERING/RAVELING L 350.00 SqFt Comments:

Sample Number: 130 Type: R Area: 3,500.00SqFt PCI = 92

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 49.01 Ft Comments: 52 WEATHERING/RAVELING L 35.00 Sqft Comments:

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 124,355.72SqFt

Section: 215 of 2 From: - To: - Last Const.: 1/1/1993

40.00Ft

Surface: AC Family: FDOT-RL-TW-AC Zone: Category: Rank: P

Area: 8,528.61SqFt Length: 200.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 2 Surveyed: 1

Conditions: PCI:68.00 | Inspection Comments:

Sample 1	Number: 100	Type: R	Area:		4,906.37SqFt		PCI = 68
Sample Co							
56 SWE	LLING			L	198.00	SqFt	Comments:
56 SWE	LLING			L	364.00	SqFt	Comments:
48 LON	GITUDINAL/TF	RANSVERSE CRACKING	:	L	128.03	Ft	Comments:
52 WEA	THERING/RAVE	LING	]	M	8.00	SqFt	Comments:
52 WEA	THERING/RAVE	LING	:	L	735.99	SqFt	Comments:

40.00Ft

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW B1 Name: TAXIWAY B1 Use: TAXIWAY Area: 9,652.91SqFt

To: -Section: 220 of From: -Last Const.: 1/1/1993

Surface: Family: FDOT-RL-TW-AC Zone: Category: Rank: P ACWidth:

Area: 9,652.91SqFt Length: 200.00Ft Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Total Samples: 2 Surveyed: 1 Last Insp. Date4/25/2012

Conditions: PCI:77.00 | Inspection Comments:

Sample Number: 100	Type: R	Area:	5,309.07SqFt	P	CI = 77
Sample Comments:					
48 LONGITUDINAL/TRA	NSVERSE CRACKING	M	56.01	Ft	Comments:
48 LONGITUDINAL/TRA	NSVERSE CRACKING	L	171.04	Ft	Comments:
48 LONGITUDINAL/TRA	NSVERSE CRACKING	M	12.00	Ft	Comments:
52 WEATHERING/RAVEL	ING	L	795.99	SqFt	Comments:

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Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 239,637.52SqFt

Section: 103 of 3 From: - To: - Last Const.: 1/1/2007

60.00Ft

Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P

Area: 16,849.17SqFt Length: 250.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 3 Surveyed: 1

Conditions: PCI:91.00 | Inspection Comments:

Sample Number: 101 Type: R Area: 6,000.00SqFt PCI = 91

Sample Comments:

48 LONGITUDINAL/TRANSVERSE CRACKING L 60.02 Ft Comments: 52 WEATHERING/RAVELING L 100.00 SqFt Comments:

60.00Ft

6,000.00 SqFt

Comments:

FDOT COMB

Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 239,637.52SqFt

Section: 105 of 3 From: - To: - Last Const.: 1/1/2012

Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P

Area: 210,434.62SqFt Length: 3,400.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

NOTE: \*\*\* Pre-Construction PCI \*\*\*

Last Insp. Date10/10/2007 Total Samples: 50 Surveyed: 5

Conditions: PCI:47.00 | Inspection Comments:

Sample Number: 101 Type: R Area: 5,000.00SqFt PCI = 78

Sample Comments:

52 WEATH/RAVEL

52 WEATH/RAVEL L 1,700.00 SqFt Comments:

48 L & T CR L 34.00 Ft Comments:

Sample Number: 114 Type: R Area: 5,000.00SqFt PCI = 42Sample Comments:

52 WEATH/RAVEL L 5,000.00 SqFt Comments:

43 BLOCK CR M 5,000.00 SqFt Comments:

Sample Number: 122 Type: R Area: 6,000.00SqFt PCI = 41

Sample Comments:
48 L & T CR M 80.00 Ft Comments:

43 BLOCK CR M 4,800.00 SqFt Comments:

L

Sample Number: 130 Type: R Area: 6,000.00SqFt PCI = 42 Sample Comments:

43 BLOCK CR M 6,000.00 SqFt Comments: 52 WEATH/RAVEL L 6,000.00 SqFt Comments:

Sample Number: 134 Type: R Area: 6,000.00SqFt PCI = 37

Sample Comments:
52 WEATH/RAVEL L 6,000.00 SqFt Comments:

53 RUTTING L 84.00 Sqft Comments:

43 BLOCK CR M 6,000.00 SqFt Comments:

40.00Ft

FDOT\_COMB

Report Generated Date: 5/10/2012

Site Name:

Network: LNA Name: PALM BEACH COUNTY PARK AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 239,637.52SqFt

Section: 115 of 3 From: - To: - Last Const.: 6/1/2007

Surface: AAC Family: FDOT-RL-TW-AAC Zone: Category: Rank: P

Area: 12,353.73SqFt Length: 250.00Ft Width: Shoulder: Street Type: Grade: 0.00 Lanes: 0

Section Comments:

Last Insp. Date4/25/2012 Total Samples: 3 Surveyed: 1

Conditions: PCI:89.00 | Inspection Comments:

Sample Number: 100 Type: R Area: 4,349.17SqFt PCI = 89

Sample Comments:

45 DEPRESSION L 30.00 SqFt Comments: 52 WEATHERING/RAVELING L 200.00 SqFt Comments: