

## STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

## Statewide Airfield Pavement Management Program Herlong Airport (Reliever) Jacksonville, Florida (District 2)

January 15, 2008



Prepared for: Florida Department of Transportation Aviation Office

*by:* URS Corporation Inc. / MACTEC Engineering & Consulting, Inc. / Planning Technology, Inc. / ASC Geosciences, Inc.



## **TABLE OF CONTENTS**

#### **SECTION**

#### PAGE NO.

Exec	cutive Summary	ii
1.	Introduction	1
2.	Network Definition	10
3.	Pavement Inventory	12
	Pavement Condition	
5.	Pavement Condition Prediction	16
6.	Maintenance Policies and costs	17
7.	Pavement Rehabilitation Needs Analysis	22
8.	Maintenance and Rehabilitation Plan	25
9.	Visual Aids	26
10.	Recommendations	27

#### LIST OF FIGURES

Figure 1-1: Pavement Life Cycle	4
Figure 1-2: PCI Rating Scale	6
Figure 3-1: Pavement Area by Surface Type	
Figure 4-1: Network PCI Distribution by Rating Category	
Figure 4-2: Percentage of Pavement Area within Each PCI Range by Pavement Us	se 14
Figure 5-1: Predicted PCI by Pavement Use	16
Figure 7-1: Budget Scenario Analysis	

#### LIST OF TABLES:

Table 1-1: Sampling Rate for FDOT Condition Surveys	5
Table 2-1: Herlong Airport Network Definition	10
Table 3-1: Pavement Area by Pavement Use	12
Table 4-1: Condition by Pavement Use	14
Table 6-1: Routine Maintenance Activities for Airfield Pavements	18
Table 6-2: Critical PCI for Regional Relievers	19
Table 6-3: Desired Minimum PCI for Regional Relievers	19
Table 6-4: M&R Activities for Regional Relievers	20
Table 6-5: Maintenance Unit Costs for FDOT	20
Table 6-6: M&R Activities and Unit Costs by Condition for Regional Relievers	21
Table 7-1: Summary of Immediate Major M&R Needs	23
Table 8-1: M&R Costs under Unlimited Funding Scenario	25

## APPENDIX

Appendix A	Network Definition Map and	Pavement Inventory Table
------------	----------------------------	--------------------------

- Appendix B PCI Re-Inspection Report
- Appendix C 2007 Condition Map and Tables
- Appendix D Area-Weighted PCI Results by Branch
- Appendix E Major M&R Plan by Year
- Appendix F 10-Year M&R Map
- Appendix G Photographs

## **EXECUTIVE SUMMARY**

URS Corporation, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) were awarded with a contract to provide services in support of the Florida Department of Transportation (FDOT) Aviation Office for Phase II of the Statewide Aviation Pavement Management program. As part of this contract, MACTEC conducted pavement condition survey for airside pavements at Herlong Airport, evaluated the condition and developed a maintenance and rehabilitation program to improve conditions to prescribed minimum levels.

The total pavement area in 2007 at Herlong Airport is 1,872,518 square feet. The breakdown of pavement area for each pavement use is provided as follows:

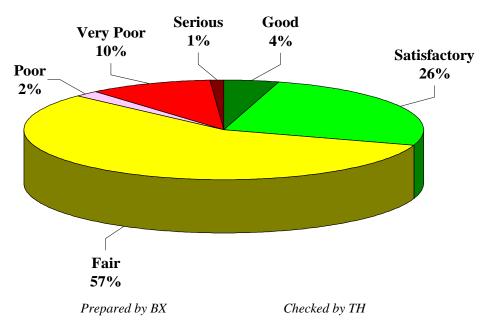
Use	Area, SqFt	% of Total Area
Runway	808,300	43
Taxiway	487,718	26
Apron	576,500	31
Total	1,872,518	100
Prepared by BX	Check	ked by TH

### Pavement Area by Pavement Use

The overall area-weighted Pavement Condition Index (PCI) of the areas in 2007 is 65, representing a Fair overall network condition.

The figure below provides the PCI distribution by rating category for the network. Approximately 30% of the network is in Good and Satisfactory condition while 13% of the network is in Poor to Serious condition.

The condition summary by pavement use table illustrates the area-weighted PCI computed individually for each use. On average, the runways, taxiways, and aprons are in Fair condition.



## Network PCI Distribution by Rating Category

#### **Condition Summary by Pavement Use**

Use	Area-Weighted PCI
Runway	70
Taxiway	66
Apron	58
All	65
Prepared by BX	Checked by TH

The immediate M&R needs include several large areas of the aprons and taxiways (North Apron and Taxiway A). These aprons and taxiways may not be the highest priority for funding but would need to be programmed over several years. These immediate needs are summarized in the following table.

Branch	Section	Section Area, SqFt	Major M&R Funded**	PCI Before	Maintenance	PCI After
AP N	4305	144,000	\$1,411,488	38	Major M&R < Critical	100
AP N	4310	10,000	\$108,980	37	Major M&R < Critical	100
AP NE	4405	16,400	\$124,804	50	Major M&R < Critical	100
AP NE	4410	30,000	\$491,340	32	Major M&R < Critical	100
AP NW	4105	108,000	\$567,216	56	Major M&R < Critical	100
AP NW	4110	51,250	\$289,306	55	Major M&R < Critical	100
AP RU	5105	12,000	\$170,232	34	Major M&R < Critical	100
AP RU	5110	12,000	\$91,320	41	Major M&R < Critical	100
TW A	105	174,000	\$845,466	57	Major M&R < Critical	100
TW CONN RW	610	4,700	\$19,143	59	Major M&R < Critical	100
TW CONN RW	620	4,700	\$28,379	54	Major M&R < Critical	100
TW E FBO	710	3,990	\$30,364	41	Major M&R < Critical	100
TW E NW AP	405	8,605	\$159,795	23	Major M&R < Critical	100
TW HS CONN	315	3,300	\$18,629	55	Major M&R < Critical	100
TW N AP	805	2,915	\$34,963	37	Major M&R < Critical	100
TW NE AP	1105	5,250	\$34,963	46	Major M&R < Critical	100
TW T-HANG	905	3,035	\$7,794	64	Major M&R < Critical	100
		Total	\$4,439,171	65*	←Network Avg. PCI →	80*

#### Immediate Major M&R Needs

\* This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all pavement sections at Herlong Airport, including those sections not shown in this table.

\*\* Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation. *Prepared by BX* Checked by TH

A forecast of Major M&R needs for a 10-year period was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval.

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	\$101,633	\$0	\$4,439,171	\$4,550,805
2009	\$271,379	\$0	\$13,886	\$285,266
2010	\$104,387	\$0	\$1,944,573	\$2,048,960
2011	\$116,182	\$0	\$0	\$116,182
2012	\$136,784	\$0	\$0	\$136,783
2013	\$159,644	\$0	\$68,769	\$228,413
2014	\$189,204	\$0	\$183,213	\$372,417
2015	\$207,141	\$0	\$323,484	\$530,625
2016	\$212,087	\$0	\$468,680	\$680,766
2017	\$199,515	\$0	\$551,853	\$751,368
Total	\$1,707,955	\$0	\$7,993,630	\$9,701,584

## 10 Year M&R Costs under Unlimited Funding Scenario

Note: Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.Prepared by BXChecked by TH

The 10 year analysis suggests an annual budget on the order of \$1 million would be expected to provide an improvement in the overall condition, where the area-weighted PCI would increase from 65 in 2007 to 84 in 2017. However, as stated above, a number of large projects, mostly aprons and taxiways sections, do exist that would need to be programmed over multiple years.

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 Herlong Airport pavements in 2017 may remain near 84. 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 Herlong 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. These public airports range from small general aviation airports to large international hub airports. These airports serve business travelers, tourism, and cargo operations crucial to the daily life of the people of Florida.

There are millions of square yards of pavement for the runways, taxiways, aprons and other areas 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, FDOT has implemented pavement management system technology.

This report describes the procedures used to ensure that the appropriate engineering and scientific standards of care, quality budget, and schedule requirements are implemented at your airport as a result of your participation in the Statewide Aviation Pavement Management Program.

### 1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

- Describe, briefly, the Florida Department of Transportation (FDOT) Aviation Office Statewide Pavement Management Program and the roles and responsibilities of the program's participants
- Provide background information on pavement management principles, objectives, and benefits to the participating airport
- Outline the procedures used to collect, evaluate and report pavement inspection results at your airport
- Present the findings from the inspection and analysis of the needs for maintenance and rehabilitation activities for this airport.

### **1.2 FDOT Aviation PMS Program**

In 1992, FDOT implemented a Pavement Management System (PMS) program 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 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 was implemented and condition surveys performed in 1992 and 1993 and again updated in 1998 and 1999. The proprietary system, AIRPAV, is no longer supported.

In 2004, the FDOT Aviation Office undertook a project to update the PMS Program software utilized for the PMS program. The Aviation Office selected a consultant team consisting of URS Corporation, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) to aid with the implementation of the program update. This project involved a review of the AIRPAV software and other available

PMS software. As a result of this review, MicroPAVER was selected as the software for the update project. Condition data from the 1998/1999 surveys were converted to the MicroPAVER system.

The inventory of the pavement systems and drawings of the pavements were updated to reflect maintenance, rehabilitation, and construction activities since 1998/1999 to the extent that information was available. Detailed, specific procedures for the inspection and collection of pavement data were developed for this project. A web-site (www.floridaairportpavement.com) was developed for the input of data under secure procedures. The site also has a public section for dissemination of information to the general public.

#### 1.3 Organization

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

#### 1.3.1 Consultant Role

The Consultant (MACTEC Engineering and Consulting/URS Corporation/Planning Technology/ASC Geosciences) developed the PMS based upon procedures outlined in FAA Advisory Circular 150/5380-6B Guidelines and Procedures for Maintenance of Airport Pavements (FAA/AC) and ASTM D 5340 Standard Test Method for Airport Pavement Condition Index Surveys (2004). The Consultant provides technical and administrative assistance to the Aviation Office PM, during the execution of this program, which involves the continuing evaluation of airport pavements and updating of the PMS. A website is available to view and update airport information, including construction activities and pavement condition data. In addition, pavement evaluation reports will be available for viewing and download from the site (www.floridaairportpavement.com).

#### 1.3.2 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 FDOT Aviation Office. The airport should review system inventory drawings in their folder in the pavement management website and add maintenance and rehabilitation activities conducted on airside pavements on the website system inventory form.

#### **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 asphalt concrete (AC) surface, and
- Rigid pavement composed of 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 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, the base or subbase layer is mainly constructed to provide a smooth and continuous platform for the concrete. Due to the different nature of both 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.

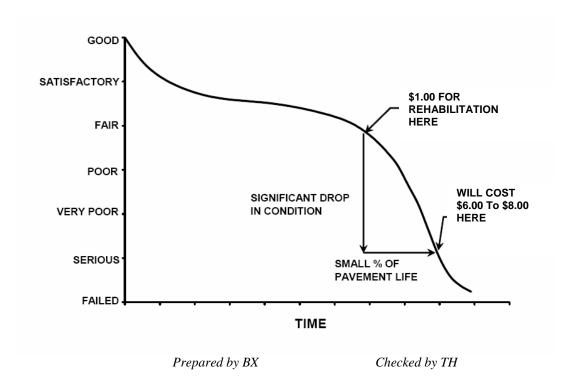
#### 1.4.2 Pavement Management System Concept

A pavement management system (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, taken from FAA/AC 5380-7A Pavement Management System, 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 "Satisfactory" condition depends on how well it is maintained. 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.

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 stretch and 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.





Pavements deteriorate even if they do not carry any traffic. Pavement distresses may be attributed to climate, environment, materials, construction or traffic. Knowing the cause, extent and predominance of pavement distresses helps determine the most appropriate maintenance or rehabilitation work needed. Planning and applying preventive maintenance prolongs pavement life and minimizes future pavement repair costs. By projecting the rate of deterioration, a life cycle cost analysis can be performed for various alternatives, and the optimal time of application of the most feasible alternative can be determined. Such a decision is critical in order to avoid higher M&R costs at a later date.

A PMS enables the managing agency to identify and maintain the pavement conditions, keeping them at the upper end of the service life-condition curve. At this point, the total annual costs between maintaining a good pavement above a critical condition is much less than rehabilitating a poor pavement that has rapidly deteriorated beyond a critical condition level.

A PMS is a long-term planning tool that will result in an overall improvement of the pavement network condition and will also result in savings by applying the appropriate maintenance and rehabilitation activity at the appropriate time. Accurate estimates and timely M&R decisions and budgeting are of great importance when managing approximately 300 million square feet of Florida airside pavements.

#### 1.4.3 Pavement Inspection Methodology for PMS

Pavement condition assessment is one of the primary decision variables in any airport pavement management system. 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 indepth engineering evaluation or sampling and testing methods.

Pavement sections are broken down into sample units as established in FAA AC 150/5380-6B and ASTM D 5340. Sample unit sizes are approximately  $5000 \pm 2000$  square feet for AC-surfaced pavements and  $20 \pm 8$  slabs for PCC-surfaced pavements. Before 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 FDOT Statewide Pavement Management Program is provided in Table 1-1 below.

AC Pavements			PCC Pavements		
N	N Runway Others N		N	n	
IN			Runway	Others	
1-4	1	1	1-3	1	1
5-10	2	1	4-6	2	1
11-15	3	2	7-10	3	2
16-30	5	3	11-15	4	2
31-40	7	4	16-20	5	3
41-50	8	5	21-30	7	3
<u>&gt;</u> 51	20% but <u>&lt;</u> 20	10% but <u>&lt;</u> 10	31-40	8	4
			41-50	10	5
			<u>&gt;</u> 51	20% but <u>&lt;</u> 20	10% but <u>&lt;</u> 10

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

Where

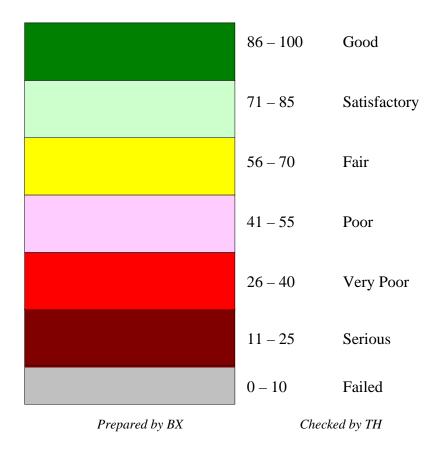
N = total number of sample units in section n = number of sample units to inspect

Prepared by BX

Checked by TH

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. MicroPAVER provides a rating scale that relates PCI to pavement condition, with a PCI between 0 and 10 considered 'Failed' pavement and a PCI between 86 and 100 considered 'Good' pavement, with five other conditions for PCI values between 11 and 85. Figure 1-2 shows the PCI scale.



## Figure 1-2: PCI Rating Scale

#### **1.5 Definitions**

<u>Aviation Office</u> - The Aviation Office is charged with responsibility for promoting the safe development of aviation to serve the people of the State of Florida. The Aviation Office worked closely with FDOT District Aviation Specialists, during development of this project. District Aviation Specialists will consult with airport owners in implementation of project recommendations.

<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.

 $\underline{Branch}$  – (Facility in prior system) - A runway, taxiway or apron is called a Branch. This is an easy reference to a recognizable component of airport pavement. In this report, Branch ID

maintains the original AirPAV identification where 100 series through 3000 series facilities are taxiways, 4000 and 5000 series facilities are aprons (the 5000 series represent runup aprons and turnarounds), and 6000 series facilities are runways. It also 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

<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>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>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>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 system requirements described by 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>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>Network Definition</u> – (Airport Sketch in prior system) – A Network Definition is a CAD drawing which shows the airport pavement outline with Branch and Section boundaries. This sketch is intended to assist the user of the report to quickly associate information from the text to a location on the airport. 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 in this report 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 an instant 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 5340-04, "Standard Test Method for Airport Pavement Condition Index Surveys," 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</u> – Pavement management is a broad function that uses pavement evaluation and pavement performance trends as a basis for planning, programming, financing, and maintaining a pavement system.

 $\underline{Rank}$  – 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.

 $\underline{Section}$  – (Feature in prior system) - 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.

 $\underline{Use}$  – 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

Herlong Airport (HEG) is located approximately 8 miles southwest of Jacksonville, Florida. Owned by the Jacksonville Airport Authority (JAA), this airport focuses primarily on recreational and sport flying activities. Herlong Airport is served by two intersecting runways: Runway 7-25 and Runway 11-29. Both runways are served by full-length parallel taxiways. Herlong Airport is designated as a Regional Reliever (RL) airport and is located in District 2 of the Florida Department of Transportation.

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. The airport pavement network is subdivided into separate branches (runways, taxiways, or aprons) that have distinctly different uses. Branches are then 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.

The network definition is used to identify changes in the network since the most recent update in 1998/1999 and also to plan the field inspection activities for 2007 survey. Prior to the field inspection process, the network definition drawing was updated. The purpose of this update is to compare the previous airport configuration and history with the current airport configuration and history and update the existing drawing showing network branch, section and sample unit designations to match the current configuration. This drawing serves not only as a primary guide for the airfield inspectors but also as an important history record.

The updated network definition fields of Herlong Airport are provided in Table 2-1 and the updated network definition drawing of the airport is given in Appendix A. The field of *Rank* in Table 2-1 is defined in the definitions section in section 1.

Table 2-1: Heriong Airport Network Definition			
Branch Name	Section ID	Rank	
FBO APRON	4215	Р	
	4220	Р	
	4225	Р	
NORTH APRON	4305	Р	
	4310	Р	
NORTHEAST APRON	4405	Р	
	4410	Р	
NORTHWEST APRON	4105	Р	
	4110	Р	
	4115	Р	
	4120	Р	
RUN UP APRON ON RWS 7, 25, 29	5105	Р	
	5110	Р	
	5115	Р	
RUNWAY 11-29	6205	S	

#### Table 2-1: Herlong Airport Network Definition

Table 2-1: Herlong Airport Network Definition			
Branch Name	Section ID	Rank	
RUNWAY 7-25	6105	Р	
	6110	Р	
TAXIWAY A - PARALLEL TO RW 7-25	105	Р	
TAXIWAY B - PARALLEL TO RW 11-29	205	Р	
CONNECTOR TAXIWAY BETWEEN RWS &	605	Р	
TWB	610	Р	
	620	Р	
	625	Р	
TAXIWAY EAST OF FBO RAMP	710	Р	
TAXIWAY EAST CONNECTOR TO NW APRON	405	Р	
HIGH SPEED CONNECTION TAXIWAY	305	Р	
	315	Р	
CONNECTOR TAXIWAY TO N APRON	805	Р	
TAXIWAY TO NORTHEAST APRON	1105	Р	
TAXIWAY T-HANGARS	905	Р	
	910	Р	
	915	Р	
	920	Р	
	925	Р	
TAXIWAY WEST CONNECTOR TO NW RAMP	550	Р	
Duran and hu DV	Cheeked by TI	-	

## Table 2-1: Herlong Airport Network Definition

Prepared by BX

Checked by TH

#### 3. PAVEMENT INVENTORY

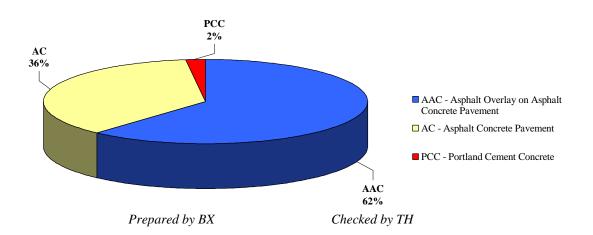
The detailed pavement inventory was updated to reflect the network definition update and field inspection results.

The total pavement area in 2007 at Herlong Airport is 1,872,518 square feet. The breakdown of pavement area for each pavement use is provided in Table 3-1.

Use	Area, SqFt	% of Total Area
Runway	808,300	43
Taxiway	487,718	26
Apron	576,500	31
Total	1,872,518	100
Prepared by BX	Checked	l by TH

#### Table 3-1: Pavement Area by Pavement Use

Figure 3-1 presents the breakdown of the pavement area at Herlong Airport by surface type.



## Figure 3-1: Pavement Area by Surface Type

Details of pavement section information including section dimensions, rank, surface type, last construction date and last inspection date are given in Appendix A.

## 4. **PAVEMENT CONDITION**

Pavement conditions were inspected in accordance with the methods outlined in FAA AC 150/5380-6B and ASTM D 5340 "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).

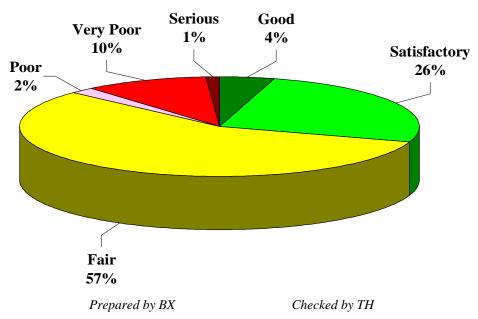
Pavement condition inspections at Herlong Airport were performed in April 2007. Data were recorded in the field using hand-held PDA (personal digital assistant) technology. The identifying information for each sample unit was pre-loaded into the PDA, and the survey results were entered directly, at the time of inspection. This simplified data handling and management.

During the inspections Global Positioning System (GPS) coordinates were recorded 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 tables on updated Network Definition drawings available from the website.

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

Appendix B includes detailed distress data generated by MicroPAVER, Appendix C contains a table and a map of PCI results by section inspected in 2007, and Appendix D contains a table of PCI results by branch.

According to the 2007 survey, the overall area-weighted PCI at Herlong Airport is 65, representing a Fair overall network condition. Figure 4-1 provides the PCI distribution by rating category for the network.



## Figure 4-1: Network PCI Distribution by Rating Category

Approximately 30% of the network is in Good and Satisfactory condition while 13% of the network is in Poor to Serious condition. Table 4-1 illustrates the area-weighted PCI computed individually for each pavement use.

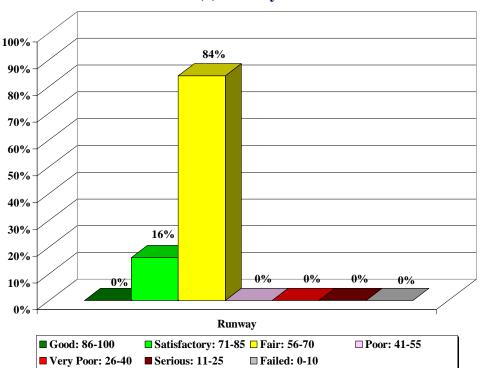
Use	Area-Weighted PCI
Runway	70
Taxiway	66
Apron	58
All	65
Prepared by BX	Checked by TH

## Table 4-1: Condition by Pavement Use

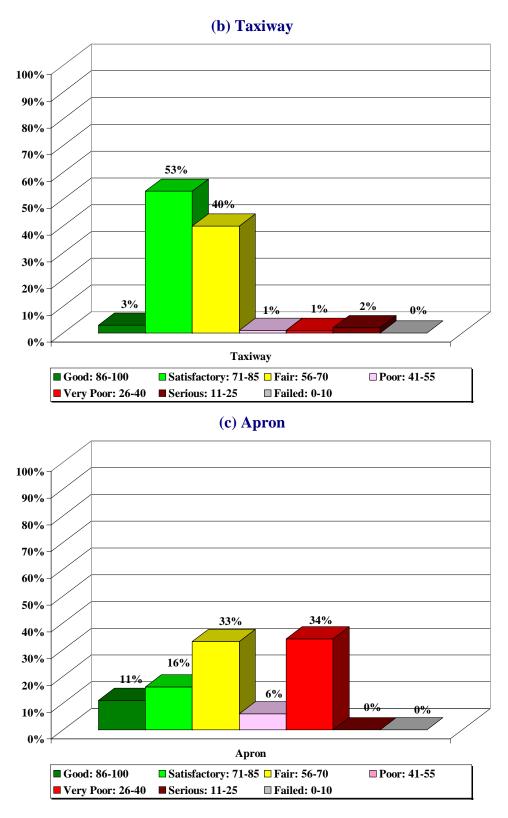
On average, the runways, taxiways, and aprons are all in Fair condition.

Figure 4-2 presents the breakdown of PCI by range for each pavement use.





(a) Runway

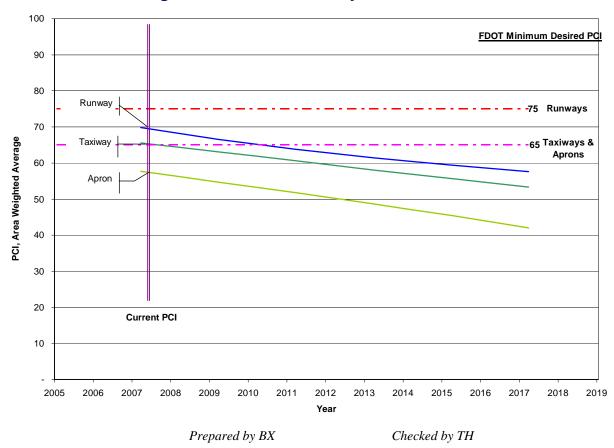


Prepared by BX

Checked by TH

#### 5. 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 5-1 illustrates the predicted performance of pavements at Herlong 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 condition criteria for regional reliever (RL) airports.



#### Figure 5-1: Predicted PCI by Pavement Use

Appendix C presents the tabular summary of the predicted Section PCI for each year from 2008 to 2017.

#### 6. MAINTENANCE POLICIES AND COSTS

#### 6.1 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 6-1 provides the list of the maintenance activities used in MicroPAVER to treat specific distress types. These repairs are used in an analysis only if there is an inspection within one year prior to the first year of the analysis period. MicroPAVER applies repairs to these distresses and adjusts the PCI based on specific rules.

Rehabilitation is warranted when the pavement condition decreases below a critical point such that the deterioration is extensive or 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 Phase I of Statewide Pavement Management Program were reviewed and updated for 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 6-2 gives the critical PCI levels for regional relievers.

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

## Table 6-1: Routine Maintenance Activities for Airfield Pavements

L = Low, M = Medium, H = High

Prepared by BX

Checked by TH

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65
Prepared by BX	Checked by TH

## Table 6-2: Critical PCI for Regional Relievers

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 6-3 gives the targeted, or desired, Minimum PCI values for runways, taxiways, and aprons of regional relievers.

## Table 6-3: Desired Minimum PCI for Regional Relievers

Minimum PCI							
Runway Taxiway Apron							
75	65	65					
Prepared by BX Checked by TH							

Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values in Table 6-2 and our experience with pavement management systems, the PCI trigger range when the likely activity would be a mill and resurface was 31 to 55 and reconstruction at a PCI of 30 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. With this objective, microsurfacing has been recommended to maintain pavements that have a PCI from 56 and 79. Microsurfacing is a surface treatment suggested for pavements in Fair to Satisfactory condition to extend the pavement life by five to seven years.

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 6-4 summarizes the M&R activities for regional relievers based on PCI value.

	Activity	PCI Range
Maintenance	Crack Sealing and Full-Depth Patching	80 and 90
	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	56 to 79
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	31 to 55
	Reconstruction	30 and less
Propara	d by BY Checked by TH	

### Table 6-4: M&R Activities for Regional Relievers

Prepared by BX

Checked by TH

#### 6.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were reviewed in Phase I of Statewide Pavement Mangement Program in order to determine meaningful costs for the program. Table 6-5 presents the unit costs summary.

## Table 6-5: Maintenance Unit Costs for FDOT

Code	Name	Cost	Unit
PA-AL	Patching – AC Leveling	\$2.00	SqFt
PA-AS	Patching – AC Shallow	\$4.00	SqFt
PA-PF	Patching – PCC Full Depth	\$50.00	SqFt
PA-PP	Patching – Partial Depth	\$35.00	SqFt
SL-PC	Slab Replacement	\$15.00	SqFt
CS-PC	Crack Sealing – PCC	\$2.00	Ft
UN-PC	Undersealing – PCC	\$3.00	Ft
CS-AC	Crack Sealing – AC	\$2.00	Ft
GR-PP	Grinding (Localized for PCC)	\$20.00	Ft
JS-LC	Joint Seal (Localized)	\$1.75	Ft
JS-SI	Joint Seal – Silicon	\$2.50	Ft
PA-AD	Patching – AC Deep	\$7.00	SqFt
OL-AT	Overlay – AC Thin	\$1.50	SqFt
SS-CT	Surface Seal – Coal Tar	\$0.20	SqFt
SS-RE	Surface Seal – Rejuvenating	\$0.15	SqFt
ST-SS	Surface Treatment – Slurry Seal	\$0.25	SqFt
ST-ST	Surface Treatment – Sand Tar	\$0.25	SqFt
MI-AC	Microsurfacing	\$0.90	SqFt

Prepared by BX

Checked by TH

The improvement in condition due to maintenance actions applied to specific distresses is only performed when an inspection is recent 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 PCI. 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 6-6. 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.

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crack Sealing and Full-Depth	90	\$0.10
Maintenance	Patching	80	\$0.40
	Microsurfacing (AC) or Concrete Pavement Restoration	70	\$0.90
	(PCC)	60	\$3.68
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration	50	\$7.61
	(PCC)	40	\$7.61
	Reconstruction	30	\$18.57
		20	\$18.57
	Prepared by BX	Checked by TH	

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

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

#### 7. 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. 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 7-1 presents the M&R needs 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. Several sections were not accessible during inspections due to ongoing maintenance activities; therefore the prediction of current condition from previous inspection data and immediate Major M&R needs would require further evaluation.

The 10 year forecast results are shown in Figure 7-1, 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.

Branch	Section	Section Area, SqFt	Major M&R Funded**	PCI Before	Maintenance	PCI After
AP N	4305	144,000	\$1,411,488	38	Major M&R < Critical	100
AP N	4310	10,000	\$108,980	37	Major M&R < Critical	100
AP NE	4405	16,400	\$124,804	50	Major M&R < Critical	100
AP NE	4410	30,000	\$491,340	32	Major M&R < Critical	100
AP NW	4105	108,000	\$567,216	56	Major M&R < Critical	100
AP NW	4110	51,250	\$289,306	55	Major M&R < Critical	100
AP RU	5105	12,000	\$170,232	34	Major M&R < Critical	100
AP RU	5110	12,000	\$91,320	41	Major M&R < Critical	100
TW A	105	174,000	\$845,466	57	Major M&R < Critical	100
TW CONN RW	610	4,700	\$19,143	59	Major M&R < Critical	100
TW CONN RW	620	4,700	\$28,379	54	Major M&R < Critical	100
TW E FBO	710	3,990	\$30,364	41	Major M&R < Critical	100
TW E NW AP	405	8,605	\$159,795	23	Major M&R < Critical	100
TW HS CONN	315	3,300	\$18,629	55	Major M&R < Critical	100
TW N AP	805	2,915	\$34,963	37	Major M&R < Critical	100
TW NE AP	1105	5,250	\$34,963	46	Major M&R < Critical	100
TW T-HANG	905	3,035	\$7,794	64	Major M&R < Critical	100
		Total	\$4,439,171	65*	←Network Avg. PCI →	80*

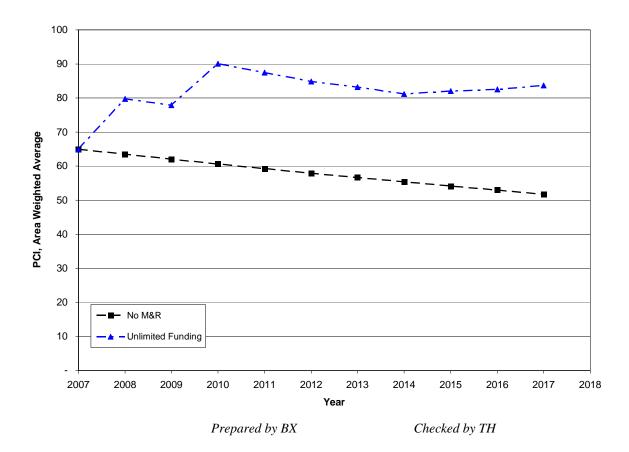
### Table 7-1: Summary of Immediate Major M&R Needs

\* This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all pavement sections at Herlong Airport, including those sections not shown in this table.

\*\* Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

Prepared by BX

Checked by TH





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

- The PCI will deteriorate from 65 to 52 in ten years if no M&R activities are performed.
- The PCI will remain above 78 through the 10-year analysis period under the unlimited budget scenario. A 2017 PCI of 84 with this scenario is 32 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about \$8 million.

#### 8. 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 PCI 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 8-1 provides the summary results under the critical PCI scenario.

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	\$101,633	\$0	\$4,439,171	\$4,550,805
2009	\$271,379	\$0	\$13,886	\$285,266
2010	\$104,387	\$0	\$1,944,573	\$2,048,960
2011	\$116,182	\$0	\$0	\$116,182
2012	\$136,784	\$0	\$0	\$136,783
2013	\$159,644	\$0	\$68,769	\$228,413
2014	\$189,204	\$0	\$183,213	\$372,417
2015	\$207,141	\$0	\$323,484	\$530,625
2016	\$212,087	\$0	\$468,680	\$680,766
2017	\$199,515	\$0	\$551,853	\$751,368
Total	\$1,707,955	\$0	\$7,993,630	\$9,701,584

### Table 8-1: M&R Costs under Unlimited Funding Scenario

Note: Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

Prepared by BX

Checked by TH

Approximately 55% of the total Major M&R cost is required in the first year (2008). This is a consequence several very large areas of the aprons and taxiways (North Apron and Taxiway A) being below Critical PCI. These areas need further evaluation to identify capital project(s) that may be funded separately. The unlimited budget scenario provides the basis for estimating the total repair cost. In reality, it is neither operationally nor fiscally prudent.

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

## 9. VISUAL AIDS

### 9.1 GIS Linked Shape File

The pavement inventory data and pavement condition were linked to the airport's shape file to 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.

#### 9.2 Photographs

Selected digital photographs taken during the pavement inspection were provided in an Appendix G to provide visual support to special pavement conditions or distress observed during the inspection of the facility.

#### **10. RECOMMENDATIONS**

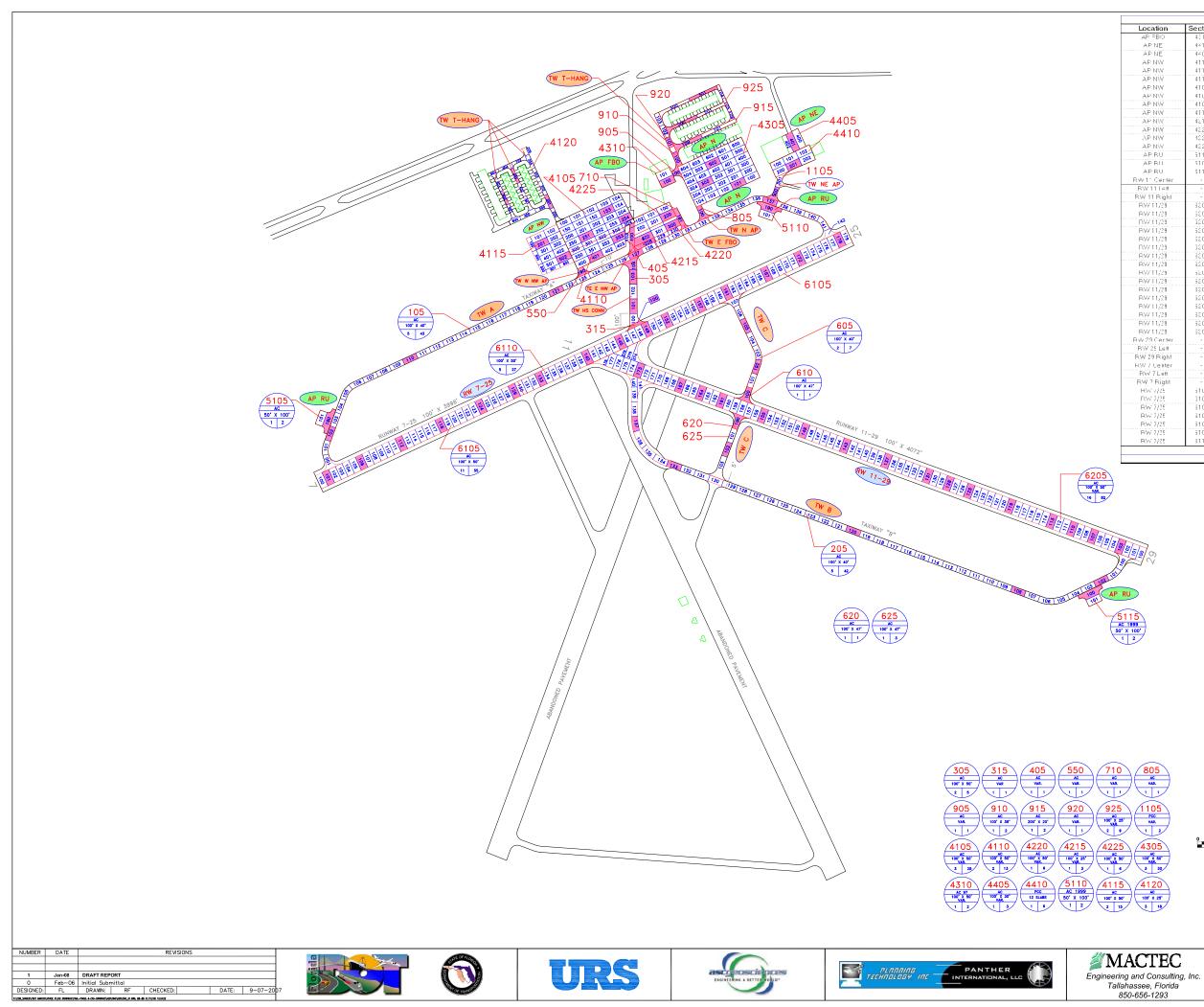
Pavement condition inspections were performed at Herlong Airport and a 10-year M&R plan was developed based on the unlimited funding scenario.

The following recommendations were made based on 2007 condition inspections and M&R analysis results:

- Runways 11-29 and 7-25 are currently in Fair and Satisfactory condition, respectively. These runways are recommended for microsurfacing in 2010.
- Several large areas of the aprons and taxiways (North Apron and Taxiway A) were identified that will require significant funding to restore them above Minimum PCI levels. Further evaluation of these features is necessary in order to develop repair plans and timing for future budgets. These cannot be addressed with typical annual expenditures as some of them amount to over one million dollars.

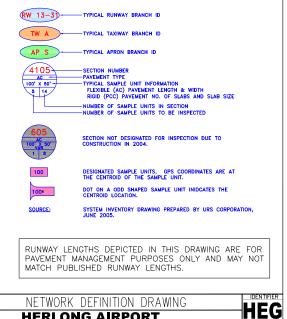
# **APPENDIX A**

NETWORK DEFINITION MAP AND PAVEMENT INVENTORY TABLE



	GPS COORDINATES - HERLONG AIRPORT											
cation	Section	Sample	Latitude	Longitude	Location	Section	Sample	Latitude	Longitude			
P FBO	4310	00	30.28207167	-8.80740172	E(W/ 7/25	6110	140	30.27873206	-81809-128			
PNE	4410	201	30.28243646	-81.8046649	RW/ 7/25	6110	1 45	30.27900301	-81 8084578			
PINE	4405	401	30.28281251	-81.80471173	RW/7/25	6110	149	30.27923768	-81 8078986			
P NW	4115	201	30.20072376	-01.01000124	RW 7/25	6110	152	00.27944564	-01/0074052			
PNW	4115	502	30 28054245	-81 80954553	BW/ 7/25	6105	157	30 2797392	-61 8066767			
P NW	4110	401	30.28073618	-81.8089773	RW 7/25	6105	161	30.27998057	-81.806103			
PNW	4105	251	30.28110523	-81.80918574	RW/ 7/25	6105	167	30.28032311	-81 8052374			
PINW	4105	153	30.28160697	-81.80874273	RW 7725	6105	172	30.28061521	-118045246			
PNW	4105	254	30.2814431	-81.80831559	RW/ 7/25	6105	178	30.28097565	-61 8036652			
PNW	4110	353	30.28111351	-81.80845793	P.vV 25 Center	-	-	30.28105254	-81 8034726			
PNW	4215	228	30.28098721	-81.807884:8	RV/ 25 Lett	-	-	30.28054703	-81 8033855			
PINW	4220	302	30.28 07158	-8 .80791111	RW 25 Fligt	-	-	30.2811328	-618035249			
PNW	4220	300	30.28128139	-81.80728351	TW A	105	137	30.28168137	-61 8051 548			
PINW	4225	200	30.28145315	-81.80735274	TW A	105	127	30.28073397	-61 8081 359			
PRU	5110	.00	30.28152511	-81.80507018	TW A	105	121	30.28002382	-81 8098578			
PRU	5105	- 0.0	30.27753093	-81 81 468123	TW A	105	110	30.27872504	-81 8129847			
PRU	5115	100	30.2744142	-81.79811759	TW A	105	102	30.27724295	-81.814657			
11 Center	-	-	30.27834977	-81.80746212	T₩ AP FB0	905	100	30.28222362	-61 8071921			
/111eft	-	-	30.27847191	-8: 80740357	T₩ AP FB0	910	101	30.28249184	-61 8071846			
11 Right	-	-	30.27821411	-81.80750579	TW B	315	100	30.27937392	-61 8080479			
V 11/29	6205	103	30.27526212	-81.79753324	TW B	305	101	30.27974384	-81 8081 089			
1/29	5205	107	00.27540946	-01.79010010	TW D	305	104	00.20055792	-01.0001615			
V 11/29	3205	-10	30.27558307	81.79858352	TW B	305	103	30.28031706	£1 808° 312			
V 11/29	6205	13	30.27572437	-81.79902318	TW B	205	137	30.27753109	-61 8080499			
// 11/29	6205	19	00.27599650	-01.79991525	TW D	205	100	00.27674657	-01/0072625			
//11/29	3205	125	30.27628184	81.8008172	TW B	205	120	30.27554455	£1 8033934			
//11/29	6205	-28	30.27642816	-81.80126755	TW B	205	108	30.274/3401	-81 7998233			
//11/29	6205	131	30.27656183	-81.80171015	TW B	205	102	30.27458709	-81.798031			
V 11/29	52U5	137	30.27684592	-81.802612.2	TW C	685	105	30.27936238	-81 8056878			
V 11/29	6205	43	30.27712863	-8 .80351572	TW C	6.0	100	30.27806468	-818056345			
//11/29	6205	- 49	30.2773999	-81.80439312	TW C	605	102	30.27859376	-81.805443			
//11/29	6205	- 55	30.27768401	-81.80529352	TW C	620	100	30.27756374	-61 8058675			
V 11/29	5205	61	30.27796024	-8.80620159	TWIC	625	102	30.27704355	-818060748			
//11/29	3205	64	30.27809429	-81.80663348	TW/E FBO	7.0	101	30.28144544	-81.807168			
V 11/29	6205	67	30.27823463	-81.80709519	TWENWAP	405	100	30.28110343	-61 8081 455			
// 11/29	5205	170	00.27851170	-01.00799259	TW N	4305	303	00.20212259	-010064715			
29 Center		-	30 27509948	-81 79702413	TW N	4305	502	30 28246798	-61 8063374			
/ 29 Left	·····	····· -	30.27496905	-81.79707346	TWIN	4305	101	30.28208058	-81.805771			
29 Right	-	-	30.27522917	-81.79696354	TWINAP	805	100	30.28152395	-61 8066659			
/Center			30.27636119	-81.8149357 -81.81496554	TWINE AP 1105 500	1105 4120	500 602	30.28189788	-£18050445 -£18109197			
o/7Left			30.2764875		TWT_HANG			30.28172369				
7 Right	-	-	30.27624151	-81.81482373	TWT HANG	4120	403	30.28198246	-61 8106155			
₩17/25 ₩15705	6105 2105	101	30.27645048	-81.81468314	TWIT_HANG	4120 920	201	30.28165321 30.2827358	-£1 8099507 £1 8073504			
W 7/25 W 7/25	3105 3105	12	30.27673924 30.27707445	81.81398433 -81.81314553	TWT_HANG TWT HANG	920	200	30.2827358	E1 8073504 -E1 8070609			
						925 915	200					
W 7/2E	\$105 2105	18 124	30.27742977	-81.81228144	TWT_HANG	925	301	30.28281384	-81 8069216			
W 7/25	6105 6105	24	30.27776023	-81.81147376 -81.810765/4	TW T_HANG TW W NW AP	925	301	30.2836779 30.28042571	-81 8066486 -81 8092655			
W 7/25			30.27806125		1.66.66.147.6.575	550	100	00.20012071	-018082655			
W 7/25	6110	133	30.27832591	-81.81013235								
					ecimal degrees (GS-84 D							
	All GPS coordinates are at the centroid of the sample units.											







Ν

0 150

**HERLONG AIRPORT** JACKSONVILLE, DUVAL, FLORIDA FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

#### **Table A-1: Pavement Inventory** Section Longth Width Ar

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4215	388	25	9,700	Ρ	AC	1/1/1980	5/14/2007
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4220	330	70	23,100	Ρ	AC	12/25/1999	5/14/2007
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4225	320	100	32,000	Ρ	AC	1/1/1997	5/14/2007
HERLONG AIRPORT	HEG	NORTH APRON	AP N	4305	480	300	144,000	Ρ	AC	1/1/1990	5/14/2007
HERLONG AIRPORT	HEG	NORTH APRON	AP N	4310	50	200	10,000	Ρ	AC	1/1/1990	5/14/2007
HERLONG AIRPORT	HEG	NORTHEAST APRON	AP NE	4405	130	120	16,400	Ρ	AC	12/25/1999	5/14/2007
HERLONG AIRPORT	HEG	NORTHEAST APRON	AP NE	4410	300	100	30,000	Ρ	PCC	12/25/1999	5/14/2007
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4105	480	225	108,000	Ρ	AC	1/1/1984	5/14/2007
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4110	380	125	51,250	Р	AC	1/1/1981	5/14/2007
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4115	280	235	65,800	Р	AC	1/1/2005	5/14/2007
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4120	1,800	25	45,000	Ρ	AC	1/1/2001	5/14/2007
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5105	100	100	12,000	Р	AC	1/1/1999	5/14/2007
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5110	100	100	12,000	Р	AC	1/1/1999	5/14/2007
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5115	100	100	12,000	Р	AC	1/1/1999	5/14/2007
HERLONG AIRPORT	HEG	RUNWAY 11-29	RW 11-29	6205	4,083	100	408,300	S	AAC	1/1/1984	5/14/2007

See note at end of table.

Pavement Evaluation Report – Herlong Airport Florida Statewide Pavement Management Program January 15, 2008

#### Section Length, Width, Area, Last Const. Network Last Insp. Network Name **Branch Name** Branch ID Rank Surface ID SqFt Date ID Ft Ft Date HERLONG HEG RUNWAY 7-25 RW 7-25 6105 2,700 100 270,000 Ρ AAC 1/1/1981 5/14/2007 AIRPORT HERLONG HEG RW 7-25 1,300 130,000 Р 1/1/1997 5/14/2007 RUNWAY 7-25 6110 100 AAC AIRPORT **TAXIWAY A - PARALLEL** HERLONG HEG TW A 105 4.350 174.000 Р AAC 1/1/1981 5/14/2007 40 AIRPORT TO RW 7-25 TAXIWAY B - PARALLEL HERLONG HEG TW B 205 4,117 40 164,700 Ρ AAC 1/1/1984 5/14/2007 AIRPORT TO RW 11-29 HERLONG CONNECTOR TAXIWAY TW CONN HEG 605 739 40 29.550 Р AC 1/1/1997 5/14/2007 AIRPORT **BETWEEN RWS & TWB** RW HERLONG CONNECTOR TAXIWAY TW CONN HEG Р 5/14/2007 610 100 47 4,700 AAC 1/1/1984 AIRPORT **BETWEEN RWS & TWB** RW HERLONG CONNECTOR TAXIWAY TW CONN HEG 620 Р AAC 1/1/1984 5/14/2007 100 47 4.700 AIRPORT **BETWEEN RWS & TWB** RW TW CONN HERLONG CONNECTOR TAXIWAY HEG 625 360 47 17.050 Р AC 1/1/1997 5/14/2007 AIRPORT **BETWEEN RWS & TWB** RW HERLONG TAXIWAY EAST OF FBO HEG 25 Р AC 5/14/2007 TW E FBO 710 140 3,990 1/1/1960 AIRPORT RAMP TAXIWAY EAST HERLONG TW E NW Р HEG CONNECTOR TO NW 405 AC 5/14/2007 215 40 8.605 1/1/1981 AIRPORT AP APRON HERLONG **HIGH SPEED** TW HS HEG 305 420 Ρ AC 5/14/2007 50 21.000 1/1/1969 AIRPORT CONNECTION TAXIWAY CONN HIGH SPEED TW HS HERLONG HEG 80 25 3.300 Р AC 1/1/1969 5/14/2007 315 AIRPORT CONNECTION TAXIWAY CONN CONNECTOR TAXIWAY HERLONG HEG TW N AP 805 90 30 2,915 Р AC 1/1/1990 5/14/2007 AIRPORT TO N APRON HERLONG **TAXIWAY TO** HEG Ρ PCC 5/14/2007 TW NE AP 1105 175 30 5.250 12/25/1999 AIRPORT NORTHEAST APRON HERLONG TW T-HEG 3,035 Ρ AC 1/1/1990 5/14/2007 TAXIWAY T-HANGARS 905 50 40 AIRPORT HANG

#### **Table A-1: Pavement Inventory**

See note at end of table.

Pavement Evaluation Report – Herlong Airport Florida Statewide Pavement Management Program January 15, 2008

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	910	150	35	5,250	Р	AC	1/1/1990	5/14/2007
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	915	460	20	9,200	Р	AC	1/1/1990	5/14/2007
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	920	68	35	2,380	Р	AC	1/1/1996	5/14/2007
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	925	1,575	20	31,500	Р	AC	1/1/1996	5/14/2007
HERLONG AIRPORT	HEG	TAXIWAY WEST CONNECTOR TO NW RAMP	TW W NW AP	550	46	40	1,843	Р	AC	1/1/1981	5/14/2007

#### **Table A-1: Pavement Inventory**

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

# **APPENDIX B**

**PCI RE-INSPECTION REPORT** 

Network: HEG	Name: HERLONG AIRPORT-JACKSO	DNVILLE		
Branch: AP FBO	Name: FBO APRON	Use: APRON	Area: 64,800	.00 SqFt
Section: 4215 Surface: AC Area: 9,700.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: Yype: Grade: 0.00 L	To: - Zone: Category: 388.00 Ft Wid	Rank: P th: 25.00 Ft	Last Const.: 1/1/1980
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 2 Survey	red: 1		
Sample Number: 228 Sample Comments: 52 L	Туре: к А	Area: 2,700.00	SqFt PCI = 74	

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE		
Branch: AP FBO	Name: FBO APRON		Use: APRON A	rea: 64,800.00 SqFt
Section: 4220 Surface: AC Area: 23,100.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: Yype: Grade: 0.00	Zone: 330.00 Lanes: 0	To: - Category: Rank: P Ft Width: 70.00	Last Const.: 12/25/199 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:71.00   Inspection Comments:	Total Samples: 1 Surv	veyed: 2		
Sample Number: 300 Sample Comments: 52 L	Туре: к	Area: 4,000.00	SqFt	PCI = 74
Sample Number: 302 Sample Comments: 48 L 52 L	Туре: к	Area: 5,000.00	SqFt	PCI = 69

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE			
Branch: AP FBO	Name: FBO APRON	1	Use: APRON A	ea: 64,800.	00 SqFt
Section: 4225 Surface: AC Area: 32,000.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 320.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00		Last Const.: 1/1/1997
Last Insp. 5/14/2007 Date: Conditions: PCI:67.00   Inspection Comments:	Total Samples: 8 Surve	eyed: 1			
Sample Number: 200 Sample Comments: 48 L 50 L 52 L	Туре: к	Area: 4,000.00	SqFt	PCI = 67	

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE		
Branch: AP N	Name: NORTH APRON		Use: APRON Are	ea: 154,000.00 SqFt
Section: 4305 Surface: AC Area: 144,000.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 480.00 Lanes: 0	To: - Category: Rank: P Ft Width: 300.00	Last Const.: 1/1/1990 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:40.00   Inspection Comments:	Total Samples: 36 Sur	rveyed: 3		
Sample Number: 101 Sample Comments: 52 M 48 L	Туре: к	Area: 5,000.00	SqFt	PCI = 41
Sample Number: 303 Sample Comments: 48 L 52 M	Туре: к	Area: 5,000.00	SqFt	PCI = 43
Sample Number: 502 Sample Comments: 50 L 52 M 48 M	Туре: к	Area: 5,000.00	SqFt	PCI = 36

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE		
Branch: AP N	Name: NORTH APRON		Use: APRON AI	rea: 154,000.00 SqFt
Section: 4310 Surface: AC Area: 10,000.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 50.00 Lanes: 0	To: - Category: Rank: P Ft Width: 200.00	
Last Insp. 5/14/2007 Date: Conditions: PCI:39.00   Inspection Comments:	Total Samples: 2 Surv	eyed: 1		
Sample Number: 100 Sample Comments: 50 L 52 M	Туре: к	Area: 5,000.00	SqFt	PCI = 39

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE			
Branch: AP NE	Name: NORTHEAST APRON		Use: APRON Ar	ea: 46,400.	00 SqFt
Section: 4405 Surface: AC Area: 16,400.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-AP-AC SqFt Length: Yype: Grade: 0.00	Zone: 130.00 Lanes: 0	To: - Category: Rank: P Ft Width: 120.00		Last Const.: 12/25/199
Last Insp. 5/14/2007 Date: Conditions: PCI:51.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1			
Sample Number: 401 Sample Comments: 41 M 48 L 52 L	Туре: к	Area: 3,000.00	SqFt	PCI = 51	

Network: HEG	Name: HERLONG AIRPORT-JACK	KSONVILLE			
Branch: AP NE	Name: NORTHEAST APRON		Use: APRON	Area: 46,	400.00 SqFt
Section: 4410 Surface: PCC Area: 30,000.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-PCC SqFt Length: Type: Grade: 0.00	Zone: 300.00 Lanes: 0	To: - Category: Rank Ft Width: 10	C: P 0.00 Ft	Last Const.: 12/25/199
Last Insp. 5/14/2007 Date: Conditions: PCI:33.00   Inspection Comments:	Total Samples: 6 Surv	veyed: 1			
Sample Number: 201 Sample Comments: 70 L 66 L 72 L	Туре: к 72 M 63 L 73 N 67 L	Area: 12.0	00 Coun	t $PCI = 3$	3

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE		
Branch: AP NW	Name: NORTHWEST APRON		Use: APRON Are	ea: 270,050.00 SqFt
Section: 4105 Surface: AC Area: 108,000.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 480.00 Lanes: 0	To: - Category: Rank: P Ft Width: 225.00	Last Const.: 1/1/1984 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:57.00   Inspection Comments:	Total Samples: 27 Sur	veyed: 3		
Sample Number: 153 Sample Comments: 50 L 48 M 52 M	Туре: к	Area: 5,000.0	00 SqFt	PCI = 36
Sample Number: 251 Sample Comments: 52 L 50 L 48 L	Туре: к 48 М	Area: 5,000.0	00 SqFt	PCI = 65
Sample Number: 254 Sample Comments: 48 L 52 L	Туре: к	Area: 5,000.0	00 SqFt	PCI = 69

Network: HEG	Name: HERLONG AIRPORT-JAC	CKSONVILLE		
Branch: AP NW	Name: NORTHWEST APRON		Use: APRON A	rea: 270,050.00 SqFt
Section: 4110 Surface: AC Area: 51,250.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 380.00 Lanes: 0	To: - Category: Rank: P Ft Width: 125.00	
Last Insp. 5/14/2007 Date: Conditions: PCI:56.00   Inspection Comments:	Total Samples: 13 Su	rveyed: 2		
Sample Number: 353 Sample Comments: 52 M 50 L 48 M	Type: r 52 L	Area: 4,500.00	SqFt	PCI = 36
Sample Number: 401 Sample Comments: 52 L	Туре: к	Area: 5,000.00	SqFt	PCI = 74

Network: HEG	Name: HERLONG AIRPORT-JACH	KSONVILLE		
Branch: AP NW	Name: NORTHWEST APRON		Use: APRON Area	a: 270,050.00 SqFt
Section: 4115 Surface: AC Area: 65,800.00 Shoulder: Street T Section Comments:	of 4 From: NW END Family: FDOT-RL-AP-AC SqFt Length: Yype: Grade: 0.00	Zone: 280.00 Lanes: 0	To: SECTION 4105 Category: Rank: P Ft Width: 235.00	Last Const.: 1/1/2005
Last Insp. 5/14/2007 Date: Conditions: PCI:96.00   Inspection Comments:	Total Samples: 2 Surv	veyed: 2		
Sample Number: 201 Sample Comments: <no distresses=""></no>	Туре: к	Area: 5,000.00	SqFt	PCI = 100
Sample Number: 502 Sample Comments: 48 L	Туре: к	Area: 5,000.00	SqFt	PCI = 93

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE			
Branch: AP NW	Name: NORTHWEST APRON		Use: APRON	Are	a: 270,050.00 SqFt
Section: 4120 Surface: AC Area: 45,000.00 Shoulder: Street T Section Comments:	of 4 From: Family: FDOT-RL-AP-AC SqFt Length: Type: Grade: 0.00	Zone: 1,800.0 Lanes: 0	To: Category: 0 Ft Widt	Rank: P h: 25.00	Last Const.: 1/1/2001 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 3			
Sample Number: 201 Sample Comments: 52 L	Туре: к	Area: 2	,500.00	SqFt	PCI = 74
Sample Number: 403 Sample Comments: 52 L	Туре: к	Area: 2	,500.00	SqFt	PCI = 74
Sample Number: 602 Sample Comments: 52 L	Туре: к	Area: 2	,500.00	SqFt	PCI = 74

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE		
Branch: AP RU	Name: RUN UP APRON ON RWS 7	7, 25	Use: APRON Are	ea: 36,000.00 SqFt
Section: 5105 Surface: AC Area: 12,000.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: 'ype: Grade: 0.00	Zone: 100.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00	Last Const.: 1/1/1999 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:36.00   Inspection Comments:	Total Samples: 1 Surv	veyed: 1		
Sample Number: 100 Sample Comments: 48 L 50 L 52 M	Туре: к	Area: 5,000.00	SqFt	PCI = 36

Network: HEG	Name: HERLONG AIRPORT-JACKS	SONVILLE		
Branch: AP RU	Name: RUN UP APRON ON RWS 7,	25	Use: APRON AI	rea: 36,000.00 SqFt
Section: 5110 Surface: AC Area: 12,000.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: 'ype: Grade: 0.00	Zone: 100.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00	Last Const.: 1/1/1999 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:43.00   Inspection Comments:	Total Samples: 1 Surve	eyed: 1		
Sample Number: 100 Sample Comments: 52 M	Туре: к	Area: 5,000.00	SqFt	PCI = 43

Network: HEG	Name: HERLONG AIRPORT-JACKS	SONVILLE		
Branch: AP RU	Name: RUN UP APRON ON RWS 7,	25	Use: APRON Are	a: 36,000.00 SqFt
Section: 5115 Surface: AC Area: 12,000.00 Shoulder: Street T Section Comments:	of 3 From: - Family: FDOT-RL-AP-AC SqFt Length: 'ype: Grade: 0.00	Zone: 100.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00	Last Const.: 1/1/1999 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 1 Surve	eyed: 1		
Sample Number: 100 Sample Comments: 52 L	Туре: к	Area: 5,000.00	SqFt	PCI = 74

Network: HEG	Name: HERLONG AIRPORT-JA	CKSONVILLE		
Branch: RW 11-29	Name: RUNWAY 11-29		Use: RUNWAY Are	ea: 408,300.00 SqFt
Section: 6205 Surface: AAC Area: 408,300.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-RW-AAC SqFt Length: ype: Grade: 0.00	Zone: 4,083.00 Lanes: 0	To: - Category: Rank: s Ft Width: 100.00	Last Const.: 1/1/1984 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:68.00   Inspection Comments:	Total Samples: 102 Su	irveyed: 16		
Sample Number: 103 Sample Comments: 48 M 48 L 43 M	Туре: к	Area: 5,000	00 SqFt	PCI = 64
Sample Number: 107 Sample Comments: 48 M 48 L	Туре: к	Area: 5,000	.00 SqFt	PCI = 70
Sample Number: 110 Sample Comments: 48 M 48 L	Туре: к	Area: 5,000	00 SqFt	PCI = 72
Sample Number: 113 Sample Comments: 52 L 48 L 48 M	Туре: к	Area: 5,000	.00 SqFt	PCI = 75
Sample Number: 119 Sample Comments: 48 L 48 M	Туре: к	Area: 5,000	00 SqFt	PCI = 77
Sample Number: 125 Sample Comments: 48 L 48 M	Туре: к	Area: 5,000	.00 SqFt	PCI = 66
Sample Number: 128 Sample Comments: 48 M 48 L	Туре: к	Area: 5,000	.00 SqFt	PCI = 70
Sample Number: 131 Sample Comments: 48 M 48 L	Туре: к	Area: 5,000	.00 SqFt	PCI = 69
Sample Number: 137 Sample Comments: 48 M 48 L	Туре: к	Area: 5,000	.00 SqFt	PCI = 72
Sample Number: 143 Sample Comments: 48 L 48 M	Туре: к	Area: 5,000	00 SqFt	PCI = 67
Sample Number: 149	Туре: к	Area: 5,000 Page 15 o		PCI = 69

#### FDOT

Report Generated Date: 12/28/200 Site Name:

### Sample Comments:

48 L 43 L 48 M

Sample Number: 155 Sample Comments: 43 L 48 L 48 M	Туре: к	Area:	5,000.00	SqFt	PCI = 70
Sample Number: 161 Sample Comments: 48 L 52 L	Туре: к	Area:	5,000.00	SqFt	PCI = 72
Sample Number: 164 Sample Comments: 48 M 48 L	Туре: к	Area:	5,000.00	SqFt	PCI = 69
Sample Number: 167 Sample Comments: 48 L 48 M 52 L	Туре: к	Area:	5,000.00	SqFt	PCI = 65
Sample Number: 173 Sample Comments: 43 M	Туре: к	Area:	5,000.00	SqFt	PCI = 47

Page 16 of 37

Network: HEG Name: HERLONG AIRPORT-JACKSONVILLE					
Branch: RW 7-25 Nar	ne: RUNWAY 7-25		Use: RUNWAY Are	a: 400,000.00 SqFt	
Section: 6105 of Surface: AAC F Area: 270,000.00 Shoulder: Street Type: Section Comments:	2 From: - amily: FDOT-RL-RW-AAC SqFt Length: Grade: 0.00	Zone: 2,700.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00	Last Const.: 1/1/1981 Ft	
Last Insp. 5/14/2007 To Date: Conditions: PCI:68.00   Inspection Comments:	tal Samples: 68 Surv	veyed: 11			
Sample Number: 101 Sample Comments: 43 M 48 M	Туре: к	Area: 5,00	00.00 SqFt	PCI = 67	
Sample Number: 106 Sample Comments: 50 L 43 L 52 L 48 L	Туре: к	Area: 5,00	00.00 SqFt	PCI = 64	
Sample Number: 112 Sample Comments: 48 M 48 L 43 M	Туре: к	Area: 5,00	00.00 SqFt	PCI = 65	
Sample Number: 118 Sample Comments: 48 L 48 M 43 M	Туре: к	Area: 5,00	00.00 SqFt	PCI = 64	
Sample Number: 124 Sample Comments: 43 L 48 L 52 L 48 N	Туре: к 1	Area: 5,00	00.00 SqFt	PCI = 66	
Sample Number: 129 Sample Comments: 48 L 48 M 43 M	Туре: к	Area: 5,00	00.00 SqFt	PCI = 59	
Sample Number: 157 Sample Comments: 52 L 48 L	Туре: к	Area: 5,00	00.00 SqFt	PCI = 82	
Sample Number: 161 Sample Comments: 48 M	Туре: к	Area: 5,00	00.00 SqFt	PCI = 72	
Sample Number: 167 Sample Comments: 48 M 48 L	Туре: к	Area: 5,00	00.00 SqFt	PCI = 75	
Sample Number: 172 Sample Comments: 48 M 43 M 48 L	Туре: к	Area: 5,00	00.00 SqFt	PCI = 61	
Sample Number: 178	Туре: к	Area: 5,00 Page 17	00.00 SqFt of 37	PCI = 71	

FDOT Report Generated Date: 12/28/200 Site Name:

Sample Comments: 48 M

Network: HEG Name: HERLONG AIRPORT-JACKSONVILLE				
Branch: RW 7-25	Name: RUNWAY 7-25		Use: RUNWAY Are	ea: 400,000.00 SqFt
Section: 6110 Surface: AAC Area: 130,000.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-RW-AAC SqFt Length: Type: Grade: 0.00	Zone: 1,300.00 Lanes: 0	To: - Category: Rank: P Ft Width: 100.00	Last Const.: 1/1/1997 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:80.00   Inspection Comments:	Total Samples: 13 Sur	veyed: 5		
Sample Number: 133 Sample Comments: 52 L	Туре: к	Area: 5,000.	00 SqFt	PCI = 89
Sample Number: 140 Sample Comments: 56 L 50 L 48 L	Type: R	Area: 5,000.	00 SqFt	PCI = 74
Sample Number: 145 Sample Comments: 56 L	Туре: к	Area: 5,000.	00 SqFt	PCI = 84
Sample Number: 149 Sample Comments: 48 L 56 L	Туре: к	Area: 5,000.	00 SqFt	PCI = 76
Sample Number: 152 Sample Comments: 56 L	Туре: к	Area: 5,000.	00 SqFt	PCI = 76

Network: HEG	Name: HERLONG AIRPORT-JAC	CKSONVILLE		
Branch: TW A	Name: TAXIWAY A - PARALLE	L TO R	Use: TAXIWAY Are	a: 174,000.00 SqFt
Section: 105 Surface: AAC Area: 174,000.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AAC SqFt Length: Type: Grade: 0.00	Zone: 4,350.00 Lanes: 0	To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1981 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:58.00   Inspection Comments:	Total Samples: 44 Su	rveyed: 5		
Sample Number: 102 Sample Comments: 43 L 43 M	Туре: к	Area: 4,000.00	) SqFt	PCI = 57
Sample Number: 110 Sample Comments: 43 M 48 M	Type: R	Area: 4,000.00	) SqFt	PCI = 47
Sample Number: 121 Sample Comments: 43 L 48 L	Туре: к	Area: 4,000.00	) SqFt	PCI = 64
Sample Number: 127 Sample Comments: 43 L 48 L	Туре: к	Area: 4,000.00	) SqFt	PCI = 67
Sample Number: 137 Sample Comments: 43 M 48 L 43 L	Туре: к	Area: 4,000.00	) SqFt	PCI = 55

Network: HEG Name: HERLONG AIRPORT-JACKSONVILLE				
Branch: TW B	Name: TAXIWAY B - PARAI	LLEL TO	Use: TAXIWAY A	rea: 164,700.00 SqFt
Section: 205 Surface: AAC Area: 164,700.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AAG SqFt Length: 'ype: Grade: 0.00		To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1984
Last Insp. 5/14/2007 Date: Conditions: PCI:71.00   Inspection Comments:	Total Samples: 41	Surveyed: 5		
Sample Number: 102 Sample Comments: 48 L	Туре: к	Area: 4,00	0.00 SqFt	PCI = 76
Sample Number: 108 Sample Comments: 48 L 43 L	Туре: к	Area: 4,00	0.00 SqFt	PCI = 72
Sample Number: 120 Sample Comments: 48 M 43 L 48 L	Туре: к	Area: 4,00	0.00 SqFt	PCI = 69
Sample Number: 133 Sample Comments: 48 L	Туре: к	Area: 4,00	0.00 SqFt	PCI = 75
Sample Number: 137 Sample Comments: 48 L 48 M 43 L	Туре: к	Area: 4,00	0.00 SqFt	PCI = 64

Network: HEG	Name: HERLONG AIRPORT-JACI	KSONVILLE		
Branch: TW CONN RW	Name: CONNECTOR TAXIWAY	BETWEEN	Use: TAXIWAY A	rea: 56,000.00 SqFt
Section: 605 Surface: AC Area: 29,550.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-TW-AC SqFt Length: Yype: Grade: 0.00	Zone: 738.75 Lanes: 0	To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1997 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:73.00   Inspection Comments:	Total Samples: 8 Sur	veyed: 2		
Sample Number: 102 Sample Comments: 52 L	Туре: к	Area: 4,000.00	SqFt	PCI = 74
Sample Number: 105 Sample Comments: 50 L 52 L	Туре: к	Area: 4,000.00	SqFt	PCI = 72

Network: HEG	Name: HERLONG AIRPORT-JACKSON	IVILLE		
Branch: TW CONN RW	Name: CONNECTOR TAXIWAY BETW	VEEN Use: TAXIWAY	Area: 56,0	000.00 SqFt
Section: 610 Surface: AAC Area: 4,700.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-TW-AAC SqFt Length: Type: Grade: 0.00 La	To: - Zone: Category: 100.00 Ft Wid	Rank: P th: 47.00 Ft	Last Const.: 1/1/1984
Last Insp. 5/14/2007 Date: Conditions: PCI:60.00   Inspection Comments:	Total Samples: 1 Surveye	d: 1		
Sample Number: 100 Sample Comments: 43 M 48 M	Type: R A	rea: 4,700.00	SqFt $PCI = 60$	)

Network: HEG	Name: HERLONG AIRPORT-JACK	KSONVILLE		
Branch: TW CONN RW	Name: CONNECTOR TAXIWAY B	BETWEEN	Use: TAXIWAY Are	ea: 56,000.00 SqFt
Section: 620 Surface: AAC Area: 4,700.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-TW-AAC SqFt Length: Type: Grade: 0.00	Zone: 100.00 Lanes: 0	To: - Category: Rank: P Ft Width: 47.00	Last Const.: 1/1/1984
Last Insp. 5/14/2007 Date: Conditions: PCI:56.00   Inspection Comments:	Total Samples: 1 Surv	veyed: 1		
Sample Number: 100 Sample Comments: 43 M 43 L	Туре: к	Area: 4,700.00	SqFt	PCI = 56

Network: HEG	Name: HERLONG AIRPORT-JACKSON	IVILLE		
Branch: TW CONN RW	Name: CONNECTOR TAXIWAY BETW	VEEN Use: TAXIWAY	Area: 56,0	00.00 SqFt
Section: 625 Surface: AC Area: 17,050.00 Shoulder: Street T Section Comments:	of 4 From: - Family: FDOT-RL-TW-AC SqFt Length: Type: Grade: 0.00 La	To: - Zone: Category: 360.00 Ft Wid	Rank: P th: 47.00 Ft	Last Const.: 1/1/1997
Last Insp. 5/14/2007 Date: Conditions: PCI:90.00   Inspection Comments:	Total Samples: 4 Surveye	d: 1		
Sample Number: 102 Sample Comments: 52 L	Туре: к Ал	rea: 4,700.00	sqFt PCI = 90	

Network: HEG	Name: HERLONG AIRPORT-JACKSONVIL	LE		
Branch: TW E FBO	Name: TAXIWAY EAST OF FBO RAMP	Use: TAXIWAY	Area: 3,9	90.00 SqFt
Section: 710 Surface: AC Area: 3,990.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AC SqFt Length: 'ype: Grade: 0.00 Lanes	140.00 Ft Width:	Cank: P 25.00 Ft	Last Const.: 1/1/1960
Last Insp. 5/14/2007 Date: Conditions: PCI:42.00   Inspection Comments:	Total Samples: 1 Surveyed:	1		
Sample Number: 101 Sample Comments: 52 M 50 L 48 L	Туре: к Area: 48 M 48 H	2,500.00	SqFt PCI = 42	

Network: HEG	Name: HERLONG AIRPORT-JACKSO	NVILLE		
Branch: TW E NW AP	Name: TAXIWAY EAST CONNECTOR	r to I	Use: TAXIWAY Are	a: 8,605.00 SqFt
Section: 405 Surface: AC Area: 8,605.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AC SqFt Length: 'ype: Grade: 0.00 L	Zone: 215.12 Lanes: 0	To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1981 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:25.00   Inspection Comments:	Total Samples: 1 Survey	red: 1		
Sample Number: 100 Sample Comments: 43 M 52 M	Туре: к А	Area: 6,000.00	SqFt	PCI = 25

Network: HEG	Name: HERLONG AIRPORT-JAC	CKSONVILLE		
Branch: TW HS CONN	Name: HIGH SPEED CONNECTION	ON TAX	Use: TAXIWAY Are	ea: 24,300.00 SqFt
Section: 305 Surface: AC Area: 21,000.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-TW-AC SqFt Length: Type: Grade: 0.00	Zone: 420.00 Lanes: 0	To: - Category: Rank: P Ft Width: 50.00	Last Const.: 1/1/1969 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:73.00   Inspection Comments:	Total Samples: 5 Sur	rveyed: 3		
Sample Number: 101 Sample Comments: 48 M 48 L	Туре: к	Area: 4,000.	00 SqFt	PCI = 77
Sample Number: 103 Sample Comments: 48 L	Type: R	Area: 4,000	00 SqFt	PCI = 76
Sample Number: 104 Sample Comments: 43 L 43 M 48 L	Туре: к	Area: 5,110.	00 SqFt	PCI = 68

Network: HEG	Name: HERLONG AIRPORT-JACKSONV	ILLE		
Branch: TW HS CONN	Name: HIGH SPEED CONNECTION TAX	Use: TAXIWAY	Area: 24,	300.00 SqFt
Section: 315 Surface: AC Area: 3,300.00 Shoulder: Street T Section Comments:	of 2 From: - Family: FDOT-RL-TW-AC SqFt Length: Type: Grade: 0.00 Lan	To: - Zone: Category: 80.00 Ft Widt es: 0	Rank: P h: 25.00 Ft	Last Const.: 1/1/1969
Last Insp. 5/14/2007 Date: Conditions: PCI:56.00   Inspection Comments:	Total Samples: 1 Surveyed:	: 1		
Sample Number: 100 Sample Comments: 43 M 43 L	Type: R Are	a: 2,300.00	SqFt PCI = 50	5

Network: HEG	Name: HERLONG AIRPORT-JACK	KSONVILLE		
Branch: TW N AP	Name: CONNECTOR TAXIWAY	CO N AP	Use: TAXIWAY Are	ea: 2,915.00 SqFt
Section: 805 Surface: AC Area: 2,915.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AC SqFt Length: Type: Grade: 0.00	Zone: 90.00 Lanes: 0	To: - Category: Rank: P Ft Width: 30.00	Last Const.: 1/1/1990 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:38.00   Inspection Comments:	Total Samples: 1 Surv	veyed: 1		
Sample Number: 100 Sample Comments: 43 M 52 M	Туре: к	Area: 1,400.00	SqFt	PCI = 38

Network: HEG	Name: HERLONG AIRPORT-JACKS	SONVILLE		
Branch: TW NE AP	Name: TAXIWAY TO NORTHEAST	ΓAPRO	Use: APRON Ar	rea: 5,250.00 SqFt
Section: 1105 Surface: PCC Area: 5,250.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-PCC SqFt Length: 'ype: Grade: 0.00	Zone: 175.00 Lanes: 0	To: - Category: Rank: P Ft Width: 30.00	Last Const.: 12/25/199 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:47.00   Inspection Comments:	Total Samples: 2 Surve	eyed: 1		
Sample Number: 500 Sample Comments: 62 L 62 L 73 N	Туре: R 70 L 72 M 65 L 66 L	Area: 25.00	Count	PCI = 47

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE		
Branch: TW T-HANG	Name: TAXIWAY T-HANGARS		Use: TAXIWAY Are	ea: 51,365.00 SqFt
Section: 905 Surface: AC Area: 3,035.00 Shoulder: Street T Section Comments:	of 5 From: - Family: FDOT-RL-TW-AC SqFt Length: Yype: Grade: 0.00	Zone: 50.00 Lanes: 0	To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1990 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:65.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1		
Sample Number: 100 Sample Comments: 48 L 52 M 52 L	Туре: к	Area: 3,300.00	SqFt	PCI = 65

Network: HEG	Name: HERLONG AIRPORT-JAC	KSONVILLE		
Branch: TW T-HANG	Name: TAXIWAY T-HANGARS		Use: TAXIWAY Are	ea: 51,365.00 SqFt
Section: 910 Surface: AC Area: 5,250.00 Shoulder: Street T Section Comments:	of 5 From: - Family: FDOT-RL-TW-AC SqFt Length: 'ype: Grade: 0.00	Zone: 150.00 Lanes: 0	To: - Category: Rank: P Ft Width: 35.00	Last Const.: 1/1/1990 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:66.00   Inspection Comments:	Total Samples: 1 Sur	veyed: 1		
Sample Number: 100 Sample Comments: 52 M 52 L 48 L	Туре: к	Area: 3,500.00	SqFt	PCI = 66

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE			
Branch: TW T-HANG	Name: TAXIWAY T-HANGARS	1	Use: TAXIWAY Ar	ea: 51,365.00	SqFt
Section: 915 Surface: AC Area: 9,200.00 Shoulder: Street T Section Comments:	of 5 From: - Family: FDOT-RL-TW-AC SqFt Length: Yype: Grade: 0.00	Zone: 460.00 Lanes: 0	To: - Category: Rank: P Ft Width: 20.00	La	ast Const.: 1/1/1990
Last Insp. 5/14/2007 Date: Conditions: PCI:72.00   Inspection Comments:	Total Samples: 2 Surv	reyed: 1			
Sample Number: 100 Sample Comments: 52 M 48 L 52 L	Туре: к	Area: 4,000.00	SqFt	PCI = 72	

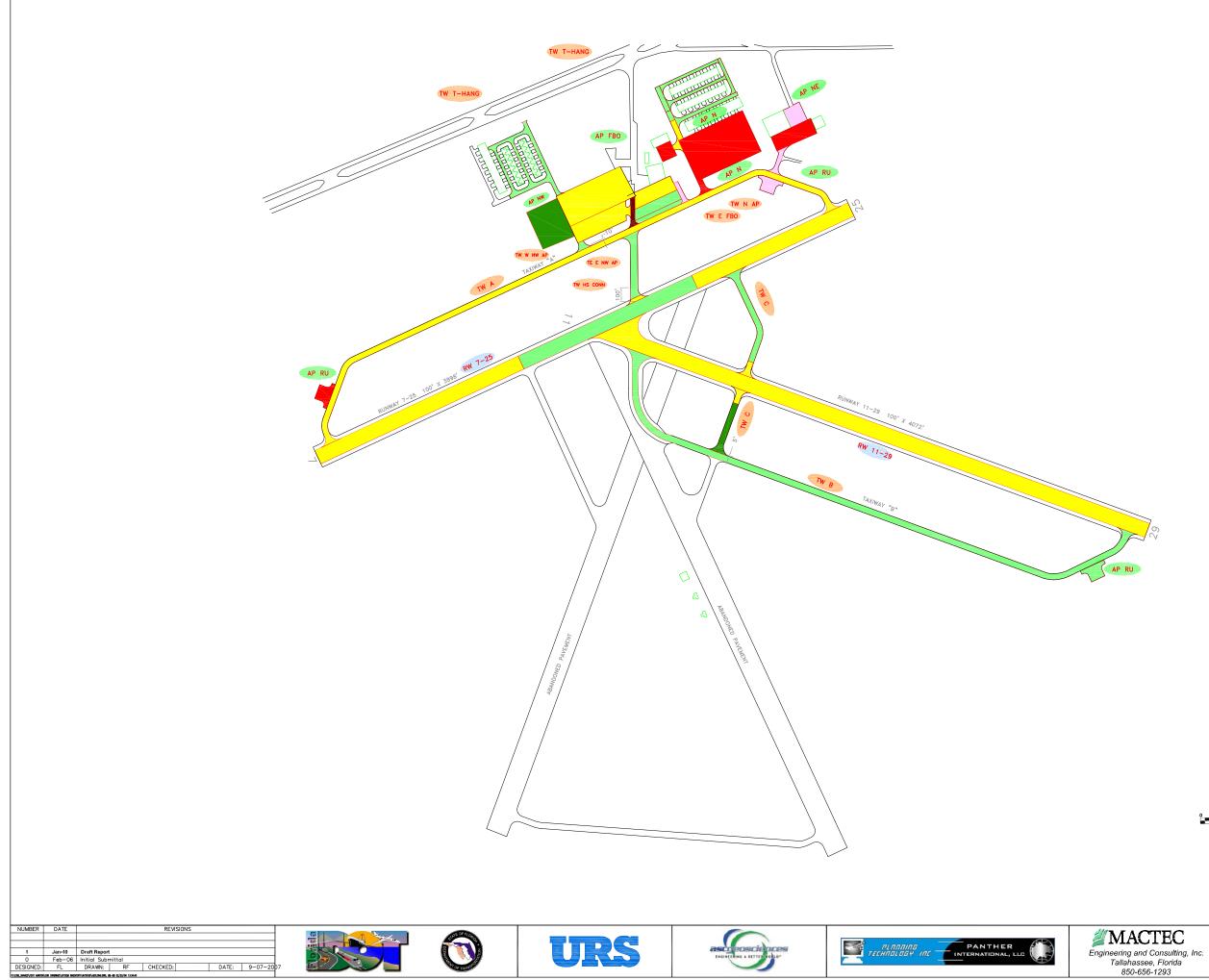
Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE		
Branch: TW T-HANG	Name: TAXIWAY T-HANGARS		Use: TAXIWAY Are	a: 51,365.00 SqFt
Section: 920 Surface: AC Area: 2,380.00 Shoulder: Street T Section Comments:	of 5 From: - Family: FDOT-RL-TW-AC SqFt Length: 'ype: Grade: 0.00	Zone: 68.00 Lanes: 0	To: - Category: Rank: P Ft Width: 35.00	Last Const.: 1/1/1996 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 1 Surv	veyed: 1		
Sample Number: 101 Sample Comments: 52 L	Туре: к	Area: 2,250.00	SqFt	PCI = 74

Network: HEG	Name: HERLONG AIRPORT-JACK	KSONVILLE		
Branch: TW T-HANG	Name: TAXIWAY T-HANGARS		Use: TAXIWAY Ar	ea: 51,365.00 SqFt
Section: 925 Surface: AC Area: 31,500.00 Shoulder: Street T Section Comments:	of 5 From: - Family: FDOT-RL-TW-AC SqFt Length: Yype: Grade: 0.00	Zone: 1,575.00 Lanes: 0	To: - Category: Rank: P Ft Width: 20.00	Last Const.: 1/1/1996 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 8 Surv	veyed: 2		
Sample Number: 200 Sample Comments: 52 L	Туре: к	Area: 5,750.00	SqFt	PCI = 74
Sample Number: 301 Sample Comments: 52 L	Туре: к	Area: 5,000.00	SqFt	PCI = 74

Network: HEG	Name: HERLONG AIRPORT-JACK	SONVILLE		
Branch: TW W NW AP	Name: TAXIWAY WEST CONNEC	TOR TO	Use: TAXIWAY Are	ea: 1,843.00 SqFt
Section: 550 Surface: AC Area: 1,843.00 Shoulder: Street T Section Comments:	of 1 From: - Family: FDOT-RL-TW-AC SqFt Length: 'ype: Grade: 0.00	Zone: 46.07 Lanes: 0	To: - Category: Rank: P Ft Width: 40.00	Last Const.: 1/1/1981 Ft
Last Insp. 5/14/2007 Date: Conditions: PCI:74.00   Inspection Comments:	Total Samples: 1 Surv	reyed: 1		
Sample Number: 100 Sample Comments: 52 L	Туре: к	Area: 2,200.00	SqFt	PCI = 74

**APPENDIX C** 

2007 CONDITION MAP AND TABLES



### <u>LEGEND</u>

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

TW A





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





### Table C-1: Pavement Condition Index

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4215	388	25	9,700	Ρ	AC	1/1/1980	5/14/2007	74
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4220	330	70	23,100	Ρ	AC	12/25/1999	5/14/2007	71
HERLONG AIRPORT	HEG	FBO APRON	AP FBO	4225	320	100	32,000	Ρ	AC	1/1/1997	5/14/2007	67
HERLONG AIRPORT	HEG	NORTH APRON	AP N	4305	480	300	144,000	Ρ	AC	1/1/1990	5/14/2007	40
HERLONG AIRPORT	HEG	NORTH APRON	AP N	4310	50	200	10,000	Ρ	AC	1/1/1990	5/14/2007	39
HERLONG AIRPORT	HEG	NORTHEAST APRON	AP NE	4405	130	120	16,400	Ρ	AC	12/25/1999	5/14/2007	51
HERLONG AIRPORT	HEG	NORTHEAST APRON	AP NE	4410	300	100	30,000	Ρ	PCC	12/25/1999	5/14/2007	33
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4105	480	225	108,000	Ρ	AC	1/1/1984	5/14/2007	57
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4110	380	125	51,250	Ρ	AC	1/1/1981	5/14/2007	56
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4115	280	235	65,800	Ρ	AC	1/1/2005	5/14/2007	96
HERLONG AIRPORT	HEG	NORTHWEST APRON	AP NW	4120	1,800	25	45,000	Ρ	AC	1/1/2001	5/14/2007	74
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5105	100	100	12,000	Ρ	AC	1/1/1999	5/14/2007	36
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5110	100	100	12,000	Ρ	AC	1/1/1999	5/14/2007	43
HERLONG AIRPORT	HEG	RUN UP APRON ON RWS 7, 25, 29	AP RU	5115	100	100	12,000	Ρ	AC	1/1/1999	5/14/2007	74
HERLONG AIRPORT	HEG	RUNWAY 11-29	RW 11-29	6205	4,083	100	408,300	S	AAC	1/1/1984	5/14/2007	68

See note at end of table.

### Table C-1: Pavement Condition Index

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
HERLONG AIRPORT	HEG	RUNWAY 7-25	RW 7-25	6105	2,700	100	270,000	Р	AAC	1/1/1981	5/14/2007	68
HERLONG AIRPORT	HEG	RUNWAY 7-25	RW 7-25	6110	1,300	100	130,000	Ρ	AAC	1/1/1997	5/14/2007	80
HERLONG AIRPORT	HEG	TAXIWAY A - PARALLEL TO RW 7-25	TW A	105	4,350	40	174,000	Ρ	AAC	1/1/1981	5/14/2007	58
HERLONG AIRPORT	HEG	TAXIWAY B - PARALLEL TO RW 11-29	TW B	205	4,117	40	164,700	Ρ	AAC	1/1/1984	5/14/2007	71
HERLONG AIRPORT	HEG	CONNECTOR TAXIWAY BETWEEN RWS & TWB	TW CONN RW	605	739	40	29,550	Ρ	AC	1/1/1997	5/14/2007	73
HERLONG AIRPORT	HEG	CONNECTOR TAXIWAY BETWEEN RWS & TWB	TW CONN RW	610	100	47	4,700	Ρ	AAC	1/1/1984	5/14/2007	60
HERLONG AIRPORT	HEG	CONNECTOR TAXIWAY BETWEEN RWS & TWB	TW CONN RW	620	100	47	4,700	Р	AAC	1/1/1984	5/14/2007	56
HERLONG AIRPORT	HEG	CONNECTOR TAXIWAY BETWEEN RWS & TWB	TW CONN RW	625	360	47	17,050	Ρ	AC	1/1/1997	5/14/2007	90
HERLONG AIRPORT	HEG	TAXIWAY EAST OF FBO RAMP	TW E FBO	710	140	25	3,990	Ρ	AC	1/1/1960	5/14/2007	42
HERLONG AIRPORT	HEG	TAXIWAY EAST CONNECTOR TO NW APRON	TW E NW AP	405	215	40	8,605	Р	AC	1/1/1981	5/14/2007	25
HERLONG AIRPORT	HEG	HIGH SPEED CONNECTION TAXIWAY	TW HS CONN	305	420	50	21,000	Ρ	AC	1/1/1969	5/14/2007	73
HERLONG AIRPORT	HEG	HIGH SPEED CONNECTION TAXIWAY	TW HS CONN	315	80	25	3,300	Р	AC	1/1/1969	5/14/2007	56
HERLONG AIRPORT	HEG	CONNECTOR TAXIWAY TO N APRON	TW N AP	805	90	30	2,915	Ρ	AC	1/1/1990	5/14/2007	38
HERLONG AIRPORT	HEG	TAXIWAY TO NORTHEAST APRON	TW NE AP	1105	175	30	5,250	Р	PCC	12/25/1999	5/14/2007	47
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	905	50	40	3,035	Р	AC	1/1/1990	5/14/2007	65

See note at end of table.

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	910	150	35	5,250	Р	AC	1/1/1990	5/14/2007	66
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	915	460	20	9,200	Ρ	AC	1/1/1990	5/14/2007	72
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	920	68	35	2,380	Ρ	AC	1/1/1996	5/14/2007	74
HERLONG AIRPORT	HEG	TAXIWAY T-HANGARS	TW T- HANG	925	1,575	20	31,500	Р	AC	1/1/1996	5/14/2007	74
HERLONG AIRPORT	HEG	TAXIWAY WEST CONNECTOR TO NW RAMP	TW W NW AP	550	46	40	1,843	Ρ	AC	1/1/1981	5/14/2007	74

### Table C-1: Pavement Condition Index

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

Network	Branch ID	Section	2007					PCI Fo	orecast				
ID	Branchib	ID	PCI	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
HEG	AP FBO	4215	74	73	71	70	69	68	66	65	64	63	62
HEG	AP FBO	4220	71	70	68	67	66	65	64	63	62	61	60
HEG	AP FBO	4225	67	66	65	64	62	61	60	59	58	57	56
HEG	AP N	4305	40	38	36	35	33	31	29	26	24	22	19
HEG	AP N	4310	39	37	35	33	31	29	27	25	23	20	17
HEG	AP NE	4405	51	50	48	47	46	44	43	41	40	38	36
HEG	AP NE	4410	33	32	31	30	29	28	27	26	25	24	23
HEG	AP NW	4105	57	56	55	54	52	51	50	49	47	46	45
HEG	AP NW	4110	56	55	54	53	51	50	49	48	46	45	43
HEG	AP NW	4115	96	94	91	89	87	85	83	82	80	78	77
HEG	AP NW	4120	74	73	71	70	69	68	66	65	64	63	62
HEG	AP RU	5105	36	34	32	30	28	26	23	21	18	15	13
HEG	AP RU	5110	43	41	40	38	36	34	32	30	28	26	24
HEG	AP RU	5115	74	73	71	70	69	68	66	65	64	63	62
HEG	RW 11-29	6205	68	66	65	64	62	61	60	59	58	58	57
HEG	RW 7-25	6105	68	66	65	64	62	61	60	59	58	58	57
HEG	RW 7-25	6110	80	77	75	73	71	69	68	66	65	63	62
HEG	TW A	105	58	57	55	54	52	50	48	46	45	43	41
HEG	TW B	205	71	70	69	68	68	67	66	66	65	65	64
HEG	TW CONN RW	605	73	72	70	69	68	67	66	65	63	62	61
HEG	TW CONN RW	610	60	59	58	56	55	53	52	50	48	46	44
HEG	TW CONN RW	620	56	54	53	51	49	47	45	44	42	40	38
HEG	TW CONN RW	625	90	88	86	84	83	81	80	78	77	75	74
HEG	TW E FBO	710	42	41	39	38	37	35	34	32	31	29	27
HEG	TW E NW AP	405	25	23	21	19	17	16	14	12	10	8	6
HEG	TW HS CONN	305	73	72	70	69	68	67	66	65	63	62	61
HEG	TW HS CONN	315	56	55	54	53	52	51	50	49	48	47	45
HEG	TW N AP	805	38	37	35	34	32	31	29	27	26	24	22
HEG	TW NE AP	1105	47	46	45	44	43	42	41	40	39	38	37
HEG	TW T-HANG	905	65	64	63	62	61	60	59	58	57	56	55
HEG	TW T-HANG	910	66	65	64	63	62	61	60	59	57	56	55

### **Table C-2: Pavement Condition Prediction**

See note at end of table.

Network	Branch ID	Section	2007		PCI Forecast								
ID Branch ID	ID	PCI	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
HEG	TW T-HANG	915	72	71	69	68	67	66	65	64	63	62	61
HEG	TW T-HANG	920	74	73	71	70	69	68	66	65	64	63	62
HEG	TW T-HANG	925	74	73	71	70	69	68	66	65	64	63	62
HEG	TW W NW AP	550	74	73	71	70	69	68	66	65	64	63	62

### **Table C-2: Pavement Condition Prediction**

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

# APPENDIX D

## AREA-WEIGHTED PCI RESULTS BY BRANCH

Network	Branch Name	2007 PCI
HERLONG AIRPORT- JACKSONVILLE	FBO APRON	69
HERLONG AIRPORT- JACKSONVILLE	NORTH APRON	40
HERLONG AIRPORT- JACKSONVILLE	NORTHEAST APRON	39
HERLONG AIRPORT- JACKSONVILLE	NORTHWEST APRON	69
HERLONG AIRPORT- JACKSONVILLE	RUN UP APRON ON RWS 7, 25, 29	51
HERLONG AIRPORT- JACKSONVILLE	RUNWAY 11-29	68
HERLONG AIRPORT- JACKSONVILLE	RUNWAY 7-25	72
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY A - PARALLEL TO RW 7-25	58
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY B - PARALLEL TO RW 11-29	71
HERLONG AIRPORT- JACKSONVILLE	CONNECTOR TAXIWAY BETWEEN RWS & TWB	76
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY EAST OF FBO RAMP	42
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY EAST CONNECTOR TO NW APRON	25
HERLONG AIRPORT- JACKSONVILLE	HIGH SPEED CONNECTION TAXIWAY	71
HERLONG AIRPORT- JACKSONVILLE	CONNECTOR TAXIWAY TO N APRON	38
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY TO NORTHEAST APRON	47
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY T-HANGARS	72
HERLONG AIRPORT- JACKSONVILLE	TAXIWAY WEST CONNECTOR TO NW RAMP	74

APPENDIX E

MAJOR M&R PLAN BY YEAR

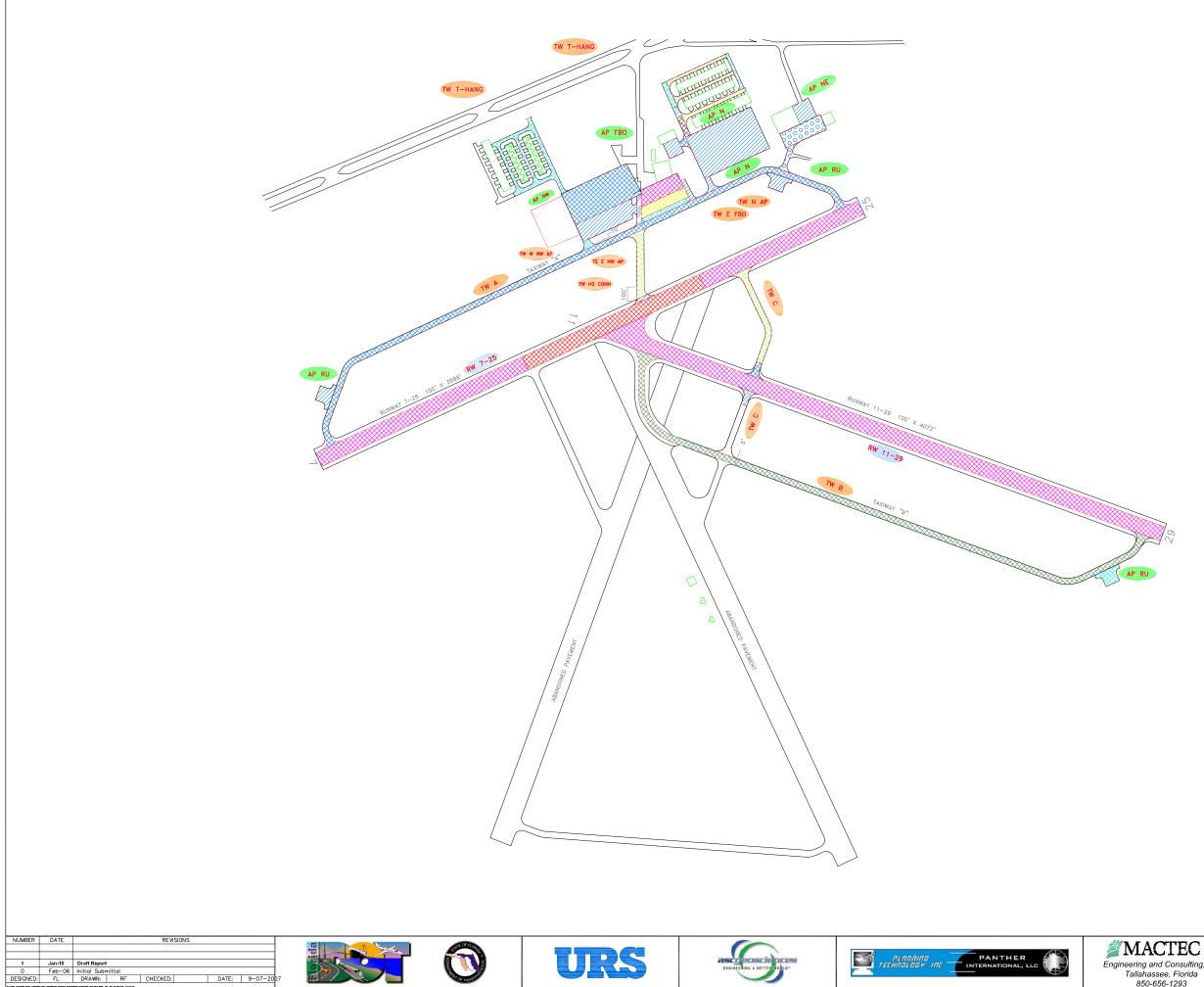
Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
HEG	APRON	AP N	4305	AC	144,000	2008	38	Mill & Overlay	100	\$1,411,488
HEG	APRON	AP N	4310	AC	10,000	2008	37	Mill & Overlay	100	\$108,980
HEG	APRON	AP NE	4405	AC	16,400	2008	50	Mill & Overlay	100	\$124,804
HEG	APRON	AP NE	4410	PCC	30,000	2008	32	PCC Restoration	100	\$491,340
HEG	APRON	AP NW	4105	AC	108,000	2008	56	Microsurfacing	100	\$567,216
HEG	APRON	AP NW	4110	AC	51,250	2008	55	Mill & Overlay	100	\$289,306
HEG	APRON	AP RU	5105	AC	12,000	2008	34	Mill & Overlay	100	\$170,232
HEG	APRON	AP RU	5110	AC	12,000	2008	41	Mill & Overlay	100	\$91,320
HEG	TAXIWAY	TW A	105	AAC	174,000	2008	57	Microsurfacing	100	\$845,466
HEG	TAXIWAY	TW CONN RW	610	AAC	4,700	2008	59	Microsurfacing	100	\$19,143
HEG	TAXIWAY	TW CONN RW	620	AAC	4,700	2008	54	Mill & Overlay	100	\$28,379
HEG	TAXIWAY	TW E FBO	710	AC	3,990	2008	41	Mill & Overlay	100	\$30,364
HEG	TAXIWAY	TW E NW AP	405	AC	8,605	2008	23	Reconstruction	100	\$159,795
HEG	TAXIWAY	TW HS CONN	315	AC	3,300	2008	55	Mill & Overlay	100	\$18,629
HEG	TAXIWAY	TW N AP	805	AC	2,915	2008	36	Mill & Overlay	100	\$34,963
HEG	APRON	TW NE AP	1105	PCC	5,250	2008	46	PCC Restoration	100	\$39,953
HEG	TAXIWAY	TW T-HANG	905	AC	3,035	2008	64	Microsurfacing	100	\$7,794
HEG	TAXIWAY	TW T-HANG	910	AC	5,250	2009	64	Microsurfacing	100	\$13,886
HEG	APRON	AP FBO	4225	AC	32,000	2010	63	Microsurfacing	100	\$96,618
HEG	RUNWAY	RW 11-29	6205	AAC	408,300	2010	64	Microsurfacing	100	\$1,112,369
HEG	RUNWAY	RW 7-25	6105	AAC	270,000	2010	64	Microsurfacing	100	\$735,586
HEG	APRON	AP FBO	4220	AC	23,100	2013	64	Microsurfacing	100	\$68,769
HEG	TAXIWAY	TW CONN RW	605	AC	29,550	2014	64	Microsurfacing	100	\$90,610
HEG	TAXIWAY	TW HS CONN	305	AC	21,000	2014	64	Microsurfacing	100	\$64,393
HEG	TAXIWAY	TW T-HANG	915	AC	9,200	2014	64	Microsurfacing	100	\$28,210
HEG	APRON	AP FBO	4215	AC	9,700	2015	64	Microsurfacing	100	\$30,636
HEG	APRON	AP NW	4120	AC	45,000	2015	64	Microsurfacing	100	\$142,124
HEG	APRON	AP RU	5115	AC	12,000	2015	64	Microsurfacing	100	\$37,900
HEG	TAXIWAY	TW T-HANG	920	AC	2,380	2015	64	Microsurfacing	100	\$7,517

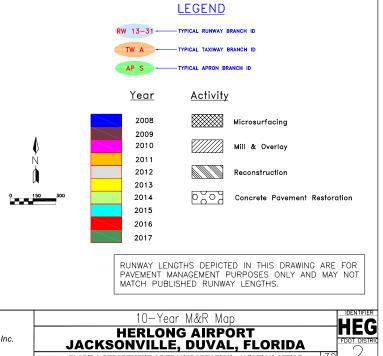
Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
HEG	TAXIWAY	TW T-HANG	925	AC	31,500	2015	64	Microsurfacing	100	\$99,487
HEG	TAXIWAY	TW W NW AP	550	AC	1,843	2015	64	Microsurfacing	100	\$5,821
HEG	RUNWAY	RW 7-25	6110	AAC	130,000	2016	63	Microsurfacing	100	\$468,680
HEG	TAXIWAY	TW B	205	AAC	164,700	2017	64	Microsurfacing	100	\$551,853

### Table E-1: Major M&R Plan by Year

# APPENDIX F

# **10-YEAR M&R MAP**





FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

 $\mathcal{D}$ 



# APPENDIX G

PHOTOGRAPHS



TW HS CONN Section 305 SU 101: Low Severity L/T Cracking (May 14, 2007)



TW HS CONN Section 315 SU 100: Section Overview (May 14, 2007)



RW 11-29 Section 6205 SU 103: Low Severity L/T Cracking (May 14, 2007)



TW CONN RW Section 610 SU 100: Low Severity Block Cracking (May 14, 2007)



TW CONN RW Section 620 SU 100: Section Overview (May 14, 2007)



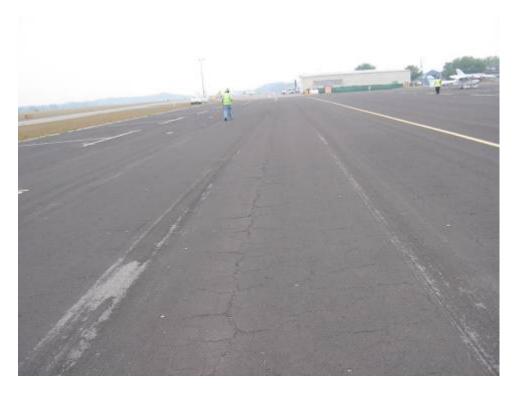
TW B Section 205 SU 102: Low Severity L/T Cracking (May 14, 2007)



AP NW Section 4110 SU 353: Medium Severity Weathering (May 14, 2007)



TW E FBO Section 710 SU 101: Medium Severity L/T Cracking



AP N Section 4305 SU 502: Medium Severity L/T Cracking (May 14, 2007)



AP N Section 4310 SU 100: Medium Severity Weathering (May 14, 2007)